



THE LAW OF INTERNATIONAL WATER RESOURCES

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

THE LAW OF INTERNATIONAL WATER RESOURCES

Some General Conventions, Declarations and Resolutions
adopted by Governments, International Legal Institutions and
International Organizations , on the Management of
International Water Resources

by
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FOREWORD

The purpose of this Legislative Study is to provide interested FAO Member Countries with a compendium of basic documentation, often not easily available, on the law of international water resources. It contains the most general international conventions, declarations, and resolutions adopted by Governments, international legal bodies and international organizations, as well as some of the judicial decisions and the teaching of the most qualified publicists of various nations concerning the management (utilization, conservation and administration) of international water resources, i.e. inland (non-maritime) water resources of rivers, hydrographic systems and drainage basins of international concern.

It was also considered appropriate to preface the collection of enactments with an introduction illustrating the multiplicity of the procedures conspiring to create that law and its evolution, and describing, as far as possible in simple terms, its essential elements and distinct values as determined by the hierarchy of the sources.

It is also intended to constitute part of the contribution of the Food and Agriculture Organization of the United Nations (FAO) to the work of the International Law Commission of the United Nations (ILC) in its effort to codify the law of the non-navigational uses of international watercourses for which the Commission has requested the cooperation of the family of the United Nations organizations. Finally, this Study is intended to serve as a working and reference tool for easy consultation for all those directly or indirectly concerned with the conservation, development and administration of the almost 260 international drainage basins existing in the world.

This publication follows the work prepared by FAO on the same subject entitled "Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases by Basin" (FAO Legislative Study No. 15, 1978) and constitutes its logical and - it is hoped - useful corollary.

Some of the documents collected in this study are those previously reproduced in the FAO Background Paper, issued under the same title in 1970 and in 1978. However, many more have been added, and the presentation has been rearranged following as much as possible the order listed in article 38 of the Statute of the International Court of Justice.

While FAO, a technical organization, in its approach towards the development of international water resources law follows the "international drainage basin" concept, the chapters that follow make no claim to evolve any theory concerning the powers of States over water resources of international concern or to set forth international rules and principles governing the use, conservation and administration of such resources. This is normally the province of publicists in international law, whether in their own learned writings or in their contributions to the work of non-governmental scientific associations which may have set up working parties for the study of these matters and, above all, of the United Nations International Law Commission, which is entrusted with the task of codification and progressive development of international law.

The collaboration of Prof. Carlo Curti Gialdino, of the University of Naples, Italy, who assisted throughout the preparation of this work, is gratefully acknowledged.

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FIRST PART
GENERAL SURVEY OF THE LAW OF INTERNATIONAL WATER
RESOURCES

1. Introduction

Water has never respected the political frontiers drawn by man. Appreciation of this elementary fact - the mobility of this natural resource - will help promote a better understanding of the importance of problems connected with the use, administration and conservation of water at the international level. Thus, it may happen that a river or lake will be taken as a reference feature for determining the demarcation line between two or more States and, then, as a result of erosion or avulsion, the bed of the river or the lake will shift slowly (or suddenly, even), with consequences for States concerned. Or it may be that activities in one State with a view to making use of the waters that it has on its territory may have repercussions jeopardizing the use that another State is making or may wish to make of the same waters once within its own frontiers.

To illustrate, the building of dams for irrigation or for hydroelectric purposes or for flood control in a downstream State may cause flooding in an upstream State. These and other potential consequences may make themselves felt not only on the principal course of the river or the water of the lake but also on the entire system of tributaries in the catchment area or in the international drainage basin. This substantial unity of river/lake systems or of a drainage basin is due to the fact that they are nearly always a constituent part of one and the same hydrological cycle; and any action taken by a State to modify the natural water régime may have repercussions in other parts of the watershed.

Similar observations apply to groundwater located below the territories of several States. Here, the problem is more complex because water tables lie at different depths and may also have an extension that is not symmetrical about the political demarcation line, so that the use by a State of the resources of one or another water table will have to be determined by reference to the actual watershed in question.

Again, natural erosion occurring in an upstream State may cause damage to channels, dams and port installations in a downstream State on the same river; or, again, water used for irrigation in an upstream State may preclude the possibility of using that water in a downstream State for navigation, household supply or industrial purposes. Similarly, the presence or absence of installations downstream, or the use of water for irrigation, may deprive the upstream State of the possibility of using the river for, say, navigation or timber floating purposes. Lastly, pollution resulting from upstream use may entail harmful effects and considerable expense for purification of the water downstream.

The examples here cited, and one could add many more, show that with water resources of concern to more than one State or belonging to an international water System or drainage basin, or, to use the more recent terminology, resources shared by two or more States, a conflict of interests may arise, at the same time indicating the need for international cooperation. Such Conflicts cannot be settled, and such needs cannot be satisfied, unless the rules governing the conduct of States in this sector are identified.

As a conclusion, it may be stated that, from the hydrogeological and physical stand-point, any interference by one State with the waters of a catchment area or a drainage basin, at any point, will have an effect, whether direct or indirect, positive or negative, on the water resources encountered at other points of the same catchment area or basin, and not necessarily inside the territory of a single State.

2. The concept of "international water resources" and other definitions generally used in the practice of States and by the most highly qualified publicists

In this general survey, the expression "international water resources" is used to identify water resources common to several States. The term connotes all water resources (surface, groundwater, atmospheric and frozen water) of international importance, and is thus better suited than any other definition for encompassing the whole range of problems arising in this sector.

The terminology here used provides a logical point of convergence for the different definitions that the learned writings have proposed and State practice, whether in formal treaty making or of the diplomatic kind, has come to adopt in the process of time pari passu with progress in people's understanding about, and in the technical potentialities of, national inland waters. and the expanding number of uses to which these lend themselves. It is in such progress, of course, and in that timely refining of definitions in the light of predominantly functional criteria, that an explanation is to be found for the gradual enlargement of the territorial scope of the rules embodied in treaties, etc.

One may go back to the late eighteenth century to find the use. for referring to watercourses of concern to several States, of such expressions as "common river or watercourse" 1/.

In the nineteenth century a frequent description was "international rivers or lakes", an expression enshrined in article 108 of the Final Act of the Congress. of Vienna of 1815 2/. The expression refers to navigable waterways of concern to two or more States, either because they cross those States ("successive international rivers") or because they serve to demarcate them ("contiguous international rivers"), or to lakes crossed by a frontier or surrounded by several riparian States ("international lakes or frontier lakes").

The Treaty of Paris of 1856 extended to the Danube the principle of freedom of navigation which had already been recognized in the other European "international rivers" by the Congress of Vienna.

In 1885, the Act of Berlin applied the same principle to the Congo and Niger rivers in Africa, which were referred to as "international rivers". Under the concept of "international river or lake" different criteria of a geographic, juridical and functional nature have been considered in the course of history. The fact of crossing or demarcating territories belonging to different States was the first, and the characteristic of its internal "navigability" from and to the sea was the second criterion, that were taken into consideration in determining a particular international river or lake to be governed by international rules (rules for the most part embodied in treaties). Finally, the last criterion used to describe a river as "international" was its potential for various uses other than navigation, such as irrigation, hydroelectric power production, timber floating, etc.

1/ Reichdeputations-Hauptschluss of 25 February 1903, art.39 (Martens, Recueil des traités, 2ème éd.); Convention between France and Elector of Mainz of 15 August 1804, art. 2 (Martens, Recueil des traités, 2ème d., VIII, p.261).

2/ The Congress of Vienna dealt mainly with European rivers: Main, Neckar, Moselle, Meuse, Scheldt. At that time, a river was considered "international" if it was "navigable".

The peace treaties following the first World War, however, used the expression "river declared international". The main distinction implicit in this expression, as opposed to the "international river", was the assimilation of national waterways crossing the territories of the defeated powers to international waterways, by that token extending to them the principle of freedom of navigation. Yet another expression was used in the 1921 Barcelona Convention, namely, "waterway of international concern". This was no mere formal change in terminology but reflected the need to extend the principle of freedom of navigation to all ' flowing waters, whether international or national (provided, of course, that the State concerned admitted the international character of the latter kind). The criterion was thus evolved which was not so much geographic as functional and was one that expressed the general interest of the international community in the freedom of communications.

Later, the expression "international rivers or lakes system" gained currency in international practice, making for the extension of the international rules to tributaries, canals and secondary courses as well as to the main stream and, again, to lakes and lake/ river sources connected with the latter. Even internal lakes, seas and other river systems having no outlet to the sea came to be covered by the expression, though only in it a connotation of surface waters: groundwater was not affected.

Toward the end of the 1950s, chiefly as a result of the studies made by the International Law Association (ILA), it was proposed to adopt the expression "international drainage basin". This connotes the entire complex made up of the main stream and its tributaries, or of the lake or lake/river system. It can refer not only to surface waters but also to groundwater where these are connected either to the surface waters of the basin or to a groundwater basin independently of the surface. A precise definition was given in article 2 of the "Helsinki Rules", adopted in 1966 by the ILA, according to which the expression should connote "a geographical area extending over two or more States determined by the watershed limits of the system of waters, including surface and underground waters, flowing into a common terminus".

The "international drainage basin" concept seems to offer a rational basis for planning the development of water resources. The basin is an area demarcated by nature in which all natural resources (land, water, animals, plant cover, etc.) may be clearly quantified. Furthermore, because of the physical interconnection between waters, any modification that may arise naturally or by human agency in the waters located in any part of the basin will normally have its effect exclusively within the confines of the basin itself. The expression also makes allowance for modern hydraulic engineering and water management techniques postulating on the one hand the multi-purpose development of" water resources and, on the other, the need for the most rational use and integrated management.

In recent years, two new expressions have come to the fore, namely "international water resources system" 1/, comprising also atmospheric water and frozen water, and "shared natural resources" 2/. The latter concept does not seem to exclude water resources common to several States - shared natural resources par excellence. It may also refer to all "international" resource - air, hydrocarbons, wildlife, fishery resources, etc.

1/ United Nations, Management of international water resources; Legal and institutional aspects; report of the group of experts on legal and institutional aspects of water resources, New York, 1976, p.14

2/ Report of the United Nations Water Conference, UN doc. E/Conf. 70/29tPP.51-fft alao OTBP Report of the Executive Director on cooperation in the field of environment, Doc. UNEP/bc/44, 20.2.75.

The foregoing review of terminology should point to the desirability of taking up a position, as has been done in these introductory remarks, regarding the most appropriate concept, or expression, to use in order to identify the cluster and scope of international rules governing water resources common to several States. Accordingly, "international water resources" is adopted here as offering a single expression that resolves and covers the traditional distinction between the problems arising under river and lake navigation and questions arising in the use, development and conservation of water resources of concern to several States.

This is a "neutral" definition, however. It is common knowledge that in discussions concerning the geographical scope of the rules governing international water resources, the choice between one or the other definition is closely bound up with the juridical stand taken by the interested States and their readiness or otherwise to accept limitations on their sovereign rights over the natural resources located on their territories.

3. Evolution of the Law of International Water Resources

From the remotest times the importance of international waters as thoroughfares for communications and commerce and also as sources of supply for domestic and agricultural uses has been recognized. Proof of this is that a number of civilizations of antiquity developed precisely along the great rivers such as the Hwang Ho, Tigris and Euphrates, Nile, Indus, Ganges and Tiber.

Even in those ages people appreciated the need to have a body of rules governing the use made of waters at the same time recognizing two principles - the sovereignty of the State on the territory on which water resources of interest to other States were to be found, and the principle of international cooperation and solidarity - as a basis on which to organize the joint use of the resource.

The historical development of international water law has followed closely that of political, economic, technical and social needs, so that we find the development process now more marked, now less so, according to the use in question.

A special place has traditionally been accorded to navigation, the earliest legislative documents extant being found in Roman Law. Freedom of navigation had its basis in the concept of aqua profluens as being a res communis omnium. The state would levy certain taxes by way of payment for the works for maintaining watercourses and for surveillance purposes.

The régime of freedom was broken throughout the Middle Ages, a time when shipping was subjected to all sorts of harassments and fiscal measures which effectively hindered development, even to the point of certain waterways being closed by treaty, as in the case of the Scheldt by the Treaty of Minster of 30 January 1648.

From the French Revolution on, and under the impulse of the libertarian ideas proclaimed by it (of. Decree of the Provisional Council of the Convention, 16 November 1792), the freedom of navigation idea began to gain currency afresh. Here support was forth-coming from certain of the powers of the time anxious to take advantage of the possibilities of trade and colonial expansion offered by this freedom.

The principle of freedom of navigation thus came to be propounded first to the advantage of riparian states (of. Final Act of the Congress of Vienna, 1815) 1/, and then in favour of all nations - not in universal terms but with reference to specific waterways (Treaty of Paris, 1856 for the Danube; Treaty of Berlin, 1885 for the Niger and the Congo; Treaty of Versailles, 1919 for the Elbe, Oder, Niemen, etc.).

Pari passu with the affirmation of freedom of navigation there emerged the need for understanding between riparians for the administration of watercourses and the ban on fiscal measures other than those designed to obtain payment for services rendered in order to improve the navigability of international rivers.

The first (and only) attempt to codify internationally the freedom of navigation and the need to establish joint commissions for the management of international rivers was the Conference convened by the League of Nations in 1921 at Barcelona 2/; from this Conference emerged the adoption of a Convention, a Statute on the régime of navigable waterways and a declaration engaging States to render navigation free even on watercourses that were geographically national. This attempt at codification met with little success, since only a few countries ratified the agreements signed at Barcelona.

The present trend where navigation is concerned is toward affirming the principle of freedom and of the obligation to cooperate to the exclusive benefit of states concerned with one and the same international river basin.

The trend is also to be seen in other forms of use of international water resources. Few nowadays subscribe to the thesis that an intransigent affirmation of sovereignty, according to which every State is so master of its own territory that it can apply to the water resources encountered there whatever measures it chooses in pursuit of its own interests without considering the harmful effects that might be brought beyond its own frontiers.

Yet, this was the thesis sustained by the then Attorney General of the United States, M. Harmon, in 1895 in a controversy between his country and Mexico over the diversion and use of the Rio Grande. Rebutting the Mexican claim to the effect that prior agreement was necessary between the two Countries on the grounds that the United States could not make use of the river water in such a way as markedly to reduce the flow, Harmon had this to say: "... the fundamental principle of international law is the absolute sovereignty of every Nation as against all others within its own territory ... all exceptions, therefore, to the power of a Nation within its own territory must be traced up to the consent of the Nation itself. They can flow from no other legitimate source." And on this premise he went on to affirm: "the rules, principles and precedents of international law impose no liability or obligation upon the United States", and that to accede to the Mexican claim would be "entirely inconsistent with the sovereignty of the United States over its national domain".3/

This theory, together with the parallel one of "absolute territorial integrity" under which downstream states are held to have an absolute right that the natural rate of flow and, broadly, the volume of international water resources to be found on their territory, shall not be altered, is certainly without juridical foundation. This is because the two theories take into account only the territorial sovereignty of a State and disregard reciprocal sovereign rights of the States that have an interest in the same international water resource. Rather there should be a combining of sovereign rights resulting from the use and conservation of resources held jointly by several States. Sovereign rights are clearly interdependent both from the technical standpoint (hydrology) and from the juridical standpoint (plurality of subjective rights over shared resources).

1/ See p. 29 of this Study

2/ See p. 31 of this Study

3/ Moore, Digest of International Law 654 (1906)

If this approach to the problem is the correct one, then this implies recognition of a community of interests among States having claims over the same international water resource, from which derive a series of reciprocal rights and duties, as was authoritatively affirmed by the Permanent Court of International Justice in 1929 ^{1/} in its judgement on the territorial competence of the River Oder Commission. This approach also implies the acceptance of the theory of limited territorial sovereignty of States over the water resources shared with other States.

The reciprocity of respective rights and duties of States sharing a common basin acquires the force of a generally applicable rule of conduct in relations between those States. Certain corollaries may also be drawn from this. First, the duty not to cause substantial damage to other States managing the same international water resource. Emphasis is placed on the "seriousness" of damage because only in this case is there a violation of a rule of international law, to the exclusion of what is referred to as slight or minimum damage. Implicit in this duty there is the further obligation to take all necessary preventive measures in order that the question of damage shall not arise in international relations where water resources are concerned.

The second corollary - or substantive guiding principle - concerns the equitable use of international water resources, which up to the present has received its fullest affirmation in articles IV to VIII of the Helsinki Rules as drafted by the International Law Association. This principle achieves a balance between potentially conflicting interests, it establishes priorities among needs, and makes allowance, if necessary, for existing uses.

The general rules governing the conduct of States summarized so far make up substantive law. But there are the procedural rules, which must also be considered. Among these there is the rule requiring that States shall inform and consult each other - a rule of general applicability, and one not limited to hypothetical situations where damage might arise. This rule, together with those governing the conduct of States with regard to the management of international water resources has been embodied in a number of international instruments such as the Geneva Convention of 1923 ^{2/}, on Hydraulic Power, in the Declaration of Montevideo of 1933 ^{3/}, and also, more recently, in article 3 of the Charter of the Economic Rights and Duties of States, which reads: "in the exploitation of natural resources shared by two or more countries, each State must cooperate on the basis of a system of information and prior consultations in order to achieve optimum use of such resources without causing damages to the legitimate interests of others". ^{4/}

It should also be noted that the obligation to consult does not imply the according of powers of veto: it does not mean that one State is obliged to obtain the consent of all interested States, and by that token to conclude an agreement with them before it may proceed. Such an obligation would conflict with the sovereignty principle and with the principle of equality of rights and community of interests - both of these being looked on as an expression of the priorities of today's international community.

^{1/} See p.224 of this Study.

^{2/} Reproduced at p. 45.

^{3/} Reproduced at p. 204.

^{4/} Reproduced at p. 162.

4. The multiplicity of law-making processes concerning the law of international water resources, and their value

The processes whereby international law is created - both in general, and as regards international water resources, in particular - are many and varied. One starting point - a traditional one that is in many respects still applicable - is to be found in the Statute of the International Court of Justice. Article 38 provides that the Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:

- "(a) international conventions, whether general or particular, establishing rules expressly recognized by the contesting States;
- (b) international customs, as evidence of a general practice accepted as law;
- (c) the general principles of law recognized by civilized nations;
- (d) ... judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law."

However, this article takes no account of procedures constituting a quasi-legislative activity of the international organizations and the "final acts" of ad hoc international conferences - instruments embodying certain statements of principle not foreseen at the time of the drafting.

5. International Conventions

The most commonly used procedure for creating rules of conduct between States where international water resources are concerned, is that of the international agreement, mentioned in article 38 of the Statute of the International Court of Justice. International law does not prescribe any specific form for these agreements; nevertheless, rarely, if ever, does it happen that an agreement will be other than of the written kind. In article 2 of the Convention on the Law of Treaties (Vienna, 23 May 1969, which entered into force on 27 January 1980), the term "treaty" is taken to mean:

"an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation." ^{1/}

International agreements, then, irrespective of the name by which they are known (convention, pact, charter, protocol, compromise, modus vivendi, exchange of notes, final act, etc.), usually come in one or other of the main forms described in what follows:

- (a) agreements open to signature and ratification by the contracting parties;
- (b) agreements not subject to ratification ("in simplified form"), which enter into force upon signature or upon a supervening determinate set of circumstances;

^{1/} A/Conf. 39/27, 23 May 1969, and corrigenda.

(c) exchanges of notes, which enter into force on a specified date or upon the actual exchange taking place - i.e., upon receipt and confirmation by one State of the note transmitted by another State;

(d) instruments of a less formal nature - "joint statement", "act", "procès-verbal", "memorandum of agreement".

A fundamental distinction must, in any case, be made between general conventions of universal or of regional application, and particular conventions of bilateral or multilateral scope.

The present Study cannot reproduce the entire corpus of treaty-made law governing international water resources. Two conventions only are given among those of general applicability in this field, together with extracts from a few other multilateral agreements of major significance. However, reference may be made to a complete survey of international instruments dealing with this subject, compiled by the Legal Office of FAO. 1/

5.1 General conventions (of universal or regional application)

Usually, general conventions are of the multilateral type which codify rules of conduct in a given sector. Where international water resources are concerned, reference should be made to:

(a) the Convention and Statute on the Régime of Navigable Waterways of International Concern (Barcelona, 20 April 1921); 2/

(b) the Convention relating to the Development of the Hydraulic Power affecting more than one State, and protocol of signature (Geneva, 9 December 1923). 3/

These two conventions were ratified by a very small number of States (twenty and eleven, respectively). On the other hand, according to the law of succession of States to treaties, they can be said to apply to States that have recently attained independence that were formerly under colonial administration. 4/

1/ Systematic index of International Water Resources Treaties, Declarations, Acts and Cases by Basin, Legislative Study No. 15, FAO, Rome, Italy, p.478, which includes information on more than 2,000 international legal instruments from 1805 to 1977.

2/ Reproduced at p. 31.

3/ Reproduced at p. 45.

4/ These two instruments belong to a group of 21 multilateral conventions negotiated under the aegis of the League of Nations. The United Nations General Assembly by resolution 1903 (XVII) of 18 November 1963 and later by resolution 2021 (XX) of 5 November 1965 considered these conventions and, in the last-mentioned instance, took note of the outcome of the consultations conducted by the Secretary-General regarding these instruments. The replies received indicated that some of these conventions required adapting to present day conditions. The General Assembly drew the attention of the parties to this fact.

The list annexed to resolution 2021 (XX) contains the 1921 Convention and Statute on the régime of navigable waterways of international concern and the Additional Protocol there- to but not the 1923 Convention relating to the development of hydraulic power affecting more than one State. This 1923 (Geneva) Convention likewise does not appear among those for which the Secretary-General of the United Nations acts as depository. On the other hand, resolution 2669 (XXV) of 8 December 1970, which was the starting point for the work of the International Law Commission on this subject, cites both - Barcelona and Geneva - conventions.

A number of multilateral conventions are designed to be applied within a territorial area defined by a given geographic region. These are the "regional agreements or conventions" which purport to establish a unified juridical structure geared to a particular geographic area (usually continent-wide - Asia, Africa, Latin America, Europe) to which they refer.

5.2 Particular conventions

As in other sectors, the fundamental distinction between multilateral agreements and bilateral agreements applies in the sphere of international water resources.

Prom the standpoint of form and substance, multilateral agreements 1/ may be divided into the following groups:

- (a) agreements relating to the general development of an international water resource (river, basin, aquifer);
- (b) agreements relating to specific utilization or development of an international water resource or basin;
- (c) agreements resulting from cooperation between States within the framework of institutions established for the purpose of utilizing international water resources;
- (d) agreements concerning technical and financial assistance between donors, on the one side (States or international organizations and institutions) and co-basin States on the other, for the development of international water resources.

Most agreements now in being concerning international water resources are of the bilateral type. Given the extreme variety of possible forms, it is difficult to arrive at an exhaustive classification. The following may be noted, however:

- (a) Framework agreements. These are usually concluded in respect of contiguous water-courses, i.e. watercourses separating two or more States, and set up a joint commission designed to facilitate exchange of information and consultation;
- (b) agreements for the integrated management of an international basin or water resource;
- (c) agreements for the study of potential uses and development of an international basin or water resource;
- (d) agreements for a specific use (navigation, floating of timber, irrigation, hydro-electric generation, etc.) of an international basin or water resource;
- (e) agreements for the control of the harmful effects of water (flooding, erosion, salination) of an international basin or water resource;
- (f) agreements for the control of water quality (pollution/contamination control) and environmental protection of international waters;

1/ United Nations, Management of International Water Resources: institutional and legal aspects, op. cit.

- (g) technical/financial assistance agreements between donor States or international agencies and basin or riparian States;
- (h) agreements calling for the harmonization of national laws governing water with a view to avoiding discrimination against users of different nationalities. Normally, in such cases, municipal legislation is introduced and referred to as "parallel" legislation; and the preparatory work is often done by a joint institution appointed by the States concerned.

6. Custom in international water resources law

Custom in international law is no different from that evolved in the general theory of law and applied in municipal law. Accordingly, it is widely held that international custom is constituted by:

- (a) constant and uniform conduct by States, together with
- (b) their conviction as to the obligatory nature of such conduct as being in conformity with a juridical norm.

This dualistic notion - usus et (inveterata) opinio juris sive necessitatis - of custom has not been immune from criticism: "opinio juris" may conceivably not be one of necessity; and the time taken for custom to establish itself may not necessarily be a matter of centuries. Again, a number of international rules have come into being in the course of very few years (as the International Court of Justice in its judgement of 20 February 1969 was able to affirm in the cases of the North Sea Continental Shelf between the Federal Republic of Germany and Denmark and the Netherlands). ^{1/}

International custom may be of a general kind, in which case it is binding upon all States, or of a particular kind, binding only upon a given group of States.

The task of determining whether or not there is a customary rule of international validity governing international water resources has ever been a complicated one. While theoretical discussion is out of place here, an examination of the development of, and the trends in, international State practice (notably those discernible in the conventions adopted by States, in the declarations of principle contained in resolutions of international organizations, in international judicial decisions and in the most authoritative and most recent learned opinion) will definitely reveal a basic conformity in the conduct of States. This conformity, despite the variety of concrete situations arising out of the interests of States, can be taken as a proof of the existence of general rules of conduct between them.

As for the content of these customary rules, one may say that there is a clear affirmation of the general rule whereby the rights of the respective States are limited in relation to any shared resources. This was recognized by the Permanent International Court of Justice in its decision concerning the territorial competence of the International Oder Commission, in which it noted that "when consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway

^{1/} of. North Sea Continental Shelf case, International Court of Justice Reports, 1969, PP. 3-ff.

traverses or separates the territory of more than one State, and the possibility of fulfilling the requirements of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the problem has been sought not in the idea of a right of passage in favour of upstream States, but in that of the community of interests of the riparian States. This community of interests in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the uses of the whole course of the river and the exclusion of any preferential privilege of any of the riparian States in relation to the others." ^{1/}

As a corollary to the rule whereby international water resources are deemed to be shared resources, there are the rules (i) prohibiting the management of those resources in such a way as to cause substantial damage to other States, (ii) requiring prior consultation in the case of water use plans, and (iii) of equitable utilization of water resources.

7. Codification of international water resources law

By codification, whether of an entire juridical system, or of any of its component parts, be it in terms of municipal or of international law, is usually understood that determination, by act of authority, of the rules which are to be considered as codified, in such a way that once codified their observance can be demanded of the community in which they are to be applied.

Because there is no legislator as such for the international community, the determination here referred to can only come about through agreement between States, i.e. through a process of negotiation and the concluding of treaties designed to give expression in a set of agreed regulations to a body of rules of international law hitherto unwritten or of a customary nature.

There was a time when the determination of the rules was the province of learned writings on the subject; later, the task was taken over by the States (codifications of the law of war, Pan-American codification, for example); and, with the advent of the United Nations, the process has been institutionalized. The United Nations Charter enjoined upon the General Assembly the task of initiating studies and making recommendations "for the purpose of ... encouraging the progressive development of international law and its codification" (art. 13, 1(a)). In order to carry out this assignment, the General Assembly by resolution 174 (II) of 21 November 1947, appointed a permanent subsidiary organ: the International Law Commission.

According to article 15 of the Statute of the Commission, the expression "progressive development of international law" is to be understood as referring to the preparation of conventions on matters not yet regulated by international law or where such law is not yet sufficiently developed. The term "codification" of international law is to be taken as referring to those attempts to formulate with a greater degree of precision and systematically the rules of international law in fields where a sizeable body of State practice has already been built up.

^{1/} Territorial jurisdiction of the International River Oder Commission, Judgement No. 23, Permanent Court of International Justice, 1929, series I, pp. 5-23.

A codified convention has the same value as an international agreement, since both bind only the contracting States. All the same, the work of codification and the convention in which it finds expression may have a broader value in that they provide an essential point of reference for discerning the general rules governing the sphere of activities concerned.

The United Nations General Assembly, by resolution 2669 (XXV) of 8 December 1970 recommended that the International Law Commission undertake the study of the law of non-navigational uses of international watercourses with a view to the progressive development and codification of this law.

The Commission included this topic in its programme of work for 1971. 1/ Upon invitation by the General Assembly [resolution 2780(XXVI) of 3 December 1971, resolution 2926 (XXVII) of 28 November 1972 and resolution 3071 (XXVIII) of 30 November 1973] to commence work, the Commission first appointed a sub-committee to make a preliminary survey of the subject matter. In 1976, the Commission discussed the latter's findings 2/ on the replies sent in by certain governments to a questionnaire submitted to them by the Secretary-General of the United Nations as to the proposed definitions of the expression "international waterways". At its 1636th meeting, on 17 July 1980, the Commission adopted provisionally the drafts of articles 1 to 5 and "X". 3/

The present Study is not the appropriate place to analyse the work so far accomplished by the International Law Commission but one may note that, given the recognized interdependence among different uses, harmful effects and the quality of water resources within any given hydrological unit, it is practically impossible to consider in isolation any single use, harmful effect or polluting activity. Most probably, therefore, the legal status of international water resources and the régime of their utilization require consolidated treatment encompassing the control of harmful effects and of polluting activities.

When dealing with water resources law, FAO refers to systematic outlines 4/ in which, among others, the following items are considered:

- (a) Beneficial uses, including domestic, municipal, agricultural uses and fishing, hydropower, industrial and mining uses, navigation, and floating, medicinal, thermal and recreational uses;
- (b) harmful effects, including floods, soil erosion and siltation, drainage and sewerage and salination; and
- (c) water use, quality and pollution control, including the waste and misuse of water, recycling and re-use, health preservation, pollution control and environment protection.

1/ Yearbook of the International Law Commission, 1971, Vol.II(Part I), p.370, doc.A/8410/ Rev. 1, paras. 119-122.

2/ Yearbook of the International Law Commission, 1976, Vol.II (Part I), pp. 147-191

3/ Reproduced at p. 57 of this Study.

4/ D.A. Caponera - Outline for the preparation of a national water resources law inventory, Background Paper No. 7, FAO, Rome, 1975; D.A. Caponera - Outline for the preparation of an inventory on the legal and institutional aspects of international water resources basins, Background Paper No. 11, FAO, Rome, 1976.

Given the fundamental differences between hydrologic units, it is unrealistic to draw up detailed model rules designed to regulate all activities making up international water resources management. Nevertheless, general principles and comprehensive framework rules would certainly facilitate the subsequent regulation of each beneficial use, harmful effect and pollution control activities. Such rules would provide in each particular case an agreed policy ensuring a rational management of international water resources within a given hydrological unit or system.

Accordingly, it would appear that the rational management of international water resources, i.e., their integrated conservation, development and utilization, requires the formulation of two categories of rules of international law:

- (a) General rules governing the legal status of international water resources and the régime ensuring their equitable utilization in the light of quantitative and qualitative requirements; and
- (b) special rules governing each particular use, harmful effects and pollution control activity, albeit in such a way that these special rules can be adapted to individual situations.

8. The law-making activity of the European Communities in the field of water resources

A special place, distinct from that of the proceedings of intergovernmental organizations, belongs to the enactments of the European Communities. 1/ This is because these enactments are intended to have effect not only within the sphere proper to the Community institution in question but also within the municipal law of each Member State: they prescribe conduct to be observed by the Member States as such and by their organs, their public and private corporations, individuals and legal persons of the nationality of, or operating in, the territory of one or more of the States making up that Community.

The enactments of the institutions of the European Economic Community are referred to in article 189, paragraph 1 of the Rome Treaty, which provides that "for the achievement of their aims ... the Council and the Commission shall adopt regulations and directives, make decisions and formulate recommendations or opinions." Community directives are binding upon the Member States to which they are addressed as regards the results it is intended to achieve, while the national authorities retain competence for the adoption of the measures they deem best suited to the attainment of those results.

The most important directives of the European Community in the field of water resources are reported in the Second Part of this Study. 2/

1/ Instituted, respectively by the Treaty of Paris, 1951, for the European Coal and Steel Community, and by the Treaty of Rome, 1957, for the European Economic Community and for Euratom.

2/ Reproduced at p. 85-ff of this study.

9. General principles of law as applied to international water resources

Article 38 of the Statute of the International Court of Justice speaks of "the general principles of law recognized by civilized nations" - but treats these as a subsidiary source, to be drawn upon in the absence of international conventions or customary rules.

Despite the fact that, by the letter of that article, the Statute seems to refer to both the general principles of international law and the general principles of national legal systems, it is very likely that only the latter meaning was intended by the Commission that drafted the Statute of the Permanent Court of International Justice at the request of the League of Nations (the Statute was subsequently taken over virtually without change for the International Court of Justice).

A reconstruction of general principles may open up interesting avenues of enquiry for verifying the existence or otherwise of international rules. Such a reconstruction has been made through judicial decisions and in learned writings, which, in striving to affirm limitations on the sovereignty of a State in the case of international water resources, have been based for the most part on:

- (a) the principle that there shall be no abuse of rights;
- (b) the principle of good-neighbourly relations;
- (c) the principles embodied in the water laws of individual States.

As regards the abuse of right principle, whenever a State makes use of its own territory in an arbitrary fashion thereby causing unjustified loss or damage in another State, such action should be deemed to be contrary to international law. Actually, almost all national legislations recognize a principle of this kind. Differences arise, however, regarding the degree and scope of rights acknowledged and on the degree to which abuses are prohibited. The prohibition is absolute in the laws of socialist countries, where frequently the obligation is affirmed of preventing damage to third parties or to the community. It is tempered somewhat by provisos in the laws of other countries, where only intentional or, in any event, culpable harm to others in the exercise of their rights is prohibited.

Under the good-neighbour principle, no State may engage on its own territory in activities likely to have damaging repercussions on the territory of another State. Territorial propinquity is, of course, a spur to greater collaboration.

In almost all national water laws one encounters the rule requiring a balancing of rights between competing users - a principle informing though without marked determining force, the criteria of equitable apportionment and use of waters among the States concerned.

10. Resolutions of intergovernmental organizations containing declarations of principles on international water resources

Reference has been made to the fact that article 38 of the Statute of the International Court of Justice - having been adopted prior to the emergence of the phenomenon - takes no account of the resolutions of intergovernmental organizations containing "declarations of principles" of conduct in relations between States.

Nevertheless, the United Nations General Assembly has also adopted a series of resolutions dealing with matters among which it is legitimate to number international water resources. Examples of these resolutions are: 1803 (XVIII) on permanent sovereignty over natural resources, 14 December 1962; 3281 (XXIX) on the Charter of Economic Rights and Duties of States, 12 December 1971 1/; and 2995 (XXVII) 2/, 3129 (XXVIII) 3/, 33/87 4/ and 34/186 5/, on cooperation in the field of the environment concerning natural resources shared by two or more States. The last set of resolutions was adopted on 15 December 1979. Again, declarations and recommendations of major significance have been adopted at the conclusion of the intergovernmental conferences convened by the United Nations General Assembly. Prominent in the list are the declarations and recommendations of the United Nations Conference on the Human Environment (Stockholm, 1972) 6/, the United Nations Water Conference (Mar de la Plata, 1977) 7/, and the United Nations Conference on Desertification (Nairobi, 9 September 1977) 8/.

Likewise worthy of mention are many resolutions adopted by the United Nations Economic and Social Council by the Economic Commission for Europe 9/, and, outside the United Nations system, by the Organisation for Economic Cooperation and Development (OECD) 10/, by the Organization of the American States (OAS) 11/, by the Council of Europe 12/, and by the Asian-African Legal Consultative Committee 13/.

As regards the value to be attached to these resolutions, etc., especially where "declarations of principles" are concerned, the question has been asked as to whether such pronouncements, given the universal vocation of the United Nations, might not take on the status of fully-fledged legislative, or quasi-legislative, source of international law. Apparently, neither actual state practice nor, even less, the travaux préparatoires leading to those resolutions, etc., warrant an affirmative reply. Nonetheless, these resolutions, it should be noted, have had a notable influence in the processes of formation of the general rules of international law governing the respective subject matters; and they have had the function of crystallizing opinion and state practice whence international customary rules take their origin and develop.

1/ See p. 160-ff of this Study.

2/ See p. 157.

3/ See p. 159.

4/ See p. 175.

5/ See p. 176.

6/ See p. 154-ff.

7/ See p. 164-ff.

8/ See p. 170.

9/ See p. 141-ff.

10/ See p. 181-ff.

11/ See p. 204-ff.

12/ See p. 207-ff.

13/ See p. 201-ff.

11. Contribution of judicial decisions

Judicial decisions considerably contribute to the creation of law of international water resources. These include:

- (a) judgements and advisory opinions of the international courts;
- (b) awards rendered by arbitral tribunals (usually constituted to resolve particular disputes); and
- (c) decisions of national tribunals.

This section examines the contributions made by the Permanent Court of International Justice (so far, no case has been brought before its successor, the International Court of Justice), and arbitral tribunals to the development of international water resources law 1/.

A selected list of decisions of national tribunals appears in the Second Part of this Study 2/.

11.1 Decisions of International Tribunals, including Arbitral Awards

According to article 38(1)(d) of the Statute of the International Court of Justice, the Court is to take into account: "subject to the provisions of article 59, judicial decisions and the teachings of the most highly qualified publicists as subsidiary means for the determination of rules of law".

Article 59 of the statute provides that: "the decision of the Court has no binding force except between the parties and in respect of that particular case". Thus, decisions of international tribunals and arbitral awards have no force of precedent (stare decisis).

In the cases concerning the Diversion of Water from the Meuse 3/ and the Jurisdiction of the European Commission of the Danube between Galatz and Braila 4/, the decisions were not based on rules of customary law, since the Court chose to interpret and base its decisions on particular treaties concluded between the Parties relating to water resources. In the case relating to the territorial jurisdiction of the International Commission of the River Oder 5/, the Court invoked the principle of community of interests of riparian States, which could be considered as one of the customary rules of international law.

1/ These are reported in pp. 221-251 of this Study.

2/ See pp. 255-263.

3/ See: Permanent Court of International Justice,
Series A/B, No. 70, 28 June 1937, reported at p.229-ff of this Study.

4/ See: PCIJ, Series B, No. 14, 8 December 1927, reported at p. 221-ff.

5/ See:PCIJ, Series A, No. 23, 10 September 1929, reported at p. 224-ff

In the United States, in the earliest of the river water cases (*Kansas v. Colorado*), the Supreme Court held that the dispute must be settled on the basis of equality of rights 1/. In other cases, the Supreme Court has applied in interstate water disputes the doctrine of equitable apportionment 2/.

In India, in a dispute between Sind and the Punjab, concerning the use of the waters of the Indus system, the Report of the Indus Commission of 1941 (Rao Commission Report) upheld the rule relating to equitable apportionment 3/.

In the River Krishna dispute, the tribunal, constituted by the Central Government to settle the dispute between the states of Maharashtra, Karnataka and Andhra Pradesh, decided that groundwater is a relevant factor to be taken into consideration for equitable distribution of water.4/

In the Narmada dispute, again, between the states of Madhya Pradesh, Maharashtra and Gujarat, the tribunal decided on the basis of the principle of equitable apportionment 5/.

From a study of some of the national tribunals' decisions it is possible to affirm the principle that neither riparian State has an absolute right to use the waters but is obliged to take into account the needs of neighbouring states.

The question arises as to whether this municipal law (law applied by national tribunals) can be transformed into customary international law concerning international water resources. In order to establish this, one must prove their consistent application in international practice with the opinion ecessitatis, for the only method by which municipal law can be transformed into international law is through its recognition as "general principles of law recognized by civilized nations" (article 38(1)(c) of the Statute of the International Court of Justice). In some countries, constitutions recognize international law as part of the law of the land 6/, but even in such cases decisions of municipal courts do not constitute a source of international law. If in municipal disputes, the court expresses the principle of the equitable apportionment of water (between two states of a federation), it might imply that the solution was based on law and equity (ex aequo et bono). One may only state that in almost every system of municipal water law will be found the principle that one State using water must take into consideration the use of water by other States (this principle is identical with the principle of customary law). As for the principle of apportionment of water, it cannot be established that it has become a general principle of law (United States, Germany and India constituting important but limited examples). States can, however, apply this principle in treaties and agreements concerning common water resources, not out of a sense of legal obligation resulting from a general customary norm but as a matter of practical utility and convenience.

1/ See: 185 US 125. (1902) (on demurrer), 206 US 46 (1907) (merits)

2/ See: *Nebraska v. Wyoming*, 325 US 589 (1945), *New Jersey v. New York*, 283 US 336 (1931), *Connecticut v. Massachusetts*. 282 US 660 (1931).

3/ Report of the Indus (Rao) Commission 10-11 (1942).

4/ See: S. Jain, A. Jacob and S. Jain, op. cit.

5/ Ibid.

6/ See Article 25 of the Constitution of the German Federal Republic.

Amongst arbitral awards, the Faber Case between Germany and Venezuela 1/ may be cited. The umpire, Henry M. Duffield's on the innocent use of rivers can be regarded as yet another principle of international water resources law that has gained currency. Also important in this context is the arbitral award in the Trail Smelter Case 2/, in which the tribunal made the award on the basis of the principle well recognized in international law and municipal law, namely, that no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, where the case is of serious consequence and the injury is established by clear and convincing evidence. In the Lake Lanoux Case 3/, although the tribunal was called upon to interpret a particular treaty, it made the interests of all riparian states as a principle of overriding concern. Adjudications by international tribunals (for example: River Oder Case, Lake Lanoux Case, Zarumilla River Case) reveal a tendency towards construction of the rights of riparian states in terms of the theory of limited sovereignty on international water resources.

11.2 Decisions of national tribunals

The contributions made by national tribunals to the complex but important water resources law has been quite significant. Mention can be made of some decisions of municipal courts and juridical decisions within the municipal legal system of federal states 4/.

In the judgement of the German Staatsgerichtshof in the Donauversinkung Case 5/, the principle of equitable apportionment of water was applied. In a dispute between the cantons of Zurich and Aargau, the Federal Court (Bundesgericht) of Switzerland affirmed the equal rights of the cantons to use the public watercourses 6/. The Italian Court of Cassation in Société Energie Electrique v. Compagnia Imprese Elettriche Liguri, affirmed the principle of a community of ownership of water resources 7/. In the case of Württemberg v. Baden 8/, the Supreme Court of Germany grounded its decision on the principle of equitable utilization.

1/ See: United Nations, Reports of International Arbitral Awards, Vol.X, p.438, reported at p. 238 of this Study.

2/ See: United Nations, Reports of International Arbitral Awards, Vol. III, pp.1965-1982.

3/ See: Revue générale de droit international public, Paris, 1958, tome LXII, pp.79-90.

4/ See: F.J. Berber, ibid., pp.168-194; Dante A. Caponera, Dominique Alhéritière "Principles of international groundwater law" in Natural Resources Journal, vol. 18, July 1978, pp. 608-611; A.M. Garretson, ibid., pp.31-33; S. Jain, A. Jacob & S. Jain, Interstate Water Disputes in India, 1971.

5/ See: Annual Digest, 1927-28, Case No. 86.

6/ Recueil officiel des arrêts du Tribunal fédéral, IV, pp.34-37.

7/ See: Annual Digest, 1938-40, p.120

8/ See: Annual Digest, 1927, No. 86, p.128

Contribution of the most highly qualified publicists to the development of international water resources law

According to article 38(1)(d) of the Statute of the International Court of Justice, the Court is to apply the teachings of the most highly qualified publicists as subsidiary means for the determination of rules of law. It is a well-known fact that learned writings have stimulated and given a fillip to the emergence of new rules of international law.

The international law of water resources has been particularly enriched through the scholarly contributions. Convincing proof of this may be seen in the work of the Institute of International Law, the International Law Association, the Inter-American Bar Association and the International Association for Water Law.

Thus, the Institute of International Law, in its Resolution, adopted during the meeting in Heidelberg (9 September 1887), proposed the International Regulation on River Navigation 1/. Amongst other resolutions adopted by the same Institute, one should mention:

- International Regulation regarding the use of international watercourses for purposes other than navigation (Declaration of Madrid, 20 April 1911) 2/;
- Regulation governing navigation on international rivers (Resolution of Paris, 19 October 1934) 3/;
- Resolution on the use of International non-maritime waters (Salzburg, 11 September 1961) 4/; and
- Resolution on the pollution of rivers and lakes and international law (Athens, 12 September 1979) 5/.

The International Law Association has made a notable contribution to the development of international water resources law through, for example: Statement of Principles (Resolution of Dubrovnik 1956) 6/, Resolution on the use of the waters of international rivers (New York 1958) 7/, Resolution on procedures concerning non-navigational uses and Resolution on pollution control (Hamburg, August 1960) 8/, Helsinki Rules on the uses of the water of international rivers (August, 1966) 9/, Articles on flood control (New York, 1972) 10/, Articles on marine pollution of continental origin (New York, August 1972) 11/, Maintenance and Improvement of Naturally Navigable Waterways separating or traversing several states (New Delhi, January 1975) 12/, Resolution on the Protection of Water Resources and Water Installation in times of armed conflicts (Madrid, 1976) 13/, Resolution on International Water Resources Administration (Madrid, 1976) 14/, Regulation of the flow of water of inter national watercourses (Belgrade, 1980) 15/, Articles on the relationship between water, other natural resources and the environment (Belgrade, 1980) 16/.

<u>1/</u>	See p. 269 of this Study.	<u>9/</u>	See p. 293-ff.
<u>2/</u>	See p. 274.	<u>10/</u>	See p. 301.
<u>3/</u>	See p. 276-ff.	<u>11/</u>	See p. 303.
<u>4/</u>	See p. 280-ff.	<u>12/</u>	See p. 305.
<u>5/</u>	See p. 282-ff	<u>13/</u>	See p. 306.
<u>6/</u>	See p. 287.	<u>14/</u>	See P. 308.
<u>7/</u>	See p. 288.	<u>15/</u>	See p. 312.
<u>8/</u>	See p. 290.	<u>16/</u>	See p. 314.

The Inter-American Bar Association is another important body inasmuch as it has contributed a great deal in this direction, for instance, through its Declaration of Buenos Aires (November 1957) 1/ establishing some general principles applicable to a system of international waters. In the Resolutions of San José (April, 1967) 2/ the Inter-American Bar Association elaborated certain suggestions for the Permanent Committee on the use of international rivers and lakes, and in the Resolution of Caracas (November 1969) 3/ it recommended the unification of laws in American countries on the industrial and agricultural utilization of rivers and lakes. The International Association for Water Laws, in the recommendations of the Caracas Conference on water law and administration (February, 1976) 4/ recommended the elaboration of norms pertaining to the use of international water resources.

Despite the fact that the International Court of Justice has had no occasion to rely on writings of international jurists, they have directly influenced the law of the international water resources, thus helping in the identification of the international customary rules on the subject. Sometimes these bodies have proposed new rules that have found favour in State practice. For example: the Resolution on the use of the waters of international rivers (ILA, New York, 1958) introduced the new concepts of the international drainage basin and the doctrine of equitable utilization. The Helsinki Rules on the uses of the waters of international rivers (August, 1966), while not having received general recognition have been incorporated into several recent international agreements on water resources which are likely to be used as guidelines in future international water resources treaty-making. In the meantime, these rules have already been used in the drafting of basic water resources agreements in the Senegal, Lake Chad, Kagera, Zambia and Lower Mekong basins, and have been the subject of a general declaration of acceptance by some governments, such as the Government of Argentina in 1967.

There are many individual scientists who have also published important studies in the field of international water resources law.

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- 1/ See p.317 of this Study.
2/ See p. 319.
3/ See p. 320.
4/ See p. 323.

SECOND PART

DOCUMENTS RELEVANT TO THE LAW OF INTERNATIONAL WATER RESOURCES

1. INTERNATIONAL CONVENTIONS

1.1 INTERNATIONAL CONVENTIONS OF UNIVERSAL APPLICATION

1.1.1 General Treaty (*)

Vienna, 9 June 1815

(Extract)

...

Article CVIII

The Powers whose states are separated, or crossed by the same navigable river, engage to regulate, by common consent, all that regards its navigation. For this purpose they will name Commissioners, who shall assemble, at latest, within six months after the termination of the Congress, and who shall adopt, as the basis of their proceedings, the principles established by the following Articles.

Article CIX

The navigation of the rivers, along their whole course, referred to in the preceding article, from the point where each of them becomes navigable, to its mouth, shall be entirely free, and shall not, in respect to commerce, be prohibited to any one; it being understood that the regulations established with regard to the police of this navigation, shall be respected; as they will be framed alike for all, and as favourable as possible to the commerce of all nations.

Article CX

The system that shall be established, both for the collection of the duties and for the maintenance of the police, shall be, as nearly as possible, the same along the whole course of the river; and shall also extend, unless particular circumstances prevent it, to those of its branches and junctions, which, in their navigable course, separate or traverse different states.

Article CXI

The duties on navigation shall be regulated in a uniform and settled manner, and with as little reference as possible to the different quality of the merchandize, in order that a minute examination of the cargo may be rendered unnecessary, except with a view to prevent fraud and evasion. The amount of the duties, which shall in no case exceed those now paid, shall be determined by local circumstances, which scarcely allow of a general rule in this respect. The tarif shall, however, be prepared in such a manner as to encourage commerce by facilitating navigation; for which purpose the duties established upon the Rhine, and now in force on that river, may serve as an approximating rule for its construction.

The tarif once settled, no increase shall take place therein, except by the common consent of the states bordering on the rivers; nor shall the navigation be burthened with any other duties than those fixed in the regulation.

(*) Text in: ERTSIET, A collection of treaties and conventions between Great Britain and Foreign Powers. Vol. 1, p.3

Article CXII

The offices for the collection of duties, the number of which shall be reduced as much as possible, shall be determined upon in the above regulation, and no change shall afterwards be made, but by common consent, unless any of the States bordering on the Rivers should wish to diminish the number of those which exclusively belong to the same.

Article CXIII

Each State bordering on the Rivers is to be at the expense of keeping in good repair the towing paths which pass through its territory, and of maintaining the necessary works through the same extent in the channels of the river, in order that no obstacle may be experienced to the navigation.

The intended regulation shall determine the manner in which the States bordering on the Rivers are to participate in these latter works, where the opposite banks belong to different governments.

Article CXIV

There shall no where be established store-house, port, or forced harbour duties. Those already existing shall be preserved for such time only as the States bordering on Rivers (without regard to the local interest of the place or the country where they are established) shall find them necessary or useful to navigation and commerce in general.

Article CXV

The custom-houses belonging to the States bordering on Rivers shall not interfere in the duties of navigation. Regulations shall be established to prevent officers of the customs, in the exercise of their functions, throwing obstacles in the way of the navigation; but care shall be taken, by means of a strict police on the bank, to preclude every attempt of the inhabitants to smuggle goods, through the medium of boatmen.

Article CXVI

Everything expressed in the preceding Articles shall be settled by a general arrangement, in which there shall also be comprised whatever may need an ulterior determination.

The arrangement once settled, shall not be changed, but by and with the consent of all the States bordering on Rivers, and they shall take care to provide for its execution with due regard to circumstances and locality.

...

Convention and Statute on the régime of navigable
waterways of international concern (*)
Barcelona, 20 April 1921

The Convention

Albania, Austria, Belgium, Bolivia, Brazil, Bulgaria, Chile, China, Colombia, Costa-Rica, Cuba, Denmark, the British Empire (with New Zealand and India), Spain, Esthonia, Finland, France, Greece, Guatemala, Haiti, Honduras, Italy, Japan, Latvia, Lithuania, Luxemburg, Norway, Panama, Paraguay, the Netherlands, Persia, Poland, Portugal, Roumania, the Serb-Croat-Slovene State, Sweden, Switzerland, Czecho-Slovakia, Uruguay and Venezuela:

Desirous of carrying further the development as regards the international régime of navigation on international waterways, which began more than a century ago, and which has been solemnly affirmed in numerous treaties,

Considering that General Conventions to which other Powers may accede at a later date constitute the best method of realising the purpose of article 23^e of the Covenant of the League of Nations,

Recognising in particular that a fresh confirmation of the principle of Freedom of Navigation in a Statute elaborated by forty-one States belonging to the different portions of the world constitutes a new and significant stage towards the establishment of cooperation among States without in any way prejudicing their rights of sovereignty or authority,

(*) Text in: League of Nations, Treaty Series, Vol. VII, p. 37

The Convention and Statute were adopted by the First General Conference on Communications and Transit by 29 votes to 1, with 2 abstentions (see League of Nations, Barcelona Conference 1921, Verbatim Records and Texts relating to the Convention on the régime of navigable waterways of international concern, 1921, p. 373). The Convention came into force on 31 October 1922, the ninetieth day after receipt by the Secretary-General of the League of Nations of the fifth ratification, in conformity with article 6.

Forty-two States were represented at the Barcelona Conference: Albania, Austria, Belgium, Bolivia, Brazil, British Empire, New Zealand, India, Bulgaria, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, Esthonia, Finland, France, Greece, Guatemala, Haiti, Honduras, Italy, Japan, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Panama, Paraguay, Persia, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Uruguay, Venezuela and Yugoslavia.

Two States were represented by observers: Germany and Hungary.

Twenty-nine States signed the Convention or acceded to it, their signatures or accessions being subject to ratification: Albania, Austria, Belgium, Bolivia, British Empire, New Zealand, India, Bulgaria, Chile, China, Colombia, Czechoslovakia, Denmark, Esthonia, Finland, France, Greece, Guatemala, Italy, Lithuania, Luxembourg, Norway, Panama, Peru, Poland, Portugal, Spain, Sweden and Uruguay. The British Empire signed subject to the declaration inserted in the Procès-verbal of the meeting of 19 April 1921 as to the British Dominions not represented at the Barcelona Conference.

(continues on next page)

Having accepted the invitation of the League of Nations to take part in a Conference at Barcelona which met on March 10th, 1921, and having taken note of the final act of such Conference.

Anxious to bring into force forthwith the provisions of the Statute relating to the Régime of Navigable Waterways of International Concern which has there been adopted,

Wishing to conclude a Convention for this purpose the High Contracting Parties have appointed as their plenipotentiaries:

Who, after communicating their full powers found in good and due form, have agreed as follows:

Article 1

The High Contracting Parties declare that they accept the Statute on the Régime of Navigable Waterways of International Concern annexed hereto, adopted by the Barcelona Conference on April 19th, 1921.

This Statute will be deemed to constitute an integral part of the present Convention. Consequently, they hereby declare that they accept the obligations and undertakings of the said Statute in conformity with the terms and in accordance with the conditions set out therein.

Article 2

The present Convention does not in any way affect the rights and obligations arising out of the provisions of the Treaty of Peace signed at Versailles on June 28th, 1919, or out of the provisions of the other corresponding Treaties, in so far as they concern the powers which have signed, or which benefit by, such Treaties.

Article 3

The present Convention, of which the French and English texts are both authentic, shall bear this day's date and shall be open for signature until December 1st, 1921.

(*) - continued from p. 31:

Twenty States ratified the Convention or finally acceded thereto: Albania on 8 October 1921; Austria on 15 November 1923; Bulgaria on 11 July 1922; the British Empire (including Newfoundland) with New Zealand and India on 2 August 1922 (for the Federated Malay States and the Unfederated Malay States on 22 August 1923; for the Mandated Territory of Palestine on 28 January 1924); Italy on 5 August 1922; Denmark on 13 November 1922; Thailand on 29 November 1922; Finland on 29 January 1923; Romania on 9 May 1924; Norway on 4 September 1923; Czechoslovakia on 8 September 1924; France on 31 December 1926; Sweden on 15 September 1927; Greece on 3 January 1928; Chile on 19 March 1928; Hungary on 18 May 1928; Luxembourg on 19 March 1930; Turkey on 27 June 1933; Malta on 13 May 1966; Nigeria on 3 November 1967; Swaziland on 16 October 1970; Democratic Kampuchea on 12 April 1971; Fiji on 15 March 1972; and Morocco on 10 October 1972.

One State denounced the Convention: India (to take effect on 26 March 1957).

One State withdrew from the Convention: Malawi (to take effect on 21 March 1969)

Article 4

The present Convention is subject to ratification. The instruments of ratification shall be transmitted to the Secretary-General of the League of Nations, who will notify the receipt of them to the other Members of the League and to States admitted to sign the Convention. The instruments of ratification shall be deposited in the archives of the secretariat.

In order to comply with the provisions of article 18 of the Covenant of the League of Nations, the Secretary-General will register the present Convention upon the deposit of the first ratification.

Article 5

Members of the League of Nations which have not signed the present Convention before December 1st, 1921, may accede to it.

The same applies to States not Members of the League to which the Council of the League may decide officially to communicate the present Convention.

Accession will be notified to the Secretary-General of the League, who will inform all Powers concerned of the accession and of the date on which it was notified.

Article 6

The present Convention will not come into force until it has been ratified by five Powers. The date of its coming into force shall be the ninetieth day after the receipt by the Secretary-General of the League of Nations of the fifth ratification. Thereafter the present convention will take effect in the case of each party ninety days after the receipt of its ratification or of the notification of its accession.

Upon the coming into force of the present Convention, the Secretary-General will address a certified copy of it to the Powers not Members of the League which are bound under the Treaties of Peace to accede to it.

Article 7

A special record shall be kept by the Secretary-General of the League of Nations, showing which of the parties have signed, ratified, acceded to or denounced the present Convention. This record shall be open to the Members of the League at all times; it shall be published as often as possible in accordance with the directions of the council.

Article 8

Subject to the provisions of article 2 of the present Convention, the latter may be denounced by any party thereto after the expiration of five years from the date when it came into force in respect of that party. Denunciation shall be effected by notification in writing addressed to the Secretary-General of the League of Nations. Copies of such notification shall be transmitted forthwith by him to all the other parties, informing them of the date on which it was received. The denunciation shall take effect one year after the date on which it was notified to the Secretary-General, and shall operate only in respect of the notifying Power. It shall not, in the absence of an agreement to the contrary, prejudice engagements entered into before the denunciation relating to a programme of works.

Article 9

A request for the revision of the present Convention may be made at any time by one-third of the High Contracting Parties.

In faith whereof Done at Barcelona, on April 20th, 1921.

1.1.2.2 The Statute

Article 1

In the application of the Statute, the following are declared to be navigable waterways of international concern:

1. All parts which are naturally navigable to and from the sea of a waterway which in its course, naturally navigable to and from the sea, separates or traverses different States, and also any part of any other waterway naturally navigable to and from the sea, which connects with the sea a waterway naturally navigable which separates or traverses different States.

It is understood that:

- a) Transshipment from one vessel to another is not excluded by the words "navigable to and from the sea";
- b) Any natural waterway or part of a natural waterway is termed "naturally navigable" if now used for ordinary commercial navigation, or capable by reason of its natural conditions of being so used; by "ordinary commercial navigation" is to be understood navigation which, in view of the economic condition of the riparian countries, is commercial and normally practicable;
- c) Tributaries are to be considered as separate waterways;
- d) Lateral canals constructed in order to remedy the defects of a waterway included in the above definition are assimilated thereto;
- e) The different States separated or traversed by a navigable waterway of international concern, including its tributaries of international concern, are deemed to be "riparian States".

2. Waterways, or parts of waterways, whether natural or artificial, expressly declared to be placed under the regime of the General Convention regarding navigable waterways of international concern either in unilateral Acts of the States under whose sovereignty or authority these waterways or parts of waterways are situated, or in agreements made with the consent, in particular, of such States.

Article 2

For the purpose of Articles 5, 10, 12 and 14 of this Statute, the following shall form a special category of navigable waterways of international concern:

Navigable waterways for which there are international Commissions upon which non-riparian States are represented;

Navigable waterways which may hereafter be placed in this category, either in pursuance of unilateral Acts of the States under whose sovereignty or authority they are situated, or in pursuance of agreements made with the consent, in particular, of such States.

Article 3

Subject to the provisions contained in Articles 5 and 17, each of the Contracting States shall accord free exercise of navigation to the vessels flying the flag of any one of the other Contracting States on those parts of navigable waterways specified above which may be situated under its sovereignty or authority.

Article 4

In the exercise of navigation referred to above, the nations, property and flags of all Contracting States shall be treated in all respects on a footing of perfect equality. No distinction shall be made between the nationals, the property and the flags of the different riparian States, including the riparian State exercising sovereignty or authority over the portion of the navigable waterway in question; similarly, no distinction shall be made between the nationals, the property and the flags of riparian and non-riparian States. It is understood, in consequence, that no exclusive right of navigation shall be accorded on such navigable waterways to companies or to private persons.

No distinctions shall be made in the said exercise, by reason of the point of departure, of destination or of the direction of the traffic.

Article 5

As an exception to the two preceding Articles, and in the absence of any Convention or obligation to the contrary:

1. A riparian State has the right of reserving for its own flag the transport of passengers and goods loaded at one port situated under its sovereignty or authority and unloaded at another port also situated under its sovereignty or authority. A State which does not reserve the abovementioned transport to its own flag may, nevertheless, refuse the benefit of equality of treatment with regard to such transport to a coriparian which does reserve it.

On the navigable waterways referred to in Article 2, the Act of Navigation shall only allow to riparian States the right of reserving the local transport of passengers or of goods which are of national origin or are nationalized. In every case, however, in which greater freedom of navigation may have been already established, in a previous Act of Navigation, this freedom shall not be reduced.

2. When a natural system of navigable waterways of international concern which does not include waterways of the kind referred to in Article 2 separates or traverses two States only, the latter have the right to reserve to their flags by mutual agreement the transport of passengers and goods loaded at one port of this system and unloaded at another port of the same system, unless this transport takes place between two ports which are not situated under the sovereignty or authority of the same State in the course of a voyage, effected without transshipment on the territory of either of the said States, involving a sea-passage over a navigable waterway of international concern which does not belong to the said system.

Article 6

Each of the Contracting States maintains its existing right, on the navigable waterways or parts of navigable waterways referred to in Article 1 and situated under its sovereignty or authority, to enact the stipulations and to take the measures necessary for policing the territory and for applying the laws and regulations relating to customs, public health, precautions against the diseases of animals and plants, emigration or immigration, and to the import or export of prohibited goods, it being understood that such stipulations and measures must be reasonable, must be applied on a footing of absolute equality between the nationals, property and flags of any one of the Contracting States, including the State which is their author, and must not without good reason impede the freedom of navigation.

Article 7

No dues of any kind may be levied anywhere on the course or at the mouth of a navigable waterway of international concern, other than dues in the nature of payment for services rendered and intended solely to cover in an equitable manner the expenses of maintaining and improving the navigability of the waterway and its approaches, or to meet expenditure incurred in the interest of navigation. These dues shall be fixed in accordance with such expenses, and the tariff of dues shall be posted in the ports. These dues shall be levied in such a manner as to render unnecessary a detailed examination of the cargo, except in cases of suspected fraud or infringement of regulations, and so as to facilitate international traffic as much as possible, both as regards their rates and the method of their application.

Article 8

The transit of vessels and of passengers and goods on navigable waterways of international concern shall, so far as customs formalities are concerned, be governed by the conditions laid down in the Statute of Barcelona on Freedom of Transit. Whenever transit takes place without transshipment the following additional provisions shall be applicable:

- a) When both banks of a waterway of international concern are within one and the same State, the customs formalities imposed on goods in transit after they have been declared and subjected to a summary inspection shall be limited to placing them under seal or padlock or in the custody of customs officers;
- b) When a navigable waterway of international concern forms the frontier between two States, vessels, passengers and goods in transit shall while "en route" be exempt from any customs formality, except in cases in which there are valid reasons of a practical character for carrying out customs formalities at a place on the part of the river which forms the frontier, and this can be done without interfering with navigation facilities.

The transit of vessels and passengers, as well as the transit of goods without transshipment, on navigable waterways of international concern, must not give rise to the levying of any duties whatsoever, whether prohibited by the Statute of Barcelona on Freedom of Transit or authorized by Article 3 of that Statute. It is nevertheless understood that vessels in transit may be made responsible for the board and lodging of any customs officers who are strictly required for supervision.

Article 9

Subject to the provisions of Articles 5 and 17, the nationals, property and flags of all the Contracting States shall, in all ports situated on a navigable waterway of international concern, enjoy, in all that concerns the use of the port, including port dues and charges, a treatment equal to that accorded to the nationals, property and flag of the riparian State under whose sovereignty or authority the port is situated. It is understood that the property to which the present paragraph relates is property originating in, coming from or destined for, one or other of the Contracting States.

The equipment of ports situated on a navigable waterway of international concern and the facilities afforded in these ports to navigation, must not be withheld from public use to an extent beyond what is reasonable and fully compatible with the free exercise of navigation.

In the application of customs or other analogous duties, local octroi or consumption duties, or incidental charges, levied on the occasion of the importation or exportation of goods through the aforesaid ports, no difference shall be made by reason of the flag of the vessel on which the transport has been or is to be accomplished, whether this flag be the national flag or that of any of the Contracting States.

The State under whose sovereignty or authority a port is situated may withdraw the benefits of the preceding paragraph from any vessel if it is proved that the owner of the vessel discriminates systematically against the nationals of that State, including companies controlled by such nationals.

In the absence of special circumstances justifying an exception on the ground of economic necessities, the customs duties must not be higher than those levied on the other customs frontiers of the State interested, on goods of the same kind, source and destination. All facilities accorded by the Contracting States to the importation or exportation of goods by other land or water routes, or in other ports, shall be equally accorded to importation or exportation under the same conditions over the navigable waterway and through the ports referred to above.

Article 10

1. Each riparian State is bound, on the one hand, to refrain from all measures likely to prejudice the navigability of the waterway, or to reduce the facilities for navigation, and, on the other hand, to take as rapidly as possible all necessary steps for removing any obstacles and dangers which may occur to navigation.

2. If such navigation necessitates regular upkeep of the waterway, each of the riparian States is bound as towards the others to take such steps and to execute such works on its territory as are necessary for the purpose as quickly as possible, taking account at all times of the conditions of navigation, as well as of the economic state of the regions served by the navigable waterway.

In the absence of an agreement to the contrary, any riparian State will have the right, on valid reason being shown, to demand from the other riparians a reasonable contribution towards the cost of upkeep.

3. In the absence of legitimate grounds for opposition by one of the riparian States, including the State territorially interested, based either on the actual conditions of navigability in its territory, or on other interests such as *inter alia*, the maintenance of the normal water-conditions, requirements for irrigation, the use of water-power, or the necessity for constructing other and more advantageous ways of communication, a riparian State may not refuse to carry out works necessary for the improvement of the navigability which are asked for by another riparian State, if the latter State offers to pay the cost of the works and a fair share of the additional cost of upkeep. It is understood, however, that such works cannot be undertaken so long as the State of the territory on which they are to be carried out objects on the ground of vital interests.

4. In the absence of any agreement to the contrary, a State which is obliged to carry out works of upkeep is entitled to free itself from the obligation, if, with the consent of all the co-riparian States, one or more of them agree to carry out the works instead of it; as regards works for improvement, a State which is obliged to carry them out shall be freed from the obligation, if it authorizes the State which made the request to carry them out instead of it. The carrying out of works by States other than the State territorially interested, or the sharing by such States in the cost of works, shall be so arranged as not to prejudice the rights of the State territorially interested as regards the supervision and administrative control over the works, or its sovereignty and authority over the navigable waterway.

5. On the waterways referred to in Article 2, the provisions of the present Article are to be applied subject to the terms of the Treaties, Conventions, or Navigation Acts which determine the powers and responsibilities of the International Commission in respect of works.

Subject to any special provisions in the said Treaties, Conventions, or Navigation Acts, which exist or may be concluded.

- a) Decisions in regard to works will be made by the Commission;
- b) The settlement, under the conditions laid down in Article 22 below, of any dispute which may arise as a result of these decisions, may always be demanded on the grounds that these decisions are ultra vires, or that they infringe international conventions governing navigable waterways.

A request for a settlement under the aforesaid conditions based on any other grounds can only be put forward by the State which is territorially interested.

The decisions of this Commission shall be in conformity with the provisions of the present Article.

6. Notwithstanding the provisions of paragraph 1 of this Article, a riparian State may, in the absence of any agreement to the contrary, close a waterway wholly or in part to navigation, with the consent of all the riparian States or of all the States represented on the International Commission in the case of navigable waterways referred to in Article 2.

As an exceptional case one of the riparian States of a navigable waterway of international concern not referred to in Article 2 may close the waterway to navigation, if the navigation on it is of very small importance, and if the State in question can justify its action on the ground of an economic interest clearly greater than that of navigation. In this case the closing to navigation may only take place after a year's notice and subject to an appeal on the part of any other riparian State under the conditions laid down in Article 22. If necessary, the judgement shall prescribe the conditions under which the closing to navigation may be carried into effect.

7. Should access to the sea be afforded by a navigable waterway of international interest through several branches, all of which are situated in the territory of one and the same State, the provisions of paragraphs 1, 2 and 3 of this Article shall apply only to the principal branches deemed necessary for providing free access to the sea.

Article 11

If on a waterway of international concern one or more of the riparian States are not Parties to this Statute, the financial obligations undertaken by each of the Contracting States in pursuance of Article 10 shall not exceed those to which they would have been subject if all the riparian States had been Parties.

Article 12

In the absence of contrary stipulations contained in a special Agreement or Treaty, for example, existing Conventions concerning customs and police measures and sanitary precautions, the administration of navigable waterways of international concern is exercised by each of the riparian States under whose sovereignty or authority the navigable waterway is situated. Each of such riparian States has, inter alia, the power and duty of publishing regulations for the navigation of such waterway and of seeing to their execution. These regulations must be framed and applied in such a way as to facilitate the free exercise of navigation under the conditions laid down in this Statute.

The rules of procedure dealing with such matters as ascertaining, prosecuting and punishing navigation offences must be such as to promote as speedy a settlement as possible.

Nevertheless, the Contracting States recognize that it is highly desirable that the riparian States should come to an understanding with regard to the administration of the navigable waterway and, in particular, with regard to the adoption of navigation regulations of as uniform a character throughout the whole course of such navigable waterway as the diversity of local circumstances permits.

Public services of towage or other means of haulage may be established in the form of monopolies for the purpose of facilitating the exercise of navigation, subject to the unanimous agreement of the riparian States or the States represented on the International Commission in the case of navigable waterways referred to in Article 2.

Article 13

Treaties, conventions or agreements in force relating to navigable waterways, concluded by the Contracting States before the coming into force of this Statute, are not, as a consequence of its coming into force, abrogated so far as concerns the States signatories to those treaties.

Nevertheless, the Contracting States undertake not to apply among themselves any provisions of such treaties, conventions or agreements which may conflict with the rules of the present Statute.

Article 14

If any of the special agreements or treaties referred to in Article 12 has entrusted or shall hereafter entrust certain functions to an international Commission which includes representatives of States other than the riparian States, it shall be the duty of such Commission, subject to the provisions of Article 10, to have exclusive regard to the interests of navigation, and it shall be deemed to be one of the organizations referred to in Article 24 of the Covenant of the League of Nations. Consequently, it will exchange all useful information directly with the League and its organizations, and will submit an annual report to the League.

The powers and duties of the Commission referred to in the preceding paragraph shall be laid down in the Act of Navigation of each navigable waterway and shall at least include the following:

- a) The Commission shall be entitled to draw up such navigation regulations as it thinks necessary itself to draw up, and all other navigation regulations shall be communicated to it;
- b) It shall indicate to the riparian States the action advisable for the up-keep of works and the maintenance of navigability;
- c) It shall be furnished by each of the riparian States with official information as to all schemes for the improvement of the waterway;
- d) It shall be entitled, in cases in which the Act of Navigation does not include a special regulation with regard to the levying of dues, to approve of the levying of such dues and charges in accordance with the provisions of Article 7 of this Statute.

Article 15

This Statute does not prescribe the rights and duties of belligerents and neutral in time of war. The Statute shall, however, continue in force in time of war so far as such rights and duties permit.

Article 16

This Statute does not impose upon a Contracting State any obligation conflicting with its rights and duties as a Member of the League of Nations.

Article 17

In the absence of any agreement to the contrary to which the State territorially interested is or may be a Party, this Statute has no reference to the navigation of vessels of war or of vessels performing police or administrative functions, or, in general, exercising any kind of public authority.

Article 18

Each of the Contracting States undertakes not to grant, either by agreement or in any other way, to a non-Contracting State treatment with regard to navigation over a navigable waterway of international concern which, as between Contracting States, would be contrary to the provisions of this Statute.

Article 19

The measures of a general or particular character which a Contracting State is obliged to take in case of an emergency affecting the safety of the State or the vital interests of the country may, in exceptional cases and for a period as short as possible, involve a deviation from the provisions of the above Articles; it being understood that the principle of the freedom of navigation, and especially communication between the riparian States and the sea, must be maintained to the utmost possible extent.

Article 20

This Statute does not entail in any way the withdrawal of existing greater facilities granted to the free exercise of navigation on any navigable waterway of international concern, under conditions consistent with the principle of equality laid down in this Statute, as regards the nationals, the goods and the flags of all the Contracting States; nor does it entail the prohibition of such grant of greater facilities in the future.

Article 21

In conformity with Article 23 (e) of the Covenant of the League of Nations, any Contracting State which can establish a good case against the application of any provisions of this Statute in some or all of its territory on the ground of the grave economic situation arising out of the acts of devastation perpetrated on its soil during the war 1914-1918, shall be deemed to be relieved temporarily of the obligations arising from the application of such provision, it being understood that the principle of freedom of navigation must be observed as far as possible.

Article 22

Without prejudice to the provisions of paragraph 5 of Article 10, any dispute between States as to the interpretation or application of this Statute which is not settled directly between them shall be brought before the Permanent Court of International Justice, unless under a special agreement or a general arbitration provision steps are taken for the settlement of the dispute by arbitration or some other means.

Proceedings are opened in the manner laid down in Article 40 of the Statute of the Permanent Court of International Justice.

In order to settle such disputes, however, in a friendly way as far as possible, the Contracting States undertake before resorting to any judicial proceedings and with-out prejudice to the powers and right of action of the Council and of the Assembly to submit such disputes for an opinion to any body established by the League of Nations as the advisory and technical organization of the Members of the League in matters of communications and transit. In urgent cases a preliminary opinion may recommend temporary measures intended in particular to restore the facilities for free navigation which existed before the act or occurrence which gave rise to the dispute.

Article 23

A navigable waterway shall not be considered as of international concern on the sole ground that it traverses or delimits zones or enclaves, the extent and population of which are small as compared with those of the territories which it traverses, and which form detached portions or establishments belonging to a State other than that to which the said river belongs, with this exception, throughout its navigable course.

Article 24

This Statute shall not be applicable to a navigable waterway of international concern which has only two riparian States, and which separates, for a considerable distance, a Contracting State from a non-Contracting State whose Government is not recognized by the former at the time of the signing of this Statute, until an agreement has been concluded between them establishing, for the waterway in question, an administrative and customs regime which affords suitable safeguards to the Contracting State.

Article 25

It is understood that this Statute must not be interpreted as regulating in any way rights and obligations inter se of territories forming part, or placed under the protection, of the same sovereign State, whether or not these territories are individually Members of the League of Nations.

1.1.2.3 Additional Protocol (*)

The States signatories of the Convention on the Régime of Navigable Waterways of International Concern, signed at Barcelona on April 20th, 1921, whose duly authorised representatives have affixed their signatures to the present Protocol, hereby declare that, in addition to the Freedom of Communications which they have conceded by virtue of the Convention on Navigable Waterways considered as of international concern, they further concede, on condition of reciprocity, without prejudice to their rights of sovereignty, and in time of peace,

- (a) on all navigable waterways,
- (b) on all naturally navigable waterways,

which are placed under their sovereignty or authority, and which, not being considered as of international concern, are accessible to ordinary commercial navigation to and from the sea, and also in all the ports situated on these waterways, perfect equality of treatment for the flags of any State signatory of this Protocol as regards the transport of imports and exports without transshipment.

At the time of signing, the signatory States must declare whether they accept the obligation to the full extent indicated under paragraph a) above, or only to the more limited extent defined by paragraph b).

It is understood that States which have accepted paragraph a) are not bound as regards those which have accepted paragraph b), except under the conditions resulting from the latter paragraph.

(*) Ratifications or definitive accessions:

ALBANIA	- Oct. 8, 1921	Federated Malay States: Peak	
AUSTRIA Paragraph	(a) Nov. 15, 1923	Selangor, Negri Sembilan and	
BRITISH EMPIRE		Pahang	-a) Aug. 22, 1923
United Kingdom	- (a) Aug. 2, 1922	Non-Fed. Malay States: Brunei,	
Newfoundland	- (a) Aug. 2, 1922	Jahore, Kedah, Perlis, Kelan	
Nyasaland Protectorate +		ton + Trengganu	- (a) Aug. 2, 1923
Tanganyika Territory	- (b) Aug. 2, 1922	Palestome	- (a) Jan. 28, 1924
Bahamas, Barbados, British		Bermuda	- (a) Dec. 27, 1928
Guiana, British Solomon		New Zealand	- (a) Aug. 2, 1922
Islands, Ceylon, Cyprus,		India	- (a) Aug. 2, 1922
Fiji, Gambia colon + Port.,		CHILE paragraph	(b) Mar. 19, 1928
Gibraltar, Gillert + Ellic		CZECHOSLOVAKIA	- (b) Sep. 8, 1924
Island Colony, Gold Coast (Ashanti + Northern Terr.s),		DENMARK	- (a) Nov. 13, 1922
Hong-Kong, Jamaica (incl.		FIJI	- (a) Nov. 13, 1922
Turks + Caicos Islands and		FINLAND	- (b) Mar. 15, 1927
Caiman Islands), Kenya		GREECE	- Jan. 3, 1928
Lony + Port., Leeward Isl.s,		HUNGARY	- (a) May 18, 1928
Malta; Mauritius, Nigeria		LUXEMBOURG	- (a) Mar. 19, 1930
Colony + Prot., Seychelles,		MALTA	- (a) May 13, 1966
Sierra Leone Colony + Prot.,		MOROCCO "on all navigable waterways"	(a) Oct. 10, 1972
St. Helena, Straits Settlements, Tonga Islands, Trinidad + Tobago, Uganda Prot.,		NIGERIA "on condition of reciprocity on all navigable water ways"	- (a) Nov. 3, 1967
Windward Isls. (Grenada, St. Lucia + St. Vincent), Zanzibar	- (a) Aug. 2, 1922		

It is also understood that those States which possess a large number of ports (situated on navigable waterways) which have hitherto remained closed to international commerce, may, at the time of the signing of the present Protocol, exclude from its application one or more of the navigable waterways referred to above.

The signatory States may declare that their acceptance of the present Protocol does not include any or all of the colonies, overseas possessions or protectorates under their sovereignty or authority, and they may subsequently adhere separately on behalf of any colony, overseas possession or protectorate so excluded in their declaration. They may also denounce the Protocol separately in accordance with its provisions, in respect of any colony, overseas possession or protectorate under their sovereignty or authority.

The present Protocol shall be ratified. Each Power shall send its ratification to the Secretary-General of the League of Nations, who shall cause notice of such ratification to be given to all the other signatory Powers; these ratifications shall be deposited in the archives of the Secretariat of the League of Nations.

The present Protocol shall remain open for the signature or adherence of the States which have signed the above-mentioned Convention or have given their adherence to it.

It shall come into force after the Secretary-General of the League of Nations has received the ratification of two States; provided, however, that the said Convention has come into force by that time.

It may be denounced at any time after the expiration of a period of two years dating from the time of the reception by the Secretary-General of the League of Nations of the ratification of the denouncing State. The denunciation shall not take effect until one year after it has been received by the Secretary-General of the League of Nations. A denunciation of the Convention on the Régime of Navigable Waterways of International Concern shall be considered as including a denunciation of the present Protocol.

Done at Barcelona, the twentieth day of April, nineteen hundred and twenty-one, in a single copy, of which the French and English texts shall be authentic.

(*) - continued from p. 42:

Ratifications or definitive accessions:

NORWAY paragraph	(a) Sep. 4, 1923	SWEDEN paragraph	(b) Sep. 15, 1927
ROMANIA – is unable to accept any restriction of her liberty		THAILAND	- (B) Nov. 29, 1922
In administrative Matters on the waterways Which are not of international Concern, that is to Say, on purely national Rivers, while at the same Time accepting the principles Of liberty in accord.		TURKEY	- (a) June 27, 1933
With the laws of the country	-May 9, 1924	INDIA denounced the Additional Protocol to take effect on 26 March 1957.	

1.1.2.4 Declaration recognising the Right to a Flag of States having no Sea-coast (*)

The undersigned, duly authorised for the purpose, declare that the States which they represent recognise the flag flown by the vessels of any State having no sea-coast which are registered at some one specified place situated in its territory; such place shall serve as the port of registry of such vessels.

Barcelona, April the 20th, 1921, done in a single copy of which the English and French texts shall be authentic.

(*) Ratifications or definitive accessions:

ALBANIA - Oct. 8, 1921; AUSTRIA - July 10, 1924; BELGIUM - May 16, 1927; BRITISH EMPIRE, including Newfoundland - Oct. 9, 1922; CANADA - Oct. 31, 1922; AUSTRALIA - Oct. 31, 1922; NEW ZEALAND - Oct. 9, 1922; UNION OF SOUTH AFRICA - Oct. 31, 1922; INDIA - Oct. 9, 1922; BULGARIA - July 11, 1922; CHILE - March 19, 1928; CZECHOSLOVAKIA - Sept. 8, 1924; DENMARK - Nov. 13, 1922; *ESTONIA; FIJI - March 15, 1972; FINLAND - Sept. 22, 1922; *FRANCE; GERMAN DEMOCRATIC REPUBLIC; GERMANY - Nov. 10, 1931; GREECE - Jan. 3, 1928; HUNGARY - May 18, 1928; IRAQ - April 17, 1935; *ITALY; JAPAN - Feb. 20, 1924; LATVIA - Feb. 12, 1924; LESOTHO - Oct. 23, 1973; MALAWI - June 11, 1969; MALTA - Sept. 21, 1966; MAURITIUS - July 18, 1969; MEXICO - Oct. 17, 1935; MONGOLIA - Oct. 15, 1976; *THE NETHERLANDS (incl. Netherlands Indies, Surinam and Curacao) - Nov. 28, 1921; NORWAY - Sept. 4, 1923; POLAND - Dec. 20, 1924; ROMANIA - Feb. 22, 1923; RWANDA - Feb. 10, 1965; SPAIN - July 1, 1929; SWAZILAND - Oct. 16, 1970; SWEDEN - Jan. 9, 1925; *SWITZERLAND; THAILAND - Nov. 29, 1922; TURKEY - June 27, 1933; UNION OF SOVIET SOCIALIST REPUBLICS - May 16, 1935; YUGOSLAVIA - May 7, 1930.

Asterisked States accept Declaration as binding without ratification.

In a notification received on 31 Jan. 1974, the Government of the German Democratic Republic stated that the German Democratic Republic had declared the reapplication of the Convention as of 4 June 1958. In this connexion, the Secretary-General received, on 23 February 1976, the following communication from the Government of the Federal Republic of Germany:

"With reference to the communication by the German Dem. Rep. of 31 Jan. 1974, concerning the application, as from 4 June 1958, of the Declaration of 20 April 1921 recognising the Right to a Flag of States having no Sea-coast, the Government of the Federal Republic of Germany declares that in the relation between the Fed. Rep. of Germany and the German Dem. Rep. the declaration of application has no retroactive effect beyond 21 June 1973."

Subsequently, in a communication received on 17 June 1976, the Government of the German Dem. Rep. declared:

"The Government of the German Dem. Rep. takes the view that in accordance with the applicable rules of international law and the international practice of States the regulations on the reapplication of agreements concluded under international law are an internal affair of the successor State concerned. Accordingly, the German Dem. Rep. was entitled to determine the date of reapplication of the Declaration recognising the Right to a Flag of States having no Sea-coast, April 20th, 1921 to which it established its status as a party by way of succession."

1.1.3 Convention relating to the Development of Hydraulic Power
affecting more than one State and Protocol of Signature (*)

Geneva, 9 December 1923

1.1.3.1 The Convention

Austria, Belgium, The British Empire (with New Zealand), Bulgaria, Chile, Denmark, The Free City of Danzig, France, Greece, Hungary, Italy, Lithuania, Poland, Kingdom of the Serbs, Croats and Slovenes, Siam and Uruguay:

Desirous of promoting international agreement for the purpose of facilitating the exploitation and increasing the yield of hydraulic power;

Having accepted the invitation of the League of Nations to take part in the Conference which met at Geneva on November 15, 1923;

Wishing to conclude a General Convention for the above purpose;

The High Contracting Parties have appointed as their plenipotentiaries:

who, after communicating their full powers, found in good and due form, have agreed as follows:

(*) Text in: League of Nations, Treaty Series, Vol. XXXVI, p. 77

The Convention was adopted by the Second Conference on Communications and Transit by 24 votes to 3, with 6 abstentions (see League of Nations, Second General Conference on Communications and Transit, Records and Texts, 1921 (C.30.M.16.1924.VIII), annex I, p.76.)

The Convention came into force on 30 June 1925, the ninetieth day after the receipt by the Secretary-General of the League of Nations of the third ratification, in conformity with article 18.

Thirty-nine States were represented at the Conference; one State was represented by an observer (USA). Seventeen States signed the Convention (Austria, Belgium, British Empire, New Zealand, Bulgaria, Chile, Denmark, Free City of Danzig, France, Greece, Hungary, Italy, Lithuania, Poland, Thailand, Uruguay and Yugoslavia).

Eleven States ratified the Convention or finally acceded thereto: Thailand on Jan.9, 1925; New Zealand (incl. the Mandated Terr. of Western Samoa) on April 1, 1925; British Empire on April 1, 1925 (for Southern Rhodesia and Newfoundland on April 28, 1925; for the following Colonies, Protectorates and Mandated Territories: British Guiana, British Honduras, Brunei, Federated Malay States, Gambia, Gold Coast, Hong Kong, Kenya, Unfederated Malay States, Nigeria, Northern Rhodesia, Nyasaland, Palestine, Sierra Leone, Straits Settlements and Tanganyika Territory on Sept. 22, 1925; and for Uganda Protectorate on Jan. 12, 1927); Denmark on April 27, 1926; Austria on Jan. 20, 1927; Greece on March 14, 1929; Hungary on March 20, 1933; Free City of Danzig on May 13, 1934; Panama on July 7, 1934; Iraq on Jan. 28, 1936; Egypt on Jan. 29, 1940 (see League of Nations, Treaty Series, Vols. XXXVI, p. 77; XLV, p. 170; L, p. 167; LXXXIII, p. 395; CXXXIV, p.405; CXLVIII, p. 322; CLII, p. 295; CLXIV, p. 367; and CC, p.501).

1.1.3.1 The Convention (contd.)

Article 1

The present Convention in no way affects the right belonging to each State, with-in the limits of international law, to carry out on its own territory any operations for the development of hydraulic power which it may consider desirable.

Article 2

Should reasonable development of hydraulic power involve international investigation, the Contracting States concerned shall agree to such investigation, which shall be carried out conjointly at the request of any one of them, with a view to arriving at the solution most favourable to their interests as a whole, and to drawing up, if possible, a scheme of development, with due regard for any works already existing, under construction or projected.

Any Contracting State desirous of modifying a programme of development so drawn up shall, if necessary, apply for a fresh investigation, under the conditions laid down in the preceding paragraph.

No State shall be obliged to carry out a programme of development unless it has formally accepted the obligation to do so.

Article 3

If a Contracting State desires to carry out operations for the development of hydraulic power, partly on its own territory and partly on the territory of another Contracting State or involving alterations on the territory of another Contracting State, the States concerned shall enter into negotiations with a view to the conclusion of agreements which will allow such operations to be executed.

Article 4

If a Contracting State desires to carry out operations for the development of hydraulic power which might cause serious prejudice to any other Contracting State, the States concerned shall enter into negotiations with a view to the conclusion of agreements which will allow such operations to be executed.

Article 5

The technical methods adopted in the agreements referred to in the foregoing articles shall, within the limits of the national legislation of the various countries, be based exclusively upon considerations which might legitimately be taken into account in analogous cases of development of hydraulic power affecting only one State, without reference to any political frontier.

Article 6

The agreements contemplated in the foregoing articles may provide, amongst other things, for:

- a) General conditions for the establishment, upkeep and operation of the works;
- b) Equitable contributions by the States concerned towards the expenses, risks, damage of the works, as well as for meeting the cost of upkeep;
- c) The settlement of questions of financial cooperation;
- d) The methods for exercising technical control and securing public safety;
- e) The protection of sites;
- f) The regulation of the flow of water;
- g) The protection of the interests of third parties;
- h) The method of settling disputes regarding the interpretation or application of the agreements.

Article 7

The establishment and operation of works for the exploitation of hydraulic power shall be subject, in the territory of each State, to the laws and regulations applicable to the establishment and operation of similar works in that State.

Article 8

So far as international waterways are concerned which, under the terms of the general Convention on the Regime of Navigable Waterways of International Concern, are contemplated as subject to the provisions of that Convention, all rights and obligations which may be derived from agreements concluded in conformity with the present Convention shall be construed subject to all rights and obligations resulting from the general Convention and the special instruments which have been or may be concluded, governing such navigable waterways.

Article 9

This Convention does not prescribe the rights and duties of belligerents and neutrals in time of war. The Convention shall, however, continue in force in time of war so far as such rights and duties permit.

Article 10

This Convention does not entail in any way the withdrawal of facilities which are greater than those provided for in the Statute and which have been granted to international traffic by rail under conditions consistent with its principles. This Convention also entails no prohibition of such grant of greater facilities in the future.

Article 11

The present Convention does not in any way affect the rights and obligations of the Contracting State arising out of former conventions or treaties on the subject matter of the present Convention, or out of the provisions on the same subject-matter in general treaties, including the Treaties of Versailles, Trianon and other treaties which ended the war of 1914-18.

Article 12

If a dispute arises between Contracting States as to the application or interpretation of the present Statute, and if such dispute cannot be settled either directly between the Parties or by some other amicable method of procedure, the Parties to the dispute may submit it for an advisory opinion to the body established by the League of Nations as the advisory and technical organization of the Members of the League in matters of communications and transit, unless they have decided or shall decide by mutual agreement to have recourse to some other advisory, arbitral or Judicial procedure.

The provisions of the preceding paragraph shall not be applicable to any State which represents that the development of hydraulic power would be seriously detrimental to its national economy or security.

Article 13

It is understood that this Convention must not be interpreted as regulating in any way rights and obligations inter se of territories forming part of or placed under the protection of the same sovereign State, whether or not these territories are individually Contracting States.

Article 14

Nothing in the preceding articles is to be construed as affecting in any way the rights or duties of a Contracting State as Member of the League of Nations.

Article 15

The present Convention, of which the French and English texts are both authentic, shall bear this day's date, and shall be open for signature until October 31, 1924, by any State represented at the Conference of Geneva, by any Member of the League of Nations and by any States to which the Council of the League of Nations shall have communicated a copy of the Convention for this purpose.

Article 16

The present Convention is subject to ratification. The instruments of ratification shall be deposited with the Secretary-General of the League of Nations, who shall notify their receipt to every State signatory of or acceding to the Convention.

Article 17

On and after November 1, 1924, the present Convention may be acceded to by any State represented at the Conference of Geneva, by any Member of the League of Nations, or by any State to which the Council of the League of Nations shall have communicated a copy of the Convention for this purpose.

Accession shall be effected by an instrument communicated to the Secretary-General of the League of Nations to be deposited in the archives of the Secretariat. The Secretary-General shall at once notify such deposit to every State signatory of or acceding to the Convention.

Article 18

The present Convention will not come into force until it has been ratified in the name of three States. The date of its coming into force shall be the ninetieth day after the receipt by the Secretary-General of the League of Nations of the third ratification. Thereafter, the present Convention will take effect in the case of each Party ninety days after the receipt of its ratification or of the notification of its accession.

In compliance with the provisions of Article 18 of the Covenant of the League of Nations, the Secretary-General will register the present Convention upon the day of its coming into force.

Article 19

A special record shall be kept by the Secretary-General of the League of Nations showing, with due regard to the provisions of Article 21, which of the Parties have signed, ratified, acceded to or denounced the present Convention. This record shall be open to the Members of the League at all times; it shall be published as often as possible, in accordance with the directions of the Council.

Article 20

Subject to the provisions of Article 11 above, the present Convention may be denounced by any Party thereto after the expiration of five years from the date when it came into force in respect of that Party. Denunciation shall be effected by notification in writing addressed to the Secretary-General of the League of Nations. Copies of such notification shall be transmitted forthwith by him to all the other Parties, informing them of the date on which it was received.

A denunciation shall take effect one year after the date on which the notification thereof was received by the Secretary-General and shall operate only in respect of the notifying State.

Article 21

Any State signing or adhering to the present Convention may declare, at the moment either of its signature, ratification or accession, that its acceptance of the present Convention does not include any or all of its colonies, overseas possessions, protectorates, or overseas territories, under its sovereignty or authority, and may subsequently accede, in conformity with the provisions of Article 17, on behalf of any such colony, overseas possession, protectorate or territory excluded by such declaration.

Denunciation may also be made separately in respect of any such colony, overseas possession, protectorate or territory, and the provisions of Article 20 shall apply to any such denunciation.

Article 22

A request for the revision of the present Convention may be made at any time by one-third of the Contracting States.

1.1.3.2 Protocol of Signature

At the moment of signing the Convention of to-day's date relating to the development of hydraulic power affecting more than one State, the undersigned, duly authorised, have agreed as follows:

The provisions of the Convention do not in any way modify the responsibility or obligations imposed on States, as regards injury done by the construction of works for development of hydraulic power, by the rules of international law.

The present Protocol will have the same force, effect and duration as the Convention of to-day's date, of which it is to be considered as an integral part.

In faith whereof the above-named Plenipotentiaries have signed the present Protocol.

Done at Geneva, the ninth day of December one thousand nine hundred and twenty-three, in a single copy, which will remain deposited in the archives of the Secretariat of the League of Nations; certified copies will be transmitted to all the States represented at the Conference.

1.1.4 General Agreement on Tariffs and Trade (GATT) (*)

Geneva, 30 October 1947

(Extract)

...

Article V

Freedom of Transit

1. Goods (including baggage), and also vessels and other means of transport, shall be deemed to be in transit across the territory of a contracting party when the passage across such territory, with or without trans-shipment, warehousing, breaking bulk, or change in the mode of transport, is only a portion of a complete journey beginning and terminating beyond the frontier of the contracting party across whose territory the traffic passes. Traffic of this nature is termed in this Article "traffic in transit".

2. There shall be freedom of transit through the territory of each contracting party, via the routes most convenient for international transit, for traffic in transit to or from the territory of other contracting parties. No distinction shall be made which is based on the flag of vessels, the place of origin, departure, entry, exit or destination, or on any circumstances relating to the ownership of goods, of vessels or of other means of transport.

(*) Text in: United Nations, Treaty Series, Vol. 55, p. 187

Entry into force: Applied provisionally as from 1 Jan. 1948, pursuant to the Protocol of Provisional Application.

List of Contracting Parties to this Agreement:

Argentina, Australia, Austria, Bangladesh, Barbados, Belgium, Benin, Brazil, Burma, Burundi, Canada, Central African Empire, Chad, Chile, Congo, Cuba, Cyprus, Czechoslovakia, Denmark, Dominican Republic, Egypt, Finland, France, Gabon, Gambia, Germany (Federal Republic of), Ghana, Greece, Guyana, Haiti, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Ivory Coast, Jamaica, Japan, Kenya, Kuwait, Luxembourg, Madagascar, Malawi, Malaysia, Malta, Mauritania, Mauritius, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Peru, Poland, Portugal, Republic of Korea, Romania, Rwanda, Senegal, Sierra Leone, Singapore, South Africa, Southern Rhodesia, Spain, Sri Lanka, Sweden, Switzerland, Togo, Trinidad and Tobago, Turkey, Uganda, United Kingdom, United Republic of Cameroon, United Republic of Tanzania, United States of America, Upper Volta, Uruguay, Yugoslavia, Zaire.

The following States which had provisionally applied the GATT, notified the Secretary-General of the cessation of such application:

China, Lebanon, Liberia, Syrian Arab Republic.

1.1.4 General Agreement on Tariffs and Trade (Contd.)

(Extract)

Article V (Contd.)

3. Any contracting party may require that traffic in transit through its territory be entered at the proper custom house, but, except in cases of failure to comply with applicable customs laws and regulations, such traffic coming from or going to the territory of other contracting parties shall not be subject to any unnecessary delays or restrictions and shall be exempt from customs duties and from all transit duties or other charges imposed in respect of transit, except charges for transportation or those commensurate with administrative expenses entailed by transit or with the cost of services rendered.

4. All charges and regulations imposed by contracting parties on traffic in transit to or from the territories or other contracting parties shall be reasonable, having regard to the conditions of the traffic.

5. With respect to all charges, regulations and formalities in connection with transit, each contracting party shall accord to traffic in transit to or from the territory of any other contracting party treatment no less favourable than the treatment accorded to traffic in transit to or from any third country.

6. Each contracting party shall accord to products which have been in transit through the territory of any other contracting party treatment no less favourable than that which would have been accorded to such products had they been transported from their place of origin to their destination without going through the territory of such other contracting party. Any contracting party shall, however, be free to maintain its requirements of direct consignment existing on the date of this Agreement, in respect of any goods in regard to which such direct consignment is a requisite condition of eligibility for entry of the goods at preferential rates of duty or has relation to the contracting party's prescribed method of valuation for duty purposes.

7. The provisions of this Article shall not apply to the operation of aircraft in transit, but shall apply to air transit of goods (including baggage).

...

1.1.5 Convention on Transit Trade of Land-Locked States (*)

New York, 8 July 1965

(Extract)

Article I

The recognition of the right of each land-locked State of free access to the sea is an essential principle for the expansion of international trade and economic development.

Article II

In territorial and On internal waters, vessels flying the flag of land-locked countries should have identical rights and enjoy treatment identical to that enjoyed by vessels flying the flag of coastal States other than the territorial State.

(*) Text in: United Nations, Treaty Series, Vol. 597, p. 3

Reservations and Declarations made by Belgium, Bolivia, Byelorussian SSR, Chile, Czechoslovakia, Federal Republic of Germany, Hungary, Italy, Luxembourg, Mongolia, Sudan, Ukrainian SSR, Union of Soviet Socialist Republics.

Signatory States: Afghanistan on July 8, 1965; Argentina on Dec. 29, 1965; Bolivia on Dec. 29, 1965; Brazil on Aug.4, 1965; Central African Empire on Dec. 30, 1965; Fed. Rep. of Germany on Dec. 20, 1965; Holy See on Dec. 30, 1965; Italy on Dec. 31, 1965; Luxembourg on Dec. 28, 1965; Paraguay on Dec. 23, 1965; Sudan on Aug. 11, 1965; Switzerland on Dec. 10, 1965; Uganda, on Dec. 21, 1965; United Republic of Cameroon on Aug. 10, 1965.

Ratification and accession States: Australia on May 2, 1972; Belgium on April 21, 1970; Burundi on May 1, 1968; Byelorussian SSR on July 11, 1972; Chile on Oct. 25, 1972; Chad on March 2, 1967; Czechoslovakia on Aug. 8, 1967; Denmark on March 26, 1969; Finland on Jan. 22, 1971; Hungary on Sept. 20, 1967; LAO People's Democratic Republic on Dec. 29, 1967; Lesotho on May 28, 1969; Malawi on Dec. 12, 1966; Mali on Oct. 11, 1967; Mongolia on July 26, 1966; Nepal on Aug. 22, 1966; Netherlands on Nov. 30, 1971; Niger on June 3, 1966; Nigeria on May 16, 1966; Norway on Sept. 17, 1968; Rwanda on Aug. 13, 1968; San Marino on June 12, 1968; Swaziland on May 26, 1969; Sweden on June 16, 1971; Turkey on March 25, 1969; Ukrainian SSR on July 21, 1972; Union of Soviet Socialist Republics on July 21, 1972; United States of America on Oct. 29, 1968; Yugoslavia on May 10, 1967; Zambia on Dec. 2, 1966.

1.1.5 Convention on Transit Trade of Land-Locked States (Contd.)

Article III

In order to enjoy the freedom of the seas on equal terms with coastal States, States having no sea-coast should have free access to the sea. To this end States situated between the sea and a State having no sea-coast shall by common agreement with the latter and in conformity with existing international conventions accord to ships flying the flag of that State treatment equal to that accorded to their own ships or to the ships of any other State as regards access to seaports and the use of such ports.

Article IV

In order to promote fully the economic development of the land-locked countries, the said countries shall be afforded by all States, on the basis of reciprocity, free and unrestricted transit, in such a manner that they have free access to regional and international trade in all circumstances and for every type of goods.

Goods in transit should not be subject to any customs duty.

Means of transport in transit should not be subject to special taxes or charges higher than those levied for the use of means of transport of the transit country.

Article V

The State of transit, while maintaining full sovereignty over its territory, shall have the right to take all indispensable measures to ensure that the exercise of the right of free and unrestricted transit shall in no way infringe its legitimate interests of any kind.

Article VI

In order to accelerate the evolution of a universal approach to the solution of the special and particular problems of trade and development of land-locked countries in the different geographical areas, the conclusion of regional and other international agreements in this regard should be encouraged by all States.

Article VII

The facilities and special rights accorded to land-locked countries in view of their special geographical position are excluded from the operation of the most favoured-nation clause.

Article VIII

The principles which govern the right of free access to the sea of the land-locked State shall in no way abrogate existing agreements between two or more contracting parties concerning the problems, nor shall they raise an obstacle as regards the conclusions of such agreements in the future, provided that the latter do not establish a regime which is less favourable than or opposed to the abovementioned provisions.

...

1.2 PROPOSED INTERNATIONAL CONVENTIONS OF
UNIVERSAL APPLICATION

1.2.1 International Law Commission of the United Nations
Draft articles on the law of the non-navigational uses of international
watercourses (*)

Geneva, 17 July 1980

Article 1

Scope of the present articles

1. The present articles apply to uses of international watercourse systems and of their waters for purposes other than navigation and to measures of conservation related to the uses of those watercourse systems and their waters.
2. The use of the waters of international watercourse systems for navigation is not within the scope of the present articles except insofar as other uses of the waters affect navigation or are affected by navigation.

Article 2

System States

For the purposes of the present articles, a State in whose territory part of the waters of an international watercourse system exists is a system State.

Article 3

System agreements

1. A system agreement is an agreement between two or more system States which applies and adjusts the provisions of the present articles to the characteristics and uses of a particular international watercourse system or part thereof.
2. A system agreement shall define the waters to which it applies. It may be entered into with respect to an entire international watercourse system, or with respect to any part thereof or particular project, programme or use provided that the use by one or more other system States of the waters of an international watercourse system is not, to an appreciable extent, affected adversely.
3. Insofar as the uses of an international watercourse system may require, system States shall negotiate in good faith for the purpose of concluding one or more System agreements.

Article 4

Parties to the negotiation and conclusion of system agreements

1. Every system State of an international watercourse system is entitled to participate in the negotiation of and to become a party to any system agreement that applies to that international watercourse system as a whole.
2. A system State whose use of the waters of an international watercourse system may be affected to an appreciable extent by the implementation of a proposed system agreement that applies only to a part of the system or to a particular project, programme or use is entitled to participate in the negotiation of such an agreement, to the extent that its use is there-by affected, pursuant to article 3 of the present articles.

(*) Adopted provisionally by the Commission at its 1636th meeting. United Nations General Assembly, International Law Commission, Draft Report of the ILC: A/CN.4/L321 and L/321 Add.1

1.2.1 Draft Articles on Non-Navigational Uses (Concluded)

Article 5

Use of waters which constitute a shared natural resource

1. To the extent that the use of Waters of an international Watercourse system in the territory of one system State affects the use of Waters of that system in the territory of another system State, the waters are for the purposes of the present articles, a shared natural resource.
2. Waters of an international watercourse system which constitute a shared natural resource shall be used by a system State in accordance with the present articles.

Article X

Relationship between the present articles and other treaties in force

Without prejudice to paragraph 3 of article 3, the provisions of the present articles do not affect treaties in force relating to a particular international watercourse system or any part thereof or particular project, programme or use.

1.3 INTERNATIONAL CONVENTIONS OF REGIONAL APPLICATION

1.3.1 Africa

1.3.1.1 African Convention on the Conservation of Nature and Natural Resources (*) Algiers, 15 September 1968

(Extracts)

...

Article II.- Fundamental Principle

The Contracting States shall undertake to adopt the measures necessary to ensure conservation, utilization and development of soil, water, flora and faunal resources in accordance with scientific principles and with due regard to the best interests of the people.

...

Article V.- Water

1. The Contracting States shall establish policies for conservation, utilization and development of underground and surface water, and shall endeavour to guarantee for their populations a sufficient and continuous supply of suitable water, taking appropriate measures with due regard to:

- (i) the study of water cycles and the investigation of each catchment area,
- (ii) the co-ordination and planning of water resources development projects,
- (iii) the administration and control of all water utilization, and prevention and control of water pollution.

2. Where surface or underground water resources are shared by two or more of the *Contracting States*, the latter shall act in consultation, and if the need arises, set up inter-State Commissions to study and resolve problems arising from the joint use of these resources, and for the joint development and conservation thereof.

...

(*) Text in: African Convention on the Conservation of Nature and Natural Resources, published by the Organization of African Unity - General Secretariat -OAU, CM/232

Entry into force on 9 October 1969.

Parties and dates of entry into force: Central African Empire on April 16, 1970; Djibouti on May 7, 1978; Egypt on May 12, 1972; Ghana on Oct. 9, 1969; Ivory Coast on Oct. 9, 1969; Kenya on Oct. 9, 1969; Malagasy Rep. on Oct. 23, 1971; Malawi on April 6, 1973; Mali on July 3, 1974; Morocco on Dec. 11, 1977; Niger on Feb. 26, 1970; Nigeria on May 7, 1974; Senegal on Feb. 24, 1972; Seychelles on Nov. 14, 1977; Sudan on Nov. 30, 1973; Swaziland on Oct. 9, 1969; Tanzania on Dec. 22, 1974; Uganda on Dec. 30, 1977; Upper Volta on Oct. 9, 1969; Zaire on Nov. 13, 1976.

1.3.2 America

1.3.2.1 Act of Asunción on the Use of International Rivers (Argentina, Bolivia, Brazil, Paraguay, Uruguay) - 3 June 1971 (*)

(Extract)

...

Resolution No. 25

Declaration of Asunción on the Use of International Rivers

The Fourth Meeting of Foreign Ministers of the countries of the River Plate Basin, DECIDES

To endorse all the resolutions so far adopted in this field and to express its particular satisfaction at the results of the Second Meeting of Experts on Water Resources, held at Brasilia (18-22 May 1970). They also wish to express their conviction that such an important subject will continue to be dealt with in the same spirit Of frank and cordial collaboration at the third Meeting of this Group, convened for 29 June 1971.

The Foreign Ministers consider that it is of real value to record the fundamental points on which agreement has already been reached, on the basis of which the studies on this subject are to proceed:

1. In contiguous international rivers, which are under dual sovereignty, there must be a prior bilateral agreement between the riparian States before any use is made of the waters.
2. In successive international rivers, where there is no dual sovereignty, each State may use the waters in accordance with its needs provided that it causes no appreciable damage to any other State of the Basin.
3. As to the exchange of hydrological and meteorological data:
 - (a) Processed data shall be disseminated and exchanged systematically through publications;
 - (b) Unprocessed data, whether in the form Of observations, instrument measurements or graphs, shall be exchanged or furnished at the discretion of the countries concerned.
4. The States shall try as far as possible gradually to exchange the cartographic and hydrographic results of their measurements in the River Plate Basin in order to facilitate the task of determining the characteristics of the flow system.

(*) Text in: Rios y lagos internacionales (Utilización para fines agrícolas e industriales)

4 ed. rev., OEA/Ser.I/VI, CIJ-75 rev.2 (Wash., D.C., Organization of American States), 1971 pp. 183-186. English version in Legal Problems relating to the non-navigational uses Of international watercourses, A/CN.4/274 - Supplementary Report by the Secretary-General, United Nations Yearbook of the International Law Commission, 1974 , Vol. II (Part two), p. 324

1.3.2 America (Concluded)

1.3.2.1 Act of Asunción (Concluded)

5. The States shall do their best to maintain the best possible conditions of navigability on the reaches of the rivers under their sovereignty and shall adopt for that purpose whatever measures may be necessary to ensure that any permanent works that are constructed do not interfere with the other present uses of the river system.

6. When executing permanent works for any purpose on the rivers, of the Basin, the States shall take the necessary steps to ensure that navigability is not impaired.

7. When executing permanent works on the navigable waterways system, the States shall ensure the conservation of the living resources.

1.3.3 Europe

1.3.3.1 European Agreement on the restriction of the Use of Certain Detergents in Washing and Cleaning Products (*) - Strasbourg, 16 September 1968

The Governments of the Kingdom of Belgium, the Kingdom of Denmark, the French Republic, the Federal Republic of Germany, the Italian Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands, the Swiss Confederation and the United Kingdom of Great Britain and Northern Ireland,

Considering that the Parties to the Brussels Treaty of 17 March 1948, as amended on 23 October 1954, resolved to strengthen the social ties by which they are united and to make every effort in common, both by direct consultation and in specialised Agencies, to raise the standard of living of their peoples and promote the harmonious development of social services in their respective countries;

Considering that the social activities governed by the Brussels Treaty and carried on, until 1959, under the auspices of the Brussels Treaty Organisation and the Western European Union are now conducted within the framework of the Council of Europe, in accordance with the decision taken on 21 October 1959 by the Council of Western European Union and with Resolution (59) 23 adopted on 16 November 1959 by the Committee of Ministers of the Council of Europe;

Considering that the Swiss Confederation and the Kingdom of Denmark have participated since 6 May 1964 and 2 April 1968 respectively in activities in the field of public health carried on under the aforesaid resolution;

Whereas the aim of the Council of Europe is to achieve greater unity between its Members, so as to further economic and social progress by Agreements and by common action in economic, social, cultural, scientific, legal and administrative matters;

Whereas the said Governments have striven to encourage progress as far as may be practicable not only in social matters but in the related field of public health, and have undertaken to harmonise their national legislations in pursuance of the action mentioned in the foregoing paragraph;

Whereas it is becoming increasingly necessary to secure harmonisation of the laws on the control of fresh water pollution;

(*) Text in: United Nations, Treaty Series, Vol. 788, pp. 182-190

Ratifications: Belgium on Feb. 16, 1971; Denmark on Feb. 16, 1971; France on May 30, 1971; Italy on Dec. 28, 1978; The Netherlands on Feb. 28, 1971; Spain on, Oct. 11, 1975; Switzerland on Dec. 22, 1975; United Kingdom of Great Britain and Northern Ireland on Feb. 16, 1971.

1.3.3 Europe (Contd.)

1.3.3.1 European Agreement (Contd.)

Being convinced that appropriate measures are essential not only from the standpoint of human needs but also to ensure the protection of nature in general, the paramount objectives being to protect effectively:

- (a) the supply of water for the population, for industry, for agriculture and for other business occupations;
- (b) the natural aquatic fauna and flora, and in particular so far as they contribute to human well-being;
- (c) the unhindered enjoyment of places devoted to leisure and sport;

Observing that the general household and industrial use of certain types of detergents might cause considerable prejudice to these interests;

Feeling, therefore, that some restriction must be put on the use of such products;

Have agreed as follows:

Article 1

The Contracting Parties undertake to adopt measures as effective as possible in the light of the available techniques, including legislation if it is necessary, to ensure that:

- (a) in their respective territories, washing or cleaning products containing one or more synthetic detergents are not put on the market unless the detergents in the product considered are, as a whole, at least 80% susceptible to biological degradation;
- (b) the appropriate measurement and control procedures are implemented in their respective territories to guarantee compliance with the provisions of sub-paragraph (a) of this Article.

Article 2

Compliance with the provisions of paragraph (a) of Article 1 of this Agreement must not result in the usage of detergents which, under conditions of normal use, might affect adversely human or animal health.

Article 3

The Contracting Parties shall, every five years, or more frequently if one of the Parties should so request, hold multilateral consultations within the Council of Europe to examine the application of this Agreement, and the advisability of revising it or extending any of its provisions. These consultations shall take place at meetings convened by the Secretary General of the Council of Europe. The Contracting Parties shall communicate the name of their representative to the Secretary General of the Council of Europe at least two months before the meetings.

Article 4

1. This Agreement shall be open to signature by member States of the Council of Europe which take part in the activities in the field of public health referred to in Resolution (59) 23 mentioned in the Preamble hereto. They may become Parties to it by either:

1.3.3 Europe (Contd.)

1.3.3.1 European Agreement (Contd.)

- (a) signature without reservation in respect of ratification or acceptance, or
- (b) signature with reservation in respect of ratification or acceptance, followed by ratification or acceptance.

2. Instruments of ratification or acceptance shall be deposited with the Secretary General of the Council of Europe.

Article 5

1. This Agreement shall enter into force *one* month after the date on which three member States of the Council shall have become Parties to the Agreement, in accordance with the provisions of

2. As regards any member States who shall subsequently sign the Agreement without reservation in respect of ratification or acceptance or who shall ratify or accept it, the Agreement shall enter into force one month after the date of such signature or after the date of deposit of the instrument of ratification or acceptance.

Article 6

1. After the entry into force of this Agreement,

- (a) any member State of the Council of Europe which does not take part in the activities in the field of public health referred to in Resolution (59) 23 mentioned in the Preamble to this Agreement, may accede thereto;
- (b) the Committee of Ministers of the Council of Europe may invite any State not a Member of the Council to accede to this Agreement provided that the resolution containing such invitation receives the unanimous agreement by member States of the Council of Europe which take part in the activities in the field of public health referred to in Resolution (59) 23 mentioned in the Preamble to this Agreement.

2. Such accession shall be effected by depositing with the Secretary General of the Council of Europe an instrument of accession which shall take effect one month after the date of its deposit.

Article 7

1. Any Contracting Party may at the time of signature or when depositing its instrument of ratification, acceptance or accession, specify the territory or territories to which this Agreement shall apply.

2. Any Contracting Party may, when depositing its instrument of ratification, acceptance or accession or at any later date, by declaration addressed to the Secretary General of the Council of Europe, extend this Agreement to any other territory or territories specified in the declaration and for whose international relations it is responsible or on whose behalf it is authorised to give undertakings.

3. Any declaration made in pursuance of the preceding paragraph may, in respect of any territory mentioned in such declaration, be withdrawn according to the procedure laid down in Article 8 of this Agreement.

1.3.3 Europe (concluded)

1.3.3.1 European Agreement (concluded)

Article 8

1. This Agreement shall remain in force indefinitely.
2. Any Contracting Party may, insofar as it is concerned, denounce this Agreement by means of a notification addressed to the Secretary General of the Council of Europe.
3. Such denunciation shall take effect six months after the date of receipt by the Secretary General of such notification.

Article 9

The Secretary General of the Council of Europe shall notify the member States of the Council and any State which has acceded to this Agreement, of:

- (a) any signature without reservation in respect of ratification or acceptance;
- (b) any signature with reservation in respect of ratification or acceptance;
- (c) the deposit of any instrument of ratification, acceptance or accession;
- (d) any date of entry into force of this Agreement in accordance with Article 5 thereof;
- (e) any declaration received in pursuance of the provisions of paragraphs 2 and 3 of Article 7;
- (f) any notification received in pursuance of the provisions of Article 8 and the date on which denunciation takes effect.

IN WITNESS WHEREOF the undersigned, being duly authorised thereto, have signed this Agreement.

DONE at Strasbourg, this 16th day of September 1968, in the English and French languages, both texts being equally authoritative, in a single copy which shall remain deposited in the archives of the Council of Europe. The Secretary General of the Council of Europe shall transmit certified copies to each of the signatory and acceding States.

1.4 PROPOSED INTERNATIONAL CONVENTIONS
OF REGIONAL APPLICATION

1.4.1 America

1.4.1.1 Organization of American States: Draft Convention on the Industrial and Agricultural Use of International Rivers and Lakes (*) Rio de Janeiro, 1st September 1965

WHEREAS:

The American States have co-operated for many generations in the realization of important common undertakings;

The utilization of waters in accordance with modern technological methods contributes decisively to the economic development of their peoples; and

It is the common desire of the Contracting Parties to ensure the development of those resources so that they may benefit the well-being of their peoples;

The Governments of the member States of the Organization of American States have agreed as follows:

Article 1

This convention establishes the general standards concerning the utilization of the waters of international rivers and lakes for industrial and agricultural purposes.

Article 2

The provisions of this convention shall not imply the total or partial revocation of regional or bilateral agreements in effect between the High Contracting Parties.

Article 3

The terms mentioned below have the following meanings:

- (a) An international river is one that flows through or separates two or more States. The former shall be called successive, and the latter contiguous.
- (b) An international lake is one whose banks belong to more than one State.
- (c) Agricultural use is the utilization of the waters for irrigation or other agricultural uses.
- (d) Industrial use is the utilization of the water for the production of electric power or for other industrial purposes.
- (e) A notification is a written communication stating that it is planned to utilize the waters or to build works that may modify the existing regimen.
- (f) An interested State is one that has jurisdiction over some part of an international river or lake.

(*) Text in: Report of the Inter-American Juridical Committee on the work accomplished during its 1965 meeting (OEA/Ser. 1/VI.1, CIJ-83) (Washington, D.C. Panamerican Union, 1966), pp. 7-10.

1.4.1 America (Contd.)

1.4.1.1 OAS: Draft Convention (Contd.)

Article 4

The right of a State to industrial or agricultural utilization of the waters of an international river or lake that are under its sovereignty does not imply non-recognition of the eventual right of the other riparian States.

Article 5

The utilization of the waters of an international river or lake for industrial or agricultural purposes must not prejudice the free navigation thereof in accordance with the applicable legal rules, or cause substantial injury, according to international law, to the riparian States or alterations to their boundaries.

Article 6

In cases in which the utilization of an international river or lake results or may result in damage or injury to another interested State, the consent of that interested State shall be required, as well as the payment or indemnification for any damage or harm done, when such is claimed.

Article 7

No State may utilize or authorize the utilization of an international river under conditions that are less strict than those to which the utilization of domestic rivers is subjected by law, custom, or usage.

A State may, however, demand that greater precautions or requisites be adopted when those that govern in another of the interested States are inferior to those that are generally or prevalently in force for international waters.

Article 8

A State that plans to build works for utilization of an international river or lake must first notify the other interested States. The notification shall be in writing and shall be accompanied by the necessary technical documents in order that the other interested States may have sufficient basis for determining and judging the scope of the works. Along with the notification, the names of the technical expert or experts who are to have charge of the first international phase of the matter should also be supplied.

Article 9

The reply to the notification must be given within six months and no postponements of any kind may be allowed, unless the requested State asks for supplementary information in addition to the documents that were originally provided, which request may be made only within thirty days following the date of the said notification and must set forth in specific terms the background information that is desired. In such case, the term of six months shall be counted from the date on which the aforesaid supplementary information is provided.

- I. If no reply is received within the aforesaid period, it shall be understood that the State or States that were notified have no objections to the work that is being planned and that, consequently, the notifying State may proceed to execute its plans in accordance with the project that was presented. No later claim by the notified State shall be valid.

1.4.1 America (Concluded)

1.4.1.1 OAS: Draft Convention (Concluded)

- II. If observations of a technical nature or relating to foreseeable damage or injury are made in the reply to the notification, this document should indicate the nature and estimate of these and the name of the technical expert or experts who together with those mentioned in the notification will form a Joint Commission that will proceed to study the matter. The reply should also include an indication of the place and date for the meeting of the Joint Commission thus formed.

If the reply does not meet the foregoing requirements, it shall be considered that this procedure has not been executed.

The Joint Commission shall carry out its mandate of seeking a solution, both with respect to the best way of executing and taking advantage of the works that are planned in common benefit, and, when appropriate, with respect to indemnification for the damage and injury caused, all within the period of six months from the date of the reply to the notification.

Article 10

For the purposes of this Convention, the High Contracting Parties shall settle the disputes that may arise with respect to the industrial or agricultural use of international rivers and lakes in accordance with the peaceful procedures established by the inter-American system.

Article 11

This Convention shall be ratified in accordance with the constitutional procedures of the respective countries. It shall enter into force for them at the time that notification of ratification is communicated to the Secretary General of the Organization of American States.

Article 12

This Convention may be denounced in writing to the Pan American Union by any of the High Contracting Parties.

The Pan American Union shall in each case inform the other Member States of the Organization of the denunciation received, which shall take effect six months after the parties have been informed.

1.4.2 Europe

1.4.2.1 Council of Europe: Draft European Convention for the Protection of International Watercourses against Pollution (*) - Strasbourg, February 1974

(Extracts)

The member States of the Council of Europe, signatory hereto,

Considering that the aim of the Council of Europe is to achieve a greater unit between its Members;

Considering that protection of the environment, an important factor in the conditions of human life, demands closer co-operation between governments;

Considering that water resources are threatened by increasing pollution;

Convinced of the urgent need for general and simultaneous action on the part of States and for co-operation between them with a view to protecting all water resources against pollution, especially watercourses forming part of an international hydrographic basin;

Being of the opinion that the protection of international watercourses against pollution constitutes only one important step towards the achievement of that objective and that this action must be complemented by the conclusion of conventions for the prevention of marine pollution from land-based sources, in order to ensure that the present Convention is fully effective;

Have agreed as follows:

Article 1

For the purposes of this Convention:

- (a) "international watercourse" means any watercourse, canal or lake which separates or passes through the territories of two or more States;
- (b) "estuary" means the part of a watercourse between the freshwater limit and the baseline of the territorial sea;
- (c) "freshwater limit" means the place in the watercourse where, at low tide and in a period of low freshwater flow, there is an appreciable increase in salinity due to the presence of sea water;
- (d) "water pollution" means any impairment of the composition or state of water, resulting directly or indirectly from human agency, in particular to the detriment of:
 - its use for human and animal consumption;
 - its use in industry and agriculture;
 - the conservation of the natural environment, particularly of aquatic flora and fauna.

(*) Text in: Legal Problems relating to the non-navigational uses of international watercourses, Supplementary Report by the Secretary General, doc. A/CN.4/274, United Nations, Yearbook of International Law Commission, 1974, Vol. II (part two), pp. 346-349.

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

Article 2

Each Contracting Party shall endeavour to take, in respect of all surface waters in its territory, all measures appropriate for the reduction of existing water pollution and for the prevention of new forms of such pollution.

Article 3

1. Each Contracting Party undertakes, with regard to international watercourses, to take:
 - (a) all measures required to prevent new forms of water pollution or any increase in the degree of existing water pollution;
 - (b) measures aiming at the gradual reduction of existing water pollution.
2. This Convention is not to lead to the replacement of existing measures by measures giving rise to increased pollution.

Article 4

1. Each Contracting Party shall take all measures appropriate for maintaining the quality Of the waters Of international watercourses at, or for raising it to, a level not lower than:
 - (a) the specific standards referred to in Article 15, paragraph 2; or
 - (b) in the absence of such specific standards, the minimum standards laid down in Appendix I to this Convention, subject to any derogation provided for in paragraph 2 of the present Article.
2. The minimum standards laid down in Appendix I shall be applied:
 - (a) in the case of freshwater standards, at the freshwater limit and at each point upstream from this limit where the watercourse is crossed by a frontier between States;
 - (b) in the case of brackish water standards, at the baseline of the territorial sea and at the points where the estuary is crossed by a frontier between States.
3. Derogations to the application of Appendix I at the points fixed by the previous paragraph are authorized for the watercourses and the parameters listed in Appendix IV to this Convention. The Contracting Parties riparian to such a watercourse shall co-operate with each other in accordance with the provisions of Article 10.

Article 5

1. The discharge into the waters of international hydrographic basins of any of the dangerous or harmful substances listed in Appendix II to this Convention shall be prohibited or restricted under the conditions provided for in that Appendix.
2. Insofar as a Contracting Party cannot immediately give effect to the provisions of the preceding paragraph, it shall take steps to comply with them in a reasonable time.

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

Article 6

1. The provisions of Articles 3 and 4 may not be invoked against a Contracting Party to the extent that the latter is prevented, as a result of water pollution having its origin in the territory of a non-Contracting State, from ensuring their full application.
2. However, the said Contracting Party shall endeavour to co-operate with the non-Contracting State so as to make possible the full application of these provisions.

Article 7

1. Each Contracting Party shall communicate to the Secretary General of the Council of Europe every five years a written statement of the measures which it has taken to implement Articles 2 to 5 inclusive and of the results achieved.
2. The Secretary General shall notify the other Contracting Parties of the information received from each of them and shall forward such information to the Committee of Ministers of the Council of Europe.

Article 8

The Contracting Parties undertake to co-operate with each other with a view to achieving the aims of this Convention.

Article 9

The Contracting Parties riparian to an international watercourse to which the minimum standards laid down in Appendix I to this Convention are to be applied and the waters of which do not yet meet the level of these standards shall advise each other of the measures they have taken with a view to reaching, within a fixed time-limit, this level at the points fixed by Article 4, paragraph 2.

Article 10

1. The Contracting Parties situated either upstream or downstream of a point on an international watercourse at which the derogations provided for in Article 4, paragraph 3, apply shall carry out, in consultation with each other and before the end of the first year after this Convention enters into force in respect of them, an inquiry with a view to establishing the quality of the waters at this point as regards the parameters covered by the derogation.
2. The Contracting Parties riparian to such a watercourse shall jointly establish a programme designed to achieve, within a fixed time-limit, certain objectives for reducing pollution at the point referred to in the preceding paragraph. This programme may envisage various stages each reaching intermediate objectives. A comparison shall be effected between the objectives envisaged and the results obtained at the expiration of the fixed time-limits.
3. If the inquiry or the results mentioned in the preceding paragraphs show that it is no longer necessary to maintain the derogation as regards one of the parameters, the Contracting Party which requested the derogation shall notify the Secretary General of the Council of Europe of its suppression as regards that parameter.

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

Article 11

As soon as a sudden increase in pollution is recorded, the Contracting Parties riparian to the same watercourse shall immediately warn each other, and shall take unilaterally or jointly all measures in their power to avert injurious consequences or to limit the extent thereof, having recourse to the early warning system envisaged in Article 15, paragraph 1(c), if any.

Article 12

1. The Contracting Parties whose territories the same international watercourse separates or passes through, hereinafter called "the interested Contracting Parties", undertake to enter into negotiations with each other, if one of them so requests, with a view to concluding a co-operation agreement or to adapting existing co-operation agreements to the provisions of this Convention.

2. When the interested Contracting Parties admit expressly or tacitly that the contribution of one of them to the pollution of the international watercourse can be deemed negligible, the latter Contracting Party is not bound to enter into negotiations in conformity with the preceding paragraph. Likewise, when the pollution of one section of an international watercourse by another section situated upstream on the same watercourse can be deemed negligible, the Contracting Parties riparian to one or the other of these two sections are not bound to enter into negotiations with regard to the watercourse as a whole.

Article 13

If an interested Contracting Party does not enter into negotiations within a reasonable time, any interested Contracting Party may inform the Committee of Ministers of the Council of Europe which shall then hold itself at the disposal of the interested Contracting Parties in order to find a procedure for reaching a satisfactory solution. The same shall apply if the negotiations, once begun, do not reach a positive conclusion within a reasonable time.

Article 14

1. The co-operation agreement referred to in Article 12 of this Convention shall, unless the interested Contracting Parties decide otherwise, provide for the establishment of an international commission and lay down its organization, its modes of operating and, if necessary, the rules for financing it.

2. The co-operation agreement shall, where appropriate, provide that any existing commission or commissions shall be assigned the functions provided for in Article 15.

3. Where two or more international commissions exist for the protection against pollution of the waters of the international watercourses of the same hydrographic basin, the interested Contracting Parties undertake to co-ordinate their activities in order to improve the protection of the waters of this basin.

Article 15

1. Each international commission for water protection shall have inter alia the following functions:

- (a) to collect and to verify at regular intervals data concerning the quality of the water of the international watercourse;

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

- (b) to propose, if necessary, that the interested Contracting Parties carry out or have carried out any additional investigation to establish the nature, degree and source of pollution; the commission may also decide to undertake certain studies itself;
- (c) to propose to the interested Contracting Parties that an early warning system be set up for serious accidental pollution;
- (d) to propose to the interested Contracting Parties any additional measures that it considers useful;
- (e) to study, at the request of the interested Contracting Parties, the advisability and, if necessary, the methods of jointly financing large-scale projects concerning water pollution control;
- (f) to propose to the interested Contracting Parties the inquiries and the programmes and objectives for reducing pollution mentioned in Article 10 concerning the international watercourses for which a derogation has been made pursuant to Article 4, paragraph 3.

2. In compliance with the general aims defined in Articles 2, 3, 4 and 5, each international commission shall, if it deems it necessary, propose to the interested Contracting Parties the assignment of the international watercourse under its authority, or one or more of its sections, to one or more of the possible uses of the watercourse. According to these uses and in conformity with the provisions of Article 17, the commission shall elaborate specific standards of water quality as well as the ways and means of applying them, and shall propose these for adoption by the interested Contracting Parties.

Article 16

1. Each interested Contracting Party shall have one vote in any international commission of which it is a member, unless the co-operation agreement provides otherwise.

2. The co-operation agreement may provide that a proposal adopted by a unanimous decision of the commission shall be binding on each member State, unless it informs the commission within a period to be fixed by the latter that it does not approve of the proposal or is unable to express an opinion thereon.

Article 17

1. The specific standards referred to in Article 15, paragraph 2 shall be adapted to the various possible uses of the international watercourse, such as:

- (a) production of drinking water for human consumption;
- (b) consumption by domestic and wild animals;
- (c) conservation of wild life, both flora and fauna, and securing conditions in which they thrive, and the conservation of the self-purifying capacity of water;
- (d) fishing;
- (e) recreational amenities, with due regard to health and aesthetic requirements;
- (f) the application of freshwater directly or indirectly to land for agricultural purposes;

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

- (g) production of water for industrial purposes;
- (h) the need to preserve an acceptable quality of sea water.

2. These specific standards shall be determined taking into account the quality limits for each use as set out in Appendix III to this Convention, and in particular must be at a level which ensures that the quality of the water of the watercourse or of the section thereof which has been assigned to the use is of a level at least equal to that of those quality limits in Appendix III which are of an imperative nature.

Article 18

Each interested Contracting Party undertakes to furnish to the international commissions of which it is a member the necessary facilities for the accomplishment of their tasks.

Article 19

1. Each interested Contracting Party shall take all legislative and administrative measures necessary for the implementation of the undertakings which it has accepted under co-operation agreements.

2. Such undertakings may in no case be interpreted to prevent a Contracting Party from taking, as far as it is concerned, stricter or more effective measures.

Article 20

The co-operation agreement may make provision for a procedure which, set in motion at the request of any Contracting State, would permit a satisfactory solution to be reached when:

- (a) the international commission has not reached agreement on the adoption of a proposal;
- (b) a Contracting State has not approved, within a reasonable time, a proposal submitted to it by the international commission of which it is a member.

Article 21

The provisions of this Convention shall not affect the rules applicable under general international law to any liability of States for damage caused by water pollution.

Article 22

1. Any dispute between Contracting Parties concerning the interpretation or application of this Convention or of a co-operation agreement referred to in Articles 12 to 20 thereof, including an act made in execution of such an agreement and binding upon the Parties, shall, if it has not been possible to settle it through negotiations between the parties to the dispute and unless these parties decide otherwise, be submitted, on the application of one of them, to arbitration as provided for in Appendix A to this Convention.

2. The provisions of the preceding paragraph shall not affect the undertakings by which the parties to the dispute have agreed or may agree, under a co-operation agreement, upon another procedure for the settlement of disputes concerning the interpretation or application of this agreement or of acts made in execution of it and binding upon the parties. However, if provision is not made in such procedure for a binding decision and if, once set in motion, such procedure does not lead to the settlement of the dispute within nine months, one or other of the parties to the dispute may have recourse to the arbitral procedure provided for in Appendix A to this Convention.

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

Appendix I

Minimum standards for international watercourses referred to in Article 4, paragraph 1(b).

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Appendix II

Dangerous or harmful substances referred to in Article 5.

...

Appendix III

Quality limits for international watercourses according to their possible uses, as referred to in Article 17, paragraph 2.

...

List of watercourses for which derogations to the undertakings under Article 4, paragraph 1(b) are permissible.

...

APPENDIX A - ARBITRATION

Article 1

Unless the parties to the dispute decide otherwise, the arbitral procedure shall be in accordance with the provisions of this Appendix.

Article 2

1. Upon an application addressed by one Contracting Party to another Contracting Party in accordance with Article 22 of the Convention, an arbitral tribunal shall be set up. The application for arbitration shall state the subject-matter of the application and shall be accompanied by proposals for the settlement of the dispute as well as any supporting documents,

2. If the dispute relates to the Convention, the party making the application shall inform the Secretary General of the Council of Europe of the fact that it has asked for an arbitral tribunal to be set up, of the name of the other party to the dispute and of the articles of the Convention the interpretation or application of which are, in its opinion, the subject-matter of the dispute. The Secretary General shall transmit the information so received to all the Contracting Parties to the Convention.

1.4.2 Europe (Contd.)

1.4.2.1 Council of Europe: Draft European Convention (Contd.)

Article 3

The arbitral tribunal shall consist of three members: each of the parties to the dispute shall appoint one arbitrator; the two arbitrators so appointed shall designate by common agreement the third arbitrator who shall be the chairman of the tribunal. The latter shall not, be a national of one of the parties to the dispute, nor have his usual place of residence in the territory of one of these parties, nor be employed by one of them, nor have dealt with the case in another capacity.

Article 4

1. If the chairman of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the President of the European Court of Human Rights shall, at the request of either party, designate him within a further two months' period.

2. If one of the parties to the dispute does not appoint an arbitrator within two months of receipt of the application, the other party may refer the matter to the President of the European Court of Human Rights, who shall designate the chairman of the arbitral tribunal within a further two months' period. As soon as designated, the chairman of the arbitral tribunal shall request the party which has not appointed an arbitrator to do so within two months. After this period has expired, he shall refer the matter to the President of the European Court of Human Rights, who shall make this appointment within a further two months' period.

3. If in the cases envisaged in the preceding paragraphs, the President of the European Court of Human Rights is unable to act or is a national of one of the parties to the dispute, the chairman of the arbitral tribunal shall be designated or the arbitrator appointed by the Vice-President of the Court or by the most senior member of the Court who is not unable to act and is not a national of one of the parties to the dispute.

4. The above provisions shall apply, as the case may be, in order to fill any vacancy.

Article 5

1. The arbitral tribunal shall decide according to the rules of international law and, in particular, those of this Convention and of the co-operation agreement binding upon the parties to the dispute, including the acts made in execution of this agreement and binding upon these parties.

2. Any arbitral tribunal constituted under the provisions of this Appendix shall draw up its own rules of procedure.

Article 6

1. The decisions of the arbitral tribunal, both on questions of procedure and of substance, shall be taken by majority vote of its members; the absence or abstention of a member for whose appointment one of the parties to the dispute was responsible shall not prevent the tribunal from reaching a decision.

2. The tribunal may take all appropriate measures in order to establish the facts. If two or more arbitral tribunals set up under the provisions of this Appendix are seized of applications with identical or analogous subject-matter, they may inform themselves of the proceedings relating to the establishment of the facts and take them into account as far as possible.

1.4.2 Europe (Concluded)

1.4.2.1 Council of Europe; Draft European Convention (Concluded)

3. The parties to the dispute shall provide all facilities necessary for the effective conduct of the proceedings.

4. The absence or default of a party to the dispute shall not prevent the operation of the proceedings.

Article 7

1. The award of the arbitral tribunal shall be supported by a statement of reasons. It shall be final and binding upon the parties to the dispute.

2. Any dispute which may arise between the parties concerning the interpretation or execution of the award may be submitted by either party to the arbitral tribunal which made the award or, if the latter cannot be seized thereof, to another arbitral tribunal set up for this purpose in the same manner as the first.

2. **RULES OF THE EUROPEAN ECONOMIC COMMUNITY (EEC)**

2.1 COUNCIL DIRECTIVE

of 22 November 1973

on the Approximation of the Laws of the Member States relating to Detergents (*)
(73/404/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof;

Having regard to the proposal from the Commission;

Having regard to the Opinion of the European Parliament (1);

Having regard to the Opinion of the Economic and Social Committee (2);

Whereas the laws in force in the Member States for ensuring the biodegradability of surfactants differ from one Member state to another, which results in a hindrance to trade;

Whereas the increasing use of detergents is one of the causes of pollution of the natural environment in general and the pollution of waters in particular;

Whereas one of the pollutant effects of detergents on waters, namely the formation of foam in large quantities restricts contact between water and air, renders oxygenation difficult, causes inconvenience to navigation, impairs the photosynthesis necessary to the life of aquatic flora, exercises an unfavourable influence on the various stages of processes for the purification of waste waters, causes damage to waste water purification plants and constitutes an indirect microbiological risk due to the possible transference of bacteria and viruses.

Whereas it is desirable to maintain an average level of biodegradability of detergents of 90% and whereas technology and industrial practicalities make this possible, and whereas it is desirable nevertheless to safeguard against uncertainties of test methods which could lead to rejection decisions having important economic consequences.

HAS ADOPTED THIS DIRECTIVE:

Article 1

For the purposes of this Directive, detergent shall mean the composition of which has been specially studied with a view to developing its detergent properties, and which is made up of essential constituents (surfactants) and, in general, additional constituents (adjuvants, intensifying agents, fillers additives and other auxiliary constituents).

(*) Text in: Official Journal of the European Communities (O.J.), No. L347, 17.12.1973,p.51

(1) O.J. No. C10, 5.2.1972, p. 29

(2) O.J. No. C89, 23.8.1972, P. 13

2.1 COUNCIL DIRECTIVE (73/404/EEC) (Contd.)

Article 2

Member States shall prohibit the placing on the market and use of detergents where the average level of biodegradability of the surfactants contained therein is less than 90% for each of the following categories: anionic, cationic, non-ionic and amphoteric.

The use of surfactants with an average level of biodegradability less than 90% must not, under normal conditions of use, be harmful to the environment.

Article 3

No Member State may, on grounds of the biodegradability or toxicity of surfactants, prohibit or restrict or hinder the placing on the market and use of detergents which comply with the provisions of this Directive.

Article 4

Compliance with the requirements of Article 2 shall be established by the methods of testing provided for in other Council Directives, which take due account of the unreliability of such methods and lay down the relevant tolerances.

Article 5

1. If a Member State should establish, by test procedures carried out on the basis of the Directives referred to in Article 4, that a detergent does not comply with the requirements laid down in Article 2, the Member State shall prohibit the placing on the market and use of that detergent in its territory.

2. In the event of that Member State taking the decision to prohibit a detergent, it shall immediately inform the Member State from which the product comes and the Commission to that effect, stating the reasons for its decision and details of the tests referred to in paragraph 1.

If the State from which the detergent comes raises objections to the decision, the Commission shall consult without delay both the Member States concerned and, if appropriate, any other Member States.

If it is not possible to reach agreement, the Commission shall, within three months from the date of receiving the information provided for in the first subparagraph obtain the opinion of one of the laboratories referred to in Article 6, but not one of the laboratories notified by the two Member States concerned under that Article.

The opinion shall be issued using the reference methods laid down in the directives referred to in Article 4.

The Commission shall transmit the opinion of the laboratory to the Member States concerned which may, within one month forward their comments to the Commission. The Commission may at the same time hear any comments from the interested parties on that opinion.

After taking note of those comments, the Commission shall make any necessary recommendations.

2.1 COUNCIL DIRECTIVE (73/404/EEC) (Concluded)

Article 6

Each Member State shall notify the other Member States and the Commission of the laboratory or laboratories authorized to carry out the tests in accordance with the reference methods referred to in Article 5(2).

Article 7

1. The following information must appear in legible, visible and indelible characters on the packaging in which the detergents are put up for sale to the consumer:

- (a) the name of the product,
- (b) the name or trade name and address or trademark of the party responsible for placing the product on the market.

The same information must appear on all documents accompanying detergents transported in bulk.

2. Member States may make the placing on the market of detergents in their territory subject to the use of their national languages for the information specified in paragraph 1.

Article 8

1. Member States shall put into force the laws, regulations and administrative provisions necessary for compliance with this Directive within eighteen months of its notification and shall forthwith inform the Commission thereof.

2. Member States shall ensure that the texts of the main provisions of national law in the field covered by this Directive are communicated to the Commission.

Article 9

This Directive is addressed to the Member States.

DONE at Brussels, 22 November 1973. SIGNED - for the Council, the President (J. KAMPMANN)

2.2 COUNCIL DIRECTIVE

of 22 November 1973

on the Approximation of the Laws of the Member States relating
to Methods of Testing the Biodegradability of Anionic Surfactants (*)

(73/405/EEC)

(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof;

Having regard to the Council Directive of 22 November 1973 (1) on the Approximation of the Laws of the Member States relating to Detergents, and in particular Article 4 thereof;

Having regard to the proposal of the Commission;

Having regard to the Opinion of the European Parliament (2);

Having regard to the Opinion of the Economic and Social Committee (3);

Whereas, to enable Member States to determine the level of biodegradability of the anionic surfactant, it is advisable to employ methods of testing already in use for this purpose in certain Member States; whereas, however, biodegradability must be tested by a common method in the event of a dispute;

Whereas as concerns the approximation of the laws of the Member States relating to detergents, suitable tolerances for measuring biodegradability should be determined as provided for likewise in Article 4 of Council Directive of 22 November 1973, in order to take account of the unreliability of testing methods which could lead to rejection decisions having important economic consequences and whereas a rejection decision must only be taken therefore if an analysis shows a level of biodegradability less than 80%,

HAS ADOPTED THIS DIRECTIVES

Article 1

This Directive concerns the methods of testing the biodegradability of anionic surfactants.

Article 2

In accordance with the provisions of Article 4 of Council Directive of 22 November 1973, due account being taken of the unreliability of testing methods, the Member States shall prohibit the placing on the market and use on their territory of a detergent if the level of biodegradability of this detergent is less than 80%, determined on a single analysis in accordance with one of the following methods:

(*) Text in: official Journal of the European Communities(O.J.), No.1347,17.12.1973,p.53

(1) Seep. 51 of this O.J.

(2) O.J. No. C10, 5.2.1972, p.29

(3) O.J. No. C89, 23.8.1972, p.13

2.2 COUNCIL DIRECTIVE (73/405/EEC) (Concluded)

- the method in use in France, approved by decree of 11 December 1970, published in the 'Jurnal Officiel de la République française' No. 3 of 5 January 1971, and by experimental standard T 73-260 February 1971, published by the 'Association française de normalisation' (AFNOR);
- the method in use in the Federal Republic of Germany, approved by the 'Verordnung über die Abbaubarkeit von Detergentien in Wasch- und Reinigungsmitteln' of 1 December 1962, published in the Bundesgesetzblatt, Part I, page 698;
- the OECD method, published in the OECD's technical report of 29 December 1970 on 'Determination of the Biodegradability of anionic synthetic surface active agents'.

Article 3

Under the procedure laid down in Article 5.2 of the Council Directive of 22 Nov. 1973, the laboratory opinion on anionic surfactants shall be based on the "Confirmatory test procedure" in the OECD method, described in the Annex to this Directive.

Article 4

1. Member States shall put into force the legal, statutory and administrative measures necessary to comply with this Directive within eighteen months of its notification and shall forthwith inform the Commission thereof.
2. Member States shall ensure that the Commission be informed of the text of the main provisions of national law they adopt in the field covered by this Directive.

Article 5

This Directive is addressed to the Member States.

DONE at Brussels, 22 November 1973. SIGNED - for the Council, the President (J. **KAMPMANN**)

ANNEX

Determination of the Biodegradability of Anionic Surfactants

...

2.3 COUNCIL DIRECTIVE

of 16 June 1975

concerning the Quality required of Surface Water intended for
the Abstraction of Drinking Water in the Member States (*)

(75/440/EEC)

(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof;

Having regard to the proposal from the Commission;

Having regard to the Opinion of the European Parliament (1);

Having regard to the Opinion of the Economic and Social Committee (2);

Whereas the increasing use of water resources for the abstraction of water for human consumption necessitates a reduction in the pollution of water and its protection against subsequent deterioration;

Whereas it is necessary to protect public health and, to this end, to exercise surveillance over surface water intended for the abstraction of drinking water and over the purification treatment of such water;

Whereas any disparity between the provisions on the quality required of surface water intended for the abstraction of drinking water already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas it is therefore necessary to approximate laws in this field as provided for in Article 100 of the Treaty;

Whereas it seems necessary for this approximation of laws to be accompanied by Community action so that one of the aims of the Community in the sphere of protection of the environment and improvement of the quality of life can be achieved by wider regulations; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoked as the powers required for this purpose have not been provided by the Treaty;

Whereas the programme of action of the European Communities on the environment (3) provides that quality objectives are to be jointly drawn up fixing the various requirements which an environment must meet inter alia the definition of parametric values for water, including surface water intended for the abstraction of drinking water;

Whereas the joint fixing of minimum quality requirements for surface water intended for the abstraction of drinking water precludes neither more stringent requirements in the case of such water otherwise utilized nor the requirements imposed by aquatic life;

(*) Text in: Official Journal of the European Communities(O.J.),No. L194, 25.7.1975,P.26

(1) J. No. C109, 19.9.1974, p.41

(2) O.J. O.J. No. C62, 30.5.1974, p.7

(3) O.No. C112, 20.12.1973, p.3

2.3 COUNCIL DIRECTIVE (75/440/EEC) (Contd.)

Whereas it will be necessary to review in the light of new technical and scientific knowledge the parametric values defining the quality of surface water used for the abstraction of drinking water;

Whereas the methods currently being worked out for water sampling and for measuring the parameters defining the physical, chemical and microbiological characteristics of surface water intended for the abstraction of drinking water are to be covered by a Directive to be adopted as soon as possible,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive concerns the quality requirements which surface fresh water used or intended for use in the abstraction of drinking water, hereinafter called "surface water", must meet after application of appropriate treatment. Ground water, brackish water and water intended to replenish water-bearing beds shall not be subject to this Directive.

2. For the purposes of applying this Directive, all surface water intended for human consumption and supplied by distribution networks for public use shall be considered to be drinking water.

Article 2

For the purposes of this Directive surface water shall be divided according to limiting values into three categories, A1, A2 and A3, which correspond to the appropriate standard methods of treatment given in Annex I. These groups correspond to three different qualities of surface water, the respective physical, chemical and microbiological characteristics of which are set out in the table given in Annex II.

Article 3

1. Member States shall set, for all sampling points, or for each individual sampling point, the values applicable to surface water for all the parameters given in Annex II.

Member States may refrain from setting the values of parameters in respect of which no value is shown, in the table in Annex II, pursuant to the first subparagraph pending determination of the figures in accordance with the procedure under Article 9.

2. The values set pursuant to paragraph 1 may not be less stringent than those given in the "I" columns of Annex II.

3. Where values appear in the "G" columns of Annex II, whether or not there is a corresponding value in the "I" columns of that Annex, Member States shall endeavour to respect them as guidelines, subject to Article 6.

Article 4

1. Member States shall take all necessary measures to ensure that surface water conforms to the values laid down pursuant to Article 3. Each Member State shall apply this Directive without distinction to national waters and waters crossing its frontiers.

2.3 COUNCIL DIRECTIVE (75/440/EEC) (Contd.)

2. In line with the objectives of this Directive, Member States shall take the necessary measures to ensure continuing improvement of the environment. To this end, they shall draw up a systematic plan of action including a timetable for the improvement of surface water and especially that falling within category A3. In this context, considerable improvements are to be achieved under the national programmes over the next 10 years.

The timetable referred to in the first subparagraph will be drawn up in the light of the need to improve the quality of the environment, and of water in particular, and the economic and technical constraints which exist or which may arise in the various regions of the Community.

The Commission will carry out a thorough examination of the plans referred to in the first subparagraph, including the timetables, and will, if necessary, submit appropriate proposals to the Council.

3. Surface water having physical, chemical and microbiological characteristics falling short of the mandatory limiting values corresponding to treatment type A3 may not be used for the abstraction of drinking water. However, such lower quality water may, in exceptional circumstances, be utilized provided suitable processes - including blending - are used to bring the quality characteristics of the water up to the level of the quality standards for drinking water. The Commission must be notified of the grounds for such exceptions, on the basis of a water resources management plan within the area concerned, as soon as possible, in the case of existing installations, and in advance, in the case of new installations. The Commission will examine these grounds in detail and, where necessary, submit appropriate proposals to the Council.

Article 5

1. For the purposes of Article 4 surface water shall be assumed to conform to the relevant parameters if samples of this water taken at regular intervals at the same sampling point and used in the abstraction of drinking water show that it complies with the parametric values for the water quality in question, in the case of:

- 95% of the samples for parameters conforming to those specified in the "I" columns in Annex II,
- 90% of the samples in all other cases,

and if in the case of the 5 or 10% of the samples which do not comply:

- (a) the water does not deviate from the parametric values in question by more than 50%, except for temperature, pH, dissolved oxygen and microbiological parameters;
- (b) there can be no resultant danger to public health;
- (c) consecutive water samples taken at statistically suitable intervals do not deviate from the relevant parametric values.

2. Pending a Community policy on the matter, the frequency of sampling and the analysis of each parameter, together with the methods of measurement shall be defined by the competent national authorities which shall take into account the volume of water abstracted, the extent of the abstraction, the population served, the degree of risk engendered by the quality of the water and seasonal variations in the quality.

2.3 GOUNCIL DIRECTIVE (75/440/EEC) (Contd.)

3. Higher values than those referred to in paragraph 2, shall not be taken into consideration in the calculation of the percentages referred to in paragraph 1 when they are the result of floods or natural disasters or abnormal weather conditions.

4. Sampling shall mean the place at which surface water is abstracted before being sent for purification treatment.

Article 6

Member States may at any time fix more stringent values for surface water than those laid down in this Directive.

Article 7

Implementation of the measures taken pursuant to this Directive may under no circumstances lead either directly or indirectly to deterioration of the current quality of surface water.

Article 8

This Directive may be waived:

- (a) in the case of floods or other natural disasters;
- (b) in the case of certain parameters marked (0) in Annex II because of exceptional meteorological or geographical conditions;
- (c) where surface water undergoes natural enrichment in certain substances as a result of which it would exceed the limits laid down for categories A1, A2 and A3 in the table in Annex II;
- (d) in the case of surface water in shallow lakes or virtually stagnant surface water, for parameters marked with an asterisk in the table in Annex II, this derogation being applicable only to lakes with a depth not exceeding 20 m., with an exchange of water slower than one year, and without a discharge of waste water into the water body.

Natural enrichment means the process whereby, without human intervention, a given body of water receives from the soil certain substances contained therein.

In no case may the exceptions provided for in the first subparagraph disregard the requirements of public health protection.

Where a Member State waives the provisions of this Directive, it shall forthwith notify the Commission thereof, stating its reasons and the periods anticipated.

Article 9

The numerical values and the list of parameters given in the table in Annex II, defining the physical, chemical and microbiological characteristics of surface water may be revised either at the request of a Member State or on a proposal from the Commission, whenever technical and scientific knowledge regarding methods of treatment is extended or drinking water standards are modified.

2.3 COUNCIL DIRECTIVE (75/440/EEC) (Concluded)

Article 10

Member States shall bring into force the laws, regulations and administrative provisions needed in order to comply with this Directive within two years of its notification. They shall forthwith inform the Commission thereof.

Article 11

This Directive is addressed to the Member States.

DONE at Luxembourg, 16 June 1975. SIGNED - for the Council, the President (R. RYAN)

ANNEX I

Definition of the standard methods of treatment for transforming surface water of categories A1, A2 and A3 into drinking water

- Category A1
Simple physical treatment and disinfection, e.g. rapid filtration and disinfection.
- Category A2
Normal physical treatment, Chemical treatment and disinfection, e.g. pre-chlorination, coagulation, flocculation, decantation, filtration, disinfection (final chlorination).
- Category A3
Intensive physical and chemical treatment, extended treatment and disinfection, e.g. chlorination to break-point, coagulation, flocculation, decantation, filtration, adsorption (activated carbon), disinfection (ozone, final chlorination).

ANNEX.II

Characteristics of surface water intended for the abstraction of drinking water

...

2.4 COUNCIL DIRECTIVE
of 8 December 1975
concerning the Quality of Bathing water (*)
(76/160/EEC)
(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

whereas, in order to protect the environment and public health, it is necessary to reduce the pollution of bathing water and to protect such water against further deterioration;

whereas surveillance of bathing water is necessary in order to attain, within the framework of the operation of the common market, the Community's objectives as regards the improvement of living conditions, the harmonious development of economic activities throughout the Community and continuous and balanced expansion;

Whereas there exist in this area certain laws, regulations or administrative provisions in Member States which directly affect the functioning of the common market; Whereas, however, not all the powers needed to act in this way have been provided for in the Treaty;

Whereas the programme of action of the European Communities on the environment (3) provides that quality objectives are to be jointly drawn up fixing the various requirements which an environment must meet inter alia the definition of parameters for water, including bathing water;

whereas, in order to attain these quality objectives, the Member States must lay down limit values corresponding to certain parameters; whereas bathing water must be made to conform to these values within 10 years following the notification of this Directive;

whereas it should be provided that bathing water will, under certain conditions, be deemed to conform to the relevant parametric values even if a certain percentage of samples taken during the bathing season does not comply with the limits specified in the Annex;

Whereas, to achieve a certain degree of flexibility in the application of this Directive, the Member States must have the power to provide for derogations; whereas such derogations must not, however, disregard requirements essential for the protection of public health;

(*) Text in: Official Journal of the European Communities(O.J) , No. L31, 5.2.1976, p.1.

(1) O.J. No. C128, 9.6.1975, P.13

(2) O.J. No. C286, 15.12.1975, P.5

(3) O.J. No. C112, 20.12.1973, p.3

2.4 COUNCIL DIRECTIVE (76/160/EEC) (Contd.)

whereas technical progress necessitates rapid adaptation of the technical requirements laid down in the Annex; whereas, in order to facilitate the introduction of the measures required for this purpose, a procedure should be provided for whereby close cooperation would be established between the Member States and the Commission within a Committee on Adaptation to Technical Progress;

Whereas public interest in the environment and in the improvement of its quality is increasing; whereas the public should therefore receive objective information on the quality of bathing water,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive concerns the quality of bathing water, with the exception of water intended for therapeutic purposes and water used in swimming pools.
2. For the purposes of this Directive:
 - (a) "bathing water" means all running or still fresh waters or parts thereof and sea water, in which:
 - bathing is explicitly authorized by the competent authorities of each Member State, or
 - bathing is not prohibited and is traditionally practised by a large number of bathers;
 - (b) "bathing area" means any place where bathing water is found;
 - (c) "bathing season" means the period during which a large number of bathers can be expected, in the light of local custom, and any local rules which may exist concerning bathing and weather conditions.

Article 2

The physical, chemical and microbiological parameters applicable to bathing water are indicated in the Annex which forms an integral part of this Directive.

Article 3

1. Member States shall set, for all bathing areas or for each individual bathing area, the values applicable to bathing water for the parameters given in the Annex.

In the case of the parameters for which no values are given in the Annex, Member States may decide not to fix any values pursuant to the first subparagraph, until such time as figures have been determined.
2. The values set pursuant to paragraph 1 may not be less stringent than those given in column I of the Annex.
 1. where values appear in column G of the Annex, whether or not there is a corresponding value in column I of the Annex, Member States shall endeavour, subject to Article 7, to observe them as guidelines.

2.4 COUNCIL DIRECTIVE (76/160/EEC) (Contd.)

Article 4

1. Member States shall take all necessary measures to ensure that, within 10 years following the notification of this Directive, the quality of bathing water conforms to the limit values set in accordance with Article 3.

2. Member States shall ensure that, in bathing areas specially equipped for bathing to be created by the competent authorities of the Member States after the notification of this Directive, the "I values" laid down in the Annex are observed from the time when bathing is first permitted. However, for bathing areas created during the two years following the notification of this Directive, these values need not be observed until the end of that period.

3. In exceptional circumstances Member States may grant derogations in respect of the 10 year time limit laid down in paragraph 1. Justifications for any such derogations based on plans for the management of water within the area concerned must be communicated to the Commission as soon as possible and not later than six years following the notification of this Directive. The Commission shall examine these justifications in detail and, where necessary, make appropriate proposals concerning them to the Council.

4. As regards sea water in the vicinity of frontiers and water crossing frontiers which affect the quality of the bathing water of another Member State, the consequences for the common quality objectives for bathing areas so affected shall be determined in collaboration by the riparian Member States concerned.

The Commission may participate in these deliberations.

Article 5

1. For the purposes of Article 4, bathing water shall be deemed to conform to the relevant parameters:

if samples of that water, taken at the same sampling point and at the intervals specified in the Annex, show that it conforms to the parametric values for the quality of the water concerned, in the case of:

- 95% of the samples for parameters corresponding to those specified in Col. I of the Annex;
- 90% of the samples in all other cases with the exception of the "total coliform" and "faecal coliform" parameters where the percentage may be 80%

and if, in the case of the 5, 10 or 20% of the samples which do not comply:

- the water does not deviate from the parametric values in question by more than 50%, except for microbiological parameters, pH and dissolved oxygen;
- consecutive water samples taken at statistically suitable intervals do not deviate from the relevant parametric values.

2. Deviations from the values referred to in Article 3 shall not be taken into consideration in the calculation of the percentage referred to in paragraph 1 when they are the result of floods, other natural disasters or abnormal weather conditions.

2.4 COUNCIL DIRECTIVE (76/160/EEC) (Contd.)

Article 6

1. The competent authorities in the Member States shall carry out sampling operations, the minimum frequency of which is laid down in the Annex.
2. Samples should be taken at places where the daily average density of bathers is highest. Samples should preferably be taken 30 cm. below the surface of the water except for mineral oil samples which shall be taken at surface level. Sampling should begin two weeks before the start of the bathing season.
3. Local investigation of the conditions prevailing upstream in the case of fresh running water, and of the ambient conditions in the case of fresh still water and sea water should be carried out scrupulously and repeated periodically in order to obtain geographical and topographical data and to determine the volume and nature of all polluting and potentially polluting discharges and their effect according to the distance from the bathing area.
4. Should inspection by a competent authority or sampling operations reveal that there is a discharge or a probable discharge of substances likely to lower the quality of the bathing water, additional sampling must take place. Such additional sampling must also take place if there are any other grounds for suspecting that there is a decrease in water quality.
5. Reference methods of analysis for the parameters concerned are set out in the Annex. Laboratories which employ other methods must ensure that the results obtained are equivalent or comparable to those specified in the Annex.

Article 7

1. Implementation of the measures taken pursuant to this Directive may under no circumstances lead either directly or indirectly to deterioration of the current quality of bathing water.
2. Member States may at any time fix more stringent values for bathing water than those laid down in this directive.

Article 8

This Directive may be waived:

- (a) in the case of certain parameters marked (o) in the Annex, because of exceptional weather or geographical conditions;
- (b) when bathing water undergoes natural enrichment in certain substances causing a deviation from the values prescribed in the Annex.

Natural enrichment means the process whereby, without human intervention, a given body of water receives from the soil certain substances contained therein.

In no case may the exceptions provided for in this Article disregard the requirements essential for public health protection.

where a Member State waives the provisions of this Directive, it shall forthwith notify the Commission thereof, stating its reasons and the period anticipated.

2.4 COUNCIL DIRECTIVE (76/160/EEC) (Contd.)

Article 9

such amendments as are necessary for adapting this Directive to technical progress shall relate to:

- the methods of analysis
- the G and I parameter values set out in the Annex.

They shall be adopted in accordance with the procedure laid down in Article 11.

Article 10

1. A Committee on Adaptation to Technical Progress (hereinafter called "the committee") is hereby set up. It shall consist of representatives of the Member States and be chaired by a representative of the Commission.

2. The committee shall draw up its own rules of procedure. Article 11

Article 11

1. where the procedure laid down in this Article is to be followed, matters shall be referred to the committee by the chairman, either on his own initiative or at the request of the representative of a Member State.

2. The representative of the Commission shall submit to the committee a draft of the measures to be adopted. The committee shall deliver its opinion on the draft within a time limit set by the chairman having regard to the urgency of the matter. Opinions shall be adopted by a majority of 41 votes, the votes of the Member States being weighted as provided in Article 148(2) of the Treaty. The chairman shall not vote.

3. (a) The Commission shall adopt the measures envisaged where they are in accordance with the opinion of the committee.

(b) where the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is adopted, the Commission shall without delay propose to the Council the measures to be adopted. The Council shall act by a qualified majority.

(c) If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 12

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification. They shall forthwith inform the Commission thereof.

2. Member States will communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

2.4 COUNCIL DIRECTIVE (76/160/EEC) (Concluded)

Article 13

Member States shall, four years "following the notification of this Directive and at regular intervals thereafter, submit a comprehensive report to the Commission on their bathing water and the most significant characteristics thereof.

After prior consent has been obtained from the Member State concerned the Commission may publish the information obtained.

Article 14

This Directive is addressed to the Member States.

DONE at Brussels, 8 December 1975. SIGNED - for the Council, the President (M. PEDINI)

ANNEX

Quality Requirements for Bathing Water

...

2.5 COUNCIL DIRECTIVE

of 4 May 1976

on Pollution caused by Certain Dangerous Substances Discharged
into the Aquatic Environment of the Community (*)

(76/464/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

Whereas there is an urgent need for general and simultaneous action by the Member States to protect the aquatic environment of the Community from pollution, particularly that caused by certain persistent, toxic and bioaccumulable substances;

Whereas several conventions or draft conventions, including the Convention for the prevention of marine pollution from land-based sources, the draft Convention for the protection of the Rhine against chemical pollution and the draft European Convention for the protection of international watercourses against pollution, are designed to protect international watercourses and the marine environment from pollution; whereas it is important to ensure the coordinated implementation of these conventions;

Whereas any disparity between the provisions on the discharge of certain dangerous substances into the aquatic environment already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas it is therefore necessary to approximate laws in this field, as provided for in Article 100 of the Treaty;

Whereas it seems necessary for this approximation of laws to be accompanied by Community action so that one of the aims of the Community in the sphere of protection of the environment and improvement of the quality of life can be achieved by more extensive rules; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoked as the powers required for this purpose have not been provided for by the Treaty;

Whereas the programme of action of the European Communities on the environment (3), provides for number of measures to protect fresh water and sea water from certain pollutants;

Whereas in order to ensure effective protection of the aquatic environment of the Community, it is necessary to establish a first list, called List I, of certain individual substances selected mainly on the basis of their toxicity, persistence, and bioaccumulation,

(*) Text in: Official Journal of the European Communities (O.J.), No. L129, 18.5.1976, p.23

(1) O.J. No. C5, 8.1.1975, p.62

(2) O.J. No. C108, 15.5.1975, p.76

(3) O.J. No. C112, 20.12.1973, p.1

2.5 COUNCIL DIRECTIVE (76/464/EEC) (contd.)

with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless, and a second list, called List II, containing substances which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged; whereas any discharge of these substances should be subject to prior authorization which specifies emission standards;

whereas pollution through the discharge of the various dangerous substances within List I must be eliminated; whereas the Council should, within specific time limits and on a proposal from the Commission, adopt limit values which the emission standards should not exceed, methods of measurement, and the time limits with which existing dischargers should comply;

Whereas the Member States should apply these limit values, except where a Member State can prove to the Commission, in accordance with a monitoring procedure set up by the Council, that the quality objectives established by the Council, on a proposal from the Commission, are being met and continuously maintained throughout the area which might be affected by the discharges because of the action taken, among others, by the Member State;

Whereas it is necessary to reduce water pollution caused by the substances within List II; whereas to this end the Member States should establish programmes which incorporate quality objectives for water drawn up in compliance with Council Directives where they exist; whereas the emission standards applicable to such substances should be calculated in terms of these quality objectives;

Whereas, subject to certain exceptions and modifications, this Directive should be applied to discharges into ground water pending the adoption of specific Community rules in the matter;

Whereas one or more Member States may be able, individually or jointly, to take more stringent measures than those provided for under this Directive;

Whereas an inventory of discharges of certain particularly dangerous substances into the aquatic environment of the Community should be drawn up in order to know where they originated;

Whereas it may be necessary to revise and, where required, supplement Lists I and II on the basis of experience, if appropriate, by transferring certain substances from List II to List I.

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. Subject to Article 8, this Directive shall apply to:
 - inland surface water,
 - territorial waters,
 - inland coastal waters,
 - ground water.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

2. For the purposes of this Directive:

- (a) "inland surface water" means all static or flowing fresh surface water situated in the territory of one or more Member States;
- (b) "internal coastal waters" means waters on the land-ward side of the base line from which the "breadth of territorial waters is measured, extending, in the case of watercourses, up to the fresh-water limit ;
- (c) "fresh-water limit" means the place in the watercourse where, at low tide and in a period of low fresh-water flow, there is an appreciable increase in salinity due to the presence of sea-water;
- (d) "discharge" means the introduction into the waters referred to in paragraph 1 of any substances in List I or List II of the Annex, with the exception of:
 - discharges of dredgings,
 - operational discharges from ships in territorial waters,
 - dumping from ships in territorial waters;
- (e) "pollution" means the discharge by man, directly or indirectly, of substances or energy into the aquatic environment, the results of which are such as to cause hazards to human health, harm to living resources and to aquatic ecosystems, damage to amenities or interference with other legitimate uses of water.

Article 2

Member States shall take the appropriate steps to eliminate pollution of the waters referred to in Article 1 by the dangerous substances in the families and groups of substances in List I of the Annex and to reduce pollution of the said waters by the dangerous substances in the families and groups of substances in List II of the Annex, in accordance with this Directive, the provisions of which represent only a first step towards this goal.

Article 3

with regard to the substances belonging to the families and groups of substances in List I, hereinafter called "substances within List I":

1. all discharges into the waters referred to in Article 1 which are liable to contain any such substance shall require prior authorization by the competent authority of the Member State concerned;
2. the authorization shall lay down emission standards with regard to discharges of any such substance into the waters referred to in Article 1 and, where this is necessary for the implementation of this Directive, to discharges of any such substance into sewers;
3. in the case of existing discharges of any such substance into the waters referred to in Article 1, the dischargers must comply with the conditions laid down in the authorization within the period stipulated therein. This period may not exceed the limits laid down in accordance with Article 6(4);
4. authorizations may be granted for a limited period only. They may be renewed, taking into account any charges in the limit values referred to in Article 6.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

Article 4

1. Member States shall apply a System of zero-emission to discharges into ground water of substances within List I,
2. Member States shall apply to ground water the provisions of this Directive relating to the substances belonging to the families and groups of substances in List II hereinafter called "substances within List II",
3. Paragraphs 1 and 2 shall apply neither to domestic effluents nor to discharges injected into deep, saline and unusable strata.
4. The provisions of this Directive relating to ground water shall no longer apply upon the implementation of a separate Directive on ground water.

Article 5

1. The emission standards laid down in the authorizations granted pursuant to Article 3 shall determine:
 - (a) the maximum concentration of a substance permissible in a discharge. In the case of dilution the limit value provided for in Article 6(1)(a) shall be divided by the dilution factor;
 - (b) the maximum quantity of a substance permissible in a discharge during one or more specified periods of time. This quantity may, if necessary, also be expressed as a unit of weight of the pollutant per unit of the characteristic element of the polluting activity (e.g. unit of weight per unit of raw material or per product unit).
2. For each authorization, the competent authority of the Member State concerned may, if necessary, impose more stringent emission standards than those resulting from the application of the limit values laid down by the Council pursuant to Article 6, taking into account in particular the toxicity, persistence, and bioaccumulation of the substance concerned in the environment into which it is discharged.
3. If the discharger states that he is unable to comply with the required emission standards, or if this situation is evident to the competent authority in the Member State concerned, authorization shall be refused.
4. Should the emission standards not be complied with, the competent authority in the Member State concerned shall take all appropriate steps to ensure that the conditions of authorization are fulfilled and, if necessary, that the discharge is prohibited.

Article 6

1. The Council, acting on a proposal from the Commission, shall lay down the limit values which the emission standards must not exceed for the various dangerous substances included in the families and groups of substances within List I. These limit values shall be determined by:
 - (a) the maximum concentration of a substance permissible in a discharge, and

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

- (b) where appropriate, the maximum quantity of such a substance expressed as a unit of weight of the pollutant per unit of the characteristic element of the polluting activity (e.g. unit of weight per unit of raw material or per product unit).

where appropriate, limit values applicable to industrial effluents shall be established according to sector and type of product.

The limit values applicable to the substances within List I shall be laid down mainly on the basis of:

- toxicity,
- persistence,
- bioaccumulation,

taking into account the best technical means available.

2. The Council, acting on a proposal from the Commission, shall lay down quality objectives for the substances within List I.

These objectives shall be laid down principally on the basis of the toxicity, persistence and accumulation of the said substances in living organisms and in sediment, as indicated by the latest conclusive scientific data, taking into account the difference in characteristics between salt-water and fresh water.

3. The limit values established in accordance with paragraph 1 shall apply except in the cases where a Member State can prove to the Commission, in accordance with a monitoring procedure set up by the Council on a proposal from the Commission, that the quality objectives established in accordance with paragraph 2, or more severe Community quality objectives, are being met and continuously maintained throughout the area which might be affected by the discharges because of the action taken, among others, by that Member State.

The Commission shall report to the Council the instances where it has had recourse to the quality objectives method. Every five years the Council shall review, on the basis of a Commission proposal and in accordance with Article 148 of the Treaty, the instances where the said method has been applied.

4. For those substances included in the families and groups of substances referred to in paragraph 1, the deadlines referred to in point 3 of Article 3 shall be laid down by the Council in accordance with Article 12, taking into account the features of the industrial sectors concerned and, where appropriate, the types of products.

Article 7

1. In order to reduce pollution of the waters referred to in Article 1 by the substances within List II, Member States shall establish programmes in the implementation of which they shall apply in particular the methods referred to in paragraphs 2 and 3.

2. All discharges into the waters referred to in Article 1 which are liable to contain any of the substances within List II shall require prior authorization by the competent authority in the Member State concerned, in which emission standards shall be laid down. Such standards shall be based on the quality objectives, which shall be fixed as provided for in paragraph 3.

3. The programmes referred to in paragraph 1 shall include quality objectives for water; these shall be laid down in accordance with Council Directives, where they exist.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

4. The programmes may also include specific provisions governing the composition and use of substances or groups of substances and products and shall take into account the latest economically feasible technical developments.
5. The programmes shall set deadlines for their implementation.
6. Summaries of the programmes and the results of their implementation shall be communicated to the Commission.
7. The Commission, together with the Member States, shall arrange for regular comparisons of the programmes in order to ensure sufficient coordination in their implementation. If it sees fit, it shall submit relevant proposals to the Council to this end.

Article 8

Member States shall take all appropriate steps to implement measures adopted by them pursuant to this Directive in such a way as not to increase the pollution of waters to which Article 1 does not apply. They shall in addition prohibit all acts which intentionally or unintentionally circumvent the provisions of this Directive.

Article 9

The application of the measures taken pursuant to this Directive may on no account lead, either directly or indirectly, to increased pollution of the waters referred to in Article 1.

Article 10

where appropriate, one or more Member States may individually or jointly take more stringent measures than those provided for under this Directive.

Article 11

The competent authority shall draw up an inventory of the discharges into the waters referred to in Article 1 which may contain substances within List I to which emission standards are applicable.

Article 12

1. The Council, acting unanimously, shall take a decision within nine months on any Commission proposals made pursuant to Article 6 and on the proposals concerning the methods of measurement applicable.

Proposals concerning an initial series of substances as well as the methods of measurement applicable and the deadlines referred to in Article 6(4) shall be submitted by the Commission within a maximum period of two years following notification of this Directive.

2. The Commission shall, where possible within 27 months following notification of this Directive, forward the first proposals made pursuant to Article 7(7). The Council, acting unanimously, shall take a decision within nine months.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

Article 13

1. For the purposes of this Directive, Member States shall supply the Commission, at its request to be submitted in each case, with all the necessary information, and in particular:

- details of authorizations granted pursuant to Article 3 and Article 7(2),
- the results of the inventory provided for in Article 11,
- the results of monitoring by the national network,
- additional information on the programmes referred to in Article 7.

2. Information acquired as a result of the application of this Article shall be used only for the purpose for which it was requested.

3. The Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information acquired by them pursuant to this Directive and of a kind covered by the obligation of professional secrecy.

4. The provisions of paragraphs 2 and 3 shall not prevent publication of general information or surveys which do not contain information relating to particular undertakings or associations of undertakings.

Article 14

The Council, acting on a proposal from the Commission, which shall act on its own initiative or at the request of a Member State, shall revise and, where necessary, supplement Lists I and II on the basis of experience, if appropriate, by transferring certain substances from List II to List I.

Article 15

This Directive is addressed to the Member States.

DONE at Brussels, 4 May 1976. SIGNED - for the Council, the President (G. THORN)

ANNEX

List I of families and groups of substances

List I contains certain individual substances which belong to the following families and groups of substances, selected mainly on the basis of their toxicity, persistence and bioaccumulation, with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless:

1. organohalogen compounds and substances which may form such compounds in the aquatic environment.
2. organophosphorus compounds.
3. organotin compounds.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Contd.)

4. substances in respect of which it has been proved that they possess carcinogenic properties in or via the aquatic environment (1).
5. mercury and its compounds,
6. cadmium and its compounds,
7. persistent mineral oils and hydrocarbons of petroleum origin, and for the purposes of implementing Articles 2, 8, 9 and 14 of this Directive:
8. persistent synthetic substances which may float, remain in suspension or sink and which may interfere with any use of the waters.

List II of families and groups of substances

List II contains:

- substances belonging to the families and groups of substances in List I for which the limit values referred to in Article 6 of the Directive have not been determined,
- certain individual substances and categories of substances belonging to the families and groups of substances listed below,

and which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged.

Families and groups of substances referred to in the second indent

1. The following metalloids and metals and their compounds:

1.	Sino	6.	Selenium	11.	Tin	16.	Vanadium
2.	Copper	7.	Arsenio	12.	Barium	17.	Oobalt
3.	Niokel	8.	Antimony	13.	Beryllium	18.	Thalium
4.	Chromium	9.	Molybdenum	14.	Boron	19.	Tellurium
5.	Lead	10.	Titanium	15.	Uranium	20.	silver

2. Biocides and their derivatives not appearing in List I.
3. Substances which have a deleterious effect on the taste and/or smell of the products for human consumption derived from the aquatic environment, and compounds liable to give rise to such substances in water.
4. Toxic or persistent organic oomounds of silicon, and substances which may give rise to such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.

(1) Where certain substances in List II are carcinogenic, they are included in category 4 of this list.

2.5 COUNCIL DIRECTIVE (76/464/EEC) (Concluded)

5. Inorganic compounds of phosphorus and elemental phosphorus.
6. Non persistent mineral oils and hydrocarbons of petroleum origin.
7. Cyanides, fluorides.
8. Substances which have an adverse effect on the oxygen balance, particularly: ammonia, nitrites.

STATEMENT OF ARTICLE 8

With regard to the discharge of waste water into the open sea by means of pipelines, Member States undertake to lay down requirements which shall be not less stringent than those imposed by this Directive.

2.6 COUNCIL DECISION

of 12 December 1977

establishing a Common Procedure for the Exchange of Information
on the Quality of Surface Fresh Water in the Community (*)

(77/795/EEC)

(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

Whereas the 1973 (3) and 1977 (4) programmes of action of the European Communities on the environment provide for the introduction of a procedure for the exchange of information between the pollution surveillance and monitoring networks;

Whereas such a procedure is necessary to determine the pollution levels of the rivers in the Community and consequently to lay down guidelines for the control of pollution and nuisances, which is one of the Community's objectives in respect of the improvement of living conditions and the harmonious development of economic activities throughout the Community; whereas no provision is made in the Treaty for the specific powers required for this purpose;

Whereas such an exchange of information on pollution levels is one of the means of monitoring the long-term trends and the improvements resulting from the application of current national and Community rules;

Whereas the exchange of information provided for in this Decision should allow for as significant a comparison as possible of the results obtained in the sampling and measuring stations;

Whereas the exchange of information provided for in this Decision would lay the foundations for a System for monitoring surface fresh-water pollution at Community level and could constitute a component of the global environmental monitoring System provided for in the United Nations environment programme;

Whereas to attain these objectives the Member States must forward to the Commission data relating to certain parameters for surface fresh water; whereas the Commission will draw up a Consolidated report which it will transmit to the Member States;

(*) Text in: Official Journal of the European Communities(O.J.), No. L334, 24.12.1977,P.29

(1) O.J. No. C178, 2.8.1976, p.48

(2) O.J.No. C285, 2.12.1976, p.10

(3) O.J. No. C112, 20.12.1973, p.3

(4) O.J. No. C139, 13.6.1977, p.3

2.6 COUNCIL DECISION (77/795/EEC) (Contd.)

Whereas the list of stations in Annex I may, with advantage, be modified by the Commission at the request of the Member State concerned, provided that certain criteria are fulfilled;

Whereas technical progress requires that the technical specifications laid down in Annex II to this Decision should be adapted promptly; whereas, to facilitate the implementation of the measures required for this purpose, provision must be made for a procedure establishing close cooperation between the Member States and the Commission within the Committee for the adaptation of this Decision to technical progress,

HAS ADOPTED THIS DECISION:

Article 1

A common procedure for the exchange of information on the quality of surface fresh water in the Community is hereby established.

Article 2

1. For the purposes of this Decision "sampling or measuring stations" means the stations listed in Annex I.
2. The information concerning the parameters listed in the first column of Annex II covered by the exchange of information shall be:
 - (a) the results of the measurements carried out by the sampling or measuring stations;
 - (b) a description of the sampling, sample preservation and measuring methods used and the frequency of sampling.

Article 3

1. Each Member State shall designate a central agency and inform the Commission thereof within 15 days of the notification of this Decision.
2. The information referred to in Article 2(2) shall be forwarded to the Commission through the central agency in each Member State.
3. The data referred to in Article 2(2)(a) shall be presented according to the modes of expression and with the significant figures set out in the second and third columns of Annex II.
4. The information, covering a calendar year, shall be forwarded to the Commission at least every 12 months.
5. The Commission shall draw up annually a consolidated report based on the information referred to in Article 2(2). The part of the draft of this report concerning the information supplied by a Member State shall be sent to the central agency of that Member State for verification. Any comments on the draft shall be included in the report. The final version shall be forwarded to the Member States.
6. The Commission shall assess the effectiveness of the procedure for the exchange of information and, within not more than three years of the notification of this Decision, shall submit proposals, where appropriate, to the Council with a view to improving the procedure and, if necessary, harmonizing the methods of measurement.

2.6 COUNCIL DECISION (77/795/EEC) (Contd.)

Article 4

1. Member States shall forward the information referred to in Article 2(2) through their central agencies for the first time within six months of the notification of this Decision.
2. The first information to be exchanged shall be that available in the calendar year preceding the notification of this Decision.

Article 5

1. The list in Annex I may be amended by the Commission on a request from the Member State concerned.
2. The Commission shall make such amendments when it is satisfied that the following requirements are met:
 - that the list of sampling or measuring stations for each Member State is sufficiently representative for the purposes of this Decision,
 - that the stations are at points which are representative of water conditions in the area around and not directly and immediately influenced by a source of pollution,
 - **that they are capable of measuring at regular intervals the parameters in Annex II,**
 - **that they are as a general rule not more than 100 kilometres apart on main rivers, not including tributaries,**
 - that they are upstream of any confluences and not on tidal stretches of water.
3. The Commission shall inform the Council of any amendments which it has accepted.
4. The Commission shall submit for decision by the Council any requests for amendments which it has been unable to accept.

Article 6

Amendments necessary to adapt the list of parameters and the modes of expression and significant figures in respect thereof set out in Annex II to technical progress shall be adopted in accordance with the procedure laid down in Article 8, provided that any additions to the list involve only parameters covered by Community law and for which data are available in all sampling and measuring stations of the Member States. Any changes in the modes of expression and significant figures must not involve changes to the method of measurement used by the Member States in the various stations in Annex I.

Article 7

1. A Committee for the adaptation of this Decision to technical progress (hereinafter referred to as "the Committee") is hereby set up, consisting of representatives of the Member States with a representative of the Commission as Chairman.
2. The Committee shall adopt its own rules of procedure.

Article 8

1. Where the procedure laid down in this Article is to be followed, the matter shall be referred to the Committee by its chairman, either on his own initiative or at the request of a representative of a Member State.

2.6 COUNCIL DECISION (77/795/EEC) (Concluded)

2. The Commission representative shall submit to the Committee a draft of the measures to be taken. The Committee shall give its opinion on the draft within a time limit set by the chairman according to the urgency of the matter. Opinions shall be delivered by a majority of 41 votes, the votes of the Member States being weighted as provided for in Article 148(2) of the Treaty. The chairman shall not vote.

3. (a) Where the measures envisaged are in accordance with the opinion of the Committee, the Commission shall adopt them.

(b) Where the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is delivered, the Commission shall without delay submit to the Council a proposal on the measures to be taken. The Council shall act by a qualified majority.

(c) If within three months of the proposal being submitted to it the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 9

This Decision is addressed to the Member States.

DONE at Brussels, 12 December 1977. SIGNED - for the Council, the President (L. DHOORE)

ANNEX I

List of Sampling or Measuring Stations involved in the Exchange of Information

...

ANNEX II

Parameters in respect of which Information is to be Exchanged

(Modes of expression and significant figures for the parametric data)

...

2.7 COUNCIL DIRECTIVE
of 18 July 1978
on the Quality of Fresh Waters Needing Protection or Improvement
in order to Support Fish Life (*) (78/659/EEC)

(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

Whereas the protection and improvement of the environment necessitates concrete measures to protect waters against pollution, including waters capable of supporting fresh-water fish;

Whereas it is necessary from the ecological and economic viewpoint to safeguard fish populations from various harmful consequences, resulting from the discharge of pollutant substances into the waters, such as, in particular, the reduction in number of fish belonging to a certain species and even in some cases the disappearance of a number of these species;

Whereas the programmes of action of the European Communities on the environment of 1973 (3) and 1977 (4) provide that quality objectives are to be jointly drawn up fixing the various requirements which an environment must meet, inter alia the definition of parameters for water, including waters capable of supporting freshwater fish;

Whereas differences between the provisions already in force or in preparation in the various Member States as regards the quality of waters capable of supporting the life of freshwater fish may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas laws in the field should be approximated as provided for by Article 100 of the Treaty;

Whereas it is necessary to couple this approximation of laws with Community action aiming to achieve, by means of wider-ranging provisions, one of the Community's objectives in the field of environmental protection and the improvement of the quality of life; whereas certain specific provisions must be laid down in this connection; whereas, since the specific powers of action required to this end have not been provided for in the Treaty, it is necessary to invoke Article 235 thereof;

(*) Text in: Official Journal of the European Communities(O.J.), No. L222, 14.8.1978, p.1

(1) O.J. No. C30, 7.2.1977, p.37

(2) O.J. No. C77, 30.3.1977, p.2

(3) O.J. No. C112, 20.12.1973, p.3

(4) O.J. No. C139, 13.6.1977, P.3

2.7 COUNCIL DIRECTIVE (78/659/EEC) (Conta.)

Whereas, in order to attain the objectives of the Directive, the Member States will have to designate the waters to which it will apply and will have to set limit values corresponding to certain parameters; whereas action will be taken to ensure that the waters so designated will conform to these values within five years of this designation;

Whereas provision should be made that waters capable of supporting freshwater fish will, under certain conditions, be deemed to conform to the relevant parametric values even if a certain percentage of samples taken does not comply with the limits specified in the Annex;

Whereas to ensure that the quality of waters capable of supporting freshwater fish is checked a minimum number of samples should be taken and the measurements relating to parameters set out in the Annex should be carried out; whereas such sampling may be reduced or discontinued in the light of the quality of the water;

Whereas the Member States are unable to control certain natural circumstances and it is therefore necessary to provide for the possibility of derogating from this Directive in certain cases;

Whereas technical and scientific progress may make necessary the rapid adaptation of certain of the requirements laid down in the Annexes to this Directive; whereas, in order to facilitate the introduction of the measures required for this purpose, a procedure should be laid down whereby close cooperation would be established between the Member States and the Commission within a Committee on Adaptation to Technical and Scientific Progress,

HAD ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive concerns the quality of fresh waters and applies to those **waters** designated by the Member States as needing protection or improvement in order to support fish life.
2. This Directive shall not apply to waters in natural or artificial fish ponds used for intensive fish-farming.
3. The aim of this Directive is to protect or improve the quality of those running or standing fresh waters which support or which, if pollution were reduced or eliminated, would become capable of supporting fish belonging to:
 - indigenous species offering a natural diversity, or
 - species the presence of which is judged desirable for water management purposes by the competent authorities of the Member States.
4. For the purposes of this Directive:
 - salmonid waters shall mean waters which support or become capable of supporting **fish** belonging to species such as salmon (*Salmo salar*), trout (*Salmo trutta*), grayling (*Thymallus thymallus*) and whitefish (*Coregonus*),
 - cyprinid waters shall mean waters which support or become capable of supporting fish belonging to the cyprinids (*Cyprinidae*), or other species such as pike (*Esox lucius*), perch (*Peroa fluviatilis*) and eel (*Anguilla anguilla*).

2.7 COUNCIL DIRECTIVE (78/659/EEC) (Contd.)

Article 2

1. The physical and chemical parameters applicable to the waters designated by the Member States are listed in Annex I.
2. For the purposes of applying these parameters, waters are divided into salmonid waters and cyprinid waters.

Article 3

1. Member States shall, for the designated waters, set values for the parameters listed in Annex I, insofar as values are listed in column G or in column T. They shall comply with the comments contained in each of these two columns.
2. Member States shall not set values less stringent than those listed in column I of Annex I and shall endeavour to respect the values in column G taking into account the principle set out in Article 8.

Article 4

1. Member States shall, initially within a two year period following the notification of this Directive, designate salmonid waters and cyprinid waters.
2. Member States may subsequently make additional designations.
3. Member States may revise the designation of certain waters owing to factors unforeseen at the time of designation, taking into account the principle set out in Article 8.

Article 5

Member States shall establish programmes in order to reduce pollution and to ensure that designated waters conform within five years following designation in accordance with Article 4 to both the values set by the Member States in accordance with Article 3 and the comments contained in columns G and I of Annex I.

Article 6

1. For the purposes of implementing Article 5, the designated waters shall be deemed to conform to the provisions of this Directive if samples of such waters, taken at the minimum frequency specified in Annex I at the same sampling point and over a period of 12 months, show that they conform to both the values set by the Member States in accordance with Article 3 and to the comments contained in columns G and I of Annex I, in the case of:
 - 95% of the samples for the parameters: pH, BOD₅, non-ionized ammonia, total ammonium, nitrites, total residual chlorine, total zinc, and dissolved copper. When the sampling frequency is lower than one sample per month, both the abovementioned values and comments shall be respected for all the samples,
 - the percentages listed in Annex I for the parameters: temperature and dissolved oxygen,
 - the average concentration set for the parameter: suspended solids.
2. Instances in which the values set by Member States in accordance with Article 3 or the comments contained in columns G and I of Annex I are not respected shall not be taken into consideration in the calculation of the percentages provided for in paragraph 1 when they are the result of floods or other natural disasters.

2.7 COUNCIL DIRECTIVE (78/659/EEC) (Contd.)

Article 7

1. The competent authorities in the Member States shall carry out sampling operations, the minimum frequency of which is laid down in Annex I.
2. Where the competent authority records that the quality of designated water is appreciably higher than that which would result from the application of the values set in accordance with Article 3 and the comments contained in columns G and I of Annex I, the frequency of the sampling may be reduced. Where there is no pollution or no risk of deterioration in the quality of the waters, the competent authority concerned may decide that no sampling is necessary.
3. If sampling shows that a value set by a Member State in accordance with Article 3 or a comment contained in either of columns G or I of Annex I is not respected, the Member State shall establish whether this is the result of chance, a natural phenomenon or pollution and shall adopt appropriate measures.
4. The exact sampling point, the distance from this point to the nearest point where pollutants are discharged and the depth at which the samples are to be taken shall be fixed by the competent authority of each Member State on the basis of local environmental conditions in particular.
5. Certain reference methods of analysis for the parameters concerned are set out in Annex I. Laboratories which employ other methods shall ensure that the results obtained are equivalent or comparable to those specified in Annex I.

Article 8

Implementation of the measures taken pursuant to this Directive may on no account lead, either directly or indirectly, to increased pollution of fresh water.

Article 9

Member States may at any time set more stringent values for designated waters than those laid down in this Directive. They may also lay down provisions relating to other parameters than those provided for in this Directive.

Article 10

When fresh waters cross or form national frontiers between Member States and when one of these States considers designating these waters, these States shall consult each other in order to determine the stretches of such waters to which the Directive might apply and the consequences to be drawn from the common quality objectives; these consequences shall be determined, after formal consultations, by each State concerned. The Commission may participate in these deliberations.

Article 11

The Member States may derogate from this Directive:

- (a) in the case of certain parameters marked (0) in Annex I, because of exceptional weather or special geographical conditions;
- (b) when designated waters undergo natural enrichment in certain substances, so that the values set out in Annex I are not respected.

2.7 COUNCIL DIRECTIVE (78/659/EEC) (Contd.)

Natural enrichment means the process whereby, without human intervention, a given body of water receives from the soil certain substances contained therein.

Article 12

Such amendments as are necessary for adapting to technical and scientific progress:

- the G values for the parameters, and
- the methods of analysis,

contained in Annex I shall be adopted in accordance with the procedure laid down in Article 14.

Article 13

1. A Committee on Adaptation to Technical and Scientific Progress (hereinafter called "the Committee"), consisting of representatives of Member States and chaired by a Commission representative, is hereby set up for the purpose laid down in Article 12.
2. The Committee shall draw up its rules of procedure.

Article 14

1. where the procedure laid down in this Article is to be followed, matters shall be referred to the Committee by its chairman, either on his own initiative or at the request of the representative of a Member State.

2. The Commission representative shall submit to the Committee a draft of the measures to be adopted. The Committee shall deliver its opinion on the draft within a time limit set by the chairman having regard to the urgency of the matter. It shall act by a majority Of 41 votes, the votes of the Member States being weighted as provided for in Article 148(2) of the Treaty. The chairman shall not vote.

3. (a) The Commission shall adopt the measures envisaged where they are in accordance with the opinion of the Committee.
- (b) where the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is adopted, the Commission shall without delay submit a proposal to the Council concerning the measures to be adopted. The Council shall act by a qualified majority.
- (c) If, within three months of the proposals being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 15

For the purposes of applying this Directive, Member States shall provide the Commission with information concerning:

- the waters designated in accordance with Article 4(1) and (2), in summary form,
- the revision of the designation of certain waters in accordance with Article 4(3),
- the provisions laid down in order to establish new parameters in accord. with Article 9,
- the application of the derogations from the values listed in column I in Annex I.

2.7 COUNCIL DIRECTIVE (78/659/EEC) (Concluded)

More generally, Member States shall provide the Commission, on a reasoned request from the latter, with any information necessary for the application of this Directive.

Article 16

1. Member States shall, five years following the initial designation in accordance with Article 4(1), and at regular intervals thereafter, submit a detailed report to the Commission on designated waters and the basic features thereof.

2. After prior consent has been obtained from the Member State concerned, the Commission shall publish the information obtained.

Article 17

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification. They shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive.

Article 18

This Directive is addressed to the Member States.

DONE at Brussels, 18 July 1978. SIGNED - for the Council, the President (M.LAHNSTEIN)

ANNEX I

List of Parameters

...

ANNEX II

Particulars regarding Total Zinc and Dissolved Copper

...

2.8 COUNCIL DIRECTIVE

of 17 December 1979

on the Protection of Groundwater against Pollution caused by Certain
Dangerous Substances (*)
(80/68/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas there is an urgent need for action to protect the groundwater of the Community from pollution, particularly that caused by certain toxic, persistent and bioaccumulable substances;

Whereas the 1973 programme of action of the European Communities on the environment(4), supplemented by that of 1977 (5), provides for a number of measures to protect groundwater from certain pollutants;

Whereas Article 4 of Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (6) provides for the implementation of a separate Directive on groundwater;

Whereas any disparity between the provisions on the discharge of certain dangerous substances into groundwater already applicable or in preparation in the Member States may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas it is therefore necessary to approximate laws in this field, as provided for in Article 100 of the Treaty;

Whereas it is necessary for this approximation of laws to be accompanied by Community action in the sphere of environmental protection and improvement of the quality of life; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoked as the requisite powers have not been provided for by the Treaty;

(*) Text in: Official Journal of the European Communities(O.J.), No. L20, 26.1.1980,p.43

(1) O.J. No. C37, 14.2.1978, p.3

(2) O.J. No. C296, 11.12.1978, p.35

(3) O.J. No. C283, 27.11.1978, p.39

(4) O.J. No. C112, 20.12.1973, p.3

(5) O.J. No. C139, 13.6.1977, p.3

(6) O.J. No. L129, 18.5.1976, p.23

2.8 COUNCIL DIRECTIVE (80/68/EEC) (Contd.)

Whereas the following should be excluded from the scope of this Directive: domestic effluent from certain isolated dwellings and discharges containing substances in lists I or II in very small quantities and concentrations, on account of the low risk of pollution and the difficulty of controlling the discharge of such effluent; whereas discharges of matter containing radioactive substances, which will be dealt with in a specific Community instrument, should also be excluded;

Whereas to ensure the effective protection of groundwater in the Community it is necessary to prevent the discharge of substances in list I and limit the discharge of substances in list II;

Whereas a distinction should be drawn between direct discharges of dangerous substances into groundwater and actions likely to result in indirect discharges;

Whereas, with the exception of direct discharges of substances in list I, which are automatically prohibited, all discharges must be made subject to a system of authorization; whereas such authorizations may only be delivered after a survey of the receiving environment;

Whereas provision should be made for exceptions to the rules prohibiting discharges into groundwater of substances in list I, after a survey has been made of the receiving environment and prior authorization given, provided that the discharge is made into ground water permanently unsuitable for any other use, particularly domestic or agricultural purposes;

Whereas artificial recharges of groundwater intended for public water supplies should be made subject to special rules;

Whereas the competent authorities of the Member States should monitor compliance with the conditions laid down in the authorizations and the effects of discharges on groundwater;

whereas an inventory should be kept of authorization of discharges into groundwater of substances in list I and of direct discharges into groundwater of substances in list II, and an inventory of authorizations for artificial recharges for the purpose of, ground-water management;

Whereas, to the extent that the Hellenic Republic is to become a member of the European Economic Community on 1 January 1981 in accordance with the Act concerning the conditions of accession of the Hellenic Republic and the adjustments to the Treaties, it appears necessary that, for that State, the period granted to Member States to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive should be extended from two to four years, bearing in mind the inadequacy of that State's technical and administrative infrastructure,

HAD ADOPTED THIS DIRECTIVE:

Article 1

1. The purpose of this Directive is to prevent the pollution of groundwater by substances belonging to the families and groups of substances in lists I or II in the Annex, herein-after referred to as "substances in lists I or II", and as far as possible to check or eliminate the consequences of pollution which has already occurred.

2.8 COUNCIL DIRECTIVE (80/68/EEC) (Contd.)

2. For the purposes of this Directives:

- (a) "groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;
- (b) "direct discharge" means the introduction into groundwater of substances in lists I or II without percolation through the ground or subsoil;
- (c) "indirect discharge" means the introduction into groundwater of substances in lists I or II after percolation through the ground or subsoil;
- (d) "pollution" means the discharge by man, directly or indirectly, of substances or energy into groundwater, the results of which are such as to endanger human health or water supplies, harm living resources and the aquatic ecosystem or interfere with other legitimate uses of water.

Article 2

This Directive shall not apply to:

- (a) discharges of domestic effluents from isolated dwellings not connected to a sewerage system and situated outside areas protected for the abstraction of water for human consumption;
- (b) discharges which are found by the competent authority of the Member State concerned to contain substances in lists I or II in a quantity and concentration so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater;
- (c) discharges of matter containing radioactive substances.

Article 3

Member States shall take the necessary steps to:

- (a) prevent the introduction into groundwater of substances in list I; and
- (b) limit the introduction into groundwater of substances in list II so as to avoid pollution of this water by these substances.

Article 4

1. To comply with the obligation referred to in Article 3(a), Member States:

- shall prohibit all direct discharge of substances in list I,
- shall subject to prior investigation any disposal or tipping for the purpose of disposal of these substances which might lead to indirect discharge. In the light of that investigation, Member States shall prohibit such activity or shall grant authorization provided that all the technical precautions necessary to prevent such discharge are observed,
- shall take all appropriate measures they deem necessary to prevent any indirect discharge of substances in list I due to activities on or in the ground other than those mentioned in the second indent. They shall notify such measures to the Commission, which, in the light of this information, may submit proposals to the Council for revision of this Directive.

2.8 COUNCIL DIRECTIVE (80/68/EEC) Contd.)

2. However, should prior investigation reveal that the groundwater into which the discharge of substances in list I is envisaged is permanently unsuitable for other use, especially domestic or agricultural, the Member States may authorize the discharge of these substances provided that their presence does not impede exploitation of ground resources.

These authorizations may be granted only if all technical precautions have been taken to ensure that these substances cannot reach other aquatic systems or harm other ecosystems.

3. Member States may, after prior investigation, authorize discharges due to re-injection into the same aquifer of water used for geothermal purposes, water pumped out of mines and quarries or water pumped out for civil engineering works.

Article 5

1. To comply with the obligation referred to in Article 3(b), Member States shall make subject to prior investigation:

- all direct discharge of substances in list II, so as to limit such discharges,
- the disposal or tipping for the purpose of disposal of these substances which might lead to indirect discharge.

In the light of that investigation, Member States may grant an authorization, provided that all the technical precautions for preventing groundwater pollution by these substances are observed.

2. Furthermore, Member States shall take the appropriate measures they deem necessary to limit all indirect discharge of substances in list II, due to activities on or in the ground other than those mentioned in the first paragraph.

Article 6

Notwithstanding Articles 4 and 5, artificial recharges for the purpose of ground-water management shall be subject to a special authorization issued by the Member States on a case-by-case basis. Such authorization shall be granted only if there is no risk of polluting the groundwater.

Article 7

The prior investigations referred to in Articles 4 and 5 shall include examination of the hydrogeological conditions of the area concerned, the possible purifying powers of the soil and subsoil and the risk of pollution and alteration of the quality of the ground-water from the discharge and shall establish whether the discharge of substances into groundwater is a satisfactory solution from the point of view of the environment.

Article 8

The authorizations referred to in Articles 4, 5 and 6 may not be issued by the competent authorities of the Member States until it has been checked that the groundwater, and in particular its quality, will undergo the requisite surveillance.

2.8 COUNCIL DIRECTIVE 80/68/EEC) (Contd.)

Article 9

When direct discharge is authorized in accordance with Article 4(2) and (3) or Article 5, or when waste water disposal which inevitably causes indirect discharge is authorized in accordance with Article 5, the authorization shall specify in particular:

- the place of discharge,
- the method of discharge,
- essential precautions, particular attention being paid to the nature and concentration of the substances present in the effluents, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water,
- the maximum quantity of a substance permissible in an effluent during one or more specified periods of time and the appropriate requirements as to the concentration of these substances,
- the arrangements enabling effluents discharged into groundwater to be monitored;
- if necessary, measures for monitoring groundwater, and in particular its quality.

Article 10

When disposal or tipping for the purpose of disposal which might lead to indirect discharge is authorised in accordance with Articles 4 or 5, authorization shall specify in particular:

- the place where such disposal or tipping is done,
- the methods of disposal or tipping used,
- essential precautions, particular attention being paid to the nature and concentration of the substances present in the matter to be tipped or disposed of, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water,
- the maximum quantity permissible, during one or more specified periods of time, of the matter containing substances in lists I or II and, where possible, of those substances themselves, to be tipped or disposed of and the appropriate requirements as to the concentration of those substances,
- in the cases referred to in Article 4(1) and Article 5(1) the technical precautions to be implemented to prevent any discharge into groundwater of substances in list I and any pollution of such water by substances in list II,
- if necessary, the measures for monitoring the groundwater, and in particular its quality.

Article 11

The authorizations referred to in Articles 4 and 5 may be granted for a limited period only, and will be reviewed at least every four years. They may be renewed, amended or withdrawn.

2.8 COUNCIL DIRECTIVE (80/68/EEC) (Contd.)

Article 12

1. If the person requesting an authorization as referred to in Articles 4 or 5 states that he is unable to comply with the conditions laid down, or if this situation is evident to the competent authority in the Member State concerned, authorisation shall be refused.
2. Should the conditions laid down in an authorization not be complied with, the competent authority in the Member State concerned shall take appropriate steps to ensure that these conditions are fulfilled; if necessary, it shall withdraw the authorization.

Article 13

The competent authorities of the Member States shall monitor compliance with the conditions laid down in the authorizations and the effects of discharges on groundwater.

Article 14

As regards discharges of the substances in lists I or II already occurring at the time of notification of this Directive, the Member States may stipulate a period not exceeding four years after entry into force of the provisions referred to in Article 21 (1), on expiry of which the discharges in question must comply with this Directive.

Article 15

The competent authorities of the Member States shall keep an inventory of the authorizations referred to in Article 4 of discharges of substances in list I, the authorizations referred to in Article 5 of direct discharges of substances in list II and the authorizations referred to in Article 6.

Article 16

1. For the purposes of implementing this Directive, Member States shall supply the Commission, at its request and on a case-by-case basis, with all the necessary information, and in particular with:
 - (a) the results of the prior investigations referred to in Articles 4 and 5;
 - (b) details of the authorizations granted;
 - (c) the results of the monitoring and inspection operations carried out;
 - (d) the results of the inventories provided for in Article 15.
2. Information acquired as a result of the application of this Article shall be used only for the purpose for which it was requested.
3. The Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information acquired by them pursuant to this Directive and of a kind covered by the obligation of professional secrecy.
4. The provisions of paragraphs 2 and 3 shall not prevent publication of general information or surveys which do not contain information relating to particular undertakings or associations of undertakings.

2.8 COUNCIL DIRECTIVE (80/68/EEC)

Article 17

With regard to discharges into transfrontier groundwater, the competent authority of the Member State which intends to grant authorization for such discharges shall inform the other Member States concerned before an authorization is issued. At the request of one of the Member States concerned and before an authorization is issued, consultations shall be held in which the Commission may participate.

Article 18

The application of the measures taken pursuant to this Directive may on no account lead, either directly or indirectly, to pollution of the water referred to in Article 1.

Article 19

Where appropriate, one or more Member States may individually or jointly take more stringent measures than those provided for under this Directive.

Article 20

The Council, acting on a proposal from the Commission, shall, in the light of experience, revise and, if necessary, supplement lists I and II, where appropriate, by transferring certain substances from list II to list I.

Article 21

1. The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification. They shall immediately inform the Commission thereof.

However, this period shall be increased to four years for the Hellenic Republic, subject to its accession on 1 January 1981.

2. The Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

3. Once the measures referred to in paragraph 1 have been implemented by a Member State, the provisions of Directive 76/464/EEC relating to groundwater shall no longer apply in respect of that Member State,

Article 22

This Directive is addressed to the Member States.

DONE at Brussels, 17 December 1979. SIGNED - for the Council, the President (S.BARRETT)

2.8 COUNCIL DIRECTIVE (80/68/EEC) (Concluded)

ANNEX

List I of families and groups of substances

List I contains the individual substances which belong to the families and groups of substances enumerated below, with the exception of those which are considered inappropriate to List I on the basis of a low risk of toxicity, persistence and bioaccumulation.

Such substances which with regard to toxicity, persistence and bioaccumulation are appropriate to List II are to be classed in List II.

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment
2. Organophosphorus compounds
3. Organotin compounds
4. Substances which possess carcinogenic, mutagenic or teratogenic properties in or via the aquatic environment (1)
5. Mercury and its compounds
6. Cadmium and its compounds
7. Mineral oils and hydrocarbons
8. Cyanides.

List II of families and groups of substances

List II contains the individual substances and the categories of substances belonging to the families and groups of substances listed below which could have a harmful effect on ground-water.

1. The following metalloids and metals and their compounds:

1. Zinc	6. Selenium	11. Tin	16. Vanadium
2. Copper	7. Arsenic	12. Barium	17. Cobalt
3. Nickel	8. Antimony	13. Beryllium	18. Thallium
4. Chrome	9. Molybdenum	14. Boron	19. Tellurium
5. Lead	10. Titanium	15. Uranium	20. Silver

2. Biocides and their derivatives not appearing in List I.
3. Substances which have a deleterious effect on the taste and/or odour of groundwater, and compounds liable to cause the formation of such substances in such water and to render it unfit for human consumption.
4. Toxic or persistent organic compounds of silicon, and substances which may cause the formation of such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
5. Inorganic compounds of phosphorus and elemental phosphorus.
6. Fluorides.
7. Ammonia and nitrites

(1) Where certain substances in List II are carcinogenic, mutagenic or teratogenic, they are included in category 4 of this list.

4.9 COUNCIL DIRECTIVE

of 15 July 1980

relating to the Quality of Water intended for Human Consumption (*)

(80/778/EEC)

(Extract)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

Whereas, in view of the importance for public health of water for human consumption, it is necessary to lay down quality standards with which such water must comply;

Whereas a disparity between provisions already applicable or in the process of being drawn up in the various Member States relating to the quality of water for human consumption may create differences in the conditions of competition and, as a result, directly affect the operation of the common market; whereas laws in this sphere should therefore be approximated as provided for in Article 100 of the Treaty;

Whereas this approximation of laws should be accompanied by Community action designed to achieve, by more extensive rules concerning water for human consumption, one of the aims of the Community with regard to the improvement of living conditions, the harmonious development of economic activities throughout the Community and a continuous and balanced expansion; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoiced as the necessary powers have not been provided for by the Treaty;

Whereas the 1973 (3) and 1977 (4) programmes of action of the European Communities on the environment provide for both the setting of standards to apply to toxic chemical substances and to bacteria presenting a healty hazard which are present in water intended for human consumption and the definition of physical, chemical and biological parameters corresponding to the different uses of water and, in particular, to water for human consumption;

Whereas by Directive 75/440/EEC (5), the Council has already laid down standards for surface water intended for the abstraction of drinking water;

Whereas the values fixed for certain parameters must be equal to or lower than a maximum admissible concentration;

(*) Text in: Official Journal of the European Communities (O.J.), N0.L229,30.8.1980, p.11.

(1) O.J. No. C28, 9.2.1976, p.27

(2) O.J. No. C131, 12.6.1976, p.13

(3) O.J. No. C112, 20.12.1973, p.1

(4) O.J. No. C69, 11.6.1970, p.1

(5) O.J. No. L194, 25.7.1975, P.34

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

Whereas, in the case of softened water intended for human consumption, the values fixed for certain parameters must be equal to or greater than a required minimum concentration;

Whereas it is desirable that the Member States should take the values adopted as a 'guide level';

Whereas, since the preparation of water for human consumption may involve the use of certain substances, rules should be drawn up to govern the use thereof in order to avoid possible harmful effects on public health due to excessive quantities of such substances;

Whereas the Member States should be authorized to make provision, under certain conditions, for derogations from this Directive, in particular to take account of certain special situations;

Whereas, in order to check the values of concentrations for the different parameters, it is necessary to provide that Member States take the steps required to ensure regular monitoring of the quality of water intended for human consumption;

Whereas the reference methods of analysis defined in the Annexes to this Directive must be speedily adapted to scientific and technical progress; whereas, in order to facilitate application of the measures required for this purpose, provision should be made for a procedure establishing close cooperation between the Member States and the Commission within a committee responsible for the adaptation to scientific and technical progress,

HAS ADOPTED THIS DIRECTIVE:

Article 1

This Directive concerns standards for water intended for human consumption.

Article 2

For the purposes of this Directive, water intended for human consumption shall mean all water used for that purpose, either in its original state or after treatment, regardless of origin,

- whether supplied for consumption, or
- whether
 - used in a food production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption and
 - affecting the wholesomeness of the foodstuff in its finished form.

Article 3

With regard to water referred to in the second indent of Article 2, Member States shall apply the values for the toxic and microbiological parameters listed in Tables D and E respectively of Annex I and the values for the other parameters which the competent national authorities consider are likely to affect the wholesomeness of the foodstuff in its finished form.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

Article 4

1. This Directive shall not apply to:
 - (a) natural mineral waters recognized or defined as such by the competent national authorities;
 - (b) medicinal waters recognized as such by the competent national authorities.
2. Member States may not prohibit or impede the marketing of foodstuffs on grounds relating to the quality of the water used where the quality of such water meets the requirements of this Directive unless such marketing constitutes a hazard to public health.

Article 5

This Directive shall apply without prejudice to the specific provisions of other Community regulations.

Article 6

1. Member States shall send the Commission:
 - appropriate information as to the industrial sectors in which the competent national authorities consider that the wholesomeness of the finished product, within the meaning of Article 2, is unaffected by the quality of the water used;
 - national values for parameters other than the toxic and microbiological parameters referred to in Article 3.
2. The Commission shall examine this information and shall take any measures which may be appropriate. It shall periodically draw up a comprehensive report for the Member States.

Article 7

1. Member States shall fix values applicable to water intended for human consumption for the parameters shown in Annex I.
2. Member States may refrain from fixing, pursuant to the first paragraph, the values of parameters in respect of which no value is shown in Annex I, as long as these values have not been determined by the Council.
3. For the parameters given in Tables A, B, C, D, and E of Annex I:
 - the values to be fixed by the Member States must be less than or the same as the values shown in the 'Maximum admissible concentration' column;
 - in fixing the values, Member States shall take as a basis the values appearing in the 'guide level' column.
4. For the parameters appearing in Table F of Annex I, the values to be fixed by Member States must be not lower than those given in the 'Minimum required concentration' column for softened water, of the kind referred to in the first indent of Article 2.
5. In the interpretation of the values shown in Annex I account shall be taken of the observations.
6. Member States shall take the steps necessary to ensure that water intended for human consumption at least meets the requirements specified in Annex I.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

Article 8

Member States shall take all the necessary measures. to ensure that any substances used in the preparation of water for human consumption do not remain in concentrations higher than the maximum admissible concentration relating to these substances in water made available to the user and, that they do not, either directly or indirectly, constitute a public health hazard.

Article 9

1. Member States may make provision for derogations from this Directive in order to take account of:

- (a) situations arising from the nature and structure of the ground in the area from which the supply in question emanates.

Where a Member State decides to make such a derogation, it shall inform the Commission accordingly within two months of its decision stating the reasons for such derogation;

- (b) situations arising from exceptional meteorological conditions.

Where a Member State decides. to make such a derogation, it shall inform the Commission accordingly within.15 days of its decision stating the reasons for this derogation and its duration.

2. Member States shall report to the Commission only those derogations referred to in para. 1 which relate to a daily water supply of at least 1,000 m³ or a population of at least 5,000.

3. In no case shall the derogations made by virtue of this Article relate to toxic or microbiological factors or constitute a public health hazard.

Article 10

1. In the event of emergencies, the competent national authorities may, for a limited period of time and up to a maximum value to be determined by them, allow the maximum admissible concentration shown in Annex I to be exceeded, provided that this does not constitute an unacceptable risk to public health and provided that the supply of water for human consumption cannot be maintained in any other way.

2. Without prejudice to the application of Directive 75/440/EEC, and in particular Article 4(3) thereof, when, for its supply of drinking water, a Member State is obliged to resort to surface water which does not reach the concentrations required of category A3 water within the meaning of Article 2 of the aforementioned Directive and when it cannot devise suitable treatment to obtain drinking water of the quality laid down by this Directive, it may, for a limited period of time and up to a maximum permissible value which it shall determine, authorize the maximum admissible concentration shown in Annex I to be exceeded provided that this does not constitute an unacceptable risk to public health.

3. Member States which have recourse to the derogations referred to in this article shall immediately inform the Commission thereof, stating the reasons for and probable duration of such derogations.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

Article 11

Member States shall ensure that all necessary measures taken to apply the provisions taken pursuant to this Directive shall in no case have the effect of allowing, directly or indirectly, either any deterioration in the present quality of water intended for human consumption or an increase in the pollution of waters used for the production of drinking water.

Article 12

1. Member States shall take all necessary steps to ensure regular monitoring of the quality of water intended for human consumption.
2. All water intended for human consumption shall be monitored at the point where it is made available to the user in order to check whether it meets the requirements laid down in Annex I.
3. The points of sampling shall be determined by the competent national authorities.
4. For such monitoring, Member States shall conform with Annex II.
5. Member States shall as far as practicable use the reference methods of analysis set out in Annex III.

Laboratories using other methods shall ensure that the results thus obtained are equivalent to or comparable with the methods obtained by the methods indicated in Annex III.

Article 13

Such changes as are necessary for adapting the reference methods of analysis set out in Annex III to scientific and technical progress shall be adopted in accordance with the procedure laid down in Article 15.

Article 14

- (a) A Committee on the Adaptation to Scientific and Technical Progress, hereinafter called 'the Committee', is hereby set up; it shall consist of representatives of the Member States with a representative of the Commission as chairman.
- (b) The Committee shall adopt its own rules of procedure.

Article 15

1. Where the procedure laid down in this Article is to be followed, the matter shall be referred to the Committee by its chairman, either on his own initiative or at the request of a representative of a Member State.
2. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall give its opinion on that draft within a time limit set by the chairman having regard to the urgency of the matter. Opinions shall be adopted by a majority of 41 votes, the votes of the Member States being weighted as provided in Article 148 (2) of the Treaty. The chairman shall not vote.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

3. (a) Where the measures envisaged are in accordance with the opinion of the Committee, the Commission shall adopt them.
- (b) Where the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is delivered, the Commission shall without delay submit to the Council a proposal on the measures to be taken. The Council shall act by a qualified majority.
- (c) If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 16

Without prejudice to Article 4(2), Member States may lay down more stringent provisions than those provided for in this Directive for water intended for human consumption.

Article 17

Member States may adopt special provisions regarding information-both on packaging or labels and in advertising-concerning a water's suitability for the feeding of infants. Such provisions may also concern the properties of the water which determine the use of the said information.

Member States which intend taking such measures shall inform the other Member States and the Commission of them beforehand.

Article 18

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive and its Annexes within two years following its notification. They shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive.

Article 19

The Member States shall take the necessary measures to ensure that the quality of water intended for human consumption complies with this Directive within five years of its notification

Article 20

Member States may, in exceptional cases and for geographically defined population groups, submit a special request to the Commission for a longer period for complying with Annex I.

This request, for which grounds must be duly put forward, shall set out the difficulties experienced and must propose an action programme with an appropriate timetable to be undertaken for the improvement of the quality of water intended for human consumption.

The Commission shall examine these programmes, including the timetables. In the case of disagreement with the Member State concerned, the Commission shall submit appropriate proposals to the Council.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Contd.)

Article 21

This Directive is addressed to the Member States.

DON E at Brussels, 15 July 1980. SIGNED - for the Council, the President (J. SANTER)

ANNEX I

List of Parameters

A. Organoleptic Parameters

...

B. Physico-Chemical Parameters (in relation to the water's natural structure)

...

C. Parameters concerning Substances undesirable in excessive mounts(1)

...

D. Parameters concerning toxic substances

...

E. Microbiological Parameters

...

F. imum required concentration for softened water intended for human consumption

...

ANNEX II

Patterns and Frequency of Standard Analyses

A. Table of standard pattern analyses (Parameters to be considered in monitoring)

...

B. Table of minimum frequency of standard analyses

...

(1) Certain of these substances may even be toxic when present in very substantial quantities.

2.9 COUNCIL DIRECTIVE (80/778/EEC) (Concluded)

ANNEX III

Reference Methods of Analysis

A. Organoleptic Parameters

...

B. Physico-Chemical Parameters

...

C. Parameters concerning undesirable substances

...

D. Parameters concerning toxic substances

...

E. Microbiological Parameters

...

F. Minimum required concentration

...

3. **DECLARTIONS OF PRINCIPLES AND RESOLUTIONS OF
INTERGOVERNMENTAL ORGANIZATIONS**

3.1 THE UNITED NATIONS SYSTEM

3.1.1 Economic Commission for Europe

Recommendation No. 2 submitted to Governments by the Committee on
Electric Power with a view to facilitating the hydroelectric
development of contiguous rivers and lakes (*)

Geneva, 3 October 1951

The Committee on Electric Power,

Considering that the hydro-electric development of rivers or lakes serving as a frontier between two or more States-so called contiguous rivers and lakes -is of increasingly great importance for the development of European electrical resources and for the satisfaction of the requirements of the European economy,

But that this development raises a certain number of political, legal and administrative difficulties concerning both the construction and the operation of plants,

Draws the attention of Governments to the importance of introducing into conventions regarding such development, clauses which might be drafted as follows:

Where two or more neighbouring States participate in the construction of works, such works shall be treated by the States concerned in the same way as if construction were taking place on their own territory, irrespective of the site chosen.

The two States agree that supplies of equipment and materials and the various services required for carrying out the harnessing shall not be charged import duties (customs duty etc.) irrespective of the site on which any of such supplies and services are actually used.

Similarly any taxes levied on experts in either of the two States shall not be levied by that State, irrespective of the site on which any such supplies and services are actually used.

Should special taxation be imposed in either of the two States, for instance in the form of a capital levy, the necessary measures shall be taken to grant adequate compensation to the other State for any damage sustained by it or by the natural or judicial persons under its jurisdiction.

The two States, each insofar as it is concerned, shall grant residence, working, entry, exit and any other similar permits required by persons needed by the concessionaires for the construction of the works.

(*) Tex in: E/ECE/EP/117

3.1.1 ECE - Recommendation No. 2 (Concluded)

Recommends

1. With regard to construction:

(a) that the best site should be selected after an examination of the locality by a joint commission composed of representatives of the two countries concerned, on the basis of technical considerations irrespective of the position of the frontier; this commission might also be entrusted with supervision of the fair and rational apportionment of supplies and services between the two countries;

(b) that in the event of a country setting up several joint commissions with another country, that country's representatives on these various commissions should consist, in part, of the same individuals;

2. With regard to operation:

(a) that power allocated to one of the two States and produced on the territory of the other should be exempted by the latter from all taxation, dues and legal restrictions of any kind, so that it may be freely transmitted to the former State, and be subject to the same conditions, in every respect, as power produced on its own territory;

(b) that the power allocated to each of the two States should be exportable to the other State in accordance with the legal provisions governing the export of electric power in force in the State entitled to that power;

(c) that if either State is unable to utilize the power allocated to it on its own territory, it should do nothing to prevent the power thus available from being exported to the territory of the other State;

(d) that the same facilities should be accorded to personnel operating the works as were laid down for the construction period;

3. More generally, with regard to the legal position of the common concessionaire:

(a) that taxes and dues on companies should be levied in accordance with the fiscal agreements and conventions on double taxation concluded between the countries concerned, but that taxes and dues on dividends should not include charges which would result in differentiation between the sums finally received by the shareholders;

(b) that fiscal agreements or conventions on double taxation, where these do not already exist, should be concluded between the countries concerned;

(c) that each of the two States should undertake to provide the joint concessionary undertaking, upon request, with the necessary currency transfer facilities, both during the construction period, and for the operating requirements of the works;

(d) that the above provisions regarding currency exchange regulations should be included in an agreement to be concluded between the two States for the payment of wages; such agreement should also make provision for the transfer by workers belonging to the other riparian State of their wages and allowances to their country of origin.

3.1.2 Economic Commission for Europe

Recommendation No. 4 submitted to Governments by the Committee on Electric Power with a view to promoting the hydroelectric development of successive rivers in Europe (*)

Geneva, 26 May 1954

(Extracts)

The Committee on Electric Power,

...

Being of opinion that the hydro-electric development of rivers that flow through the territory of a number of States in turn and in so doing cross their frontiers - the so-called successive rivers - is becoming of increasing importance for the development of Europe's electric power resources and the satisfaction of the European economy's requirements,

but that such development, in most cases, raises a number of political legal and administrative difficulties relating both to the building and the operation of plants;

Considering that, in order to facilitate the conclusion between States of agreements concerning the development and utilization of such rivers, it would be better to look for possible means of overcoming the difficulties which arise in this connexion, rather than contemplate the conclusion of a general convention or even prejudice at this juncture the possibility of making recommendations on the problem as a whole;

Considering it essential for this purpose to adopt a procedure in keeping with accepted standards of international courtesy and in the interests of the harmonious hydro-electric development of successive rivers in Europe;

...

Recommends that a State proposing to embark within its own territory on projects likely to have serious repercussions on the territory of other States, whether upstream or downstream, should first communicate to the States concerned such information as would enlighten them as to the nature of those repercussions;

Recommends that, in the event of objections being raised by the States concerned following such prior notification, the State proposing to embark on the projects should endeavour, by negotiations with those States, to reach an agreement such as will ensure the most economic development of the river system.

(*) Text in: E/ECE/EP/147

3.1.3 Economic Commission for Europe

Resolution No. 10(XXI), Declaration of policy on water pollution (*)

Geneva, 29 April 1966

(Extracts)

...

1. Water pollution control constitutes a fundamental governmental responsibility and calls for close international collaboration as well as the co-operation of local communities and of all uses of water. Control of water pollution forms an integral part of water resources and water utilization policies. All problems concerning the rational utilization of water resources should be viewed in relation to the special features of each drainage area.

...

9. States bordering on the same surface water should reach an understanding to the effect that such water represents for them a common asset, the use of which should be based on the desire to reconcile their respective interests to the greatest possible extent. This involves more particularly concerted action in pollution control, and such States should, by means of bilateral or multilateral agreements, define their mutual relations on water pollution. These agreements should provide that States are to maintain water at a quality such that neither public health nor the basic needs of the economy are jeopardized.

(*) Text in: Official Records of the Economic and Social Council, Forty-first Session, Supplement No. 3 (E/4177), part III.

3.1.4 Proposals of Panel of Experts on the Legal and Institutional Aspects of International Water Resources Development (*)

New York, 9 December 1969

The Panel, at its final plenary session, prepared and approved the following specific proposals:

1. As a preliminary stage to the establishment of institutional arrangements in a river basin and in order to encourage basin States to cooperate, it is important that the States of a basin know the potential benefits to them from cooperative development of water resources. It may be necessary, therefore, that preliminary reconnaissance surveys be made to determine the potential for development. The possibility of obtaining external financing may serve as a catalyst for cooperation. Full advantage should be taken of the opportunities of assistance from United Nations organizations, including the United Nations Development Programme and the specialized agencies, and regional and bilateral financing institutions.
2. A gradual approach to institutionalization should be employed for the early stages of development of river basin resources. The institutions should develop from the cooperation and the facts as they emerge. Elaborate institutional arrangements at the outset may tend to impede rather than encourage cooperation.
3. Basin States should assess their own human and other resources, and the potentially available external assistance and project or programme financing in order to effect careful selection and timing of international water resources development undertakings, within their overall national or regional priorities and plans for development. Where institutional arrangements do not exist, the developing countries concerned should consider the establishment of an office in the national Government to initiate the development of water resources involving cooperation and collaboration with other States in an international drainage basin. The Panel believes further that direct utilization of regional economic commissions and regional international organizations should be made to enable the member States to identify the most worthwhile water resources undertakings in the total context of economic and social development.
4. Wherever multinational institutions are created for purposes of international water resources development, conservation and use, differences should be accommodated at the technical level. In this connexion, consideration should be given to appropriate authority and procedures to prevent disagreements from rising unnecessarily to the level of a formal dispute.
5. All aspects of conservation and the prevention of degradation of the water resources should receive serious attention in planning for the present and future development of international drainage basins.
6. In planning integrated international river basin development, due regard should be given to adequate administrative structures and the necessary supervisory controls and monitoring devices in order to accomplish optimal water management.
7. In order to promote the technical capabilities as well as the mutual understanding of co-basin States concerned with development of international water resources, regional training, research and documentation centres could be established for certain regions or river basins which would be able to serve for specific basin-oriented training and research as well as regional data banks.

(*) Text in: Natural Resources/Water Series No. 1, Management of International Water Resources; Institutional and Legal Aspects, United Nations, 1975, pp. 181-184.

3.1.4 Panel of Experts - International Water Resources Development - 1969 (Contd.)

8. The consideration of legal and institutional implications of international water resources development should be energetically continued. The publication of this report should be followed up by systematic collection and dissemination of all available information on the subject and on additional aspects of international water resources development.

9. Regarding existing multinational water resources agencies or other multinational institutions established for the co-ordinated or joint study, planning, construction or operation of programmes and projects related to international water resources, the United Nations system of organizations should cooperate directly with these multinational water agencies and institutions by:

- (a) Providing a clearing house for the mutual exchange of information on legal, institutional and managerial experience and problems related to the activities of such agencies and institutions, and publishing the relevant information as appropriate;
- (b) Organizing at regular intervals meetings and conferences of executive and technical personnel of such agencies and institutions, thus providing a forum for the reciprocal exchange of the actual legal, institutional and managerial experience;
- (c) Providing advice to and cooperation with such agencies and institutions as and when requested by them or by the constituent co-basin Governments, as appropriate, on subjects that fall within their respective responsibilities;
- (d) Helping to develop technical assistance especially tailored to the needs of these existing institutions.

10. Regarding international drainage basins for which no multinational institutional arrangements have been established with respect to coordinated or joint development and use of their resources, it would appear desirable for the United Nations system of organizations to:

- (a) Undertake studies, as appropriate, encompassing a preliminary inventory of international drainage basins indicating the co-basin States, prevailing economic and social conditions and patterns of water use as well as multinational arrangements, where they exist;
- (b) Encourage the Governments of co-basin States which have not yet established multinational institutional arrangements for the development of the joint basins' resources to do so, offering the assistance and machinery of the United Nations system of organizations when these Governments are ready to undertake joint development of the resources of each particular basin if this is considered to be helpful by the States concerned;
- (c) Stimulate studies of significant international water resources development problems, giving special consideration to related legal and institutional aspects, and encourage the publication of the results; and
- (d) Organize or support related seminars, training courses and other meetings to be attended by officers concerned with international water resources development.

11. Arrangements should be made and funds provided for adequate training of personnel from developing countries, inter alia,

- (a) In the form of international interships for junior officers from States that are engaged in, or intend to engage in discussions and planning with one or more co-

3.1.4 Panel of Experts - International Water Resources Development - 1969 (Concluded)

basin States for the regulation or development of the water resources of an international drainage basin. Such internships should include formally organized study, a period of time with the secretariat of an appropriate international organization and a working period with one or more existing international river commissions;

- (b) In the form of support for officers charged with the planning for the legal and institutional framework for an international drainage basin, or basin project, to visit one or more selected existing basin or project commissions or administrations for a period of study and personal discussion with the staff members of those commissions or administrations in order to profit from their experience and, in particular, to learn about the effectiveness and adequacy of their machinery for tasks relevant to the officers' own basin.

12. The United Nations system of organizations should amplify its cooperation with international non-governmental organizations working in the fields related to water resources development and administration, including logistical and consultative support for the meetings of the substantive bodies of such organizations. In particular, the budgetary implications of attending such meetings, the provision of adequate technical services including consultants, and documentation have created difficulties for such organizations.

13. The United Nations system of organizations and the Governments of Member States should promptly review existing arrangements for international cooperation in the development, conservation and management of water resources, and evaluate their adequacy in the light of current trends and long-term requirements.

14. Appropriate international rules pertinent to the utilization and development of international (non-maritime) water resources should be adopted under the auspices of the United Nations, preferably in the form of a general convention. The Panel felt certain that in the preparation of such rules the work already accomplished in this field by other bodies such as the Institute of International Law, the Inter-American Bar Association and the International Law Association, including the Helsinki Rules on the Uses of the Waters of International Rivers, would prove to be of much relevance and assistance.

15. The Panel expressed the hope that the International Law Commission of the United Nations, when considering its future programme of work, would give some priority to the question of the codification of the law relating to the utilization of international non-maritime water resources.

16. Meanwhile, the Panel considered, it would be useful if additional steps could be taken through the United Nations to suggest to Governments the desirability of their examining the question of the formulation of rules with respect to the utilization and development of international (non-maritime) water resources; and to acquaint Governments with the efforts that have already been made by other bodies towards the formulation of such rules.

3.1.5 Economic Commission for Europe

Recommendation to ECE Governments concerning the protection of
ground and surface waters against pollution by oil and oil products,
approved by the Committee on Water Problems" (*)

Geneva, 1970

Preamble

1. With the growth of industrialization and mechanization and the rising demand for oil as a raw material for the chemical industry, the production of crude oil has greatly increased. The trend towards the replacement of solid fuel by liquid fuel as a source of energy and domestic heating, as well as the rapidly increasing needs for oil and oil products arising from the development of air, rail, road and water transport, have resulted in the storage of ever-increasing quantities of crude oil and oil products in commercial and domestic tanks and their transport over long distances by rail, road and inland water tankers, as well as in pipelines. Consequently there is a growing danger of water and soil pollution by oil on both a national and an international scale, affecting ground as well as surface waters a danger which is causing grave concern particularly because relatively small quantities of oil may have serious water pollution effects. Attention is drawn, not only to the dangers resulting from oil-drilling, production and refining and to the problem of industrial effluents, including those from petro-chemical plants, but also to the number of spillages due to human errors of judgement, to traffic accidents and to storage tank failures, particularly at consumer level.

2. At the present time, when the need for conserving the quality of water resources has become urgent, concerted action is required in order to ensure:

- (a) adequate administrative and legal measures aimed at prevention of accidents at the earliest possible stage of oil production, as well as during transport, storage and consumption; it is particularly important that regulations be established regarding the compulsory reporting of all accidents and failures of storage and transport facilities and that emergency plans be prepared for remedial measures in case of accidents and failures under specified conditions;
- (b) the further development of methods and techniques for identifying and assessing oil pollution and for both routine and emergency treatment of waste water, surface waters, ground waters and soil contaminated by oil and oil products;
- (c) co-operation between ECE Governments especially as regards joint preventive and remedial action with respect to waters in whose use they have a direct common interest, and which could take the form of multilateral agreements between the countries concerned.

Recommendations

3. On the basis of the above considerations, ECE Governments are recommended:

- (a) to designate "protection zones" in areas needing to be preserved from pollution in view of their utilization and where the use, storage and transport of crude oil and oil products are permitted only under special conditions of safety and precaution;

(*) Text in: E/ECE/WATER/7, Annex I

3.1.5 ECE - Recommendation by Cttee on Water Problems - 1970 (Concluded)

- (b) to issue, where this has not yet been done, regulations aiming at the safe storage and transport of oil and oil products, as well as at the disposal of waste oils, of effluents from oil industries and of surplus products resulting from the treatment of such effluents, in such a way that water pollution is avoided in case of human and material failure, and to ensure adequate enforcement of these regulations;
- (c) to render compulsory the immediate reporting to the nearest appropriate public authority of all spillages of oil and oil products likely to contaminate either ground or surface waters;
- (d) to make arrangements for the periodic inspection by appropriate bodies of oil storage and transport facilities and of pipelines;
- (e) to set up systems which in the event of oil accidents would immediately warn water users likely to be affected;
- (f) to organize emergency task forces which would be equipped to intervene rapidly and to circumscribe the damage caused in the case of oil accidents (particularly in protection Zones);
- (g) to establish national study groups comprising water and oil disciplines to help resolve their common technical problems; these national study groups could serve as focal points in an international network of such contacts under the auspices of the ECE for the exchange of experience and the promotion of water supplies for multiple uses;
- (h) to take appropriate steps to intensify research into the most effective and economical methods for detecting, determining and preventing pollution as well as for neutralizing the results of water and soil contamination by oil products;
- (i) to undertake programmes of education and publicity in order to draw attention to the economic and social effects of water contamination by crude oil and oil products and to the need for intensified water resources protection in this respect;
- (j) to encourage co-operation from the public in reporting oil pollution;
- (k) to arrange with neighbouring countries for joint or coordinated action which should usefully be taken with respect to common boundary waters (ground as well as surface) in case of oil accidents and for the prevention of pollution by oil.

3.1.6 Economic Commission for Europe

Recommendation to ECE Governments concerning River Basin Management, approved by the Committee on Water Problems (*)

Geneva, 1971

Preamble

1. Rapid industrial development and intensive urbanization, together with increased standards of living throughout the last decades have resulted in every higher demands for water and an increasing deterioration of the environment in virtually all ECE countries. These growing demands, including more stringent needs for high quality water, in conjunction with the natural fluctuations and the growing pollution of the water resources, have caused water shortages to occur in more and more regions. In certain areas water has thus become a determining factor in the location of water-using industries, and a shortage of it is considered a limiting factor in economic and social development. It is accepted that only careful planning and rational management of the allocation, utilization and conservation of water resources as well as a disciplined use of water for the various legitimate purposes can assure that requirements will be met in the future and that the natural environment will be improved and preserved. However, there is a growing gap between the standard of management of water resources and available modern technology. On the basis of existing experience it appears that the improvement of water resources management may best be attained through the establishment of appropriate regional organs which operate in the framework of natural river basins, sub-basins or groups of smaller basins, as physical and administrative conditions may require in individual countries (1). At the same time, it seems that a successful solution to all these problems would, in certain cases, demand some strengthening of national policies, programmes of development and research activities.

Recommendations to ECE Member and Participating Governments.

2. It is therefore recommended that ECE Member and Participating Governments consider the establishment and/or strengthening or coordination of river basin management organs within their countries, taking into account the following needs to the extent that the physical conditions and administrative structures prevailing in each country permit:

- (a) to create or strengthen the necessary legal framework and policies at the national level;
- (b) to give water authorities at the national level the powers required efficiently to guide and coordinate activities carried out at the regional or river basin level;
- (c) to establish, at both national and river basin levels, the maximum possible integration and coordination of all the interests concerned with water resources management;

(*) Text in: E/ECE/WATER/9, Annex 2

- (1) In relatively flat countries adjacent to sea coasts this concept is bound to be less significant; in such areas water management can perhaps be more efficiently organized on a regional basis, covering the relevant estuaries or coastal areas, together with the tributary rivers and land drainage.

3.1.6 ECE - Recommendation by Cttee on Water Problems - 1971 (Concluded)

- (d) to define clearly the relationship between river basin organs and the authority or authorities responsible for national water management and to take note of the need for more extensive action and guidance by central governmental authorities;
- (e) to establish close links between the management of water resources and overall regional planning within the same river basin, with a view to facilitating the gradual integration of water management into the overall management of the environment;
- (f) to define the scope and powers of river basin organs so as to provide for the comprehensive management of all ground and surface water resources, including water quality control and flood protection within the context of environment, as well as the possibility of influencing user behaviour to effect economies in water use;
- (g) to ensure that the river authorities have the staff and technical facilities needed for the proper management of water resources;
- (h) to set up basin-wide networks for continuous monitoring of water quality and flow, making use, as far as possible, of computers for data processing and analysis;
- (i) to require water users to bear all or part of the investment costs involved in any action taken to improve the water resources of the basin, and, in addition, all or part of the operating costs of the river basin organ;
- (j) to assess users' charges in a way that relates to the effect on the balance of water resources in each case, taking into account the various criteria such as abstractions made and the pollution caused;
- (k) to intensify scientific research into problems arising in integrated river basin management, in particular with regard to:
 - the methods of long-term prognosis of future water flow;
 - prognosis of water consumption and water supply for various users during periods of low flow according to the degree of reliability required;
 - possibilities of assessing and forecasting water pollution as well as self-purification processes in river basins;
 - flow regulation by water storage;
 - optimization of integrated water systems at the planning, designing and operative stages, using computers and appropriate mathematical methods;
- (l) to ensure adequate training, particularly for the personnel of operational agencies, in the use of computers and the application of mathematical modelling techniques;
- (m) to coordinate the programmes and activities of river basin management organs with those of corresponding organs of neighbouring countries.

3.1.7 Economic Commission for Europe

Recommendation to the Governments of Southern European Countries concerning Selected Water Problems, approved by the Committee on Water Problems (*)

Geneva, 1972

Preamble

1. In the last two decades the rational development and protection of water resources have assumed very great importance in the ECE region, as a result of rapid industrial and agricultural development and urbanization.

2. Water, which was formerly abundant and cheap, is today regarded in many countries as a limited economic resource needing careful planning and management. The problems to which this situation gives rise are of particular importance for the southern European Countries which participated in the Seminar on Selected Water Problems in Southern Europe. These countries have many features in common, including in particular:

- (a) very marked seasonal and interannual fluctuations in precipitation causing considerable variations in stream flow and in some cases floods and long periods of drought;
- (b) intense evapotranspiration, resulting in very heavy water consumption for irrigation, particularly in summer;
- (c) a very marked imbalance between natural water resources and the needs of the population and of various sectors of the economy;
- (d) pollution of rivers and coastal waters, which is beginning to affect the environment and economic development.

3. Consequently in all the countries of this region the development of water resources creates numerous problems, viz.:

- (a) stream flow regulation, to safeguard economic development;
- (b) protection of water resources from depletion and ever-growing pollution;
- (c) control measures to prevent and combat erosion, flooding and other harmful events.

4. Of late years the governments of the southern European Countries have made a special effort to solve these numerous problems. If various difficulties in the control and use of water are to be avoided, most of the countries must introduce long-term planning for hydrographic basins and large economic complexes, promote intensive research and teach the principles of the rational use of water resources.

(*) Text in: ST/ECE/WATER/6, Add. 1, p. 11

3.1.7 ECE - Recommendation by the Cttee on Water Problems - 1972 (Concluded)

Recommendations to the governments of Southern European Countries

5. As a help in coping with these more or less specific problems and ensuring the necessary conditions for healthy economic growth, the following suggestions are recommended for consideration by the governments of the southern European Countries:

- (a) Formation (or improvement) of an effective and rational water policy closely linked to development plans for the whole country and to regional planning schemes;
- (b) Appointment (or reinforcement) of adequate bodies for the whole country and for each river basin, to apply policies of water-quality protection, water resources management, erosion and flood control, etc.;
- (c) Adoption of modern techniques and application of the latest techniques, experience and methods to water treatment, pollution control, resources management, etc.;
- (d) Strengthening of international cooperation in water management, especially in the protection of quality, above all in countries sharing a river basin.

3.1.8 Declarations of the United Nations Conference

on the Human Environment (*)

Stockholm, 16 June 1972

(Extracts)

...

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 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 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 cooperate 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.

...

(*) Text in: Report of the UN Conference on the Human Environment (United Nations publication, Sales No. E.73.II.A.14), pp. 4-5, 6, 7, 17, 20, 22, 23.

3.1.8 Declarations of the UN Conference on the Human Environment (Contd.)

...

Principle 24

International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries, big or small, on an equal footing. Cooperation 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.

...

(b) Action Plan for the Human Environment

...

Recommendations for action at the international level

...

ENVIRONMENTAL ASPECTS OF NATURAL RESOURCES MANAGEMENT

...

Recommendation 51

It is recommended that Governments concerned consider the creation of river-basin commissions or other appropriate machinery for cooperation between interested States for water resources common to more than one jurisdiction.

- (a) In accordance with the Charter of the United Nations and the principles of international law, full consideration must be given to the right of permanent sovereignty of each country concerned to develop its own resources;
- (b) The following principles should be considered by the States concerned when appropriate:
 - (i) Nations agree that when major water resource activities are contemplated that may have a significant environmental effect on another country, the other country should be notified well in advance of the activity envisaged;
 - (ii) The basic objective of all water resource use and development activities from the environmental point of view is to ensure the best use of water and to avoid its pollution in each country;
 - (iii) The net benefits of hydrologic regions common to more than one national jurisdiction are to be shared equitably by the nations affected;
- (c) Such arrangements, when deemed appropriate by the States concerned, will permit undertaking on a regional basis:
 - (i) Collection, analysis, and exchanges of hydrologic data through some international mechanism agreed upon by the States concerned;
 - (ii) Joint data-collection programmes to serve planning needs;

3.1.8 Declarations of the UN Conference on the Human Environment (Concluded)

- (iii) Assessment of environmental effects of existing water uses;
 - (iv) Joint study of the causes and symptoms of problems related to water resources, taking into account the technical, economic, and social considerations of water quality control;
 - (v) Rational use, including a programme of quality control, of the water resource as an environmental asset;
 - (vi) Provision for the judicial and administrative protection of water rights and claims;
 - (vii) Prevention and settlement of disputes with reference to the management and conservation of water resources;
 - (viii) Financial and technical cooperation of a shared resource.
- (d) Regional conferences should be organized to promote the above considerations.

...

IDENTIFICATION AND CONTROL OF POLLUTANTS OF BROAD INTERNATIONAL SIGNIFICANCE

A. POLLUTION GENERALLY

...

Recommendation 71

It is recommended that Governments use the best practicable means available to minimize the release to the environment of toxic or dangerous substances, especially if they are persistent substances such as heavy metals and organochlorine compounds, until it has been demonstrated that their release will not give rise to unacceptable risks or unless their use is essential to human health or food production, in which case appropriate control measures should be applied.

Recommendation 72

It is recommended that in establishing standards for pollutants of international significance, Governments take into account the relevant standards proposed by competent international organizations, and concert with other concerned Governments and the competent international organizations in planning and carrying out control programmes for pollutants distributed beyond the national jurisdiction from which they are released.

...

3.1.9 United Nations General Assembly

Resolution 2995(XXVII) on Cooperation between States in the Field of the Environment (*)

New York, 15 December 1972

The General Assembly,

Having considered principle 20 as contained in the draft text of a preamble and principles of the declaration on the human environment (1), referred to it for consideration by the United Nations Conference on the Human Environment,

Recalling its resolution 2849 (XXVI) of 20 December 1971 entitled "Development and environment",

Bearing in mind that, in exercising their sovereignty over their natural resources, States must seek, through effective bilateral and multilateral cooperation or through regional machinery, to preserve and improve the environment,

1. Emphasizes that, in the exploration, exploitation and development of their natural resources, States must not produce significant harmful effects in zones situated outside their national jurisdiction;
2. Recognizes that cooperation between States in the field of the environment, including cooperation towards the implementation of principles 21 and 22 of the Declaration of the United Nations Conference on the Human Environment (2), will be effectively achieved if official and public knowledge is provided of the technical data relating to the work to be carried out by States within their national jurisdiction, with a view to avoiding significant harm that may occur in the environment of the adjacent area;
3. Further recognizes that the technical data referred to in paragraph 2 above will be given and received in the best spirit of cooperation and good-neighbourliness, without this being construed as enabling each State to delay or impede the programmes and projects of exploration, exploitation and development of the natural resources of the States in whose territories such programmes and projects are carried out.

(*) Text in: United Nations, Resolutions adopted by the General Assembly during its
Twenty-Seventh Session, 19 September - 19 December 1972, p.42

(1) A/CONF.48/4, annex. See also A/CONF.48/14 and Corr. 1, chap. X, sect. D

(2) A/CONF.48/14 and Corr. 1, chap. I.

3.1.10 United Nations General Assembly
Resolution 2996 (XXVII) on International Responsibility of
States in regard to the Environment (*)

New York, 15 December 1972

The General Assembly,

Recalling principles 21 and 22 of the Déclaration of the United Nations Conference on the Human Environment (1) concerning the international responsibility of States in regard to the environment,

Bearing in mind that those principles lay down the basic rules governing this matter,

Déclares that *no* resolution adopted at the twenty-seventh session of the General Assembly can affect principles 21 and 22 of the Declaration of the United Nations Conference on the Human Environment.

(*) Text in: United Nations, Resolutions adopted by the General Assembly during its
Twenty-Seventh Session, 19 September - 19 December 1972, pp. 42-43

(1) A/CONP.48/14 and Corr. 1, chap. I.

3.1.11 United Nations General Assembly

Resolution 3129 (XXVIII) on Cooperation in the Field of the Environment Concerning Natural Resources shared by two or more States (*)

New York, 13 December 1973

The General Assembly,

Reaffirming principles 21, 22 and 24 of the Déclaration of the United Nations Conference on the Human Environment (I), held at Stockholm from 5 to 16 June 1972,

Reaffirming its resolutions 2995 (XXVII), 2996 (XXVII) and 2997 (XXVII) of 15 December 1972 relating to cooperation between States in the field of the environment, to international responsibility of States in regard to the environment and to the establishment of the Governing Council of the United Nations Environment Programme, respectively,

Reaffirming the duty of the international community to adopt measures to protect and improve the environment, and particularly the need for continuous international collaboration to that end,

Convinced of the need to pursue, in the field of the environment, the elaboration of international norms conducive to the achievement of those purposes,

Taking note with satisfaction of the important Economic Declaration adopted "by the Fourth Conference of Heads of State or Government of Non-Aligned Countries, held at Algiers from 5 to 9 September 1973 (2),

Conscious of the importance and urgency of safeguarding the conservation and exploitation of the natural resources shared by two or more States, by means of an effective System of cooperation, as indicated in the above-mentioned Economic Declaration of Algiers,

1. Considers that it is necessary to ensure effective cooperation between countries through the establishment of adequate international standards for the conservation and harmonious exploitation of natural resources common to two or more States in the context of the normal relations existing between them;

2. Considers further that cooperation between countries sharing such natural resources and interested in their exploitation must be developed on the basis of a System of information and prior consultation within the framework of the normal relations existing between them;

3. Requests the Governing Council of the United Nations Environment Programme, in keeping with its function of promoting international cooperation according to the mandate conferred upon it by the General Assembly, to take duly into account the preceding paragraph and to report on measures adopted for their implementation;

4. Urges Member States, within the framework of their mutual relations, to take fully into account the provisions of the present resolution.

(*) Text in: United Nations, Resolutions adopted by the General Assembly during its Twenty-Eighth Session, Vol. I, 18 September - 18 December 1973, p.48

(1) See Report of the United Nations Conference on the Human Environment (United Nations publication, Sales No. E.73.II.A.14), ohap. I*

(2) A/9330 and Corr. 1, p.57

3.1.12 United Nations General Assembly

Resolution 3281 (XXK) on Charter of Economic Rights and Duties of States (*)

New York, 12 December 1974

(Extracts)

The General Assembly,

Recalling that the United Nations Conférence *on* Trade and Development, in its resolution 45(III) of 18 May 1972 (1), stressed the urgency to establish generally accepted norms to govern international economic relations systematically and recognized that it is not feasible to establish a just order and a stable world as long as a charter to protect the rights of all countries, and in particular the developing States, is not formulated,

Recalling further that in the same resolution it was decided to establish a Working Group of governmental representatives to draw up a draft Charter of Economic Rights and Duties of States, which the General Assembly, in its resolution 3037 (XXVII) of 19 December 1972, decided should be composed of forty Member States;

Noting that, in its resolution 3082 (XXVIII) of 6 December 1973, it reaffirmed its conviction of the urgent need to establish or improve norms of universal application for the development of international economic relations on a just and equitable basis and urged the Working Group on the Charter of Economic Rights and Duties of States to complete, as the first step in the codification and development of the matter, the elaboration of a final draft Charter of Economic Rights and Duties of States, to be considered and approved by the General Assembly at its twenty-ninth session,

Bearing in mind the spirit and terms of its resolutions 3201 (S-VI) and 3202 (S-VI) of 1 May 1974, containing, respectively, the Déclaration and the Programme of Action on the Establishment of a New International Economic Order, which underlined the vital importance of the Charter to be adopted by the General Assembly at its twenty-ninth session and stressed the fact that the Charter shall constitute an effective instrument towards the establishment of a new System of international economic relations based on equity, sovereign equality and interdependence of the interests of developed and developing countries,

Having examined the report of the Working Group on the Charter of Economic Rights and Duties of States on its fourth session (2), transmitted to the General Assembly by the Trade and Development Board at its fourteenth session,

Expressing its appreciation to the Working Group on the Charter of Economic Rights and Duties of States which, as a result of the task performed in its four sessions held between February 1973 and June 1974, assembled the elements required for the completion and adoption of the Charter of Economic Rights and Duties of States at the twenty-ninth session of the General Assembly, as previously recommended,

(*) Text in: United Nations, Resolutions adopted by the General Assembly during its Twenty-Ninth Session, Vol. I, 17 September - 18 December 1974, pp. 50, 52, 55.

(1) See Proceedings of the United Nations Conférence on Trade and Development, Third Session Vol. I, Report and Annexes (United Nations publication, Sales No. E.73.II.D.4), annex I.A

(2) TD/B/AC.12/4 and Corr. 1

3.1.12 United Nations General Assembly - Resolution 3281 (XXIX) (Contd.)

Adopte and solemnly proclaims the following Charter:

CHARTER (F ECONOMIC RIGHTS AND DUTIES CP STATES

Preamble

The General Assembly,

Reaffirming the fundamental purposes of the United Nations, in particular the maintenance of international peace and security, the development of friendly relations among nations and the achievement of international cooperation in solving international problems in the economic and social fields,

Affirming the need for strengthening international cooperation in these fields,

Reaffirming further the need for strengthening international cooperation for development,

Declaring that it is a fundamental purpose of the present Charter to promote the establishment of the new international economic order, based on equity, sovereign equality, interdependence, common interest and cooperation among all States, irrespective of their economic and social systems,

Desirous of contributing to the creation of conditions for:

...

- (f) The protection, preservation and enhancement of the environment,

Mindful of the need to establish and maintain a just and equitable economic and social order through:

- (a) The achievement of more rational and equitable international economic relations and the encouragement of structural changes in the world economy,
- (b) The creation of conditions which permit the further expansion of trade and intensification of economic cooperation among all nations,
- (c) The strengthening of the economic independence of developing countries,
- (d) The establishment and promotion of international economic relations, taking into account the agreed differences in development of the developing countries and their specific needs,

Determined to promote collective economic security for development, in particular of the developing countries, with strict respect for the sovereign equality of each State and through the cooperation of the entire international community,

...

3.1.12 United Nations General Assembly - Resolution 3281 (XXK) (Contd.)

...

CHAPTER II

Economic Rights and Duties of States

Article 1

Every State has the sovereign and inalienable right to choose its economic System as well as its political, social and cultural Systems in accordance with the will of its people, without outside interference, coercion or threat in any form whatsoever.

Article 2

1. Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities.
2. Each State has the right:
 - (a) To regulate and exercise authority over foreign investment within its national jurisdiction in accordance with its laws and regulations and in conformity with its national objectives and priorities. No State shall be compelled to grant preferential treatment to foreign investment;
 - (b) To regulate and supervise the activities of transnational corporations within its national jurisdiction and take measures to ensure that such activities comply with its laws, rules and regulations and conform with its economic and social policies. Transnational corporations shall not intervene in the internal affairs of a host State. Every State should, with full regard for its sovereign rights, cooperate with other States in the exercise of the right set forth in this subparagraph;
 - (c) To nationalize, expropriate or transfer ownership of foreign property, in which case appropriate compensation should be paid by the State adopting such measures, taking into account its relevant laws and regulations and all circumstances that the State considers pertinent. In any case where the question of compensation gives rise to a controversy, it shall be settled under the domestic law of the nationalizing State and by its tribunals, unless it is freely and mutually agreed by all States concerned that other peaceful means be sought on the basis of the sovereign equality of States and in accordance with the principle of free choice of means.

Article 3

In the exploitation of natural resources shared by two or more countries, each State must cooperate on the basis of a System of information and prior consultations in order to achieve optimum use of such resources without causing damage to the legitimate interest of others.

3.1.12 United Nations General Assembly - Resolution 3281 (XXEC) (Concluded)

CHAPTER III

Common Responsibilities towards the International Community

...

Article 30

The protection, préservation and enhancement of the environment for the présent and future générations is the responsibility of ail States. Ail States shall endeavour to esta-blish their own environmental and developraental policies in conformity with such responsibility. The environmental policies of ail States should enhance and not adversely affect the présent and future development potential of developing countries. Ail States hâve 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 liraits of national jurisdiction. Ail States should cooperate in evolving international norms and régulations in the field of the environment...

3.1.3 Déclarations and Resolutions of the United Nations Water Conférence (*)

Mar del Plata, March 1977

REGIONAL COOPERATION

Development of shared water resources (1)

In the case of shared water resources, co-operative action should be taken to generate appropriate data on which future management can be based and to devise appropriate institutions and understandings for co-ordinated development.

COUNTRIES SHARING WATER RESOURCES, WITH APPROPRIATE ASSISTANCE FROM INTERNATIONAL AGENCIES AND OTHER SUPPORTING BODIES, ON THE REQUEST OF THE COUNTRIES CONCERNED, SHOULD REVIEW EXISTING AND AVAILABLE TECHNIQUES FOR MANAGING SHARED WATER RESOURCES AND CO-OPERATE IN THE ESTABLISHMENT OF PROGRAMMES, MECHANISMS AND INSTITUTIONS NECESSARY FOR THE CO-ORDINATED DEVELOPMENT OF SUCH RESOURCES. AREAS OF CO-OPERATION MAY WITH AGREEMENT OF THE PARTIES CONCERNED INCLUDE PLANNING, DEVELOPMENT, REGULATION, MANAGEMENT, ENVIRONMENTAL PROTECTION, USE AND CONSERVATION, FORECASTING, ETC. SUCH CO-OPERATION SHOULD BE A BASIC ELEMENT IN AN EFFORT TO OVERCOME MAJOR CONSTRAINTS SUCH AS THE LACK OF CAPITAL AND TRAINED MANPOWER AS WELL AS THE EXIGENCIES OF NATURAL RESOURCES DEVELOPMENT.

To this end it is recommended that countries sharing a water resource should:

(a) Sponsor studies, if necessary with the help of international agencies and other bodies as appropriate, to compare and analyse existing institutions for managing shared water resources and to report on their results;

(b) Establish joint committees, as appropriate with agreement of the parties concerned, so as to provide for co-operation in areas such as the collection, standardization and exchange of data, the management of shared water resources, the prevention and control of water pollution, the prevention of water-associated diseases, mitigation of drought, flood control, river improvement activities and flood warning systems;

(c) Encourage joint education and training schemes that provide economies of scale in the training of professional and subprofessional officers to be employed in the basin;

(d) Encourage exchanges between interested countries and meetings between representatives of existing international or interstate river commissions to share experiences. Representatives from countries which share resources but yet have no developed institutions to manage them could be included in such meetings;

(e) Strengthen if necessary existing governmental and intergovernmental institutions, in consultation with interested Governments, through the provision of equipment, funds and personnel;

(f) Institute action for undertaking surveys of shared water resources and monitoring their quality;

(g) In the absence of an agreement on the manner in which shared water resources should be utilized, countries which share these resources should exchange relevant information on which their future management can be based in order to avoid foreseeable damages.

(*) Text in : E/CONF.70/29, English, p. 31

(1) This term has been used only for the uniformity of the text and its use does not prejudice the position of the countries supporting the terms "transboundary waters" or "international waters" in any of the problems involved.

1.13 Déclarations of the United Nations Water Conférence (Contd.)

(h) Assist in the active co-operation of interested countries in controlling water pollution in shared water resources. This co-operation could be established through bilateral, subregional or régional conventions or by other means agreed upon by the interested countries sharing the resources.

The régional water organizations, taking into account existing and proposed studies as well as the hydrological, political, économie and geographical distinctiveness of shared water resources of various drainage basins, should seek ways of increasing their capabilities of promoting co-operation in the field of shared water resources and, for this purpose, draw upon the expérience of other régional water organizations.

INTERNATIONAL COOPERATION

Development of shared water resources (1)

It is necessary for States to co-operate in the case of shared water resources in récongnition of the growing économie, environmental and physical interdependencies across international frontiers. Such co-operation, in accordance with the Charter of the United Nations and principles of international law, must be exercised on the basis of the equality, sovereignty and territorial integrity of ail States, and taking due account of the principle expressed, inter alia, in principle 21 of the Déclaration of the United Nations Conférence on the Human Environment (2).

IN K RELATION TO THE USE, MANAGEENT AND DEVELOPMENT OF SHARED WATER RESOURCES, NATIONAL POLICIES SHOULD TAKE INTO CONSIDERATION THE RIGHT OF EACH STATE SHARING THE RESOURCES TO SUIVABLY OTILIZE SUCH RESOURCES AS THE MEANS TO PROMOTE BONDS OF SOLIDARITY AND CO-OPERATION.

A CONCERTED AND SUSTAINED EFFORT IS REQUIRED TO STRENGTHEN INTERNATIONAL WATER LAW AS A MEANS OF PLACING CO-OPERATION AMONG STATES ON A FIRMER BASIS. THE NEED FOR PROGRESSIVE DEVELOPMENT AND CODIFICATION OF THE RULES OF INTERNATIONAL LAW REGULATING THE DEVELOPMENT AND USE OF SHARED WATER RESOURCES HAS BEEN THE GROWING CONCERN OF MANY GOVERNMENTS.

To this end it is recommended that:

(a) The work of the International Law Commission in its contribution to the progressive development of international law and its codification in respect of the law of the non-navigational uses of international watercourses, should be given a higher priority in the working programme of the Commission and be co-ordinated with activities of other international bodies dealing with the development of international law of waters with a view to the early conclusion of an international convention;

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- (1) This term has been used only for the uniformity of the text and its use does not préjudice the position of the countries supporting the terms "transboundary waters"¹¹ or "international waters" in any of the problems involved.
- (2) Report of the United Nations Conférence on the Human Environment (United Nations publication, Sales No. E.73.II.A.14), chap. I, sect. II.

3.1.13 Déclarations of the United Nations Water Conférence (Contd.)

(b) In the absence of bilatéral or multilatéral agreements, Member States continue to apply generally accepted principles of international law in the use, development and management of shared water resources;

(c) The Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States of the United Nations Environment Programme be urged to expedite its work on draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious exploitation of natural resources shared by two or more States;

(d) Member States take note of the recommendations of the Panel of Experts on Légal and Institutional Aspects of International Water Resources Development set up under Economie and Social Council resolution 1033 (XXXVII) of 14 August 1964 as well as the recommendations of the United Nations Interrégional Seminar on River Basin and Inter-basin Development (Budapest, 1975).

(e) Member States also take note of the useful work of non-governmental and other expert bodies on international water law;

(f) Représentatives of existing international commissions on shared water resources be urged to meet as soon as possible with a view to sharing and disséminâting the results of their expérience and to encourage institutional and légal approaches to this question;

(g) The United Nations system should be fully utilized in reviewing, collecting, disséminâting and facilitating exchange of information and expériences on this question, The system should accordingly be organized to provide concerted and meaningful assistance to States and basin commissions requesting such assistance,

Financing arrangements for water development

A persistent and recurring problera in many countries is the mobilization and the obtaining of adéquate financial resources to implement necessary improvements in the numerous aspects of water resources planning, development and management.

A BETTER AND INCREASED FLOW OF FUNDS ON THE BEST POSSIBLE TEHMS CAN ASSIST IN ACHIEVING THE GOALS ASSOCIATED WITH WATER RESOURCES PLANNING, DEVELOPMENT AND LANAGEKENT. ARRANGEMENTS SHOULD BE MADE TO PROVIDE ADEQUATE AND TIMELY FINANCING FOR PROJECT PLANNING, FORMULATION AND BIPLEMENTATION ON A SUSTAINED AND LONG-TERM BASIS ON EASY AND LIBERAL TERMS.

STATES WHICH CCMMAND SURPLUS FINANCIAL RESOURCES MAY ESTABLISH JOINT OR INTERGOVERNMENTAL VENTURES AS THEIR CONSTITUTIONAL REGIMES PERMIT IN THE FIELD OF WATER MANAGEMENT AND DEVELOPMENT WITH DEVELOPING COUNTRIES. THIS MAY BE DONE VOLUNTARILY ON A COUNTRY-BY-COUNTRY BASIS BUT SHOULD PREFERABLY BE HANDLED ON A CCKBINED REGIONAL BASIS.

3.1.13 Déclarations of the United Nations Water Conférence (Contd.)

To this end, it is recommended that countries should:

- (a) Examine the various possibilities of mobilizing internal resources;
- (b) Develop by 1980 an inventory of investment needs in the field of water resources and determine the relative priorities of these needs;
- (c) Investigate the possibilities of making water projects, as far as possible, self-sustaining;
- (d) Attempt to reduce project costs by greater involvement of the people, more extensive use of local labour, material and technology, more economic designs and the preparation and adoption of standard designs for structures, establishment of joint ventures for manufacturing pumps, gates, pipes, valves, etc., and formation of national consultancy firms, etc.;
- (e) Improve the economic viability and the social effectiveness of projects by making them more efficient;
- (f) Support where appropriate the work of non-governmental organizations engaged in the promotion of water management projects, particularly those which are low-cost and self-help based.

International agencies and other supporting bodies, particularly international financing agencies such as the World Bank, regional and subregional development banks, national development banks and other bilateral and multilateral agencies for development financing, should, where appropriate and within their respective areas of responsibility:

- (i) Co-ordinate their policies and activities in the matter of financing projects and plans for water resources development;
- (ii) Review their financing criteria and give sufficient weight to the socio-economic effects of the projects, including direct, indirect and social benefits;
- (iii) Adopt flexible methods of project execution in order to encourage effective participation of national capacities and to promote regional co-operation;
- (iv) Enunciate well-thought-out, comprehensive and realistic policies for financial assistance, which will pave the way for the formulation of long-term programmes for the implementation of water projects;
- (v) Strengthen existing institutional arrangements at the subregional and regional levels through the provision of equipment, personnel and funds;
- (vi) Undertake such co-operative studies or joint action for the development of international river and lake basins as may be requested by basin countries;
- (vii) To the extent possible, provide appropriate opportunities for tenders to be offered on an international basis for goods and services, entrusting the recipient countries with the responsibility of executing projects financed by these agencies provided cost-effectiveness is achieved;

3.1.13 Déclarations of the United Nations Water Conference (Contd.)

- (viii) To the extent possible, agréer to the rétention of local consulting firms capable of undertaking entire projects or project éléménts, channel foreign expertise into local firms while advising on spécific aspects of the project at the request of the Governments concerned.

Technical co-operation among developing countries

The promotion of technical co-operation among developing countries will supplément, upgrade and give a new dimension to the traditional forms of bilatéral and multilatéral de-velopment co-operation to help the developing countries achieve greater intrinsic self-reliance. The development of water resources in developing countries provides a promising area where technical co-operation among developing countries can be achieved. Many developing countries have expertise and capacity which they can share with other developing countries. Alternate appropriate technologies have been developed and many developing countries have reached the stage of self-reliance in water resources development to enable them to apply the more appropriate techniques using the latest know-how and promote better understanding among the countries concerned. This can be adapted to the needs of other developing countries by means of technical co-operation among developing countries.

GOVERNMENTS OF DEVELOPING COUNTRIES SHOULD PURSUE, EXPLORE AND BUILD MECHANISMS IN ORDER TO PROMOTE TO THE FULLEST EXTENT, TECHNICAL CO-OPERATION AMONG THEMSELVES WITH A VIEW TO ACHIEVING COLLECTIVE SELF-RELIANCE IN THE DEVELOPMENT OF THEIR WATER RESOURCES.

TECHNICAL CO-OPERATION AMONG DEVELOPING COUNTRIES WILL ALSO FACILITATE THE SELECTION OF APPROPRIATE TECHNOLOGIES FOR EACH COUNTRY AND REGION ACCORDING TO LOCAL SOCIO-ECONOMIC AND PHYSICAL CONDITIONS.

In the light of these considérations it is recommended that where appropriate countries should act at the national, régional and subregional level:

- (a) Develop an adequate information base so that the capabilities and requirements for technical co-operation in water resources development are known, and put to good use on a continuing basis;
- (b) Co-operate in the préparation and upgrading of a register of experts and consultant services on a subregional/regional basis having particular knowledge of the problems confronting the development of water resources for that subregion/region, and who can be called upon as and where required by member Governments;
- (c) Détermine priority areas in water resources development, and identify institutes having facilities, capabilities and expertise in these areas to develop technologies appropriate for developing countries;

3.1.13 Déclarations of the United Nations Water Conférence (Concluded)

(d) Develop pilot projects for the region/subregion by mutual agreement among the countries concerned to comprise a group of engineers and experts in the field of water resources from the region/subregion who would travel from country to country to collect detailed information on the available resources and the need for mutual exchange of technical resources in the région to promote technical co-operation among developing countries in the water sector;

(e) Identify programmes for water resources development that can be achieved through technical co-operation among developing countries in spécifique sectors such as community water supply, irrigation, drainage, hydroelectric génération, the development and management of transboundary water resources, ground-water development, and raeans for the prévention and réduction of losses due to floods and droughts and pollution control, water législation and training, transfer of technology suited to the requirements of the developing countries and the générai development of such technology;

(f) The countries of the régions of Africa, Asia and Latin America are especially urged to study the possibility of research development and production of low-cost equipment and technology so as to achieve the objectives of a better and more comprehensive assessment of their water resources within the shortest possible time and at the least cost and to promote the exchange of information at the régional level.

International organizations and other supporting bodies should, as appropriate, and on request, take the following action:

- (i) The Administrât or of the United Nations Development Programme (UNDP) in close consultation with the whole United Nations system, should raake a study on the feasibility of establishing an information referrai system on the capacities available in the developing countries for technical co-operation with each other by means of the utilization of key water resources institutions in the developing countries. This sytem should form an intégral part of the UNDP information referrai system. It should be based on information supplied by Governements and by the United Nations system from institutions within each sector and should be managed by UNDP on behalf of the United Nations system as a whole;
- (ii) Assistance should be given in the initiation and implementation of joint programmes and institutions for research and training in water—related activities on a régional or subregional basis, as well as for financing of pilot projects and field studies as and where appropriate;
- (iii) Considération should be given in the préparâtory process for the United Nations Conférence on Technical Co-operation among Developing Countries to the provision of assistance, as necessary, to appropriate institutions concerned with water management to allow them to attend the Conférence.

3.1.14 Déclarations of the United Nations Conférence on Désertification (*)

Nairobi, 9 September 1977

(Extract)

INTERNATIONAL COOPERATION

...

Recommendation 26

Expérience has shown that processes of désertification at times transcend national boundaries, making efficient régional co-operation essential in the management of shared resources, with the objective of preventing ecological imbalance which can cause désertification.

In order to achieve judicious management and equitable sharing of resources on the basis of equality, sovereignty and territorial integrity, it is recommended that countries concerned should cooperate in the sound and judicious management of shared water resources as a means of combating désertification effectively.

In this connexion, the Conférence on Désertification reaffirms the recommendation of the United Nations Water Conférence that in the absence of bilatéral or multilatéral agreements, Member States should continue to apply generally accepted principles of international law in the use, development and management of shared water resources.

The work of the international Law Commission in its contribution to the progressive development of International Law and its codification of the law of the non-navigational uses of international watercourses should be given higher priority in the work programme of the Commission, and should be co-ordinated with activities of other international bodies dealing with the development of the international law of waters with a view to the early conclusion of an international convention.

(*) Text in: Report of the United Nations Conférence on Désertification, A/CONF.74/36, p. 55.

3. 1.15 United Nations Environment Programme

Governing Council Décision 6/14

Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonique Utilization of Naturai Resources shared by two or more States (*)

Nairobi, 19 May 1978

Principle 1

It is necessary for States to co-operate in the field of the environment concerning the conservation and harranonious utilization of naturai resources shared by two or more States. Accordingly, it is necessary that consistent with thè concept of équitabile utilisation of shared naturai resources, States co-operate with a view to controlling, preventing, reducing or eliminating adverse environraental effects which may result from the utilization of such resources. Such ce— opération is to take place on an equal footing and taking into account the sovereignty, rights and interests of the States concerned.

Principle 2

In order to ensure effective international ce—opération in the field of the environ— Lient concerning the conservation and harmonious utilization of naturai resources shared by two or more States, States sharing such naturai resources should endeavour to conclude bilatéral or multilatéral agreements between or among themselves in order to secure spécifie régulation of their conduct in this respect, applymg as necessary the présent principes in a légally binding manner, or should endeavour to enter into other arrangements, as appropriate, for this purpose. In entering into such agreements or arrangements, States should consider the establishment of institutional structures, such as joint international commissions, for consultations on environmental problems relating to the protection and use of shared naturai resources.

Principle 3

1. States hâve, in accordance with the Charter of the United Nations and the principle 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,

2. The principles set forth in paragraph 1, as well as the other principles contained in this document, apply to shared naturai resources.

3. Accordingly, it is necessary for each State to avoid to the maximum extent possible and to reduce to the minimum extent possible the adverse environmental effects beyond its jurisdiction of the utilization of a shared naturai resource so as to protect the environment, in particular when such utilization might:

(a) cause damage to the environment which could hâve repercussions on the utilization of the resource by another sharing State;

(*) Text in: Officiai Records of the General Assembly, Thirty-Third Session, Supplément No. 25, IA/33/25;, pp. 154-155

3.1.15 UNEP - Governinff Council Décision 6/14 (Contd.)

- (b) threaten the conservation of a shared renewable resource;
- (c) endanger the health of the population of another State.

Without préjudice to the generality of the above principle, it should be interpreted, taking into account, where appropriate, the practical capabilities of States sharing the natural resource.

Principle 4

States should make environraental assessinents before engaging in any activity with respect to a shared natural resource which may create a risk of significantly (l)affecting the environment of another State or States sharing that resource.

Principle 5

States sharing a natural resource should, to the extent practicable, exchange information and engage in consultations on a regular basis on its environraental aspects.

Principle 6

1. It is necessary for every State sharing a natural resource with one or more other States:

- (a) to notify in advance the other State or States of the pertinent détails of plans to initiate, or make a change in, the conservation or utilization of the resource which can reasonably be expected to affect significantly j/the environment in the territory of the other State or States; and
- (b) upon request of the other State or States, to enter into consultations concerning the above-mentioned plans; and
- (c) to provide, upon request to that effect by the other State or States, spécifie additional pertinent information concerning such plans; and
- (d) if there has been no advance notification as envisaged in sub-paragraph (a) above, to enter into consultations about such plans upon request of the other State or States.

2. In cases where the transmission of certain information is prevented by national législation or international conventions, the State or States withholding such information shall nevertheless, on the basis, in particular, of the principle of good faith and in the spirit of good neighbourliness, co-operate with the other interested State or States with the aim of finding a satisfactory solution.

Principle 7

Exohange of information, notification, consultations and other forms of co-operation regarding shared natural resources are carried out on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to avoid any unreason-able delays either in the forms of co-operation or in carrying out development or conservation projects.

(1) See définition

3.1.15 UNEP - Governing Council Décision 6/14 (Contd.)

Principle 8

When it would be useful to clarify environmental problems relating to a shared natural resource, States should [illegible] studies and assessment, with a view to facilitating the finding of appropriate and satisfactory solutions to such problems on the basis of agreed data.

Principle 9

1. States have a duty urgently to inform other States which may be affected:
 - (a) Of any emergency situation arising from the utilisation of a shared natural resource which might cause sudden harmful effects on their environment;
 - (b) Of any sudden grave natural events related to a shared natural resource which may affect the environment of such States.
2. States should also, when appropriate, inform the competent international organizations of any such situation or event.
3. States concerned should co-operate, in particular by means of agreed contingency plans, when appropriate, and mutual assistance, in order to avert grave situations, and to eliminate reduce or correct, as far as possible, the effects of such situations or events.

Principle 10

States sharing a natural resource should, when appropriate, consider the possibility of jointly seeking the services of any competent international organization in clarifying the environmental problems relating to the conservation or utilization of such natural resource.

Principle 11

1. The relevant provisions of the Charter of the United Nations and of the Déclaration of Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations apply to the settlement of environmental disputes arising out of the conservation or utilization of shared natural resources.
2. In case negotiations or other non-binding means have failed to settle a dispute within a reasonable time, it is necessary for States to submit the dispute to an appropriate settlement procedure which is mutually agreed by them, preferably in advance. The procedure should be speedy, effective and binding.
3. It is necessary for the States parties to such a dispute to refrain from any action which may aggravate the situation with respect to the environment to the extent of creating an obstacle to the amicable settlement of the dispute.

Principle 12

1. States are responsible for the fulfilment of their international obligations in the field of the environment concerning the conservation and utilization of shared natural resources. They are subject to liability in accordance with applicable international law for environmental damage resulting from violations of these obligations caused to areas beyond their jurisdiction.
2. States should co-operate to develop further international law regarding liability and compensation for the victims of environmental damage arising out of the utilization of a shared natural resource and caused to areas beyond their jurisdiction.

3.1.15 UNEP - Governing Council Décision 6/14 (Concluded)

Principle 13

It is necessary for States, when considering, under their domestic environmental policy, the permissibility of domestic activities, to take into account the potential adverse environmental effects arising out of the utilization of shared natural resources, without discrimination as to whether the effects would occur within their jurisdictions or outside it.

Principle 14

States should endeavour, in accordance with their légal Systems and, where appropriate, on a basis agreed by them, to provide persons in other States who hâve been or may be adversely affected by environmental damage resulting from the utilization of shared natural resources with équivalent access to and treatment in the same administrative and judicial proceedings, and make available to them the same remédies as are available to persons within their own jurisdictions who hâve been or may be similarly affected.

Principle 15

The présent principles should be interpreted and applied in such a way as to enhance and not to affect adversely development and the interests of ail countries, and in particular of the developing countries.

Définition

In the présent text, the expression "significantly affect" refers to any appréciable effects on a shared natural resource and excludes "de minimis" effects.

3.1.16 United Nations General Assembly

Resolution 33/87 on Coopération in the Field of the Environnement concerning Natural Resources shared "by two or more States" (*)

New York, 15 Decemher 1978

The General Assembly,

Affirming the principles stated in the Déclaration of the United Nations Conférence on the Human Environment (1),

Recalling its resolution 3129 (XXVIII) of 13 Deceraber 1973, entitled "Coopération in the field of the environment concerning natural resources shared by two or more States",

Recalling further the Charter of Economie Rights and Duties of States, contained in its resolution 3281 (XXDC) of 12 Deceraber 1974,

Noting that the Governing Council of the United Nations Environment Programme has, by décision 6/14 of 19 May 1978 (2) approved the final report of the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States, established under Governing Council décision 44(III) of 25 April 1975, containing the draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States and the déclarations and réservations expressed thereon (3),

Recognizing the right of States to provide spécifique solutions on a bilatéral or régional basis,

Desiring to promote effective coopération among States for the development of international law regarding the conservation and harmonious utilization of natural resources shared by two or mûre States,

1. Notes the valuable work done by the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States in carrying out the tasks entrusted to it in regard to the implementation of General Assembly resolution 3129 (XXVIII);

2. Takes note of the report of the Group of Experts, its approval, as adopted, by the Governing Council of the United Nations Environment Programme and its transmission to the General Assembly with an invitation to adopt the draft principles;

3. Invites the Secretary-General to transmit the report to Governments for their study and comments regarding the principles and to report thereon, taking into account also other significant information, with a view to enabling the General Assembly to take a décision at its thirty-fourth session.

(*) Tèxt in: United Nations, Résolutions and Décisions adopted by the General Assembly during its Thirty-third Session (19 September - 21 December 1970% 15-29 January 1979 and 2^-31 May 1979), p. 87

(1) Report of the UN Conférence on the Human Environment, Stockholm, 5-16 June 1972 (UN publication, Sales No. E.73.II.A.14 and corrigendum), chap. I

(2) See Officiai Records of the General Assembly, Thirty-third Session, Supplément No. 25 (A/33/25), annex I,

(3) UNEP/GC.6/17

3.1.17 United Nations General Assembly

Résolution 34/186 on Coopération in the Field of the Environment concerning Natural Resources shared by two or more States (*)

New York, 18 December 1979

The General Assembly,

Reoalling the relevant provisions of its resolutions 3201 (S-VI) and 3202 (S-VI) of 1 May 1974, *in* which it reaffirmed the principle of full permanent sovereignty of every State over its natural resources and the responsibility of States as set out in the Déclaration of the United Nations Conférence on the Human Environment (1) to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States and to coopérât© in developing the international law regarding liability and compensation for such damages,

Reoalling its resolution 3129 (XXVIII) of 13 December 1973, entitled "Coopération in the field of the environment concerning natural resources shared by two or more States",

Also reoalling the Charter of the Economic Rights and Duties of States contained in its resolution 3281 (XXEC) of 12 December 1974,

Noting that the Governing Council of the United Nations Environment Programme, by its décision 6/14 of 19 May 1978 (2) invited the General Assembly to adopt the draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States, including the explanatory note, contained in the report of the intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States established under Governins Council décision 44(111) of 25 April 1975 (3),

Koting aleo the report by the Secretary-General reçues-* ed by the General Assembly in résolution 33/87 of 15 December 1978 and containing summaries of the commente made by Governments regarding the draft principles, as well as other eignificant information, recomraenda-tions and suggestions in connexion therewith (4),

Peairing to proraote effective coopération among States for the devòlopment of international law regarding the conservation and harmonious utilization of natural resources shared by two or more States,

Reoognizing the right of States to provide spécifique solutions on a bilatéral or régional basis,

(*) Text in: United Nations, Resolutions and décisions adopt ed by the General Assembly during its TMrty-fetirth Session, 18 September 1979 to 7 January 1980

(Press Release GA/6161;., pp. 285-286,

- (1) Report of the United Nations Conférence on the Human Environment, Stockholm, 5-16 June 1972 (United Nations publication, Sales No. E.73.XI.A.14 and corrigendum), chap. I.
- (2) Ses Official Records of tha General Assembly, Thirty-third Session, Supplément No. 25, (A/33/25), annex I.
- (3) UNEP/ac.6/17.
- (4) A/34/557 and Corr. 1

3.1.17 UN General Assembly - Resolution 34/186 (Concluded)

Recalling that the principles have been drawn up for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States,

1. Takes note of the report as adopted of the Intergovernmental Group of Experts established under Governing Council decision 44 (III) in conformity with General Assembly resolution 3129 (XXVIII),

2. Takes note of the draft principles as guidelines and recommendations in the conservation and harmonious utilization of natural resources shared by two or more States without prejudice to the binding nature of those rules already recognized as such in international law,

3. Requests all States to use the principles as guidelines and recommendations in the formulation of bilateral or multilateral conventions regarding natural resources shared by two or more States, on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to enhance and not to affect adversely development and the interests of all countries and in particular of the developing countries,

4. Further requests the Governing Council of the United Nations Environment Programme to submit, through the Economic and Social Council, to the General Assembly at its thirty-sixth session a report on the progress made in the implementation of the present resolution.

**3.2 OTHER INTERGOVERNMENTAL ORGANIZATIONS
AND CONFERENCES**

3.2.1 Organisation for Economie Coopération and Development (OBCP)

3.2.1.1 Recommendation of the Council on Principles concerning Transfrontier Pollution (•) (Paris, 14 November 1974)

The Council,

Having regard to Article 5(b) of the Convention on the Organisation for Economie Coopération and Development of 14 December 1960}

Considering that the protection and improvement of the environment are common objectives of Member Countries;

Considering that the common interests of countries concerned by transfrontier pollution should induce them to cooperate more closely in a spirit of international solidarity and to initiate concerted action for preventing and controlling transfrontier pollution;

Having regard to the Recommendations of the United Nations Conférence on the Human Environment held in Stockholm in June 1972 and in particular those Principles of the Déclaration on the Human Environment which are relevant to transfrontier pollution;

On the proposal of the Environment Committee;

I. Recommends that, without préjudice to future developments in international law and international coopération in relation to transfrontier pollution, Member Countries should be guided in their environmental policy by the principles concerning transfrontier pollution contained in this Recommendation and its Annex, which is an intégral part of this Recommendation.

II. Instructs the Environment Committee to prépare without delay, taking account of the work undertaken by other international organisations, a programme of work designed to elaborate further these principles and to facilitate their practical implementation.

III. Recommends Member Countries to cooperate in developing international law applicable to transfrontier pollution.

IV. Instructs the Environment Committee, within the framework of its mandate, to examine or investigate further, as the case may be, the issues related to the Principles of the Stockholm Déclaration regarding responsibility and liability, taking into account the work undertaken by other international organisations, to submit a first report to the Council on its work by 1st March 1976 and to seek to formulate as soon as possible Draft Recommendations.

V. Instructs the Environment Committee to investigate further the issues concerning equal right of hearing, to formulate as soon as possible Draft Recommendations and to report to the Council on its work by 1st July 1975.

(*) Text in: Organisation for Economie Coopération and Development, doc. C(74)224.

3.2.1.1 CECD - Council Recommendation on Transfrontier Pollution (Contd.)

AKNEX - Some Principles concerning Transfrontier Pollution

Title A - Introduction

This Annex sets forth some principles designed to facilitate the development of harmo-nized environmental policies with a view to solving transfrontier pollution problème. Their impleraentation should be based on a fair balance of rights and obligations among countries concerned by transfrontier pollution.

Thèse principles should subséquently be supplemented and developed in the light of work undertaken by the CECD or other appropriate international organizations.

For the purpose of thèse principles, pollution means the introduction by man, directly or indirectly, of substances or energy into the environment resulting in deleterious effets of such a nature as to endanger human health, harm living resources and ecosystems, and impair or interfère with amenities and other legitimate uses of the environment.

Unless otherwise specified, thèse principles deal with pollution originating in one country and having effects within other countries.

Title B - International Solidarity (I)

1. Countries should define a concerted long-term policy for the protection and improve-raent of the environment in zones liable to be affected by transfrontier pollution.

Without préjudice to their rights and obligations under international law and in ac-cordance with their responsibility under Principle 21 of the Stockholm Déclaration, countries should seek, as far as possible, an équitable balance of their rights and obligations as regards the zones concerned by transfrontier pollution.

In implementing this concerted policy, countries should among other things:

- (a) take account of:
 - levels of existing pollution and the présent quality of the environment concerned;
 - the nature and quantities of pollutants;
 - the assimilative capacity of the environment, as established by mutual agreement by the countries concerned, taking into account the particular characteristics and use of the affected zone;
 - activities at the source of pollution and activities and uses sensitive to such pollution;
 - the situation, prospective use and development of the zones concerned from a socio-economic standpoint;
- (b) define:
 - environmental quality objectives and corresponding protective measures;

(1) The Delegate for Spain reserved his position on Title B.

3.2.1.1 CECD - Council Recommendation on Transfrontier Pollution (Contd.)

- (c) promote:
 - guidelines for a land-use planning policy consistent with the requirements both of environmental protection and socio-economic development;
 - (d) draw up and maintain up to date;
 - (i) list of particularly dangerous substances regarding which efforts should be made to eliminate polluting discharges, if necessary by stages, and
 - (ii) lists of substances regarding which polluting discharges should be subject to very strict control.
2. Pending the definition of such concerted long-term policies countries should, individually and jointly, take all appropriate measures to prevent and control transfrontier pollution, and harmonize as far as possible their relevant policies.
3. Countries should endeavour to prevent any increase in transfrontier pollution, including that stemming from new or additional substances and activities, and to reduce, and as far as possible eliminate any transfrontier pollution existing between them within time limits to be specified.

Title C - Principle of Non-discrimination

4. Countries should initially base their action on the principle of non-discrimination, whereby:
- (a) polluters causing transfrontier pollution should be subject to legal or statutory provisions no less severe than those which would apply for any equivalent pollution occurring within their country, under comparable conditions and in comparable zones, taking into account, when appropriate, the special nature and environmental needs of the zone affected;
 - (b) in particular, without prejudice to quality objectives or standards applying to transfrontier pollution mutually agreed upon by the countries concerned, the level of transfrontier pollution entering into the zones liable to be affected by such pollution should not exceed those considered acceptable under comparable conditions and in comparable zones inside the country in which it originates, taking into account when appropriate, the special state of the environment in the affected country;
 - (c) any country whenever it applies the Polluter-Pays Principle should apply it to all polluters within this country without making any difference according to whether pollution affects this country or another country;
 - (d) persons affected by transfrontier pollution should be granted no less favourable treatment than persons affected by a similar pollution in the country from which such transfrontier pollution originates.

Title D - Principle of Equal Right of Hearing (1)

5. Countries should make every effort to introduce, where not already in existence, a System affording equal right of hearing, according to which:

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- (1) The Delegate for Spain reserved his position on Title D.

3.2.1.1 CECD - Council Recommendation on Transfrontier Pollution (Contd.)

- (a) whenever a project, a new activity or a course of conduct may create a significant risk of transfrontier pollution and is investigated by public authorities, those who may be affected by such pollution should have the same rights of standing on judicial or administrative proceedings in the country where it originates as those of that country;
- (b) whenever transfrontier pollution gives rise to damage in a country, those who are affected by such pollution should have the same rights of standing in judicial or administrative proceedings in the country where such pollution originates as those of that country, and they should be extended procedural rights equivalent to the rights extended to those of that country.

Title E - Principle of Information and Consultation (1)

6. Prior to the initiation in a country of works or undertakings which might create a significant risk of transfrontier pollution, this country should provide early information to other countries which are or may be affected. It should provide these countries with relevant information and data, the transmission of which is not prohibited by legislative provisions or prescriptions or applicable international conventions, and should invite their comments.

7. Countries should enter into consultation on an existing or foreseeable transfrontier pollution problem at the request of a country which is or may be directly affected and should diligently pursue such consultations on this particular problem over a reasonable period of time.

8. Countries should refrain from carrying out projects or activities which might create a significant risk of transfrontier pollution without first informing the countries which are or may be affected and, except in cases of extreme urgency, providing a reasonable amount of time in the light of circumstances for diligent consultation. Such consultations held in the best spirit of cooperation and good neighbourliness should not enable a country to unreasonably delay or to impede the activities or projects on which consultations are taking place.

Title F - Warning Systems and Incidents

9. Countries should promptly warn other potentially affected countries of any situation which may cause any sudden increase in the level of pollution in areas outside the country of origin of pollution, and take all appropriate steps to reduce the effects of any such sudden increase.

10. Countries should assist each other, wherever necessary, in order to prevent incidents which may result in transfrontier pollution, and to minimise, and if possible eliminate, the effects of such incidents, and should develop contingency plans to this end.

Title G - Exchange of Scientific Information, Monitoring Measures and Research

11. Countries concerned should exchange all relevant scientific information and data on transfrontier pollution, when not prohibited by legislative provisions or prescriptions or by applicable international conventions. They should develop and adopt pollution measurement methods providing results which are compatible.

(1) The Delegate for Spain reserved his position on Title E.

3.2.1.1 CECD - Council Recommendation on Transfrontier Pollution; (Concluded)

12. They should, when appropriate, cooperate in scientific and technical research programmes inter alia for identifying the origin and pathways of transfrontier pollution, any damage caused and the best methods of pollution prevention and control, and should share all information and data thus obtained.

They should, where necessary, consider setting up jointly, in zones affected by transfrontier pollution, a permanent monitoring System or network for assessing the levels of pollution and the effectiveness of measures taken by them to reduce pollution.

Title H - Institutions

13. Countries concerned by a particular problem of transfrontier pollution should consider the advantages of coopération, by setting up international commissions or other bodies, or by strengthening existing institutions, in order to deal more effectively with particular aspects of such problems.

Such institutions could be authorised to collect any data needed for a proper évaluation of the problem and its causes, and make to the countries concerned practical proposals for concerted efforts to combat transfrontier pollution. With the consent of the States concerned, they could also carry out any necessary additional investigations into the origin and degree of pollution, review the effectiveness of any pollution prevention and control measures which have been taken, and publish reports of their findings.

Title I - Disputes

14. Should negotiations and other means of diplomatically settling disputes concerning transfrontier pollution fail, countries should have the opportunity to submit such a dispute to a procedure of legal settlement which is prompt, effective and binding.

Title J - International Agreements

15. Countries should endeavour to conclude, where necessary, bilateral or multilateral agreements for the abatement of transfrontier pollution in accordance with the above principles, to bring promptly into force any agreements which may already have been signed.

16. When negotiating new bilateral or multilateral agreements countries should, while taking into account the principles set out above, strive for the application of efficient pollution prevention and control measures in accordance with the Polluter-Pays Principle.

Such agreements could, inter alia, include provisions for practical procedures promoting the prompt and equitable compensation of persons affected by transfrontier pollution, and could also contain procedures facilitating the provision of information and consultation.

3.2.1 Organisation for Economic Cooperation and Development

3.2.1.2 Recommendation of the Council on Equal Right of Access in relation to Transfrontier Pollution (*) - (Paris, 11 May 1976)

The Council,

Having regard to Article 5(b) of the Convention on the Organisation for Economic Cooperation and Development of 14 December 1960;

Having regard to the Recommendation of the Council of 14 November 1974 on Principles concerning Transfrontier Pollution and, in particular, the principles of non-discrimination and equal right of hearing appearing in its Annex (1);

Having regard to the Declaration on environmental policy according to which the Governments of Member Countries "will cooperate towards solving transfrontier pollution problems in a spirit of solidarity and with the intention of further developing international law in this field" (2);

Considering the desire of Member Countries to strengthen their environmental policies relating to transfrontier pollution;

Having regard to the Report by the Environment Committee of 22 April 1976 on Equal Right of Access in Relation to Transfrontier Pollution (3);

Considering that equal right of access should facilitate the prevention and the solution of many transfrontier pollution problems, without prejudice to other means available, and that it constitutes one of the suitable channels for giving effect to the principle of non-discrimination;

On the proposal of the Environment Committee;

I. Recommends that Member Countries should endeavour to remove, possibly under conditions of reciprocity, the obstacles which may exist in their legal Systems to the implementation of a system of equal right of access, the constituent elements of which are set out in the attached Annex which constitutes an integral part of this Recommendation.

II. Recommends that Member Countries, even when their legislation already implicitly provides for equal right of access, should introduce into their legislation and regulations relating to the environment any explicit provisions that may appear to them to be necessary to ensure a system of equal right of access.

III. Recommends that Member Countries should consider in relation to discussions carried out further to paragraph IV of this Recommendation, the advisability of concluding, within suitable geographical areas and on the basis of the particular characteristics of their legal Systems, agreements on environmental protection designed to ensure the application of the principle of equal right of access and as far as it is conducive to the implementation of this principle, of the principle of non-discrimination.

(*) Text in: Organisation for Economic Coopération and Development, doc. C(76)55 Final

(1) C(74)224

(2) C/fc(74)26 (Final), Annex

(3) C(76)55

3.2.1.2 OECD - Council Recommendation on Equal Right of Access (Concluded)

IV. Instructs the Environment Committee, to go deeper in its work on equal right of access, through a study of the principle of non-discrimination, as far as it is necessary for the implementation of the principle of equal right of access with a view to preparing common guidelines designed to assist the practical implementation of these principles, to report to the Council on its work by 31 December 1976 and to draw up as soon as possible draft Recommendations or Decisions.

ANNEX - Constituent Elements of a System of Equal Right of Access

1. A system of equal right of access is made up of a set of rights recognised by a country in favour of persons who are affected or likely to be affected in their personal and/or proprietary interests by transfrontier pollution originating in such country and whose personal and/or proprietary interests are situated outside such country (hereafter referred to as "persons affected by transfrontier pollution").

2. Without prejudice to corresponding interstate procedures, the rights accorded to "persons affected by transfrontier pollution" should be equivalent to those accorded to persons whose personal and/or proprietary interests within the territory of the country where the transfrontier pollution originates are or may be affected under similar conditions by a same pollution, as regards:

- (a) information concerning projects, new activities and courses of conduct which may give rise to a significant risk of pollution;
- (b) access to information which the competent authorities make available to persons concerned;
- (c) the participation in hearings and preliminary enquiries and the making of objections in respect of proposed decisions by the public authorities which could directly or indirectly lead to pollution;
- (d) recourse to and standing in administrative and judicial procedures (including emergency procedures);

in order to prevent pollution, or to have it abated and/or obtain compensation for the damage caused,

3. Concomitantly with the rights of "persons affected by transfrontier pollution", the countries concerned by such pollution should take certain measures to make possible the exercise of the rights so recognised, in particular as regards the information and participation of "persons affected by transfrontier pollution" in hearings and enquiries prior to the taking of decisions. Such measures, which might be taken by countries where the pollution originates, would however gain in effectiveness if they were put into effect in cooperation with countries which are or may be affected by transfrontier pollution.

3.2.1 Organisation for Economic Cooperation and Development

3.2.1.3 Recommendation of the Council for the Implementation of a Régime of Equal Right of Access and Non-Discrimination in relation to Transfrontier Pollution (*) (Paris, 17 May 1977)

The Council,

Having regard to Article 5(b) of the Convention on the Organisation for Economic Co-operation and Development of 14 December 1960;

Having regard to the Declaration on the Human Environment adopted in Stockholm in June 1972 and in particular Principles 21, 22, 23 and 24 of that Declaration;

Having regard to the Recommendations of the Council of 14 November 1974 on Principles concerning Transfrontier Pollution and of 11 May 1976 on Equal Right of Access in relation to Transfrontier Pollution (1) and without prejudice to such Recommendations;

Having regard to the Report by the Secretary-General of 18 March 1977 on the Implementation of a Régime of Equal Right of Access and Non-Discrimination in relation to Trans-frontier Pollution (2);

Considering that the protection and improvement of the environment are common objectives of Member Countries;

Conscious that pollution originating in the area within the national jurisdiction of a State may have effects on the environment outside this jurisdiction;

Considering that the implementation of a régime of equal right of access and non-discrimination among Member Countries should lead to improved protection of the environment without prejudice to other channels available for the solution of transfrontier pollution problems;

On the proposal of the Environment Committee;

Recommends that Member Countries, in regard to each other, take into account the principles concerning transfrontier pollution set forth in the Annex to this Recommendation, which is an integral part of it, in their domestic legislation, possibly on the basis of reciprocity, notably regarding individual rights, and in bilateral or multilateral international agreements.

ANNEX

Introduction

This Annex sets out a number of principles intended to promote the implementation between Member Countries of a régime of equal right of access and non-discrimination in matters of transfrontier pollution, while maintaining a fair balance of rights and obligations between Countries concerned by such pollution.

(*) Text in: Organisation for Economic Cooperation and Development, doc. C(77)28 (Final)

(1) c (74)224 and c(76)55 (Final)

(2) Appendix I to C(77)28

3.2.1.3 OECD - Council Recommendation for the Implementation of a Régime (Contd.)

These principles do not prejudice any more favourable measures for the protection of the environment and of persons whose property, rights or interests are or could be affected by pollution the origin of which is situated within the area under the jurisdiction of a Member Country,

For the purposes of this Recommendation:

- (a) "Pollution" means any introduction by man, directly or indirectly, of substance or energy into the environment resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, impair amenities or interfere with other legitimate uses of the environment.
- (b) "Domestic pollution" means any intentional or unintentional pollution, the physical origin of which is situated wholly within the area under the national jurisdiction of one Country and which has effects within that area only.
- (c) "Transfrontier pollution" means any intentional or unintentional pollution whose physical origin is subject to, and situated wholly or in part within the area under, the national jurisdiction of one Country and which has effects in the area under the national jurisdiction of another Country.
- (d) "Country" means any Member Country which participates in this Recommendation.
- (e) "Country of origin" means any Country within which, and subject to the jurisdiction of which, transfrontier pollution originates or could originate in connection with activities carried on or contemplated in that Country.
- (f) "Exposed Country" means any Country affected by transfrontier pollution or exposed to a significant risk of transfrontier pollution.
- (g) "Countries concerned" means any Country of origin of transfrontier pollution and any Country exposed to such pollution.
- (h) "Regions concerned by transfrontier pollution" means any region of origin of trans-frontier pollution in the Country of origin and any regions of the Country of origin and of any exposed Country where such pollution produces or might produce its effects.
- (i) "Persons" means any natural or legal person, either private or public.
- (j) "Régime of environmental protection" means any set of statutory and administrative measures related to the protection of the environment, including those concerning the property, rights or interests of persons.

Title A - Principles to Facilitate the Solution at Inter-State Level of

Transfrontier Pollution Problems

1. When preparing and giving effect to their policies affecting the environment, Countries should, consistent with their obligations and rights as regards the protection of the environment, take fully into consideration the effects of such policies on the environment of exposed Countries so as to protect such environment against transfrontier pollution.
2. With a view to improved protection of the environment, Countries should attempt by common agreement to:
 - (a) make their environmental policies mutually compatible, particularly those bearing on regions concerned by transfrontier pollution;

3.2.1.3 OECD - Council Recommendation for the Implementation of a Régime (Contd.)

- (b) bring closer together quality objectives and environmental standards adopted by Countries, apply them systematically to oases of transfrontier pollution and, where necessary, improve those already in force;
 - (c) work out additional rules of conduct of States to be applied in matters of trans-frontier pollution.
3. (a) Pending the implementation of the objectives laid down in paragraph 2, and without prejudice to more favourable measures taken in accordance with paragraphs 1 and 2 above, each Country should ensure that its régime of environmental protection does not discriminate between pollution originating from it which affects or is likely to affect the area under its national jurisdiction and pollution originating from it which affects or is likely to affect an exposed Country.
- (b) Thus, transfrontier pollution problems should be treated by the Country of origin in an equivalent way to similar domestic pollution problems occurring under comparable conditions in the Country of origin.
 - (c) In the event of difficulties arising between Countries Concerned because the situations resulting from transfrontier pollution and domestic pollution are manifestly not comparable, for example as a result of uncoordinated land use policies in regions concerned by transfrontier pollution, those Countries should strive to arrive at a mutually agreed arrangement which ensures to the largest extent possible the application of the principle referred to in subparagraph (a) of this paragraph.

Title B - Legal Protection of Persons

4. (a) Countries of origin should ensure that any person who has suffered transfrontier pollution damage or is exposed to a significant risk of transfrontier pollution, shall at least receive equivalent treatment to that afforded in the Country of origin in oases of domestic pollution and in comparable circumstances, to persons of equivalent condition or status.
- (b) From a procedural standpoint, this treatment includes the right to take part in, or have resort to, all administrative and judicial procedures existing within the Country of origin, in order to prevent domestic pollution, to have it abated and/or to obtain compensation for the damage caused.
5. Where in spite of the existence of a liability ceiling instituted by an international agreement, there exists in a Country a system of additional compensation financed or administered by the public authorities, then such Country should not be required in the absence of reciprocal arrangements to grant entitlement to such additional compensation to victims of transfrontier pollution, but it should in advance inform the exposed Countries of the particular situation.
- 6.(a) Where the domestic law of Countries permits private non-profit legal persons that are resident within their own territories, such as environmental defence associations, to commence proceedings to safeguard environmental interests which it is their aim to protect, those Countries should grant the same right for comparable matters to similar legal persons resident in exposed Countries, provided that the latter satisfy the conditions laid down for the former in the Country of origin.
- (b) When some of the conditions concerning matters of form laid down in the Country of origin cannot reasonably be imposed on legal persons resident in an exposed Country, these latter should be entitled to commence proceedings in the Country of origin if they satisfy comparable conditions.

3.2.1.3 OECD - Council Recommendation for the Implementation of a Régime (Concluded)

7. When the law of a Country of origin permits a public authority to participate in administrative or judicial proceedings in order to safeguard general environmental interests, the Country of origin should consider, if its legal system allows it, providing, by means of international agreement if it deems it necessary, competent public authorities of exposed Countries with access to such proceedings.

Title C - Exchange of Information and Consultation

8. (a) The Country of origin, on its own initiative or at the request of an exposed Country, should communicate to the latter appropriate information concerning it in matters of transfrontier pollution or significant risk of such pollution and enter into consultations with it (1).
- (b) In order to enable a Country of origin to implement adequately that principles set out in Title A of this Recommendation, each exposed Country should, on its own initiative or at the request of the Country of origin, supply appropriate information of mutual concern.
- (c) Each Country should designate one or more authorities entitled to receive directly information communicated under subparagraphs (a) and (b) of this paragraph.
- 9.(a) Countries of origin should take any appropriate measures to provide persons exposed to a significant risk of transfrontier pollution with sufficient information to enable them to exercise in a timely manner the rights referred to in this Recommendation. As far as possible, such information should be equivalent to that provided in the Country of origin in cases of comparable domestic pollution.
- (b) Exposed Countries should designate one or more authorities which will have the duty to receive and the responsibility to disseminate such information within limits of time compatible with the exercise of existing procedures in the Country of origin.
10. Countries should encourage and facilitate regular contacts between representatives designated by them at regional and/or local levels in order to examine such transfrontier pollution matters as may arise.

(1) The Delegate for Spain reserved his position on the last six words of paragraph 8(a).

3.2.1 Organisation for Economic Cooperation and Development

3.2.1.4 Recommendation of the Council on Water Management Policies and Instruments (*) (Paris, 5 April 1978)

The Council,

Having regard to Article 5(b) of the Convention on the Organisation for Economic Cooperation and Development of 14 December 1960;

Having regard to the Recommendations of the Council of 14 November 1974, on Strategies for Specific Water Pollutants Control (1) and on Principles concerning Transfrontier Pollution (2);

Having regard to the Recommendation of the Council of 26 May 1972, on Guiding Principles concerning International Economic Aspects of Environmental Policies (3);

Having regard to the principles of the Stockholm Declaration on Human Environment, and notably principles 21 and 22;

Considering that:

- in Member Countries, the total expenditure allocated for water management is considerable in absolute terms and can be of the order of 1 percent of GNP; regional and national development schemes are often limited by water resources availability;
- planning is an essential tool of water management and must be harmonized with plans and developments in other sectors;
- in Member Countries, waste water treatment facilities are a major step in water pollution control, requiring a high capital investment and significant operating cost, and yet many of these facilities frequently operate much below design efficiency;
- the main objectives of water management are: to protect water resources against pollution and excessive use; to preserve the water environment and ecology; to safeguard and improve the hydrological cycle in general; and to provide adequate water supply, in quality and quantity for domestic, industrial and agricultural purposes, account being taken of long-term demands.

Recommends that:

Member Countries in their national and, where possible, their international water management policies take into account the following principles:

1. Water resources, both surface (lakes, rivers, estuaries and coastal waters) and under-ground, should be managed on the basis of long-term water management plans so as to follow an integrated approach regarding all relevant aspects of water quantity and quality, abstraction and discharge, supply and protection.

(*) Text in: Organisation for Economic Cooperation and Development, doc. C(78)4 (Final)

(1) C(74)221

(2) C(74)224

(3) C(72)128

3.2.1.4 OECD - Council Recommendation on Water Management (Contd.)

2. Authorities should promote the rational and equitable allocation of water resources among all users by applying appropriate regulatory and economic instruments including licensing system, and taking into account a hierarchy of real requirements in terms of quality and quantity as well as any potential effects on the environment.
3. Highest priority should be given to reserving and protecting high quality waters for potable use where there is either present or potential demand for this purpose. There is a basic need to try to preserve an acceptable level of aquatic life.
4. River basin oriented management should be encouraged as providing an effective solution to water problems beyond the scope of local management, and where advisable this should be considered in an international framework. Adequate coordination of the regional approach is required at a state and national level within the framework of a national water management policy.
5. An appropriate combination of regulatory and economic instruments (for example standards and charges) should be applied so as to provide continuing incentive for water users to control both pollution and wastage of water resources. Charges for water abstraction and waste water discharge should thus be set at a sufficient level to have a significant incentive effect, and their proceeds should be allocated to water resources development and pollution control.
6. Pollution control measures should be applied as close to the source as possible. Particularly strict regulatory, economic and technical controls should be enforced for certain categories of hazardous pollutants, on the basis of their ecologically significant characteristics especially toxicity, persistence and bioaccumulation, with a view to preventing their dispersion into the environment.
7. Authorities should ensure that the water pollution control measures they implement do not lead to uncontrolled pollution transfers to other water resources or to soil or air systems.
8. Assessment of water and effluent quality should not be limited to a few classical measurements such as BOD, COD and suspended solids, but should also include the relevant physical, chemical, biological and toxicity parameters. Effluent components should be expressed not only in terms of concentrations, but also in terms of total amounts of pollutants discharged. Monitoring is an essential tool of pollution control and should be developed adequately.
9. All the required financial, managerial and technical measurements to ensure that waste water treatment plants are always operated in an efficient manner, should be urgently adopted.
10. Authorities should facilitate public information and participation to promote more informed decision-making and to enlist public support for proposed activities.

APPENDIX - Explanatory Notes to the Draft Recommendation on Water Management Policies and Instruments

1. Underground and surface waters constitute a closely inter-related hydrologic system which should be managed as a single entity in order to prevent uncontrolled pollution and depletion of these resources. In particular, all quantitative and qualitative aspects, and activities of abstraction and discharge, are so interdependent that they should be managed in an integrated manner and should not be dissociated; thus they should whenever possible be under the same authority and fully coordinated. In certain countries, traditional practices and structures such as water rights and similar privileges have built up attitudes and customs which are generally incompatible with a modern and rational water policy, and should be progressively amended.

3.2.1.4 OECD - Council Recommendation on Water Management (Contd.)

2. When demand on resources is high, an order of priority should be established, and especially a hierarchy of the different quality requirements. Such a rational allocation of water entails good knowledge of the qualitative and quantitative requirements of the various uses as well as the environmental role of the resource. Existing water allocation procedures still frequently lack a competent rational basis. Pre-existing settlements and different forms of water rights commonly confer to certain users the right or possibility to abstract and use at will the water resources, at the expense of the other users. Further-more, high quality waters, such as underground waters, are frequently abstracted in large quantities for purposes which do not require this quality, whilst very demanding requirements such as potable water, increasingly have to utilise low quality raw waters. Such an irrational use of limited water resources is clearly unacceptable. The solution of these problems is mainly a legal one and many Countries are adopting compulsory licensing systems under the control of water authorities.

3. In large urban and industrial areas, polluted waters are increasingly being used for potable water supply purposes; water treatment is then becoming more and more costly, whilst final quality after treatment is frequently unsatisfactory from the taste, odour and health viewpoints. These problems are generally due to large numbers of trace pollutants which pass in solution or fine particulate form through treatment plants, and cannot be removed, or are formed during the treatment itself (halogenated organics formed during chlorination). Under present technological and financial conditions of operation of the treatment plants, the situation is not likely to be substantially improved unless special efforts are made to greatly enhance the quality Of the raw waters themselves. As recovery of polluted resources in many cases is likely to take considerable time, particular attention should be given to a reallocation of waters on a regional basis, reserving only the best quality for drinking purposes.

In recent decades, many OECD countries have seen a considerable deterioration in the quality of their water resources and natural environment. At the same time natural waters, including estuaries and coastal waters, have been in increasing demand for recreation and amenity purposes such as bathing, fishing, boating, etc. which represent the most popular outdoor activities in OECD Countries. It is important to maintain adequate and varied fish populations in surface waters for their value as a natural resource and their significance in the ecological equilibrium. Further, satisfactory fishlife indicates, and can be used as a monitor for, the quality of the aquatic environment.

4. An operational structure, organised on a hydrological river basin system is particularly favourable for water management, because the resource being managed has rationally defined hydrological boundaries; water supply and demand can be more realistically balanced, and pollution controlled more effectively. Such systems have already been adopted successfully in an increasing number of Member Countries. The national water management structure should consist of a limited number of sizeable regions which should be large enough to justify the employment of the multi-disciplinary skills necessary for effective modern management. However, certain Member Countries, either for geographical, historical or administrative reasons, may find it difficult to change radically to such a system and may develop flexible systems which adapt the pre-existing administrative framework to an over- all river basin concept.

In order to coordinate the regional basin management authorities and to harmonize their policies, there should be a coordinating body responsible for water policy at a state and national level. Further, in order to balance water policies within the framework of other national priorities and to resolve potential conflicts, this body should be in close liaison with the various Ministries which may have common interests in water matters. This body would also play an effective role in the harmonization of water management policies at an international level. As already practised in various Member Countries, the tasks of this body may lie with the Minister in charge of the environment, or the Minister for the Environment if such a ministry exists.

3.2.1.4 OECD - Council Recommendation on Water Management (Contd.)

5. There is a permanent conflict between the competing requirements of the various water users, and also between the maximum exploitation of the resource and its conservation for its environmental functions. In general, it is not very likely that on its own a single instrument will solve satisfactorily the complex management problems particularly in densely populated and industrial river basins. A judicious choice of complementary instruments, both regulatory and economic, will generally permit more efficient management by responsible authorities at a minimum cost for society. These instruments should normally be applied simultaneously in order to provide mutual backing. In certain cases, a progressive approach for both economic and regulatory instruments may be appropriate in order to reach the desirable level of control without economic disturbance.

Regulatory and economic instruments should be adapted to have a continuing incentive for more rational utilisation of the resource, by saving on consumption and decreasing pollution; this is a fundamental element of dynamic water management. Such a policy is also likely to constitute a constant stimulus to progress in water technology and research. In principle, instruments based on a flat rate or "lump sum" arrangement should be avoided, for in practice they are an inducement for uncontrolled abstraction and pollution. Effluent standards should be set for discharges from municipal treatment plants and from different industrial sectors. Charges, if fixed at a sufficiently high rate, have a good incentive effect, and can be used as a helpful complement to regulations by re-enforcing their efficiency and providing greater flexibility. Charges moreover generate an essential income which may provide water management authorities with useful financial capability to support, for the benefit of the community, pollution control and water resource development projects which are considered most appropriate and urgent.

6. Prevention of pollution at source is by far the most effective and safest means of control. This can be carried out, in relation to each case considered, by different strategies, e.g. by banning of undesirable processes and products and by replacement with less polluting ones; by the use of closed systems including recycling; by the early segregation of industrial effluents with application of specific treatment etc.. Furthermore, early prevention and control procedures can considerably diminish the risk of accidental spills. In effect, the later the stage of control the less effective it is likely to be due to wider dispersion of the contaminants. Experience shows that diffusion of pollutants with dilution and mixing makes their removal in general more costly and uncertain and increases the risk of synergistic effects.

Particularly strict measures of control should be enforced for certain categories of hazardous pollutants with a view to preventing their dispersion into the environment. This applies especially to toxic substances which are very persistent in the environment and/or subject to bioaccumulation in living organisms and concentration through the food chain. Examples include heavy metals (cadmium, mercury, lead etc. and their organic compounds); halogenated organic compounds (organochlorines in general, PCB's, DDT); radioactive substances, etc. The strict control of these substances must, in general, take place at their initial stages of occurrence: i.e. their production, importation, sale and use, as control in later stages proves to be practically impossible. Possibilities range from complete banning to restriction to limited uses. Finally, controlled regeneration or disposal such as is often carried out in specialised centres for treatment of toxic wastes should be ensured.

7. Experience shows that the polluter will, in general, attempt to discharge waste where the operation is least costly and the controls less stringent (e.g. direct discharge of effluents through ground waters; incineration with generation of air pollution, etc.). In order to combat uncontrolled discharge and undesirable transfers of pollution, authorities responsible for environmental protection should ensure that economic and regulatory instruments and controls, both for the different types of water resources and for other media (air, soil), are comprehensive and correctly balanced.

3.2.1.4 OECD - Council Recommendation on Water Management (Contd.)

8. Water quality parameters have hitherto mainly been limited to measurements of oxidisable matter (BOD, COD) and suspended solids. These measurements, although very useful in the past, are now recognised as being insufficiently specific to monitor the increasing quantity and variety of pollutants, e.g. toxic and persistent pollutants (including radioactive substances); thermal pollution and microbiological (including viral) pollution. Where this is not already done, these additional pollution parameters should be regularly taken into account in evaluating water quality and effluent discharges, and should be incorporated into the framework of the regulatory and economic instruments. Often the technical capability for measuring and monitoring these additional elements of pollution will have to be considerably improved. The relative importance of these different parameters may also vary in relation to the functions of the receiving waters (drinking water, fishing and recreation, etc.). Strict monitoring of progress towards water policy objectives should be regularly carried out.

In certain countries parameters for effluent discharge are still specified only in terms of concentrations (e.g. grams of pollutants per litre or cubic metre of effluent). This is useful in preventing a "shock effect" in rivers where discharges might otherwise exceed toxicity limits. Nevertheless, this is clearly insufficient and encourages easy circumvention of pollution control regulations by diluting the effluent. It is thus fundamental that each parameter be expressed also in terms of (daily or monthly) "total discharge" and that total flows of effluents be indicated. Further, for industrial effluents, the total discharge should not only be expressed as a function of time but also as a function of industrial production. This latter means of expressing the amount of pollution can rather easily be checked in relation to the technology used and also indicates the degree of sophistication of treatment being applied by industry.

9. For a number of reasons waste water treatment plants are frequently operated much below design standards. Common problems include inadequate operating funds, mismanagement, and poorly trained personnel. These treatment plants, which are a fundamental tool of pollution control, require high capital investment. Consequently, poor operation means both very unsatisfactory pollution abatement and the wastage of an important investment. Fundamental guidelines which could help reduce the problems include:

- recognition that regular and continuous financing is absolutely necessary to ensure proper operation throughout the life of the plant. The necessary provisions should be formally planned at the initial investment stage and guaranteed by a strict financing scheme. For instance, an appropriate charge levied at municipal level from all users proportionally to abstraction and discharge, might guarantee, where necessary, this regular and sufficient financing.
- adequate management of treatment plants requires operators with suitable technical qualification. So far this has not always been the case. The skill of operators should be improved by the organisation of regular training programmes leading to professional certification; this certification should become compulsory for all operators. Moreover, it would be desirable that the operation and inspection of treatment plants become progressively the responsibility of a specially trained corps of inspectors and operators. As a first step to this permanent arrangement, inspections should be carried out at all plants at frequent intervals.
- a frequent cause of deficiency in municipal plants is their overloading and the poisoning of the biological treatment of domestic sewage by toxic effluents from industrial plants. Industrial sewers likely to contain regularly or accidentally such toxic pollutants capable of affecting treatment should not be directly connected to municipal treatment plants unless they receive rigorous pre-treatment.

3.2.1.4 OECD - Council Recommendation on Water Management (Concluded)

10. Action needs to be taken to familiarise the public and water users with water management problems. This action ranges from straight-forward campaigns for public information to open discussion forums in which the public can actively participate. The categories of people concerned with water problems are the decision-makers, and expert advisers (e.g. hydrologists, engineers, chemists, economists) who constitute "management", and the water "users" comprising the general public, industrial and agricultural consumers. There is a need within water management organisations for some formalised machinery for the exchange of views between all categories.

3.2.2 Conference on Security and Cooperation in Europe

3.2.2.1 Final Act (Helsinki, 1st August 1975) (*)

(Extracts)

...

5. ENVIRONMENT

The participating States,

Affirming that the protection and improvement of the environment, as well as the protection of nature and the rational utilization of its resources in the interests of present and future generation, is one of the tasks of major importance to the well-being of people and the economic development of all countries and that many environmental problems, particularly in Europe, can be solved effectively only through close international cooperation.

Acknowledging that each of the participating States, in accordance with the principles of international law, ought to ensure, in a spirit of cooperation, that activities carried out on its territory do not cause degradation of the environment in another State or in areas lying beyond the limits of national jurisdiction.

Considering that the success of any environmental policy presupposes that all population groups and social forces, aware of their responsibilities, help to protect and improve the environment, which necessitates continued and thorough educative action, particularly with regard to youth.

Affirming that experience has shown that economic development and technological progress must be compatible with the protection of the environment and the preservation of historical and cultural values; that damage to the environment is best avoided by preventive measures; and that the ecological balance must be preserved in the exploitation and management of natural resources.

Aims of cooperation

Agree to the following aims of cooperation, in particular:

- to study, with a view to their solution, those environmental problems which, by their nature, are of a multilateral, bilateral, regional or sub-regional dimension; as well as to encourage the development of an interdisciplinary approach to environmental problems;
- to increase the effectiveness of national and international measures for the protection of the environment, by the comparison and, if appropriate, the harmonization of methods of gathering and analysing facts, by improving the knowledge of pollution phenomena and rational utilization of natural resources, by the exchange of information, by the harmonization of definitions and the adoption, as far as possible, of a common terminology in the field of the environment;
- to take the necessary measures to bring environmental policies closer together and, where appropriate and possible, to harmonize them;

(*) Text in: International Legal Materials, 1975, p.1307

3.2.2.1 Conference on Security and Cooperation in Europe - Final Act (Contd.)

- to encourage, where possible and appropriate, national and international efforts by their interested organizations, enterprises and firms in the development, production and improvement of equipment designed for monitoring, protecting and enhancing the environment.

Fields of Cooperation

To attain these aims, the participating States will make use of every suitable opportunity to cooperate in the field of environment and, in particular, within the areas described below as examples:

...

Water Pollution Control and Fresh Water Utilisation

Prevention and control of water pollution, in particular of transboundary rivers and international lakes; techniques for the improvement of the quality of water and further development of ways and means for industrial and municipal sewage effluent purification; methods of assessment of fresh water resources and the improvement of their utilisation, in particular by developing methods of production which are less polluting and lead to less consumption of fresh water;

...

Forms and Methods of Cooperation

The participating States declare that problems relating to the protection and improvement of the environment will be solved on both a bilateral and a multilateral, including regional and sub-regional, basis, making full use of existing patterns and forms of cooperation. They will develop cooperation in the field of the environment in particular by taking into consideration the Stockholm Declaration on the Human Environment, relevant resolutions of the United Nations General Assembly and the United Nations Economic Commission for Europe Prague symposium on environmental problems.

The participating States are resolved that cooperation in the field of the environment will be implemented in particular through:

- exchanges of scientific and technical information, documentation and research results, including information on the means of determining the possible effects on the environment of technical and economic activities;
- organisation of conferences, symposia and meetings of experts;
- exchanges of scientists, specialists and trainees;
- joint preparation and implementation of programmes and projects for the study and solution of various problems of environmental protection;
- harmonisation, where appropriate and necessary, of environmental protection standards and norms, in particular with the object of avoiding possible difficulties in trade which may arise from efforts to resolve ecological problems of production processes and which relate to the achievement of certain environmental qualities in manufactured products;
- consultations on various aspects of environmental protection, as agreed upon among countries concerned, especially in connexion with problems which could have international consequences.

3.2.2.1 Conference on Security and Cooperation in Europe - Final Act (Concluded)

The participating States will further develop such cooperation by:

- promoting the progressive development, codification and implementation of international law as one means of preserving and enhancing the human environment, including principles and practices, as accepted by them, relating to pollution and other environmental damage caused by activities within the jurisdiction or control of their States affecting other countries and regions;
- supporting and promoting the implementation of relevant international Conventions to which they are parties, in particular those designed to prevent and combat marine and fresh water pollution, recommending States to ratify Conventions which have already been signed, as well as considering possibilities of accepting other appropriate Conventions to which they are not parties at present;
- advocating the inclusion, where appropriate and possible, of the various areas of cooperation into the programmes of work of the United Nations Economic Commission for Europe, supporting such cooperation within the framework of the Commission and of the United Nations Environment Programme, and taking into account the work of other competent international organizations of which they are members;
- making wider use, in all types of cooperation, of information already available from national and international sources, including internationally agreed criteria, and utilizing the possibilities and capabilities of various competent international organizations.

The participating States agree on the following recommendations on specific measures:

- to develop through international cooperation an extensive programme for the monitoring and evaluation of the long-range transport of air pollutants, starting with sulphur dioxide and with possible extension to other pollutants, and to this end to take into account basic elements of a cooperation programme which were identified by the experts who met in Oslo in December 1974 at the invitation of the Norwegian Institute of Air Research;
- to advocate that within the framework of the United Nations Economic Commission for Europe a study be carried out of procedures and relevant experience relating to the activities of Governments in developing the capabilities of their countries to predict adequately environmental consequences of economic activities and technological development.

...

3.2.3 Asian-African Legal Consultative Committee

3.2.3.1 Draft Proposition on the Law of International Rivers (*) (New Delhi, 18 January 1973)

Proposition I

The general rules set forth in these propositions are applicable to the use of waters of an international drainage basin except as may be provided otherwise by convention, agreement or binding custom among the basin states.

Proposition II

1. An international drainage basin is a geographical area extending over two or more states determined by the watershed limits of the system of waters, including surface and underground waters, flowing into a common terminus.

2. A 'basin state' is a state the territory of which includes a portion of an inter-national drainage basin.

Proposition III

1. Each basin state is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin.

2. What is a reasonable and equitable share is to be determined by the interested basin states by considering all the relevant factors in each particular case.

3. Relevant factors which are to be considered include in particular:

- (a) the economic and social needs of each basin state, and the comparative costs of alternative means of satisfying such needs.
- (b) the degree to which the needs of a basin state may be satisfied without causing substantial injury to a co-basin state.
- (c) the past and existing utilization of the waters.
- (d) the population dependent on the waters of the basin in each basin state.
- (e) the availability of other water resources.
- (f) the avoidance of unnecessary waste in the utilization of waters of the basin.
- (g) the practicability of compensation to one or more of the co-basin states as a means of adjusting conflicts among uses.
- (h) the geography of the basin.
- (i) the hydrology of the basin.
- (j) the climate affecting the basin.

(*) Text in: Asian-African Legal Consultative Committee, Report of the Fourteenth Session held in New Delhi (10-18 January 1973), pp. 7-14

3.2.3.1 Asian-African Legal Consultative Committee - Draft Proposition (Contd.)

Proposition IV

1. Every basin state shall act in good faith in the exercise of its rights on the waters of an international drainage basin in accordance with the principles governing good neighbourly relations.
2. A basin state may not therefore undertake works or utilizations of the waters of an international drainage basin which would cause substantial damage to another basin state unless such works or utilizations are approved by the states likely to be adversely affected by them or are otherwise authorized by a decision of a competent international court or arbitral commission.

Proposition V

In determining preferences among competing uses by different co-basin states of the waters of an international drainage basin, special weight should be given to uses which are the basis of life, such as the consumptive uses.

Proposition VI

A basin state may not be denied the present reasonable use of the waters of an international drainage basin to reserve for a co-basin state a future use of such waters.

Proposition VII

1. An existing reasonable use may continue in operation unless the factors justifying its continuance are outweighed by other factors leading to the conclusion that it be modified or terminated so as to accommodate a competing but more important incompatible use.
2. (a) A use that is in fact operational is deemed to have been an existing use from the time of the initiation of construction directly related to the use or, where such construction is not required, the undertaking of comparable acts of actual implementation.
(b) Such a use continues to be an existing use until such time as it is discontinued with the intention that it be abandoned.
3. A use will not be deemed an existing use if at the time of becoming operational it is incompatible with an already existing reasonable use.

Proposition VIII

1. Consistent with the principle of equitable utilization of the waters of an international drainage basin, a state must prevent any new form of water pollution or any increase in the degree of existing water pollution in an international drainage basin which would cause substantial damage in the territory of a co-basin state, regardless of whether or not such pollution originates within the territory of the state.
2. Water pollution, as used in this proposition, refers to any detrimental change resulting from human conduct in the natural composition, content or quality of the waters of an international drainage basin.

3.2.3.1 Asian-African Legal Consultative Committee - Draft Proposition (Concluded)

Proposition IX

Any act or omission on the part of a basin state in violation of the foregoing rules may give rise to state responsibility under international law. The state responsible shall be required to cease the wrongful conduct and compensate the injured co-basin state for the injury that has been caused to it, unless such injury is confined to a minor inconvenience compatible with good neighbourly relations.

Proposition X

A state which proposes a change of the previously existing uses of the waters of an international drainage basin that might seriously affect utilization of the waters by another co-basin state, must first consult with the other interested co-basin states. In case agreement is not reached through such consultation, the states concerned should seek the advice of a technical expert or commission. If this does not lead to agreement, resort should be had to the other peaceful methods provided for in Article 33 of the United Nations Charter and, in particular, to international arbitration and adjudication.

3.2.4 Pan-American Union, Organization of American States

3.2.4.1 Declaration concerning the Industrial and Agricultural Use of International Rivers (*) - Seventh Inter-American Conference (Montevideo, 24 December 1933)

THE SEVENTH INTERNATIONAL CONFERENCE OF AMERICAN STATES DECLARES:

1. In the case that, in order to exploit the hydraulic power of international waters for industrial or agricultural purposes, it may be necessary to make studies with a view to their utilization, the States on whose territories the studies are to be carried on, if not willing to make them directly, shall facilitate by all means the making of such studies on their territories by the other interested States and for its account.

2. The States have the exclusive right to exploit, for industrial or agricultural purposes, the margin which is under their jurisdiction, of the waters of international rivers. This right, however, is conditioned in its exercise upon the necessity of not injuring the equal right due to the neighbouring State over the margin under its jurisdiction. In consequence, no State may, without the consent of the other riparian State, introduce into water courses of an international character, for the industrial or agricultural exploitation of their waters, any alteration which may prove injurious to the margin of the other interested State.

3. In the cases of damage referred to in the foregoing article an agreement of the Parties shall always be necessary. When damages capable of repair are concerned, the works may only be executed after adjustment of the incident regarding indemnity, reparation or compensation of the damages, in accordance with the procedures indicated below.

4. The same principles shall be applied to successive rivers as those established in Articles 2 and 3, with regard to contiguous rivers.

5. In no case either where successive or where contiguous rivers are concerned shall the works of industrial or agricultural exploitation performed cause injury to the free navigation thereof.

6. In international rivers having a successive course the works of industrial or agricultural exploitation performed shall not injure free navigation on them but, on the contrary, try to improve it insofar as possible. In this case, the State or States planning the construction of the works shall communicate to the others the result of the studies made with regard to navigation, to the sole end that they may take cognizance thereof.

7. The works which a State plans to perform in international waters shall be previously announced to the other riparian or co-jurisdictional States. The announcement shall be accompanied by the necessary technical documentation in order that other interested States may judge the scope of such works, and by the name of the technical expert or experts who are to deal, if necessary, with the international side of the matter.

(*) Text in: Pan American Union, Seventh International Conference of American States, Plenary Sessions, Minutes and antecedents, Montevideo, 1933 - p.114

3.2.4.1 Pan.American Union, OAS - Montevideo Declaration (Concluded)

8. The announcement shall be answered within a period of three months, with or without observations. In the former case, the answer shall indicate the name of the technical expert or experts to be charged by the respondent with dealing with the technical experts of the applicant, and shall propose the date and place for constituting the MIXED TECHNICAL COMMISSION of technical experts from both sides to pass judgement on the case. The Commission shall act within a period of six months, and if within this period no agreement has been reached, the members shall set forth their respective opinion, informing the governments thereof.

9. In such cases, and if it is not possible to reach an agreement through diplomatic channels, recourse shall be had to such procedure of conciliation as may have been adopted by the Parties beforehand, or, in the absence thereof, to the procedure of any of the multilateral treaties or conventions in effect in America. The tribunal shall act within a period of three months, which may be extended, and shall take into account, in the award, the proceedings of the Mixed Technical Commission.

10. The Parties shall have a month to state whether they accept the conciliatory award or not. In the latter case and at the request of the interested Parties the disagreement shall then be submitted to arbitration, the respective tribunal being constituted by the procedure provided in the Second Hague Convention for the peaceful solution of international conflicts.

RESERVATIONS (*) - (Extracts)

...

Venezuela - The delegation of Venezuela desires to record:

- (1) That, with respect to the industrial and agricultural use of international rivers, Venezuela subjects the regulation of this matter to existing partial agreements previously entered into with neighbouring States.

...

Mexico - The delegation of Mexico records expressly that it makes a general reservation on the resolutions of the Conference regarding the following:

First: Industrial and agricultural use of international rivers.

...

DECLARATION (*) - (Extract)

...

United States of America

1. The delegation of the United States of America, believing that the Declaration on the Industrial and Agricultural Use of International Rivers is not sufficiently comprehensive in scope to be properly applicable to the particular problems involved in the adjustment of its rights in the international rivers in which it is interested, refrains from giving approval to (that) Declaration.

(*) Text in: The Carnegie Foundation for International Peace, The International Conferences of American States, First Supplement, 1933-1940, Wash., D.C. 1940),pp.105-106.

3.2.4 Pan-American Union, Organization of American States

3.2.4.2 Inter-American Economic and Social Council, Resolution 24-M/66 on Control and Economic Utilization of Hydrographic Basins and Streams in Latin America (*) - (Buenos Aires, 1966)

The Inter-American Economic and Social Council, at its fourth annual session, adopted resolution 24-M/66, which reads as follows:

WHEREAS:

Control and better utilization of the hydrographic basins and streams that, in various regions of Latin America, make up a part of the common patrimony of the member countries of the Alliance for Progress will help to speed up the integration and multiply the potential capacity for development of those countries.

The Fourth Annual Meeting of the Inter-American Economic and Social Council at the Ministerial Level

RECOMMENDS:

To the member countries of the Alliance for Progress that, with the technical and financial assistance of international agencies, they begin or continue joint studies looking toward the control and economic utilization of the hydrographic basins and streams of the region of which they are part, for the purpose of promoting, through multinational projects, their utilization for the common good, in transportation, the production of electric power, irrigation works, and other uses, and particularly in order to control and prevent damage such as periodically occurs as the result of rises in the level of their waters and consequent floods.

(*) Text in: Final Report of the Fourth Annual Meeting of the Inter-American Economic and Social Council, Vol. I (CEA/Ser.H/XII-11 J, Washington, D.C. PanAmerican Union, 1966. D. 48

3.2.5 Council of Europe

3.2.5.1 Consultative Assembly, Recommendation 436(1965) on Fresh Water Pollution Control in Europe (*) - (1 October 1965)

(Extracts)

The Assembly,

I. Adopts the following "Guiding principles on fresh water pollution control":

GUIDING PRINCIPLES APPLICABLE TO FRESH WATER POLLUTION CONTROL

Preamble

1. (a) Control of water pollution forms an integral part of water resource and water utilization policies;

(b) All problems concerning the rational utilization of water resources should be viewed in relation to the special features of each drainage area;

(c) Water pollution control constitutes a fundamental governmental responsibility and requires systematic international collaboration;

(d) It also requires the cooperation of the local communities and of all users of water.

2. The purpose of water pollution control is to preserve, to the maximum extent possible, the natural qualities of surface and underground waters in order to safeguard public health and permit their use, in particular, for:

the production at a reasonable cost of drinking water of good quality;

the conservation of aquatic and other fauna and flora;

the production of water for industrial purposes, after such economically justified treatment as may be necessary;

irrigation and animal consumption;

recreational purposes, with due regard for health and aesthetic requirements.

3. Control of water being a governmental responsibility, Governments should adopt a long-term policy directed towards reduction of existing water pollution and its prevention in the future. To this end, all appropriate legal and administrative measures should be taken to implement, in particular, the principles laid down hereafter.

4. International cooperation in the field of water pollution control, in particular with regard to research, training of experts and exchange of information, should be strengthened with the help of the various international organizations concerned.

Part I -National aspects

5. Water pollution control requires the establishment of administrative agencies which might take the form of:

(*) Text in: Consultative Assembly of the Council of Europe, Report on Fresh Water Pollution Control in Europe (Doc. 1965), part III.

3.2.5.1 Council of Europe - Recommendation 436(1965) (Contd.)

- (a) a central body responsible to the Minister in charge or to the Head of Government, and vested with such administrative powers as are necessary to enforce the application of water pollution control legislation;
- (b) in each draining area a body responsible for enforcing the application of regulations and for the adoption of water pollution control measures;
- (c) joint advisory committees consisting of representatives of the public authorities, representatives of users, and independent experts to assist and advise the above-mentioned bodies.

6. Any discharge or deposit of waste directly or indirectly endangering human life should be forbidden.

7. Both for surface and for ground waters regulations should be established prohibiting the discharge or deposit, without prior administrative authorization, of any substance of a kind which pollutes such waters.

8. Applications for authorization to discharge such substances should be considered in the light of the following factors:

- (a) the capacity of the receiving water to assimilate the materials to be discharged, taking into account the physical, chemical, biological, microbiological and radio-active characteristics of these materials;
- (b) the evaluation of the economic, social and cultural advantages and disadvantages of possible methods of treatment and evacuation.

9. It is essential that legislation on water pollution control should be strictly applied and that, in case of violation, sufficiently severe administrative or penal sanctions should be imposed.

10. The construction of plants for treatment of refuse and of installations for the purification of municipal sewage and industrial effluents should be encouraged by the most appropriate means, such as non-discriminatory subsidies, low interest loans, tax advantages, government guaranteed loan issues, etc.

11. States whose territories are separated or crossed by the same water course should reach agreement on the following points:

- (a) whether upstream countries are required to maintain surface waters which flow into downstream countries at a quality equal to that maintained in waters which remain within their territory; and whether downstream countries shall have the right to require that these waters be of such quality;
- (b) whether downstream countries benefiting from exceptional efforts of purification made by upstream countries are liable on that account to make financial compensations therefor;
- (c) whether any riparian country is responsible for substantial injuries which water pollution in its territory might cause to a co-riparian country and whether it is liable to indemnify the country suffering such injuries.

12. A special body for water pollution control should be set up for each international drainage area. In defining the tasks of such a body and in determining its administrative structure, account should be taken of the principles formulated in the report of the Assembly (Doc. 1965).

3.2.5.1 Council of Europe - Recommendation 436(1965) (Concluded)

II. Recommends the Committee of Ministers to urge Member Governments, in pursuance of Article 15(b) of the Statute, to take joint action to control fresh water pollution and to this end:

1. to adopt as a basis for their policy in this field the above "Guiding principles on fresh water pollution control";
2. to provide for the training of qualified staff:
...
3. to promote scientific and technical research:
...
4. to promote the centralising and distribution of documentation:
...
5. to take steps to strengthen and continue the international cooperation in water pollution control begun by existing international organisations;
6. to ensure that delegations to the Group of Experts set up by the United Nations Economic Commission for Europe "to study the possibility of drafting a declaration of principles on water pollution control, setting forth the fundamental concepts which should be observed when planning and carrying out legislative and administrative water pollution control measures which would be submitted to Governments of Member Countries of ECE" are acquainted with this Recommendation and in particular with the "Guiding Principles" enunciated therein so that they may be guided by them in their future work.

III. Recommends that the Committee of Ministers give instructions to the:

1. Committee of Experts for the Conservation of Nature and Landscape:
 - (a) to intensify its programme of research into the ecological problems of pollution and to take action to protect the more seriously threatened biotopes;
 - (b) to draft a final text of a "Water Charter" based on the Report of the Assembly (see the outline of a "Water Charter" in the Appendix);
 - (c) to prepare publicity materials, including audiovisual materials, and see that they are distributed;
 - (d) to formulate and propose action to remedy instances of pollution damaging to wild flora and fauna and endangering natural preserves, national parks, humid zones, etc.;
 - (e) to propose that certain regions threatened by pollution should be set aside as preserves;
 - (f) to draw up a curriculum for study of the conservation of man's natural environment in cooperation with the Council for Cultural Cooperation.
2. The Council for Cultural Cooperation:

to seek, in collaboration with the Committee of Experts for the Conservation of Nature and Landscape, means to incorporate the study of the conservation of natural environment into all school curricula;

...

3.2.5 Council of Europe

3.2.5.2 European Water Charter (*) - (Strasbourg, 1967)

Preamble

The Committee of Ministers,

Having regard to Recommendation 436(1965) of the Consultative Assembly on Fresh Water Pollution Control in Europe;

Hearing in mind resolution 10(XXI)(1965) of the United Nations Economic Commission for Europe containing the ECE declaration of policy on water pollution control in Europe; and also the international standards for drinking water, particularly the European standards established by the World Health Organization;

Persuaded that the advance of modern civilization leads in certain cases to an increasing deterioration in our natural heritage;

Conscious that water holds a place of prime importance in that natural heritage;

Considering that the demand for water is increasing, largely because of the rapid development of industrialization in the main urban centres of Europe, and that steps must be taken for the qualitative and quantitative conservation of water resources;

Considering, furthermore, that collective action on a European scale on water problems is necessary and that a Water Charter constitutes an effective instrument for creating a better understanding of these problems;

Adopts and proclaims the principles of this Charter, prepared by the European Committee for the Conservation of Nature and Natural Resources of the Council of Europe, which reads as follows:

(*) Text in: Legal problems relating to the non-navigational uses of international water-courses; Supplementary Report by the Secretary-General, Doc. A/CN.4/274t, United Nations, Yearbook of the International Law Commission, 1974, Vol. II, pp.342-343. Text of the European Water Charter was adopted by the Consultative Assembly on 22 April 1967 (Recommendation 493(1967)) and by the committee of Ministers on 26 May 1967 (Resolution (67)10) • The European water charter was proclaimed in Strasbourg on 6 May 1968.

3.2.5.2 Council of Europe - European Water Charter (Contd.)

I. There is no life without water. It is a treasure indispensable to all human activity

Water falls from the atmosphere to the earth mainly in the form of rain and snow. Streams, rivers, glaciers and lakes are the principal channels of drainage towards the oceans. During its cycle, water is retained by the soil, vegetation and animals. It returns to the atmosphere principally by means of evaporation and plant transpiration. Water is the first need of man, animals and plants.

Water constitutes nearly two-thirds of man's weight and about nine-tenths of that of plants.

Man depends on it for drinking, food supplies and washing, as a source of energy, as an essential material for production as a medium for transport, and as an outlet for recreation which modern life increasingly demands.

II. Fresh water resources are not inexhaustible. It is essential to conserve, control, and wherever possible, to increase them

The population explosion and the rapidly expanding needs of modern industry and agriculture are making increasing demands on water resources. It will be impossible to meet these demands and to achieve rising standards of living, unless each one of us regards water as a precious commodity to be preserved and used wisely.

III. To pollute water is to harm man and other living creatures which are dependent on water

Water in nature is a medium containing beneficial organisms which help to keep it clean. If we pollute the water, we risk destroying those organisms, disrupting this self-purification process, and perhaps modifying the living medium unfavourably and irrevocably.

Surface and underground waters should be preserved from pollution.

Any important reduction of quantity and deterioration of quality of water, whether running or still, may do harm to man and other living creatures.

IV. The quality of water must be maintained at levels suitable for the use to be made of it and, in particular, must meet appropriate public health standards

These quality levels may vary according to the different uses of water, namely food supplies, domestic, agricultural and industrial needs, fisheries and recreation. Nevertheless, since all life on earth in its infinite variety depends upon the manifold qualities of water, arrangements should be made to ensure as far as possible that water retains its natural properties.

V. When used water is returned to a common source it must not impair the further uses, both public and private, to which the common source will be put

Pollution is a change, generally man-made, in the quality of water which makes it unusable or dangerous for human consumption, industry, agriculture, fishing, recreation, domestic animals and wildlife.

3.2.5.2 Council of Europe - European Water Charter (Contd.)

The discharge of residue (wastage) or of used water which causes physical, chemical, organic, thermal or radioactive pollution, must not endanger public health and must take into account the capacity of the receiving waters to assimilate (by dilution or self-purification) any waste matter discharged. The social and economic aspects of water-treatment methods are of great importance in this connection.

VI. The maintenance of an adequate vegetation cover, preferably forest land, is imperative for the conservation of water resources

It is necessary to conserve vegetation cover, preferably forests, and wherever it has disappeared to reconstitute it as quickly as possible.

The conservation of forests is a factor of major importance for the stabilisation of drainage basins and their water regime. As well as their economic value, forests provide opportunities for recreation.

VII. Water resources must be assessed

Fresh water that can be put to good use represents less than one per cent of the water on our planet and it is distributed in very unequal fashion.

It is essential to know surface and underground water resources, bearing in mind the water cycle, the quality of water and its utilisation.

Assessment, in this context, involves the survey, recording and appraisal of water resources.

VIII. The wise husbandry of water resources must be planned by the appropriate authorities

Water is a precious resource requiring planning which combines short- and long-term needs.

A viable water policy is needed, which should include various measures for the conservation, flow-control and distribution of water resources. Furthermore, maintenance of quality and quantity calls for development and improvement of utilisation, recycling and purification techniques.

IX. Conservation of water calls for intensified scientific research, training of specialists and public information services

Research with regard to water in general and waste water in particular should be encouraged in every way possible. Means of providing information should be increased and international exchanges facilitated; at the same time, the technical and biological training of qualified personnel is necessary in the various fields of activity involved.

X. Water is a common heritage, the value of which must be recognised by all. Everyone has the duty to use water carefully and economically

Each human being is a consumer and user of water and is therefore responsible to other users. To use water thoughtlessly is to misuse our natural heritage.

XI. The management of water resources should be based on their natural basins rather than on political and administrative boundaries

Surface waters flow away down the steepest slopes, converging to form watercourses. A river and its tributaries are like a many-branched tree, and they serve an area known as a watershed or drainage basin.

3.2.5.2 Council of Europe - European Water Charter (Concluded)

Within a drainage basin, all uses of surface and underground waters are interdependent and should be managed bearing in mind their interrelationship.

XII. Water knows no frontiers; as a common resource it demands international co-operation

International problems arising from the use of water should be settled by mutual agreement between the States concerned, to conserve the quality and quantity of water.

3.2.5 Council of Europe

3.2.5.3 Consultative Assembly. Recommendation 629(1971) on the Pollution of the Rhine Water-Table (*) - (Strasbourg, 22 January 1971)

The Assembly,

1. Having regard to the report on the pollution of the Rhine valley water-table presented by its Committee on Regional Planning and Local Authorities (Doc. 2904);
2. Recalling its earlier views on fresh water pollution control, in particular Recommendation 436(1965) calling for a Water Charter and Recommendation 555 (1969) on the conclusion of a draft European Convention on the protection of fresh water against pollution;
3. Welcoming the adoption by the Committee of Ministers of Resolution (70)30 on 24 Oct. 1970, on planning of the management of water resources, while regretting that this resolution makes no mention of the problems peculiar to water-tables;
4. Considering that the efficacy of fresh water pollution control depends on the acceptance of certain principles by as many countries as possible, and at least by the countries of Western Europe, and in general calls for concerted action within a given drainage basin in accordance with the eleventh principle of the European Water Charter;
5. Reaffirming that most environment problems, including water pollution, are of an international character;
6. Noting in this connection that the Rhine valley water-table is not only the most important fresh water reservoir in Europe but also the indivisible asset of a number of European countries;
7. Noting that, although it is not immediately apparent to the public, pollution increasingly threatens this vital fresh water reserve;
8. Noting further that the management of this water reserve and its safeguarding against pollution are tasks whose effective accomplishment can only be ensured jointly by all the countries bordering on it: Germany, France, Switzerland, Luxembourg and the Netherlands;
9. Emphasising the urgent need for such cooperation, which is a proof of both the solidarity existing between frontier regions and the practical nature of the problems calling for common action.
10. Recommends that the Committee of Ministers:
 - (a) invite the governments concerned to institute such cooperation in regard to the Rhine valley water-table and to refer the question to the European Conference of Ministers responsible for Regional Planning through their Committee of Senior Officials, in accordance with the Bonn resolution which urges, inter alia, coordinated action in frontier areas with a view to "the tracing of courses of pollution whose effects extend beyond the frontier";

(*) Text in: Consultative Assembly of the Council of Europe, Report on the Pollution of the Rhine Water-Table (doc. 2904).

3.2.5.3 Council of Europe - Recommendation 629(1971) (Concluded)

- (b) initiate concrete action on their own Resolution (68)36 concerning studies on ground-water deposits, adopted in November 1968 by taking the following decisions, which are calculated to promote international cooperation in regard to research into pollution control and to lead to joint management of the Rhine valley water-table:
- (i) to invite the governments directly concerned to initiate such cooperation among themselves and to entrust the Institut de mécanique des fluides in Strasbourg with the task of coordinating research work;
 - (ii) to authorise the Secretary-General of the Council of Europe to grant his patronage and administrative aid to such an international institute for coordination and research in regard to the Rhine valley water-table, as a first step towards cooperation between the Council of Europe and technical bodies specialising in research into surface and underground water resources;
 - (iii) to instruct the Secretary-General of the Council of Europe to seek ways and means of cooperating with the International Commission for the Protection of the Rhine against Pollution;
 - (iv) to transmit this recommendation and the report of the Committee on Regional Planning and Local Authorities (Doc. 2904) to:
 - the Committee on Cooperation in Municipal and Regional Matters, with the request that it be taken into account by the latter body in its study of transfrontier cooperation, a subject included in its work programme;
 - the European Committee for the Conservation of Nature and Natural Resources, for the attention of its Ad Hoc Study Group on Water Pollution;
 - the European Ministerial Conference on the Environment which will be held in Vienna in 1972.

4. SMARY OF INTERNATIONAL TRIBUNALS, INCLUDING
ARBITRAL
AUARDS, AND LIST OF SELDCTED DECISIONS BY NATIONAL
TRIBUNALS

4.1 INTERNATIONAL TRIBUNALS

4.1.1 Permanent Court of International Justice

4.1.1.1 Jurisdiction of the European Commission of the Danube between Galatz and Braila, Advisory opinion of 8 December 1927 (*)

Introduction

The Danube is the second longest river in Europe. It is formed by two headstreams (each about 25 miles long), the Brigach River and Brege River, which rise in the Black Forest in Germany and unite below Donaueschingen only 20 miles away from Schaffhausen on the Rhine. Thereafter, it enters the Black Sea in a wide, marshy delta. Entering Germany, it flows through Württemberg, past Ulm, and enters Austria, continues through Upper and Lower Austria. Near Vienna it forms a short frontier, and a longer frontier between Austria and Czechoslovakia. It passes Hungary (Komárno), Budapest and enters Yugoslavia, past Novi Sad, Belgrade, then reaches Romania, enters the great Walachian plain and forms most of the Rumanian-Bulgarian border. Below Galati (Romania) it receives the Prut River at the border of the Ukraine. Near Tulcea it forms three main arms: the Kiliya, the Sulina and the St. George. The Sulina, the central arm of the delta, enters the Black Sea at town of Sulina.

Facts

Under the Treaty of Paris of 1856, the Danube was subjected to an international régime which applied the principles of river law embodied in the Final Act of the Congress of Vienna in 1815. By the Treaty of Paris of 1856, two Commissions were established: a permanent riparian Commission (which never actually became operative), and a European Commission as a temporary technical body. The powers of the European Commission were extended to the Romanian seaport of Galatz, a seat being granted to that country by the Treaty of Berlin of 1878.

The Treaty of London of 1883 extended this jurisdiction to Braila, another port in Romania; but Romania had not signed this Treaty. The Treaty of Versailles of 1919 declared

the Danube an international river from Ulm to the sea and confirmed the jurisdiction of the European Commission in the powers vested in it before the war.

This Commission consisted of representatives of Great Britain, France, Italy and Romania.

The Definitive Statute of the Danube was signed on 23 July 1921 at an international conference meeting in Paris, and provided as follows:

(*) Text in: Permanent Court of International Justice, Series B, No. 14, Series C, Nos. 13-IV(V), (II), (III), (IV). Request for an advisory opinion made by the Council of the League of Nations on 9 December 1926.

Parties: France, Great Britain, Italy and Romania.

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.1 Jurisdiction of the European Commission of the Danube (Contd.)

"Article 5

The European Commission retains the powers which it possessed before the war. No alteration is made in the rights, prerogatives and privileges which it possesses in virtue of the treaties, conventions, international acts and agreements relative to the Danube and its mouths.

Article 6

The authority of the European Commission extends, under the same conditions as before, and without any modification of its existing limits, over the maritime Danube, that is to say, from the mouths of the river to the point where the authority of the International Commission commences."

Article 9 of the Statute extended the jurisdiction of the International Commission from Ulm to Braila. Romania expressed different view with regard to the powers of the Commission in the sector Galatz-Braila from that of France, Great Britain and Italy. The matter was submitted by the Special Committee to the Permanent Court of International Justice for an advisory opinion.

Request for the Advisory Opinion

Three questions were put by the Special Committee:

- "1) Under the law at present in force, has the European Commission of the Danube the same powers on the maritime sector of the Danube from Galatz to Braila as on the sector below Galatz? If it has not the same powers, does it possess powers of any kind? If so, what are these powers? How far upstream do they extend?
- 2) Should the European Commission of the Danube possess either the same powers on the Galatz-Braila sector as on the sector below Galatz, or certain powers, do these powers extend over one or more zones, territorially defined and corresponding to all or part of the navigable channel to the exclusion of other zones territorially defined and corresponding to harbour zones subject to the exclusive competence of the Romanian authorities? If so, according to what criteria shall the line of demarcation be fixed as between territorial zones placed under the competence of the European Commission and zones placed under the competence of the Romanian authorities?
- 3) If the contrary is the case, on what non-territorial basis is the exact dividing line between the respective competence of the European Commission of the Danube and of the Romanian authorities to be fixed?"

Summary of the Advisory Opinion

1. As for the first question, in the opinion of the Court, the law in force is the Definitive Statute of 1921. All Parties concerned, i.e. France, Great Britain, Italy and Romania have signed and ratified both the Treaty of Versailles and the Definitive Statute. The Definitive Statute placed the entire navigable Danube under an international régime, and the jurisdiction of the European Commission extended from Ulm to Braila (Article 9), that is to say, as far as Braila.

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.1 Jurisdiction of the European Commission of the Danube (Concluded)

2. As for the second question, as to whether the Commission should exercise all the powers in the sector Galatz-Braila in the same way as they are exercised in the sector below Galatz, according to the view of France, Great Britain and Italy, or only strictly technical powers in the disputed sector (Galatz-Braila) according to the view of Romania the Court finds that Article 6 of the Statute of 1921 is not a new draft conferring only technical powers on the Commission, because the preparatory works cannot change the interpretation of the text of Article 6. The Interpretative Protocol is not part of the Statute and that is why it cannot prevail against the Definitive Statute, So the Court concludes that before the war, the Commission had the same powers with respect to the Galatz-Braila sector as in the sector below Galatz,

The Court follows functional criteria to delimit the powers of the European Commission and Romania in the Galatz-Braila sector. Taking into account the principles of freedom of navigation and equality of flags, the Court establishes two criteria:

- (a) In the ports of Galatz and Braila, "the European Commission alone has jurisdiction over navigation, that conception being taken to mean any movement of vessels forming part of their voyage";
- (b) "with regard to vessels moved or otherwise at rest in these ports, and with regard to the use by vessels of the installations and services of these ports ... the powers of regulation and jurisdiction belong to the territorial authorities; the right of supervision, with a view to ensuring freedom of navigation and equal treatment of all flags, belongs to the European Commission."

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.2 Case relating to the territorial jurisdiction of the International Commission of the River Oder, Judgement of 10 September 1929 (*)

Introduction

The Oder River is the second longest river of Poland. It rises in Czechoslovakia in the Oder Mountains, 10 miles East-Northeast of Olomouc. It flows through the Moravian Gate, past Novy, Bohumin, into Poland, then past Opole, Wroclaw. It enters the Oder Marshes, dividing into two arms, the East Oder and the West Oder (Berlin-Stettin Canal). Fifteen miles north of Stettin, it empties into the Baltic. The Oder forms the northern part of the Oder-Neisse Line, the border between Poland and East Germany determined in 1945 by the Potsdam Conference.

Facts

Under the Treaty of Versailles of 1919 (first paragraph of Article 331), the Oder was declared an international river. The second paragraph of that Article declared as possessing international status "all navigable parts of these river systems which naturally provide more than one State with access to the sea, with or without transshipment from one vessel to another; together with lateral canals and channels constructed either to duplicate or to improve naturally navigable sections of the specified river systems, or to connect two naturally navigable sections of the same river."

By Article 341 of the Treaty, the Oder was placed under the administration of an International Commission consisting of representatives of Poland, Germany, Great Britain, Czechoslovakia, France, Denmark and Sweden. The task of this Commission was to "define the sections of the river or its tributaries to which the international régime shall be applied."

The differences between Poland and other members of the Commission concerned the question as to at what point the jurisdiction of the Commission should end in respect of two tributaries of the Oder: the Netze (Noteó) and the Warthe (Warta). In the view of Poland, the jurisdiction of the Commission ended at the point where each river crossed the Polish frontier, while the other members of the Commission considered that it should be the point where each river ceased to be navigable, even if that point was situated within the Polish territory.

The Governments represented on the International Commission of the Oder drew up a Special Agreement asking the Court:

"Does the jurisdiction of the International Commission of the Oder extend, under the provisions of the Treaty of Versailles, to the sections of the tributaries of the Oder, Warthe (Warta) and Netze (Noteó), which are situated in the Polish territory, and, if so, what is the principle laid down which must be adopted for the purpose of determining the upstream limits of the Commission's jurisdiction?"

(*) Text in: Permanent Court of International Justice, Series A, No. 23, Series C, No.17
(II), Document instituting proceedings: Special Agreement of 30 October 1928.
Parties: Germany, Denmark, France, Great Britain, Sweden, Czechoslovakia and Poland.

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.2 Territorial jurisdiction of the International Commission of the River Oder (Contd.)

Submissions of the Parties

As to the first question, Germany, Denmark, France, Great Britain, Sweden and Czechoslovakia asked the Court to declare that the jurisdiction of the International Commission extended to the sections of the Warthe and the Netze situated in Polish territory. For the juridical "bases of their position, they cited the Barcelona Statute of 1921 (definition of navigable waterways of international concern), and the Treaty of Versailles (article 331 - conditions of navigability). As to the second question, the upstream limits of the Commission's jurisdiction they submitted, should include all sections of the above two tributaries.

The Polish Government took the contrary view and asked the Court to declare that the jurisdiction of the International Commission did not extend to those two sections (of the Warthe and the Netze) situated in Polish territory.

Summary of the Judgement

Before rendering its judgement, the Court had to clarify two questions. The first of these related to Article 341 of the Treaty of Versailles stating that:

"The Oder shall be placed under the administration of an International Commission."

In the Polish view, the tributaries of the river were not placed under the authority of the Commission. The Court however rejoined that the Special Agreement expressly mentioned the Warthe and the Netze. This meant that the Commission's jurisdiction extended to the tributaries.

The second question related to the applicability of the Statute annexed to the Barcelona Convention of 20 April 1921, on which the Six Governments (except Poland) based their arguments. The Court observed that Poland had ratified neither the Convention nor the Statute of Barcelona, and that neither therefore could be cited against Poland, and accordingly based its judgement exclusively on the Treaty of Versailles.

In order to answer the first question, the Court had to interpret the second paragraph of Article 331 of the Treaty of Versailles stating as follows:

"All navigable parts of those river systems which naturally provide more than one State with access to the sea."

The difference between an international and national river is that the first must be navigable and naturally provide more than one State with access to the sea. There was no question as to the navigability of the Warthe or the Netze, but Poland considered that the sections of the Warthe and the Netze in Polish territory provided only Poland with access to the sea, whereas the six Governments maintained the contrary (access to the sea for other States). The Court based its judgement on the concept of a "community of interest" of riparian States, thus:

"When consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one State, and the possibility of fulfilling the requirements

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.2 Territorial jurisdiction of the International Commission of the River Oder (Concluded)

"of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the problem has been sought not in the idea of a right of passage in favour of upstream States, but in that of a community of interest of riparian States. This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any riparian State in relation to others."

The Court went on to affirm that the jurisdiction of the International Commission of the Oder extended to the sections of the tributaries of the Oder, Warthe and Netze, situated in Polish territory.

Regarding the second question, namely, what is the principle laid down which must be adopted for the purpose of determining the upstream limits of the Commission's jurisdiction, the Court based its decision on Article 331 of the Treaty of Versailles. The Court had this to say:

"The jurisdiction of the Commission extends up to the points at which the Warthe (Warta and the Netze (NoteÖ) cease to be either naturally navigable or navigable by means of lateral channels or canals which duplicate or improve naturally navigable sections or connect two naturally navigable sections of the same river."

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.3 The Oscar Chinn case, Judgement of 12 December 1934 (*)

Introduction

The Congo River, the second longest river in Africa, rises in the Katanga plateau in the southeastern part of what was at the time of the dispute the Belgian Congo (now Zaire) across the Central African depression and turns, reaching the Atlantic Ocean through a narrow gorge in the Crystal Mountains. With its numerous tributaries, it drains a basin of some 1,450,000 sq. miles (the second largest basin in the world). The Congo is the chief thoroughfare for trade in the Belgian Congo (now Zaire).

Facts

The river transport company "Union nationale des transports fluviaux" (Uhntra), with majority capital held by the State was setup in 1925 in the Belgian Congo (now Zaire, at Leopoldville). Four years later, in 1929, a British national, Oscar Chinn also established a river transport company in the Belgian Congo. As a result of the depression of 1930/31, the prices of raw materials of tropical origin fell, and the Belgian Government, by decision of 20 June 1931, ordered the lowering of the transport companies rates to a nominal level. Any loss would be reimbursed. Other private transporters, both Belgian and foreign, including Chinn, were excluded from this régime on the grounds of its temporary character.

In October 1932, the Belgian Government offered refunds to the private companies. Oscar Chinn however did not avail himself of this provision because he had gone out of business in July 1931. Instead, he sought the protection of the British Government, considering that he had been forced to go out of business following the decision of 20 June 1931 by which the Belgian Government had established a de facto monopoly in favour of Uhatra.

According to the British Government, this decision violated the provisions of the Convention of Saint-Germain of 10 September 1919 on the Status of the Congo, claiming on these grounds reparation by the Belgian Government for the losses suffered by Oscar Chinn.

The matter was brought before the Permanent Court of International Justice by a special agreement signed at Brussels on 13 April 1934 between the two Governments (British and Belgian). Then put to the Court the following questions:

- "1. Having regard to all the circumstances of the case, were the above-mentioned measures complained of by the Government of the United Kingdom in conflict with the international obligations of the Belgian Government towards the Government of the United Kingdom?
2. If the answer to question 1 above is in the affirmative, and if Mr. Oscar Chinn has suffered damage on account of the non-observance by the Belgian Government of the abovementioned obligations, what is the reparation to be paid by the Belgian Government to the Government of the United Kingdom?"

(*) Text in: Permanent Court of International Justice, Series A/B, NO. 63, Series C, No. 75
Parties: Great Britain, Belgium

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.3 The Osor Chinn case (Concluded)

Submissions of the Parties

The United Kingdom asked the Court to declare that the Belgian Government, by its decision of 20 June 1931, violated obligations toward the Government of the United Kingdom under the Convention of Saint-Germain and general international law and that the Belgian Government should pay the reparation for the damage suffered by Chinn.

Summary of the Judgement

First, the Court analysed the basis on which these obligations arose, namely the Convention of Saint-Germain of 1919, and the general principles of international law.

Article 1 of the Convention of Saint-Germain reads:

"The signatory powers undertake to maintain between their respective nationals and those of States, Members of the League of Nations, which may adhere to the present Convention a complete commercial equality in the territories under their authority within the area defined by Article 1 of the General Act of Berlin of 26 February 1885, set out in the Annex hereto, but subject to the reservation specified in the final paragraph of that Article."

This Article makes it clear that the Convention of Saint-Germain abrogated the General Act of Berlin of 1885 and the General Act and Declaration of Brussels of 1890. The law applicable to this item case was the Convention of Saint-Germain, which confirmed the principle of free navigation and the principle of freedom of trade. But, for the Court, freedom of trade "does not mean the abolition of commercial competition; it presupposes the existence of such competition."

Taking into account the temporary character of the measures taken by the Belgian Government and the special circumstances (the depression of 1930/31), the Court did not consider these like a violation of the Convention of Saint-Germain.

As for any violation of general international law to the effect that all States have a duty to respect the vested rights of foreigners - the Court could not accept this argument, since no vested right Was violated by the Belgian Government.

4.1.1 Permanent Court of International Justice (Contd.)

4.1.1.4 The Diversion of Water from the Meuse, Judgement of 28 June 1937 (*)

Introduction

The River Meuse rises in northeastern France, flows through Belgium and Holland into the North Sea, where it forms a common delta with the Rhine. The Rhine-Meuse delta is formed by the Upper Merwede, which has two tributaries, the New Merwede and the Lower Merwede. From its source in the Plateau of Langres, six miles west-northwest of Bourbone-les-Bains, it passes Neufchâteau au Traussey, entering Belgium below Givet. Passing Liège, it forms the Netherlands-Belgian border. At Maastricht it is wholly in the Netherlands.

Facts

The Netherlands and Belgium concluded a Treaty on 12 May 1863 in order to "settle permanently and definitively the régime governing diversions of water from the Meuse for the feeding of navigation canals and irrigation channels."

By Article 1 of this Treaty, the construction of the new intake has been provided in the Netherlands, below Maastricht, and it would constitute "the feeding conduct for all canals situated below that town and for irrigation in the Campine and in the Netherlands."

In 1925, the two States signed a new agreement designed to settle all differences concerning the construction or the enlargement of new canals. The Netherlands First Chamber however refused to ratify. Following this, the Netherlands started to construct the Juliana Canal, the Bosscheveld Lock and the Borgharen barrage, while Belgium began to construct the Albert Canal, a barrage at Monsin and a lock at Neerhaeren. The Netherlands seized the Court with a unilateral application under Article 36(2) of the Court's Statute (compulsory jurisdiction).

Submission of the Parties

The Netherlands asked the Court to declare that the construction of the new canals by Belgium was contrary to the Treaty of 1863, and to order Belgium:

- "a) to discontinue all the works and to restore to a condition consistent with the Treaty of 1863 all works constructed in breach of that Treaty; and
- b) to discontinue any feeding held to be contrary to the said Treaty and to refrain from any further feeding."

Belgium asked the Court to declare that the Netherlands' submission was ill-founded, that the Borgharen barrage had been constructed in breach of the Treaty of 1863 and that the Juliana Canal too, was subject to the provisions of that same Treaty.

(*) Text in: Permanent Court of International Justice, Series A/B, No. 70, Series C, No. 81

Parties: Belgium, Netherlands

4.1.1 Permanent Court of International Justice (Concluded)

4.1.1.4 The Diversion of Water from the Meuse (Concluded)

Summary of the Judgement

The Court rejected the Netherlands' submission with effect that the Article 1 of the Treaty of 1863 gave it the right to supervise and control all the intakes, situated not only in Netherlands' territory, but also in Belgium. The text of this article provided for only one, single feeder in the Netherlands.

With regard to the construction by Belgium of the Albert Canal (water taken from the Meuse in Netherlands territory), the origin of the water was irrelevant. In the opinion of the Court, the two States could modify, enlarge, transform, fill the canals and increase the volume of water in them on condition that the canals did not leave their territories and the volume of water was not affected.

The Court rejected the first Belgian submission concerning the Borgharen barrage, stating that the Treaty of 1863 did not forbid the Netherlands to alter the depth of water in the Meuse at Maestricht without the consent of Belgium, if the discharge of water, the volume and the current were not affected.

The second Belgian submission was also rejected by the Court on the ground that the construction of the Juliana Canal which was situated on the right bank of the Meuse did not come under the régime of water supply provided for by the Treaty of 1863, which was designed to regulate the supply of water to the canals situated on the left bank of the Meuse.

4.2 ARBITRAL AWARDS

4.2.1 Helmand River Delta Case

Arbitral Awards of 19 August 1872 and 10 April 1905 (*)

Introduction

The Helmand River rises in the mountains, 35 miles west of Kabul in Afghanistan and flows for 700 miles in Afghan territory. Downstream, about 40 miles to the north at Kohak, the river divides into two channels, flowing north and northwest into the Seistan lakes depression. The easterly tributary at Kohak, referred to as the Common River (in Afghanistan) and Rud-i-Pariun (in Iran) forms the boundary between the two countries for 12 miles and divides, flowing into lakes in Afghanistan and Iran. The other tributary at Kohak is the Rud-i-Seistan, which flows west and north-west to the Seistan lakes in Iran.

4.2.1.1 Award of 19 August 1872 rendered by General Goldsmid as arbitrator

Facts

A first dispute between Afghanistan and Persia arose in connexion with the delimitation of their boundary and the use of the waters of the Helmand River in the delta region (below Band-i-Kamal Khan) called Sistan or Seistan. In 1872, the dispute was submitted to the arbitration of a British Commissioner, General Goldsmid.

Summary of the arbitral award

On 19 August 1872, General Goldsmid gave his award at Teheran in the following terms:

" Persia should not possess land on the right bank of the Helmand. It appears therefore beyond doubt indispensable that ... both banks of the Helmand above the Kohak Band be given up to Afghanistan ... The main bed of the Helmand therefore below Kohak should be the eastern boundary of Persian Sistan It is moreover to be well understood that no works are to be carried out on either side calculated to interfere with the requisite supply of water for irrigation on the banks of the Helmand."

(*) Text in: Mayors St. John, Lovett, and Evan Smith and Mayor-General Sir Frederick John Goldsmid, Eastern Persia, An Account of the Journeys of the Persian Boundary Commission, 1870-71-72, (London, 1876), Vol. I, p.413

Parties: Afghanistan, Persia

4.2.1 Helmand River Delta Case (Concluded)

4.2.1.2 Award of 10 April 1905 rendered by Colonel MacMahon as arbitrator

Facts

In 1902, the second dispute was submitted to the arbitration of a British Commissioner, Colonel MacMahon, who on 10 April 1905 rendered an award, defining what amount of water fairly represented a requisite supply for irrigation provided on behalf of Persia by the award of 1872. The Mission in Seistan had been created in order to determine this requisite supply for Persian needs and it has been stated that one third of the water which reached Seistan would suffice for irrigation in Persian Seistan, leaving at the same time a requisite supply for Afghan requirements as well.

Summary of the Arbitral Award

The award contained eight clauses, the first and the seventh being the most relevant for the question under dispute. Thus:

"Clause I - No irrigation works are to be carried out on either side calculated to interfere with the requisite supply of water for irrigation on both banks of the river, but both sides have the right, within their own territories, to maintain existing canals, to open out old or disused canals, and to make new canals, from the Helmand river, provided that the supply of water requisite for irrigation on both sides is not diminished.

Clause VII - It will be noted that the rights to the Helmand river which its geographical position naturally gives to Afghanistan as owner of the Upper Helmand, have been restricted to the extent stated above in favour of Persia in accordance with Sir Frederick Goldsmid's award. It follows, therefore, that Persia has no right to alienate to any other power the water rights thus acquired without the consent of Afghanistan." (1)

(1) On 7 September 1950, the two Governments signed an agreement "Terms of Reference of the Helmand River Delta Commission and an interpretative statement relative thereto, agreed by Conferees of Afghanistan and Iran" (text in ST/LEG/SER.B/12, 270), and established the Helmand River Delta Commission for the elaboration of the technical methods concerning the share of the water of the Helmand River for Iran (Seistan) and Afghanistan (Chakhansur).

4.2.2 San Juan River Case

Award of 22 March 1888 rendered by Grover Cleveland,
President of the United States of America (*)

Introduction

San Juan River forms an outlet of Lake Nicaragua on the Nicaragua-Costa Rica border and issues from the southwest end of the lake at San Carlos, the river past El Castillo reaching the Caribbean Sea at San Juan del Norte (Greytown). To the right, it receives the San Carlos and Sarapiquí rivers. Near its mouth it forms three main arms: the Juanillo (in the north), the San Juan proper and the Rio Colorado (in the South).

Facts

Costa Rica and Nicaragua concluded a Treaty (Cañas-Jerez Treaty) on 15 April 1858, for the delimitation of their boundary. Article II fixed the dividing line between the two countries as:

"Starting from the Caribbean Sea , shall begin at the end of Punta de Castilla, at the mouth of the San Juan de Nicaragua river, and shall run along the right bank of the said river up to a point three English miles distant from Castillo Viejo, the said distance to be measured between the exterior works of the said castle and the abovenamed point."

Article VI reads as follows:

"The Republic of Nicaragua shall have exclusively the dominion and sovereign jurisdiction over the waters of the San Juan river from its origin in the Lake to its mouth in the Atlantic; but the Republic of Costa Rica shall have the perpetual right of free navigation on the said waters, between the said mouth and the point, three English miles distant from Castillo Viejo." (1)

A dispute arose as to the validity of this Treaty and the Parties concluded on 24 December 1886 a compromise and submitted this dispute to the arbitration of the President of the United States of America. If the arbitrator decided that the Treaty was valid, he would have to interpret certain doubtful points in it.

Summary of the Arbitral Award

The award rendered on 22 March 1888 stated that the Boundary Treaty of 15 April 1858 was valid. With regard to the special rights of both Countries, the arbitrator next observed:

"Second. The Republic of Costa Rica under said Treaty and the stipulations contained in the sixth article thereof, has not the right of navigation of the River San Juan with vessels of war." (1)

(*) Text in: Moore, History and Digest of International Arbitration to which the United States has been a party, Washington, 1898, Vol. V. p. 4706.

Parties: Costa Rica, Nicaragua

(1) See text under footnote (1) on next page.

4.2.2 San Juan River Case (Concluded)

"Third 6. The Republic of Costa Rica cannot prevent the Republic of Nicaragua from executing at her own expense and within her own territory such works of improvement, provided such works of improvement do not result in the occupation or flooding or damage of Costa Rica territory, or in the destruction or serious impairment of the navigation of the said River or any of its branches at any point where Costa Rica is entitled to navigate the same. The Republic of Costa Rica has the right to demand indemnification for any places belonging to her on the right bank of the River San Juan which may be occupied without her consent, and for any lands on the same bank which may be flooded or damaged in any other way in consequence of works of improvement." (1)

4.2.3 Kushk River Case

Award of 22 August (3 September) 1893 rendered
by an Anglo-Russian Commission (*)

Introduction

The Kushk River forms the boundary between northwest Afghanistan and southeast Turkmen (what is now the Republic in U.S.S.R.). It rises in Paropamisus Mountains, 55 miles eastnortheast of Herat, flows 150 miles northwest, past Kushk and empties into Murgab River (in Afghanistan).

Facts

On 10 September 1885, Great Britain and Russia concluded a Protocol for the delimitation of the boundary between Afghanistan and Russia. A joint commission was established in order to examine and determine the details concerning this boundary.

Under Clause III of the final Protocol No. 4, signed by this Commission at St. Petersburg on 10 (22) July 1887:

"The clause in Protocol No. 4 of the 14th (26th) December 1855, prohibiting the Afghans from making use of the irrigating canals in the Kushk Valley below Chahil Dukhter which were not in use at that time, remains in force, but it is understood that this clause can only be applied to the canals supplied by the Kushk. The Afghans shall not have the right to make use of the waters of the Kushk for their agricultural works north of Chahil Dukhter; but the waters of the Moghur belong exclusively to them, and they may carry out any works they may think necessary in order to make use of them."

A new Commission was established in order to settle a dispute concerning the application of this clause.

Summary of the Arbitral Award

On 22 August (3 September) 1893, the Commission drew up a final protocol and decided that:

"III. In order to elucidate and complete Clause III of Protocol No. 4 of 10th (22nd) July 1807, the Commissioners have established that the Afghans shall not be able to take off water from the river Kushk, north of the ruins of the Chahil Dukhteran bridge (Pul-i-Kishti), for irrigation by means of either new or disused or closed canals; the Afghans shall not have the right to carry on, below the parallel of Chahil Dukhteran fronting pillar No. 23, for irrigation, the branches of the canals which take off from the Kushk south of the ruins of the Chahil Dukhteran bridge (Pul-i-Kishti), but they shall have the right to make use of the said branches to irrigate their cultivation as far as the parallel of the Chahil Dukhteran frontier pillar No. 23."

(*) Text in: G.F. de Martens, Nouveau Recueil général de traités, 1888, 2^e Série, t.XIII, p. 566.
Parties: Great Britain, Russia.

4.2.4 Faber Case

Award rendered by the umpire, Henry M. Duffield, appointed by a German-Venezuelan Mixed Claims Commission, in 1903 (*)

Introduction

The Zulia River rises in the Cordillera Oriental, west of Pamplona in Colombia. It flows North, past Puerto Villamizar, and across the international line, to Catatumbo River in the Maracaibo basin 4 miles West of Encontrados.

The Catatumbo River rises in the Cordillera Oriental of Colombia, southeast of Ocana, and flows North through foothills, then East into the Maracaibo lowlands of Venezuela, where it receives Zulia River, and then into Lake Maracaibo.

Facts

The claimant Faber was a German subject, not domiciled in Venezuela, residing and having his place of business in Cúcuta, in Colombia. When Venezuela, by Executive decrees, suspended in 1900, 1901 and 1902 the navigation of the rivers Zulia and Catatumbo, Germany intervened, forcing Venezuela to open the river traffic on these two rivers (the Zulia route] stating that there were German merchants in Cúcuta who were injured by the Venezuelan decrees. By the Washington protocol of 13 February 1903, Germany and Venezuela established the Mixed Claims Commission, with Henry M. Duffield as umpire.

Summary of the Arbitral Award.

The umpire, Henry M. Duffield stated that:

"The Catatumbo, so far as it is navigable, is entirely within the boundaries of Venezuela after the confluence of the Zulia River with it."

After explaining the physical and political conditions of Venezuela, he said that:

"Venezuela had the right to suspend the traffic on these rivers by the closing of these ports. She was in full possession of them and they were actually under her sovereignty."

He added that Venezuela, by thus exercising her sovereignty, excluded from her internal commerce boats of other nationalities, and she had the right to regulate the internal navigation over its rivers and lakes, according to the principle of the free use of rivers running to the sea, because:

"It must be considered as an international doctrine that the navigation of rivers passing through the territory or several States together with all their affluents must be free from the point where they begin to be navigable to the point where they empty into the sea."

(*) Text in: Reports of International Arbitral Awards, Vol. X, p. 466.

Parties: Germany, Venezuela

4.2.4 Faber Case (Concluded)

As to the right of innocent use, the umpire stated that:

"Most of the advocates of the innocent use of rivers base their claim upon the grounds that inhabitants of lands traversed by another portion of the stream have a special right of use of the other portions because such use is highly advantageous to them. If the proprietary right of the State to the portion of the river within its boundaries be conceded, as it must be generally, there can be no logical defense of this position. It certainly is a novel proposition that because one may be so situated that the use of the property of another will be of special advantage to him he may on that ground demand such use as a right. The rights of an individual are not created or determined by his wants or even his necessities."

4.2.5 Tacna-Arica Case

Award of 4 March 1925, rendered by President Calvin Coolidge (*)

Introduction

The Camarones River rises in the Andes, in the Northern part of Chile, southeast of Arica, and flows about 65 miles west to the Pacific.

The Ucayali River is situated in the Eastern part of Peru. It is one of the

Amazon's main headstreams, formed by the union of Apurimac (Tambo) and Urubamba rivers; it flows about 1,000 miles North, past Masisea, Pucallpa, and Contamana and joins the Marañon River, to form the Amazon for 55 miles of its course. The main affluents are: the Pachitea (left) and the Tapiche (right) rivers.

The Sama River is formed by the confluence of the river Chaspaya and the river Tala, West of Tarata, the capital of the Peruvian province. From this junction the river Sama flows to the sea cutting across the Northern portion of the Peruvian province of Tacna.

Facts

A dispute arose between Chile and Peru as to the Northern and Southern boundary of the territory covered by Article 3 of the Treaty of Ancon, signed on 20 October 1883.

Article 3 stated as follows:

"The territory of the provinces of Tacna and Arica, bounded on the North by the river Sama from its source in the Cordilleras on the frontier of Bolivia to its mouth at the sea, on the South by the ravine and river Camarones, on the East by the Republic of Bolivia, and on the West by the Pacific Ocean, shall continue in the possession of Chile subject to Chilean laws and authority during a period of ten years, to be reckoned from the date of the ratification of the present treaty of peace."

Chile contends that the treaty established a river line, that is the river Sama from its source to its mouth, that treaty of Ancon dealt with the Peruvian provinces of Tacna and Arica and with a portion of another Peruvian province, of Tarata. In the view of Peru, Article 3 dealt only with provinces of Tacna and Arica, the province of Tarata is not included. The problem arose as regards the river line, because there was no such river line as the treaty described. The river Sama is formed by the confluence of the river Chaspaya and the river Tala, west of the capital of the Peruvian province of Tarata; but there is no river Sama that had "its source in the Cordilleras on the frontier of Bolivia."

Summary of the Arbitral Award

By a Special Agreement of 20 June 1922, the two Countries submitted the controversy to arbitration. The Arbitrator, President Calvin Coolidge, stated:

"There is a dispute as to which of the tributaries of the river Sama east of the junction of the rivers Chaspaya and Tala should be regarded as the main affluent or the continuation of the river Sama, but neither the Chaspaya nor the Tala, nor their tributaries, conform to the description of the treaty and enable the Arbitrator to establish any line of the river Sama as described from its source in the Cordilleras on the frontier of Bolivia to its mouth at the sea."

(*) Text in: Reports of International Arbitral Awards, Vol. II, pp.921-958.
Parties: Chile. Peru

4.2.6 Trail Smelter Case (Contd.)

4.2.6.1 Arbitral Award of 16 April 1938 (Concluded)

As to the damage due to the injury, the Tribunal considered only two different classes of damage:

- "(a) Damages in respect of cleared land and improvements thereon;
- (b) damages in respect of uncleared land and improvements thereon."

In the final decision on Question No. 1, the Tribunal held as follows:

"Damage caused by the Trail Smelter in the State of Washington has occurred since the first day of January 1932, and up to 1 October 1937, and the indemnity to be paid therefor is seventy-eight thousand dollars (US \$78,000), and is to be complete and final indemnity and compensation for all damage which occurred between such dates ... This decision is not subject to alteration or modification by the Tribunal hereafter."

As to Question No. 2, the Tribunal decided that until the date of the final decision:

"The Trail Smelter shall refrain from causing damage in the State of Washington in the future ... until 1 October 1940."

4.2.6.2 Summary of the Decision of 11 March 1941

In its first award, the Tribunal provided for a final decision on Question No. 2 within three months from 1 October 1940.

As to Question No. 1, the United States requested the Tribunal:

"To reconsider its decision with respect to expenditures incurred by the United States during the period 1 January 1932 to 30 June 1936."

This claim was disallowed because the Tribunal had rendered its final award concerning this question in the first award of 16 April 1938. The Tribunal did, however, consider whether this award constituted res judicata.

After examining the practice of the Permanent Court of International Justice and Arbitral Tribunals, the Tribunal concluded that:

"There is no doubt that in the present case, there is res judicata. The three traditional elements for identification: parties, object and cause are the same."

and added that:

"the sanctity of res judicata attached to a final decision of an international tribunal is an essential and settled rule of international law."

4.2.6 Trail Smelter Case (Concluded)

4.2.6.2 Decision of 11 March 1941 (Concluded)

As to Question No. 2, the Tribunal was asked to solve a problem as to whether the question should be answered on the basis of the law followed in the United States or on the basis of international law. The following answer was given:

"The Tribunal, however, finds that this problem need not be solved here as the law followed in the United States in dealing with the quasi-sovereign rights of the States of the Union, in the matter of air pollution, whilst more definite, is in conformity with the general rules of international law."

After stating that no case of air pollution or water pollution has been brought before a Tribunal but there were certain decisions of the Supreme Court of the United States which could be taken as a guide, the Tribunal reached the following conclusion:

"The Tribunal, therefore, finds that the above decisions, taken as a whole, constitute an adequate basis for its conclusions, namely, that, under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence."

At a later point in the award, the Tribunal held that:

"The Dominion of Canada is responsible in international law for the conduct of the Trail Smelter"

and answered Question No. 2 as follows:

"(2) So long as the present conditions in the Columbia River Valley prevail, the Trail Smelter shall be required to refrain from causing any damage through fumes in the State of Washington, the damage herein referred to and its extent being such as would be recoverable under the decisions of the courts of the United States in suits between private individuals. The indemnity for such damage should be fixed in such a manner as the Governments, acting under Article XI of the Convention, should agree upon."

4.2.7 Zarumilla River Case

Arbitral Award rendered by the Chancellery of Brazil,
14 July 1945 ("Aranha formula") (*)

Introduction

Zarumilla is a province in Northwest Peru. East-Northeast of Tumbes, department in Peru, the Zarumilla river starts (it is a very short river), on the border between Peru and Ecuador.

The Santiago River is situated between Ecuador and Peru, formed by the Paute and the Zamora Rivers in Santiago-Zamora province (Ecuador). It flows about 150 miles South to the Marañon river at the Western end of Pongo de Manseriche.

The Zamora River rises in the Andes, Southeastern part of Ecuador, South of Loja city, and flows about 150 miles East and North through tropical forests to join the Paute (Nama-ngoza) River.

The Paute River rises in the Andes, Southeastern part of central Ecuador, South of Cuenca, flows Northeast, past Paute, then Southeast to join the Zamora. It is about 125 miles long. Its lower course is called Namangoza.

The Maranon River is one of the Amazon's main headstreams in Peru. It rises in the Andes from a series of small lakes, and flows North-Northwest along high Andean ranges, almost reaching Ecuador border, and turns Northeast to break through the famous Pongo de Manseriche gorge into Amazon basin.

Facts

In 1938 Peruvian forces occupied the provinces of El Oro and Loja in Ecuador. By intervention of Argentina, Brazil, Chile and the United States of America, Ecuador and Peru concluded a protocol of peace in Rio de Janeiro on 29 January 1942. By Article 8 of this protocol, the borderline in Eastern Ecuador started in the confluence of San Francisco, following a divortium aquarum between the rivers Zamora and Santiago, up to the junction of the Zamora and Yaupi. The difficulties arose as to the delimitation of the Western section of the border between the two Countries. By exchange of notes of 22 May 1944, they accepted the mediation of Brazil as proposed by dr. Oswaldo Aranha, Brazilian Foreign Secretary. For the Southern part of the border, both Parties accepted a divortium aquarum, but in the North-Eastern part, the line of watershed divided into several branches. The post-captain Brazilian Braz Dias de Aguiar was chosen to act in his capacity as technician arbitrator, in order to resolve difficulties in the sector of Lagartococha-Guspi.

Summary of the Arbitral Award

Braz Dias de Aguiar rendered award the 14 July 1945, accepted by both Parties, declared:

"Peru undertakes, within three years, to divert a part of the Zarumilla River so that it may run in the old bed, so as to guarantee the necessary aid for the subsistence of the Ecuadorian populations located along its banks, thus ensuring Ecuador the co-dominion over the waters in accordance with international practice."

(*) Text in: Informe del Ministro de las Relaciones Exteriores a la Nación, p. 623, (Quito, 1946)
Parties: Ecuador, Peru.

4.2.8 Lake Lanoux Case

Award of 16 November 1957 rendered by an Arbitral Tribunal (*)

Introduction

Lake Lanoux is situated on the Southern slope of the pyrénées, in French territory (the department of Pyrénées-Orientales). The lake is fed by streams, all of which rise on French territory and traverse only that territory. The lake waters flow out through a single stream, the Fontvive, which is one of the sources of the Carol River. The latter, after about twenty-five kilometres from Lake Lanoux in French territory, crosses the Spanish border at Puigcerda and continues its course in Spain for about six kilometres before joining the Segre river, which ultimately empties into the Ebro. Before entering Spain, the waters of the Carol feed the Puigcerda canal, which is the private property of the Spanish town of Puigcerda.

Facts

France and Spain signed at Bayonne on 26 May 1866 the Additional Act to the Boundary Treaties concluded on 2 December 1856, 14 April 1862 and 26 May 1866 for the regulation of waters of common use.

On 21 September 1950, Electricité de France applied to the French Ministry of Industry to divert the waters of the Lake Lanoux to the River Ariège. The waters so diverted were to be completely returned to the River Carol by means of a tunnel connecting the rivers Ariège and Carol above the outlet to the Puigcerda Canal. France accepted the principle that waters diverted had to be returned, and that the quantity of water to be returned should correspond only to the actual needs of the Spanish riparian users.

On the basis of the Arbitration Treaty of 10 July 1929, between France and Spain, the two Countries signed a Compromis at Madrid, on 19 November 1956, by virtue of which the Arbitral Tribunal met in Geneva to pronounce on the following:

"Is the French Government justified in its contention that in carrying out, without a preliminary agreement between the two Governments, works for the use of the waters of Lake Lanoux on the terms laid down in the project and in the French proposals mentioned in the preamble to this compromis, it would not commit a violation of the provisions of the Treaty of Bayonne of 26 May 1866 and of the Additional Act of the same date?"

Summary of the Arbitral Award

The Arbitral Tribunal rendered its award on 16 November 1957, as follows:

"1. The public works envisaged in the French scheme are wholly situated in France; the most important part if not the whole of the effects of such works will be felt in French territory; they would concern waters which Article 8 of the Additional Act submits to French territorial sovereignty as follows:

Article 8 - All standing and flowing waters, whether they are in the private or public domain, are subject to the sovereignty of the State in which they are located, and therefore to that State's legislation, except for the modifications agreed upon between the two Governments. Flowing waters change jurisdiction at the moment when they pass from one country to the other, and, when the watercourses constitute a boundary, each State exercises its jurisdiction up to the middle of the flow."

(*) Text in: International Law Reports, 1957 P. 101.

Parties: Spain, France.

4.2.8 Lake Lanoux Case (Contd.)

The Tribunal held that this Act imposed a reservation to the principle of territorial sovereignty, but could not accept that these amendments should be interpreted strictly, because they derogated from sovereignty. It stated:

"Territorial sovereignty plays the part of a presumption. It must bend before all international obligations, whatever their origin, but only before such obligations."

Later, the Tribunal determined the French obligations in this matter. Spain based its arguments on the text of the Treaty and of the Additional Act of 1866, but in addition:

"The Spanish Government bases its contention on both the general and traditional features or the regime of the Pyrenean boundaries and on certain rules of customary international law (*droit international commun*) in order to proceed to the interpretation of the Treaty and the Additional Act of 1866."

The Tribunal next considered the following two questions:

- (a) Did the French project constitute a violation of the Treaty of Bayonne and of the Additional Act?
- (b) If not, could the execution of such works constitute a violation of the Treaty and of the Additional Act, because it had been subject to preliminary agreement between the two Countries, or because other provisions of Article 11 of the Additional Act concerning the negotiations between the two Countries had not been observed?

As to the first question (a) the Tribunal stated that Spain based its claim on two grounds: a prohibition, in the absence of agreement, of compensation between two basins, despite the equivalence between diversion and restitution, and a prohibition, in the absence of agreement, of any act which would create a de facto inequality with a physical possibility of a violation of rights.

In connexion with a first ground the Tribunal considered that the diversion-with-restitution envisaged in the French project was not contrary to the Treaty and to the Additional Act of 1866, because:

"The unity of a basin is sanctioned at the juridical level only to the extent that it corresponds to human realities. The water which by nature constitutes a fungible item may be the object of a restitution which does not change its qualities in regard to human needs. A diversion with restitution, such as that envisaged by the French project, does not change a state of affairs organized for the working of the requirements of social life."

In regard to the second ground, the Tribunal declared:

"In any case, we do not find either in the Treaty and the Additional Act of 26 May 1866, or in customary international law, any rule that prohibits one State, acting to safeguard its legitimate interests, to put itself in a situation that would permit it in effect, in violation of its international pledges to injure a neighbouring State even seriously."

The Tribunal replied in the negative to the first question (a), to the effect that the French project did not constitute a violation of the Treaty of Bayonne and of the Additional Act.

4.2.8 Lake Lanoux Case (Concluded)

As to the second question (b), the Tribunal examined the Spanish argument, namely, that the French project had been subject to the prior agreement. Spain made reference to the system of joint community grazing rights or to the generally accepted principles of international law, but the Tribunal rejected this argument, because:

"The pasturage rights that the Spanish Commune of Llivia possesses on French territory, in no way touch the waters of Lake Lanoux or of the Carol"

and that:

"... the rule according to which States may utilize the hydraulic force of international watercourses only on condition of a prior agreement between the interested States cannot be established either as a custom or, even less, as a general principle of law."

The Tribunal cited Article 1 of the multilateral Convention of Geneva of 9 December 1923, relative to the utilization of hydraulic forces of interest to several States to the effect that:

"The present Convention in no way alters the freedom of each State, within the framework of international law, to carry out on its territory all operations for the development of hydraulic power which it desires."

With respect to the other obligations arising from Article 11 of the Additional Act, the Tribunal stated:

"Article 11 of the Additional Act imposes on the States in which it is proposed to erect Works or to grant new concessions likely to change the course or the volume of a successive watercourse a double obligation. One is to give a prior notice to the competent authorities of the frontier district; the other is to set up machinery for dealing with compensation claims and safeguards for all interests involved on either side."

France had given notice of its projects in relation to Lake Lanoux, and this was not contested. The Tribunal noted:

"In the case of Lake Lanoux, France has maintained to the end the solution which consists in diverting the waters of the Carol to the Ariège with full restitution. *By making this choice, France is only making use of a right; the development works of Lake Lanoux are on French territory, the financing of and responsibility for the enterprise fall upon France, and France alone is the judge of works of public utility which are to be executed on her own territory, save for the provisions of Articles 9 and 10 of the Additional Act, which, however, the French scheme does not infringe.*"

The Tribunal took the view that the French project satisfied the obligations of Article 11 of the Additional Act, and that France in carrying out, without a preliminary agreement between the two Countries, works for the use of the waters of Lake Lanoux did not commit a violation of the provisions of the Treaty of Bayonne of 26 May 1866 or of the Additional Act.

4.2.9 Gut Dam Case

Decisions of 15 January 1968, 12 February 1960" ana 27 September 1968,
rendered by the Lake Ontario Claims Tribunal (*)

Introduction

The St. Lawrence River is one of the principal rivers in North America and chief outlet for the Great Lakes. The St. Lawrence proper issues from the Northeastern end of Lake Ontario and flows 744 miles Northeast to its mouth on the Gulf of St. Lawrence. Below Lake Ontario, the river forms about 114 miles of international boundary. Later, it widens into Lake St. Francis and then into St. Louis at mouth of the Ottawa River. It links up with the Atlantic Ocean through the Gulf of St. Lawrence.

Lake Ontario is situated between the United States and Canada. It is the smallest of the Great Lakes. It receives the drainage of entire Great Lakes system through the Niagara River and discharges through the St. Lawrence.

Facts

In 1874, Canada proposed to construct a dam between Adams Island in Canadian territory and Les Galops Island in United States territory in the St. Lawrence River, in order to improve navigation. The dam was to stop the flow of water through the channel (known as the Gut Channel) which passed between these two islands. The Government of Canada requested the consent of the United States to the construction of a dam, which was given in 1903 under two conditions:

"1. That if, after said dam has been constructed, it is found that it materially affects the water levels of Lake Ontario or the St. Lawrence River or causes any injury to the interests of the United States, the Government of Canada shall make such changes therein, and provide such additional regulation works in connection therewith as the Secretary of War may order.

2. That if the construction and operation of said dam shall cause damage or detriment to the property owners of Les Galops Island or to the property of any other citizens of the United States, the Government of Canada shall pay such amount of compensation as may be agreed upon between the said Government and the Parties damaged, or as may be awarded the said Parties in the proper court of the United States before which claims for damage may be brought."

Canada constructed the dam, but it was too low. So in 1904 a fresh consent was sought to increase the height of the dam. The United States duly consented. Between 1904 and 1951, as a result of certain changes, the flow of water in the Great Lakes -St. Lawrence River Basin was affected. They did not affect Gut Dam, but did affect the quantity of water flowing into Lake Ontario and the St. Lawrence River.

In 1951-1952 the level of Lake Ontario and the St. Lawrence River reached unprecedented heights, which caused flooding and erosion damage to the North and South shores of the Great Lakes, including Lake Ontario, belonging to the United States citizens. In 1962, the Congress of the United States authorized the Foreign Claims Settlement Commission of the United States to adjudicate claims of the U.S. citizens against Canada for damage caused to their property by Gut Dam. The United States and Canada by agreement signed on 25 March **1965**, established the Lake Ontario Claims Tribunal. Both Parties chose as Chairman of the Tribunal Dr. Lambertus Erades, Vice-President of the District Court of Rotterdam (Netherlands).

(*) Text in: International Legal Materials: 1969. pp.118-143.
Parties: U.S.A., Canada

4.2.9 Gut Dam Case (Contd.)

4.2.9.1 Decision of 15 January 1968

Facts

The first question concerned the liability of Canada for damages caused by the Gut Dam. Canada extended its liability only to a small class of persons, the owner of Galops Island, i.e. the island *on* the United States side of the river which the dam abutted. The United States argued that under the 1903 agreement, Canada was required to compensate any citizen of the United States whose property was damaged.

The second question arose whether the obligation was limited not only to persons but also as to time.

Summary of the decision

The decision found in favour of the United States position, to the effect that Canada should be liable to compensate for damages caused by the Out Dam, is as follows:

"The obligation extended not only to the owners of Les Galops Island but to any citizen of the United States."

4.2.9.2 Decision of 12 February 1968

Facts

The Tribunal next decided the second question, as to whether there was a time limitation on the obligation of Canada to compensate United States citizens for damage caused by the Gut Dam.

Canada argued that the time for such compensations expired in 1908. The United **States** rejoined that there was no time limit, and that Canada by sending a diplomatic note to the United States Government in 1952, acknowledging liability for damage caused by the dam, could not argue that its obligation expired in 1908.

Summary of the decision

The Tribunal held:

"In official diplomatic representations the Canadian Government clearly recognized its obligation to pay compensation so far as the 1951-1952 claims are concerned It is clear to the Tribunal that the only issues which remain for its consideration are the questions whether Gut Dam caused the damage for which claims have been filed and the quantum of such damages."

The Tribunal recommended a compromise settlement.

4.2.9 Gut Dam Case (Concluded)

4.2.9.3 Decision of 27 September 1968

Facts

The negotiations were undertaken "between the two Countries, and an agreement was reached, namely that Canada would pay to the United States \$350,000 for damage caused by the Gut Dam to American nationals.

Summary of the decision

The Tribunal recorded a joint communication concerning the compromise settlement and thereafter dissolved.

**4.3 LIST OF SELECTED DECISIONS BY NATIONAL
TRIBUNALS, BY COUNTRIES**

4.3.1 AUSTRIA

4.3.1.1 Imperial Royal Administrative Court, Vienna, 11 January 1913 - Hungary v. Austria, Wiener-Neustadt Ship Canal

Text in: 7 American Journal of International Law, 1913, pp. 653-ff.

4.3.2 GERMANY

4.3.2.1 German Constitutional Law Court, 17-18 June 1927, Württemberg and Prussia v. Baden, "Donauversinkung".

Text in: Annual Digest of Public International Law Cases, 1927-1928, p.128

4.3.2.2 Court of Appeal of Karlsruhe, 25 November 1931, Rhine Navigation Commission Case

Text in: Annual Digest of Public International Law Cases, 1931-1932, p.117

4.3.3 INDIA

- 4.3.3.1 Rau Commission (1), 13 July 1942, Sind v. Punjab
Text in: Report of the Indus Commission, Lahore Supt. Govt. Printing Punjab, 1950
- 4.3.3.2 High Court of Madras, 24 February 1953, AMSSVM and Co. v. The State of Madras and another
Text in: International Law Reports, 1953, p.167
- 4.3.3.3 Krishna Water Dispute Tribunal (2), 1969, Maharashtra, Mysore and Andra Pradesh
Text in: Gazette of India Extraordinary, 10 April 1969, pt .II, S.3
- 4.3.3.4 Godavari Water Dispute Tribunal (2), 1969, Mysore, Maharashtra, Orissa, Madhia Pradesh, Andra Pradesh
Text in: Gazette of India Extraordinary, 10 April 1969, pt.II, S.3
- 4.3.3.5 Narmada Water Dispute Tribunal (2), 1969, Madhia Pradesh, Rajasthan, Gujarat, Maharashtra
Text in: Gazette of India Extraordinary, 6 October 1969, pt. II S.3(ii)

(1) AJIL, 1959, p.33

(2) Tribunals constituted by the Central Government under provisions of Inter-State Water Disputes Act, 1956, as amended in 1968

4.3.4 ITALY

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5. TEACHINGS AND STUDIES MADE BY INTERNATIONAL
NONGOVERNMENTAL ORGANIZATIONS

5.1 INSTITUTE OF INTERNATIONAL LAW

5.1.1. International Regulation on River Navigation (*)

Resolution of Heidelberg, 9 September 1887

General Provisions

Article 1

The riparian States of a navigable river are obliged, in the general interest, to regulate, by common agreement, everything relating to the navigation of such river.

Article 2

The navigable affluents of international rivers are, in every respect, subject to the same regime as the rivers whose tributaries they are, in conformity with the agreement concluded between the riparian States, and with the present Regulation.

Article 3

The navigation on the whole course of international rivers, from the point where each of them becomes navigable, to the sea, is entirely free, and cannot, as regards commerce, be forbidden to any flags.

The boundary line of the States separated by the river is marked by the thalweg, that is to say, by the middle line of the channel.

Article 4

The subjects and flags of all nations are in every respect on the footing of perfect equality. No distinction shall be made between the subjects of riparian States and those of non-riparian States.

Article 5

The navigation dues levied on international rivers shall have, for their exclusive object, that of covering the cost of the works for the improvement of these rivers and of the maintenance of their navigability in general.

Article 6

In time of war, the navigation of international rivers shall be free for the flags of neutral nations, subject to such restrictions as may be imposed by the force of circumstances.

Article 7

All the works and establishments created in the interest of navigation, notably the offices for the collection of dues, and their safes, as also the staff permanently in the service of these establishments, are placed under the safeguard of permanent neutrality, and shall, in consequence, be respected and protected by the belligerent States.

(*) Text in: Annuaire de l'Institut de droit international, Session de Heidelberg 1887, p. 535.
English translation in Kaerkenbeeck, International Rivers, A mono-graph based on diplomatic documents, London, 1920, pp.46-58.

5.1.1 International Regulation on River Navigation (Contd.)

Particular Provisions

Article 8

Any sailing vessel or steamer, without distinction of nationality, is free to carry passengers or goods, or to tow other vessels between all the ports situated along international rivers.

Foreign vessels, whether fluvial or sea-going, shall not be admitted to the regular exercise of small coasting trade (petit cabotage), i.e. the continuous and exclusive traffic between ports of the same riparian State, except in virtue of a special authorization by that State.

Article 9

Vessels and goods in transit on international rivers are not subject to any transit duty, whatever their origin or destination.

Article 10

The navigation of international rivers is exempt from staple dues, port dues (échelle), storehouse dues (dépôt), compulsory breaking bulk or forced harbour dues. No tolls, whether maritime or fluvial, shall be levied.

Article 11

There may be levied dues or duties having the character of a reimbursement for the actual use of harbour establishments, such as cranes, weighing machines, wharves, and warehouses.

Article 12

The customs duties, octroi duties, or taxes on consumable articles established by the riparian States shall not in any way hinder navigation.

Article 13

The harbour dues for the actual use of cranes, weighing machines, etc. as also the dues for pilotage, lighthouse, lighting and buoys, destined to cover the technical and administrative expenses incurred in the interest of navigation shall be determined by tariffs officially published in all the ports of international rivers.

Article 14

The tariffs above mentioned shall be drawn up by the "mixed commission" of the riparian States.

Article 15

The tariffs shall not involve any differential treatment.

5.1.1 International Regulation on River Navigation (Contd.)

Article 16

The tariffs of the dues mentioned in Article 13 shall be calculated on the cost of construction and maintenance of the local establishments, and according to the tonnage of the vessels as indicated in the ships' papers.

Article 17

The riparian States may not levy customs duties on merchandise in transit on international rivers, except when it is to be introduced into the territory of these States.

Article 18

Vessels are not allowed to unload their cargoes, either wholly or in part, except in ports and other places on the banks provided with a custom-house, save in case of force majeure.

Article 19

Vessels proceeding on their voyage and provided with the prescribed papers may not be stopped under any pretext by the customs officers of the riparian States, if the two banks belong to different States.

Article 20

Vessels entering into a part of an international river where the two banks belong to the same State, have to pay the customs duties imposed by the local tariff upon merchandise imported into the territory of that State.

Goods in transit are only subject to the placing of seals and to the custody of customs officers.

Article 21

The riparian States shall agree among themselves upon a body of policy regulations destined to regulate the use of the river in the special interest of security and public order.

Article 22

Special tribunals of navigation, or the ordinary courts existing in the riparian countries, shall, on appeal, be competent to adjudge the penalties for infractions of the police regulations established on a footing of perfect equality for all vessels, without any distinction of nationality whatever.

Article 23

Quarantine establishments shall be created, by the initiative of the riparian States, at the mouths of international rivers; control is to be exercised over vessels both when they enter and when they leave the river.

Sanitary control over vessels, while they are navigating the river is exercised on the basis of the special provisions established by the riparian commissions.

5.1.1 International Regulation on River Navigation (Contd.)

Article 24

The works necessary to ensure the navigability of international rivers, are to be undertaken either directly by the States or on the initiative of the riparian Commissions.

Article 25

Each riparian State shall be free to take such steps as it may think necessary to maintain and improve, at its own expense, the navigability of the sections of international rivers subject to its sovereignty.

Article 26

In every case, it shall be forbidden to undertake works which may modify the actual condition of the common waterway or impede its navigation, and against which the other riparians have protested.

Article 27

The authorities set over the navigation of international rivers are:

- (1) the authorities of the riparian States;
- (2) the riparian Commission, composed of the delegates of the sovereign States,

Article 28

Each riparian State retains its sovereign rights over the sections of international rivers subject to its sovereignty, within the limits laid down by the stipulations of this Regulation and by the Treaties and Conventions.

Article 29

The riparian Commission arrives at its decisions by a majority of votes. In case of equality, the president has the casting vote.

However, a vote does not bind the States whose representatives form the minority, if, beforehand, the delegates of these States have formally objected to the execution of the measure proposed.

Article 30

The riparian Commission is a permanent authority over international rivers; it has the following functions:

- (1) to designate the works indispensable for improving and developing the navigability of the rivers, and cause them to be executed;
- (2) to draw up and put in force the tariffs of navigation and other dues mentioned in Articles 13 to 18;
- (3) to elaborate the regulations for river police;
- (4) to watch over the maintenance in good condition of the works, and the strict observance of the provisions of these international regulations;
- (5) to appoint the chief inspector of the navigation of the international river.

5.1.1 International Regulation on River Navigation (Concluded)

Article 31

The Chief Inspector exercises his functions as the organ of the riparian Commission and under its direction. He exercises his authority over all flags without distinction.

Article 32

The Chief Inspector watches over the application of this international regulation and of the river regulation, and supervises the police of navigation.

Article 33

This functionary has the right, in the performance of his duty, directly to demand the assistance of the military posts or of the local riparian authorities.

Article 34

The local inspectors, the quarantine officials and the employees of the offices for the collection of dues are appointed by each riparian State; but they perform their duties under the orders of the Chief Inspector, and have, like him, an international character.

Article 35

Two or more riparian States may make mutual agreements for the nomination of the same delegate to the riparian Commission or of the same local inspector, or of the employees of the offices for the collection of dues, of the quarantine officials, of the judges of the tribunals, etc.

Article 36

The Chief Inspector pronounces, in first instance, the penalties to be inflicted for infractions of the regulations of navigation and police.

Article 37

Appeals against his judgements must be brought either before a tribunal of navigation created for that purpose, or before a local court specially designated by each riparian State, or before the riparian Commission.

Article 38

Each riparian State appoints the engineers charged with supervising the maintenance and improvement of the section of the river subject to its sovereignty.

Article 39

The Powers shall fix by common agreement the system of measuring river and sea-going vessels for the purpose of ascertaining their tonnage, this system being obligatory for all nations.

Article 40

In case of war between the riparian States, all property afloat on an international river, without distinction between neutral and enemy property, shall be accorded similar protection to that granted to enemy property in case of war on land.

5.1.2 International Regulation regarding the Use of International Watercourses for Purposes other than Navigation (*)

Declaration of Madrid, 20 April 1911

Statement of Reasons

Riparian States with a common stream are in a position of permanent physical dependence on each other which precludes the idea of the complete autonomy of each State in the section of the natural watercourse under its sovereignty.

International law has dealt with the right of navigation with respect to international rivers but the use of water for the purposes of industry, agriculture, etc. was not foreseen by international law.

It therefore seems expedient to remedy this lack by noting the rules of law resulting from the interdependence which undoubtedly exists between riparian States with a common stream and between States whose territories are crossed by a common stream.

With the exception of the right of navigation, as already established or to be established by international law:

The Institute of International Law is of the opinion that the following regulations should be observed from the point of view of (any) use of international streams.

I. When a stream forms the frontier of two States, neither of these States may, without the consent of the other, and without special and valid legal title, make or allow individuals, corporations, etc. to make alterations therein detrimental to the bank of the other State. On the other hand, neither State may, on its own territory, utilize or allow the utilization of the water in such a way as to seriously interfere with its utilisation by the other State or by individuals, corporations, etc. thereof.

The foregoing provisions are likewise applicable to a lake lying between the territories of more than two States.

II. When a stream traverses successively the territories of two or more States:

1. The point where this stream crosses the frontiers of two States, whether naturally, or since time immemorial, may not be changed by establishments of one of the States without the consent of the other;

2. All alterations injurious to the water, the emptying therein of injurious matter (from factories, etc.) is forbidden;

3. No establishment (especially factories utilizing hydraulic power) may take so much water that the constitution, otherwise called the utilizable or essential character of the stream shall, when it reaches the territory downstream, be seriously modified;

(*) Text in: Annuaire de l'Institut de Droit International, Madrid Session 1911, (Paris 1911) Vol. 24, pp. 365-365.

5.1.2 International Regulation on the Use of International Watercourses (Concluded)

4. The right of navigation by virtue of a title recognized in international law may not be violated in any way whatsoever;
5. A State situated downstream may not erect or allow to be erected within its territory constructions or establishments which would subject the other State to the danger of inundation;
6. The foregoing rules are applicable likewise to cases where streams flow from a lake situated in one State, through the territory of another State, or the territories of other States;
7. It is recommended that the interested States appoint permanent joint commissions, which shall render decisions, or at least shall give their opinion, when, from the building of new establishments or the making of alterations in existing establishments, serious consequences might result in that part of the stream situated in the territory of the other States.

5.1.3 Regulation governing Navigation on
International Rivers (*)
Resolution of Paris, 19 October 1934

Article 1

These Regulations shall apply:

1. To rivers referred to as international, i.e. to those waterways which, in the naturally navigable part of their course, traverse or separate two or more States, and to any tributaries having the same characteristics;
2. To waterways which, though not international in the sense defined above, come under the following categories:
 - (a) navigable waterways referred to as intermediate waters between two international rivers;
 - (b) artificial navigable waterways or other man-made facilities that are, or are to be, established on or between certain sections of the same international river with a view to making good the deficiencies of the naturally navigable waterway.

Article 2

Movement on an international waterway shall be free. This freedom shall comprise:

- (a) the right for all vessels, boats, timber-trains and other means of water transport to circulate freely throughout the navigable length of the waterway, on condition that they comply with these Regulations and, as appropriate, with any additional rules or enforcement rules to be prescribed by the riparian States. Such rules may not conflict with these Regulations;
- (b) the right of users to make use, in addition, for themselves and their merchandise, of the waterways and facilities referred to in Regulation 2 (a) and (b).

Article 3

On one and the same international waterway the citizens, property and flags (whether maritime or fluvial) of all nations shall, in all matters of direct or indirect concern to navigation, be treated on a footing of perfect equality and in conformity with international law.

In particular, no distinction shall be made between them whether by reason of their provenance or by reason of their destination or, again, by reason of ports or of sea or other lines, entrepôts or other installations made use of en route, before or after their passage over international waterway.

No monopoly or privilege shall be granted on international waterways in respect of navigation or in the use of public ports and other facilities or their installations or equipment.

If any State deems it appropriate to impose for the transport of persons or merchandise from one port to another subject to its authority, restrictions similar to those that a State may impose on coastal navigation, it may do so only in such a way that does not entail the cessation of navigation for other flags on the river.

(*) Text in: Annuaire de l'Institut de droit international, Session de Paris, Octobre 1934, Bruxelles 1934, pp. 713-719

5.1.3 Regulation governing Navigation on International Rivers (Contd.)

Article 4

Any vessel plying on an international waterway have a flag.

For the purposes of enforcing this Regulation, the flag of each and every vessel shall be determined by its place of registry.

In the case of any State having no coastline or international river bank, it shall be sufficient that the place of registry be situated on its territory.

Article 5

No taxes or dues may be levied whether on the course or at the mouth of any international waterway other than those in the nature of payment for services rendered to navigation, for the upkeep of navigability or for the improvement of the waterway.

These navigations dues shall be calculated in such a way as to cover only costs and disbursements effectively sustained and established in such a way as to render any detailed examination of the cargo unnecessary.

Article 6

Each riparian State may levy for the use of the equipment and installation of its ports, taxes and dues which shall be the same for all and reflect the expenditure effectively sustained for their establishment, upkeep and operation.

Article 7

Any public service established in the interest of navigation on any part of an international waterway or in any port thereon shall, if it is not free of charge, entail tariffs that are made public and are calculated in such a way as not to exceed the reasonable cost of the service rendered.

These provisions shall apply in particular to pilotage, warning, tug, towage and lock-keeping services.

Article 8

Customs formalities shall be limited to those strictly necessary in order to delay navigation as little as possible.

Transit on sections where the river forms a frontier shall be exempt from any dues or formalities no indispensable in order to prevent contraband or to safeguard public health; at the mouths and on other sections, formalities affecting transit shall be regulated by agreement between the riparian States.

For imports and exports through any port on the international waterway, customs formalities shall be regulated by the general legislation of the State of the said port, with due regard to the observance of the general principles of freedom and equality of flags.

Save where exceptional reasons of economic necessity justify departure from this rule, customs dues levied on imports and exports by any Of the ports referred to in this regulation may not exceed those levied at the customs frontiers of the State in question on similar merchandise of the same provenance and having the same destination.

5.1.3 Regulation governing Navigation on International Rivers (Contd.)

Each riparian State shall nevertheless remain free to determine its customs tariffs and to take all appropriate measures with a view to safeguarding public order and public health, while maintaining as far as possible freedom of navigation and equality of treatment.

No vessel may be seized by reason of a customs offence committed by a member of the crew or a passenger on any of the waterways contemplated in these Regulations.

Article 9

Riparian States shall determine among themselves the rules necessary in order to guarantee freedom and safety of navigation. This consideration shall apply in particular to rules governing capacities in terms of persons and materials on board.

The uniform application of these rules shall be assured by each of the States concerned with navigation. Policing and operation of ports shall remain within the exclusive jurisdiction of the State under whose sovereignty those ports are placed, with due regard to the observance of these Regulations.

Article 10

Riparian States shall, each on its own territory, take:

- (a) police and inspection measures designed to regulate the use of the navigable waterway in the interest of public order and safety;
- (b) measures conducive to safeguarding the interests of navigation as regards the construction of bridges and other works affecting such navigation;
- (c) measures for the upkeep and improvement of the navigable waterway, and the buoyage and signalling thereof.

Whenever their agreement is necessary, they shall first consult with a view in particular to securing uniformity of the legal and technical régime of navigation, the observance of the provisions of these Regulations, the uniformity of the rules concerning the imposition, collection and destination of taxes on navigation and the settlement of any conflicts that may arise out of the different uses made of the river.

Article 11

Riparian States shall have regard to the needs of navigation in their choice of the place of their courts appointed to hear cases affecting such navigation.

The Procedure followed by such courts shall be as summary as possible. Article 12

The police and navigation rules in force on any section of the river shall apply to military vessels or those assigned to a non-commercial public service on that section.

5.1.3 Regulation governing Navigation on International Rivers (Concluded)

Article 13

All provisions of these Regulations shall apply to vessels, other than those referred to in the previous regulation, which are the property of the State on which are chartered to or requisitioned by it.

Article 14

States signatory to these Regulations shall be free to adopt, by means of special convention, a régime that is more favourable to navigation.

Article 15

Disputes arising as to the interpretation of these Regulations shall be submitted, failing amicable settlement between the States concerned, to conciliation procedures, arbitration or judicial ruling.

5.1.4 Resolution on the Use of International Non-Maritime Waters (*)

Salzburg, 11 September 1961

The Institute of International Law.

Considering that the economic value of the use of waters has been modified by modern techniques and that the application of said techniques to the waters of a river basin extending upon the territory of several States generally affects the whole of these States, and that this evolution requires an adjustment in the legal field;

Considering that there is a common interest in maximizing the use of available natural resources;

Considering that the obligation not to cause an unlawful prejudice to a third party is one of the basic principles governing general relations between neighbouring countries;

Considering that this principle also applies to relations deriving from the various uses of waters;

Considering that, for the use of waters involving several States, each of the above-mentioned States may obtain, through consultations, joint planning and reciprocal concessions, the benefits of a more efficient development of natural resources;

Notes the existence of the following rules in international law and makes the following recommendations:

Article I

The present rules and recommendations apply to the use of waters which are part of a river or of a watershed extending upon the territory of two or more States.

Article II

Every State has the right to make use of the waters flowing across or bordering its territory subject to the limitations imposed by international law and in particular those which result from the following legal dispositions. That right is limited by the right of use by the other States concerned with the same river or watershed.

Article III

If the various States disagree upon the extent of their rights of use, the disagreement shall be settled on the basis of equity, taking into consideration the respective needs of the States, as well as any other circumstances relevant to any particular case.

Article IV

Each State may only proceed with works or to use the waters of a river or water-shed that may affect the possibilities of use of the same waters by other States on condition of preserving for those States the benefit of the advantages to which they are entitled by virtue of Article III, as well as adequate compensation for any losses or damages incurred.

(*) Text in: Annuaire de l'Institut de droit international, Vol. 49, II, Salzburg Session, September 1961, (Basle 1961), pp. 381-384.

5.1.4 Resolution on the Use of International Non-Maritime Waters (Concluded)

Article V

The works or uses referred to in the abovementioned article may only be initiated after due advance notice has been given to the States concerned.

Article VI

If objections are raised, the States shall enter in negotiations in view of reaching an agreement within a reasonable time. To this end, it is desirable that the States involved make use of technical expertises and if need be of appropriate commissions and organizations to reach solutions ensuring maximum benefits for all concerned.

Article VII

During the negotiations, every State should, according to the principle of good faith, refrain from proceeding with the works or uses in dispute, or from taking any other measures likely to aggravate the conflict or to make a settlement more difficult.

Article VIII

If the States involved cannot reach an agreement within a reasonable time, it is recommended to submit to judicial or arbitral settlement the question whether the intended development runs counter to the abovementioned rules. If the State raising objections to the projected works or uses is opposed to any judicial or arbitral settlement, the other State remains free, under its own responsibility, to proceed with said works or uses, while remaining obligated by the provisions of Articles II to IV.

Article IX

It is recommended to the States concerned by particular watersheds to consider whether it would not be appropriate to set up joint organizations for the preparation of water utilization plans to facilitate their economic development, as well as to prevent or settle any disputes that might occur.

5.1.5 Resolution on the Pollution of Rivers and Lakes and International Law (*)⁽¹⁾

Athens, 12 September 1979

The Institute of International Law,

Recalling its Resolutions of Madrid in 1911 and of Salzburg in 1961;

Conscious of the multiple potential uses of international rivers and lakes and of the common interest in a rational and equitable utilization of such resources through the achievement of a reasonable balance between the various interests;

Considering that pollution spread by rivers and lakes to the territories of more than one State is assuming increasingly alarming and diversified proportions whilst protection and improvement of the environment are duties incumbent upon States;

Recalling the obligation to respect the sovereignty of every State over its territory, as a result of which each State has the obligation to avoid any use of its own territory that causes injury in the territory of another State,

Hereby adopts the following articles:

Article I

1. For the purpose of this Resolution, "pollution" means any physical, chemical or biological alteration in the composition or quality of waters which results directly or indirectly from human action and affects the legitimate uses of such waters, thereby causing injury.
2. In specific cases, the existence of pollution and the characteristics thereof shall, to the extent possible, be determined by referring to environmental norms established through agreements or by the competent international organizations and commissions.
3. This Resolution shall apply to international rivers and lakes and to their basins.

Article II

In the exercise of their sovereign right to exploit their own resources pursuant to their own environmental policies, and without prejudice to their contractual obligations, States shall be under a duty to ensure that their activities or those conducted within their jurisdiction or under their control cause no pollution in the waters of international rivers and lakes beyond their boundaries.

Article III

1. For the purpose of fulfilling their obligation under Article II, States shall take, and adapt to the circumstances, all measures required to:
 - (a) prevent any new form of pollution or any increase in the existing degree of pollution; and
 - (b) abate existing pollution within the best possible time limits.
2. Such measures shall be particularly strict in the case of ultra-hazardous activities or activities which pose a danger to highly exposed areas or environments.

(*) Text in: Annuaire de l'Institut de droit international, vol.58, T.I, Athens Session, September 1979, Basel München, 1980, pp.197-ff.

(1) This is a translation of the authentic French text.

5.1.5 Resolution of Athens (contd.)

Article IV

In order to comply with the obligations set forth in articles II and III, States shall in particular use the following means:

- (a) at national level, enactment of all necessary laws and regulations and adoption of efficient and adequate administrative measures and judicial procedures for the enforcement of such laws and regulations;
- (b) at international level, cooperation in good faith with the other States concerned.

Article V

States shall incur international liability under international law for any breach of their international obligations with respect to pollution of rivers and lakes.

Article VI

With a view to ensuring an effective system of prevention and of compensation for victims of transboundary pollution, States should conclude international conventions concerning in particular:

- (a) the jurisdiction of courts, the applicable law and the enforcement of judgements;
- (b) the procedure for special arrangements providing in particular for objective liability systems and compensation funds with regard to pollution brought about by ultra-hazardous activities.

Article VII

1. In carrying out their duty to cooperate, States bordering the same hydrographic basin shall, as far as practicable, especially through agreements, resort to the following ways of cooperation:

- (a) inform co-riparian States regularly of all appropriate data on the pollution of the basin, its causes, its nature, the damage resulting from it and the preventive procedures;
- (b) notify the States concerned in due time of any activities envisaged in their own territories which may involve the basin in a significant threat of transboundary pollution;
- (c) promptly inform States that might be affected by a sudden increase in the level of transboundary pollution in the basin and take all appropriate steps to reduce the effects of any such increase;
- (d) consult with each other on actual or potential problems of transboundary pollution of the basin so as to reach, by methods of their own choice, a solution consistent with the interests of the States concerned and with the protection of the environment;
- (e) coordinate or pool their scientific and technical research programmes to combat pollution of the basin;

5.1.5 Resolution of Athens (Concluded)

- (f) establish by common agreement environmental norms, in particular quality norms for the whole or part of the basin;
- (g) set up international commissions with the largest terms of reference for the entire basin, providing for the participation of local authorities if this proves useful, or strengthen the powers or coordination of existing institutions;
- (h) establish harmonized, coordinated or unified networks for permanent observation and pollution control;
- (i) develop safeguards for individuals who may be affected by polluting activities, both at the stages of prevention and compensation, by granting on a non-discriminatory basis the greatest access to judicial and administrative procedures in States in which such activities originate and by setting up compensation funds for ecological damage the origin of which cannot be clearly determined or which is of exceptional magnitude.

Article VIII

In order to assist developing States in the fulfilment of the obligations and in the implementation of the recommendation referred to in this Resolution, it is desirable that developed States and competent international organizations provide such States with technical assistance or any other assistance as may be appropriate in this field.

Article IX

This Resolution is without prejudice to the obligations which fundamental human rights impose upon States with regard to pollution occurring in their own territories.

5.2 INTERNATIONAL LAW ASSOCIATION

5.2.1 Statement of Principles (*)

Resolution of Dubrovnik, 1956

- I. An international river, is one which flows through or between the territories of two or more States.
- II. A state must exercise its rights over the waters of an international river within its jurisdiction in accordance with the principles stated below.
- III. While each State has sovereign control over the international rivers within its own boundaries, the State must exercise this control with due consideration for its effects upon other riparian States.
- IV. A State is responsible, under international law, for public or private acts producing change in the existing régime of a river to the injury of another State, which it could have prevented by reasonable diligence.
- V. In accordance with the general principle stated in No. III above, the States upon an international river should in reaching agreements, and States or tribunals in settling disputes, weigh the benefit to one State against the injury done to another through a particular use of the water. For this purpose, the following factors, among others, should be taken into consideration:
 - (a) The right of each to a reasonable use of the water;
 - (b) The extent of the dependence of each State upon the waters of that river;
 - (c) The comparative social and economic gains accruing to each and to the entire river community;
 - (d) Pre-existent agreements among the States concerned;
 - (e) Pre-existent appropriation of water by one State.
- VI. A State which proposes new works (construction, diversion, etc.) or change of previously existing use of water, which might effect utilisation of the water by another State, must first consult with the other State. In case agreement is not reached through such consultation, the States concerned should seek the advice of a technical commission; and, if this does not lead to agreement, resort should be had to arbitration.
- VII. Preventable pollution of water in one State, which does substantial injury to another State, renders the former State responsible for the damage done.
- VIII. So far as possible, riparian States should join with each other to make full utilization of the waters of a river both from the viewpoint of the river basin as an integrated whole, and from the viewpoint of the widest variety of uses of the water, so as to assure the greatest benefit to all.

(*) Text in: International Law Association, Report of the Forty-Seventh Conference. Held in Dubrovnik 1956, London, 1957, pp. 241-243.

5.2.2 Resolution on the Use of the Waters of International Rivers (*)

New York, 1958

Heads of Unanimous Agreement

It is agreed that our immediate purpose is to put forward some principles and some recommendations on which there is unanimous agreement.

It is agreed that there are rules of conventional and customary international law governing the uses of waters of drainage basins that are within the territories of two or more States.

It is agreed that there may be issues not adequately covered by recognized rules of international law and also that there are rules as to which there exist differences as to their meaning.

As used in this statement, a drainage basin is an area within the territories of two or more States in which all the streams of flowing surface water, both natural and artificial, drain a common watershed terminating in a common outlet or common outlets either to the sea or to a lake or to some inland place from which there is no apparent outlet to a sea.

Statement of Some Principles of International law governing, and Recommendations respecting, the Uses of the Waters of Drainage Basins with the Territories of two or more States, as to which the Members of the Committee present at the New York Conference have reached unanimous agreement.

Agreed Principles of International Law

1. A system of rivers and lakes in a drainage basin should be treated as an integrated whole (and not piecemeal).
2. Except as otherwise provided by treaty or other instruments or customs binding upon the parties, each co-riparian State is entitled to a reasonable and equitable share in the beneficial uses of the waters of the drainage basin. What amounts to a reasonable and equitable share is a question to be determined in the light of all the relevant factors in each particular case.
3. Co-riparian States are under a duty to respect the legal rights of each coriparian State in the drainage basin.
4. The duty of a riparian State to respect the legal rights of a co-riparian State includes the duty to prevent others, for whose acts it is responsible under international law, from violating the legal rights of the other co-riparian States.

(*) Text in: International Law Association, Report to the Forty-Eighth Conference, held in New York, 1-7 September 1958, London 1959, pp. viii-x.

5.2.2 Resolution of New York, 1958 (Concluded)

Agreed Recommendations

1. Co-riparian States should refrain from unilatéral acts or omissions that affect adversely the légal rights of a co-riparian State in the drainage basin so long as such co-riparian State is willing to résoudre différences as to their légal rights within a reasonable time by consultation. In the eventuality of a failure of these consultations to produce agreement within a reasonable time, the parties should seek a solution in accordance with the principles and procédures (other than consultation) set out in the Charter of the United Nations and the procédures envisaged in Article 33 thereof.
2. The action of the United Nations and its specialized agencies looking towards the assembling, exchange and dissémination of information concerning drainage basins is welcomed, and the hope is expressed that this work will be undertaken with the addition of the assembling, exchange and dissémination of légal information.
3. Co-riparian States should make available to the appropriate agencies of the United Nations and to one another hydrological, meteorological and économique information, particularly as to streamflow, quantity and quality of water, rain and snowfall, water tables and underground water movements.
4. Riparian States should by agreement constitute permanent or ad hoc agencies for the continuous study of all problems arising out of the use, administration and control of the waters of drainage basins. These agencies should be instructed to submit reports upon all matters within their compétence to the appropriate authorities of the riparian States.
5. Since priorities in the kinds of uses of waters may differ from basin to basin and from one part of a basin to another, in case of différences as to the proper order of priority, the advice of technical experts should be sought.
6. The appropriate authorities of the co-riparian States should endeavour to resolve by agreement all matters concerning which recommendations are made by technical agencies.
7. In view of the variety of conditions of climate, hydrological facts, démographie and économique conditions in the various drainage basins, and the varieties of possible uses and needs for water, it is observed that regional agreements may serve the needs of riparian States and communities in many situations and it is recommended that every effort should be made to reach agreements on a regional basis.
8. Co-riparians should take immediate action to prevent further pollution and should study and put into effect all practicable means of reducing to a less harmful degree present uses which lead to pollution.
9. It is desirable that there be further study of the hydrological engineering, économique and légal matters bearing on the prospective operation of the existing «* «£ sired rules of international law relating to the uses of the waters of a drainage basin.
10. Funds should be sought from foundations likely to be interested in «* «£ and it should be considered how, and to what extent, the work can be carried further in harmon^ with the similar work of the Institut de Droit International and of the Inter-American Bar Association.

5.2.3 Recommendations on the Procedures concerning

NOn-Navigational Uses (*)

Hamburg, August 1960

The International Law Association, having taken into consideration the importance of resolving by peaceful means differences between co-riparian States as regards their rights in respect of the waters of a drainage basin, and in furtherance of the second sentence of the first agreed recommendation of the 1958 New York Resolution on the Uses of the Waters of International Rivers, recommends, in the absence of other agreement, the following procedures:

1. In case of a difference as to the legal rights or other interests of co-riparian States they should consult one another.
2. If such consultation has not produced agreement, the States should agree to form an ad hoc Commission which shall endeavour to find a solution, likely to be accepted by the States involved, of differences as to their rights.
3. (a) The members of the Commission and among them the President of the Commission shall be appointed by the States involved.
(b) If the States involved do not agree about these appointments, each State shall appoint two members. The members thus appointed shall choose one more member who shall be the President of the Commission. If the appointed members do not agree, the member-president, shall be appointed, at the request of any State involved, by the President of the International Court of Justice or, if he does not make an appointment, by the Secretary-General of the United Nations.
(c) If a member of the Commission dies or abstains from performing his office, such member shall be replaced by the procedure set out in paragraph (a) or paragraph (b) of this recommendation, according to the manner in which he was originally appointed. If, in the case of:
 - (i) a member originally appointed under paragraph (a) of this recommendation, the States fail to agree as to a replacement; or
 - (ii) a member originally appointed under paragraph (b) of this recommendation, the State involved fails to replace the member;a replacement shall be chosen, at the request of any State involved, by the President of the International Court of Justice or, if he does not choose a replacement, by the Secretary-General of the United Nations.
(d) The States involved shall determine the place of the meetings of the Commission and settle the rules of procedure. If they do not agree, the Commission shall determine these matters.
4. If within a reasonable time a Commission has not been formed or has not been able to find a solution to be recommended or a solution recommended has not been accepted by the States involved nor an agreement between them has been otherwise arrived at, the States should agree to submit the dispute to an arbitral tribunal to be formed or to a permanent court of arbitration or, if they do not do so, to the International Court of Justice.

(*) Text in: The International Law Association, Report of the forty-Ninth Conference held in Hamburg, 8-12 August 1960 (London, 1961), pp.xvi-xviii.

5. 2. 3 Reoommendationg on the procedures concerning Non-Navigational Uses (C oncluded)

5. If the dispute is submitted to the arbitration of a tribunal to be formed, the rules of recommendation 3(d) concerning the method of determining the place of meetings and of settling the rules of procedure shall apply to the method of the formation of the arbitral tribunal and of determining its meetings and procedure, No person who has been a member of the Commission may be a member of the arbitral tribunal.

6. The Award of the Arbitral Tribunal shall be rendered in writing and signed by the President of the Tribunal. The Tribunal shall in the Award give reasons for its decision.

The Award, besides giving a decision on the dispute, shall liquidate expenses and decide which of the States shall have to bear their payments or in which proportion the expenses shall be borne by the States.

The compensation of the arbitrators shall be fixed by the Tribunal.

7. Recourse to arbitration implies the undertaking by the States involved to consider the award to be given as final and to submit in good faith to its exécution.

5.2.4 Recommandation on Pollution Control

Furthor to New York 1958 Recommendation 8) (*)

Hamburg, August 1960

1. For the control of water pollution in accordance with New York Recommendation 8, pollution-control commissions should be set Up for each separate basin by agreement among the co-riparian States of that basin.
2. To define the scope and responsibilities of pollution-control commissions for a drainage basis, preliminary studies should be made by the appropriate agencies dealing with the control and abatement of water pollution.

(*) Text in: The International Law Association, Report of the Forty-Ninth Conference held in Hamburg, 8-12 August 1960 (London, 1961), pp. xvi-xviii.

5.2.5 The Helsinki Rôles

5.2.5.1 The Helsinki Rules on the Uses of the Waters of International Rivers (*) (Helsinki, August 1966)

CHAPTER 1 - GENERAL

Article I

The general rules of international law as set forth in these chapters are applicable to the use of the waters of an international drainage basin except as may be provided otherwise by convention, agreement or binding custom among the basin States.

Article II

An international drainage basin is a geographical area extending over two or more States determined by the watershed limits of the System of waters, including surface and underground waters, flowing into a common terminus.

Article III

A "basin State" is a state the territory of which includes a portion of an international drainage basin.

CHAPTER 2 - EQUITABLE UTILIZATION OF THE WATERS OF AN INTERNATIONAL DRAINAGE BASIN

Article IV

Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin.

Article V

- (1) What is a reasonable and equitable share within the meaning of Article IV is to be determined in the light of all the relevant factors in each particular case.
- (2) Relevant factors which are to be considered include, but are not limited to:
 - (a) the geography of the basin, including in particular the extent of the drainage area in the territory of each basin State;
 - (b) the hydrology of the basin, including in particular the contribution of water by each basin State;
 - (c) the climates affecting the basin;
 - (d) the past utilisation of the waters of the basin, including in particular existing utilization;
 - (e) the economic and social needs of each basin State;
 - (f) the population dependent on the waters of the basin in each basin State;
 - (g) the comparative costs of alternative means of satisfying the economic and social needs of each basin State;

(*) Teoct in: The International Law Association, Report of the Fifty-Second Conference, Helsinki, 14~20 August 1966, (London, 1967), pp. 484-532.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Contd.)

- (h) the availability of other resources;
 - (i) the avoidance of unnecessary waste in the utilization of waters of the basin;
 - (j) the practicability of compensation to one or more of the co-basin States as a means of adjusting conflicts among uses; and,
 - (k) the degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State.
- (3) The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable share, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

Article VI

A use or category of uses is not entitled to any inherent preference over any other use or category of uses.

Article VII

A basin State may not be denied the present reasonable use of the waters of an international drainage basin to reserve for a co-basin State a future use of such waters.

Article VIII

(1) An existing reasonable use may continue in operation unless the factors justifying its continuance are outweighed by other factors leading to the conclusion that it be modified or terminated so as to accommodate a competing incompatible use.

(2) a. A use that is in fact in operation is deemed to have been an existing use from the time of the initiation of construction directly related to the use or, where such construction is not required, the undertaking of comparable acts of actual implementation.

b. Such a use continues to be an existing use until such time as it is discontinued with the intention that it be abandoned.

(3) A use will not be deemed an existing use if at the time of becoming operational it is incompatible with an already existing reasonable use.

CHAPTER 3 - POLLUTION

Article IX

As used in this Chapter, the term "water pollution" refers to any detrimental change resulting from human conduct in the natural composition, content, or quality of the waters of an international drainage basin.

Article X

(1) Consistent with the principle of equitable utilization of the waters of an international drainage basin, a State:

- (a) must prevent any new form of water pollution or any increase in the degree of existing water pollution in an international drainage basin which would cause substantial injury in the territory of a co-basin State, and

5.2.5.1 The Helsinki Rules - Helsinki, 1966 (Contd.)

- (b) should take all reasonable measures to abate existing water pollution in an international drainage basin to such an extent that no substantial damage is caused in the territory of a co-basin State.
- (2) The rule stated in paragraph (1) of this Article applies to water pollution originating:
 - (a) within a territory of the State, or
 - (b) outside the territory of the State, if it is caused by the State's conduct.

Article XI

(1) In the case of a violation of the rule stated in paragraph (1)a. of Article X of this Chapter, the State responsible shall be required to cease the wrongful conduct and compensate the injured co-basin State for the injury that has been caused to it.

(2) In a case falling under the rule stated in paragraph (1)b. of Article X, if a State fails to take reasonable measures, it shall be required promptly to enter into negotiations with the injured State with a view toward reaching a settlement equitable under the circumstances.

CHAPTER 4 - NAVIGATION

Article XII

(1) This Chapter refers to those rivers and lakes portions of which are both navigable and separate or traverse the territories of two or more states.

(2) Rivers or lakes are "navigable" if in their natural or canalized state they are currently used for commercial navigation or are capable by reason of their natural condition of being so used.

(3) In this Chapter the term "riparian State" refers to a State through or along which the navigable portion of a river flows or a lake lies.

Article XIII

Subject to any limitations or qualifications referred to in these Chapters, each riparian State is entitled to enjoy rights of free navigation on the entire course of a river or lake.

Article XIV

"Free navigation", as the term is used in this Chapter, includes the following freedom for vessels of a riparian State on a basis of equality:

- (a) freedom of movement on the entire navigable course of the river or lake;
- (b) freedom to enter ports and to make use of plants and docks; and,
- (c) freedom to transport goods and passengers, either directly or through transshipment, between the territory of one riparian State and the territory of another riparian State and between the territory of a riparian State and the open sea.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Contd.)

Article XV

A riparian State may exercise rights of police, including but not limited to the protection of public safety and health, over that portion of the river or lake subject to its jurisdiction, provided the exercise of such rights does not unreasonably interfere with the enjoyment of the rights of free navigation defined in Articles XIII and XIV.

Article XVI

Each riparian State may restrict or prohibit the loading by vessels of a foreign State of goods and passengers in its territory for discharge in such territory.

Article XVII

A riparian State may grant rights of navigation to non-riparian States on rivers or lakes within its territory.

Article XVIII

Each riparian State is, to the extent of the means available or made available to it, required to maintain in good order that portion of the navigable course of a river or lake within its jurisdiction.

Article XVIII bis 1/

1. A riparian State intending to undertake works to improve the navigability of that portion of a river or lake within its jurisdiction is under a duty to give notice to the co-riparian States.

2. If these works are likely to affect adversely the navigational uses of one or more co-riparian States, any such co-riparian State may, within a reasonable time, request consultation. The concerned co-riparian States are then under a duty to negotiate.

3. If a riparian State proposes that such works be undertaken in whole or in part in the territory of one or more other co-riparian States, it must obtain the consent of the other co-riparian State or States concerned. The co-riparian State or States from whom this consent is required are under a duty to negotiate.

Article XIX

The rules stated in this Chapter are not applicable to the navigation of vessels of war or of vessels performing police or administrative functions, or, in general, exercising any other form of public authority.

Article XX

In time of war, other armed conflict, or public emergency constituting a threat to the life of the State, a riparian State may take measures derogating from its obligations under this Chapter to the extent strictly required by the exigencies of the situation, provided that such measures are not inconsistent with its other obligations under international law. The riparian State shall in any case facilitate navigation for humanitarian purposes.

^{1/} Approved by the 56th Conference of the International Law Association, New Delhi, 1974.

Text in: Report of the Committee on International Water Resources Law of the International Law Association. Report of the 56th Conference, p. 15.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Contd.)

CHAPTER 5 - TIMBER FLOATING

Article XXI

The floating of timber on a watercourse which flows through or between the territories of two or more States is governed by the following Articles except in cases in which floating is governed by rules of navigation according to applicable law or custom binding upon the riparians.

Article XXII

The States riparian to an international watercourse utilized for navigation may determine by common consent whether and under what conditions timber floating may be permitted upon the watercourse.

Article XXIII

(1) It is recommended that each State riparian to an international watercourse not used for navigation should, with due regard to other uses of the watercourse, authorize the co-riparian States to use the watercourse and its banks within the territory of each riparian State for the floating of timber.

(2) This authorization should extend to all necessary work along the banks by the floating crew and to the installation of such facilities as may be required for the timber floating.

Article XXIV

If a riparian State requires permanent installation for floating inside a territory of a co-riparian State or if it is necessary to regulate the flow of the watercourse, all questions connected with these installations and measures should be determined by agreement between the States concerned.

Article XXV

Co-riparian States of a watercourse which is, or is to be used for floating timber should negotiate in order to come to an agreement governing the administrative regime of floating, and if necessary to establish a joint agency or commission in order to facilitate the regulation of floating in all aspects.

CHAPTER 6 - PROCEDURES FOR THE PREVENTION AND SETTLEMENT OF DISPUTES

Article XXVI

This Chapter relates to procedures for the prevention and settlement of international disputes as to the legal rights or other interests of basin States and of other States in the waters of an international drainage basin.

Article XXVII

(1) Consistently with the Charter of the United Nations, States are under an obligation to settle international disputes as to their legal rights or other interests by peaceful means in such a manner that international peace and security, and justice are not endangered.

(2) It is recommended that States resort progressively to the means of prevention and settlement of disputes stipulated in Articles XXIX to XXXIV of this Chapter.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Contd.) Article XXVIII

Article XXVIII

(1) States are under a primary obligation to resort to means of prevention and settlement of disputes stipulated in the applicable treaties binding upon them.

(2) States are limited to the means of prevention and settlement of disputes stipulated in treaties binding upon them only to the extent provided by the applicable treaties.

Article XXIX

(1) With a view to preventing disputes from arising between basin States as to their legal rights or other interest, it is recommended that each basin State furnish relevant and reasonably available information to the other basin States concerning the waters of a drainage basin within its territory and its use of, and activities with respect to such waters.

(2) A State, regardless of its location in a drainage basin, should in particular furnish to any other basin State, the interests of which may be substantially affected, notice of any proposed construction or installation which would alter the regime of the basin in a way which might give rise to a dispute as defined in Article XXVI.

The notice should include such essential facts as will permit the recipient to make an assessment of the probable effect of the proposed alteration.

(3) A State providing the notice referred to in paragraph (2) of, this Article should afford to the recipient a reasonable period of time to make an assessment of the probable effect of the proposed construction or installation and to submit its views thereon to the State furnishing the notice.

(4) If a State has failed to give the notice referred to in paragraph (2) of this Article, the alteration by the State in the regime of the drainage basin shall not be given the weight normally accorded to temporal priority in use in the event of a determination of what is a reasonable and equitable share of the waters of the basin.

Article XXX

In case of a dispute between States as to their legal rights or other interests, as defined in Article XXVI, they should seek a solution by negotiation.

Article XXXI

(1) If a question or dispute arises which relates to the present or future utilization of the waters of an international drainage basin, it is recommended that the basin States refer the question or dispute to a joint agency and that they request the agency to survey the international drainage basin and to formulate plans or recommendations for the fullest and most efficient use thereof in the interests of all such States.

(2) It is recommended that the joint agency be instructed to submit reports on all matters within its competence to the appropriate authorities of the member States concerned.

(3) It is recommended that the member States of the joint agency in appropriate cases invite non-basin States which by treaty enjoy a right in the use of the waters of an international drainage basin to associate themselves with the work of the joint agency or that they be permitted to appear before the agency.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Contd.)

Article XXXII

If a question or a dispute is one which is considered by the States concerned to be incapable of resolution in the manner set forth in Article XXXI, it is recommended that they seek the good offices, or jointly request the mediation of a third State, of a qualified international organization or of a qualified person.

Article XXXIII

(1) If the States concerned have not been able to resolve their dispute through negotiation or have been unable to agree on the measures described in Article XXXI and XXXII, it is recommended that they form a commission of inquiry or an ad hoc conciliation commission, which shall endeavour to find a solution, likely to be accepted by the States concerned, of any dispute as to their legal rights.

(2) It is recommended that the conciliation commission be constituted in the manner set forth in the Annex.

Article XXXIV

It is recommended that the States concerned agree to submit their legal disputes to an ad hoc arbitral tribunal, to a permanent arbitral tribunal or to the International Court of Justice if:

- (a) A commission has not been formed as provided in Article XXXIII, or
- (b) The commission has not been able to find a solution to be recommended, or
- (c) A solution recommended has not been accepted by the States concerned, and
- (d) An agreement has not been otherwise arrived at.

Article XXXV

It is recommended that in the event of arbitration the States concerned have recourse to the Model Rules on Arbitral Procedure prepared by the International Law Commission of the United Nations at its tenth session in 1958.

Article XXXVI

Recourse to arbitration implies the undertaking by the States concerned to consider the award to be given as final and to submit in good faith to its execution.

Article XXXVII

The means of settlement referred to in the preceding Articles of this Chapter are without prejudice to the utilization of means of settlement recommended to, or required of, members of regional arrangements or agencies and of other international organizations.

5.2.5.1 The Helsinki Rules - Helsinki 1966 (Concluded)

ANNEX

MODEL RULES FOR THE CONSTITUTION OF THE CONCILIATION COMMISSION
FOR THE
SETTLEMENT OF A DISPUTE

(In implementation of Article XXXIII of Chap. 6)

Article I

The members of the Commission, including the President, shall be appointed by the States concerned.

Article II

If the States concerned cannot agree on these appointments, each State shall appoint two members. The members thus appointed shall choose one more member who shall be the President of the Commission. If the appointed members do not agree, the member-president shall be appointed, at the request of any State concerned, by the President of the International Court of Justice, or, if he does not make the appointment, by the Secretary-General of the United Nations.

Article III

The membership of the Commission should include persons who, by reason of their special competence, are qualified to deal with disputes concerning international drainage basins.

Article IV

If a member of the Commission abstains from performing his office or is unable to discharge his responsibilities, he shall be replaced by the procedure set out in Article I or Article II of this Annex, according to the manner in which he was originally appointed. If, in the case of:

- (1) a member originally appointed under Article I, the States fail to agree as to a replacement; or
- (2) a member originally appointed under Article II, the State involved fails to replace the member;

a replacement shall be chosen, at the request of any State concerned, by the President of the International Court of Justice, or, if he does not choose the replacement, by the Secretary-General of the United Nations.

Article V

In the absence of agreement to the contrary between the parties, the Conciliation Commission shall determine the place of its meetings and shall lay down its own procedure.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.2 Articles on Flood Control (*) - (New York, 1972)

Article 1

In the context of the following Articles,

1. 'Floods' means the rising of water levels which would have detrimental effects on life and property in co-basin States.
2. 'Flood control' means the taking of all appropriate steps to protect land areas from floods or to minimize damage therefrom.

Article 2

Basin States shall co-operate in measures of flood control in a spirit of good neighbourliness, having due regard to their interests and well-being as co-basin States.

Article 3

Co-operation with respect to flood control may, by agreement between basin States, include among others:

- (a) collection and exchange of relevant data;
- (b) preparation of surveys, investigations and studies and their mutual exchange;
- (c) planning and designing of relevant measures;
- (d) execution of flood control measures;
- (e) operation and maintenance of works;
- (f) flood forecasting and communication of flood warnings;
- (g) setting up of a regular information service charged to transmit the height of water levels and the discharge quantities.

Article 4

1. Basin States should communicate amongst themselves as soon as possible on any occasion such as heavy rainfalls, sudden melting of snow or other events likely to create floods and of dangerous rises of water levels in their territory.

(*) Text in: The International Law Association, Report of the Fifty-Fifth Conference, New York, 21-26 August 1972, London 1974, "pp." xvi-xvii.

5.2.5.2 Articles on Flood Control - New York 1972 (Concluded)

2. Basin States should set up an effective system of transmission in order to fulfil the provisions contained in paragraph 1, and should ensure priority to the communication of flood warnings in emergency cases. If necessary a special system of translation should be built up between the basin States.

Article 5

1. The use of the channel of rivers and lakes for the discharge of excess waters shall be free and not subject to any limitation provided this is not incompatible with the object of flood control.

2. Basin States should maintain in good order their portions of water courses including works for flood control.

3. No basin State shall be prevented from undertaking schemes of drainage, river draining, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of its portions of water-courses. provided that, in executing any of these schemes, it avoids any unreasonable interference with the object of flood control, and provided that such schemes are not contrary to any legal restrictions which may exist otherwise.

4. Basin States should ensure the prompt execution of repairs or other emergency measures for minimization of damage by flooding during periods of high waters.

Article 6

1. Expenses for collection and exchange of relevant data, for preparation of surveys, investigations and studies, for flood forecasting and communication of flood warnings, as well as for the setting-up of a regular information service shall be borne jointly by the basin States co-operating in such matters.

2. Expenses for special works undertaken by agreement in the territory of one basin State at the request of another basin State shall be borne by the requesting State, unless the cost is distributed otherwise under the agreement.

Article 7

A basin State is not liable to pay compensation for damage caused to another basin State by floods originating in that basin State unless it has acted contrary to what could be reasonably expected under the circumstances, and unless the damage caused is substantial.

Article 8

In case of dispute, Articles XXX to XXXVII of the Helsinki Rules are, so far as may be, applicable.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.3 Articles on Marine Pollution of Continental Origin (*) (New York, August 1972)

Article I

As used in this chapter "Continental sea-water pollution" means any detrimental change in the natural composition, content or quality of sea water resulting from human conduct taking place within the limits of the national jurisdiction of a State,

This conduct shall include, inter alia, the discharge or introduction of substances directly into the sea from pipelines, extended outlets, or ships, or indirectly through rivers or other watercourses whether natural or artificial, or through atmospheric fall-out.

Article II

Taking into account all relevant factors referred to in Article III a State

(a) shall prevent any new form of continental sea-water pollution or any increase in the degree of existing continental sea-water pollution which would cause substantial injury in the territory of another State or to any of its rights under international law or to the marine environment, and

(b) shall take all reasonable measures to abate existing continental sea-water pollution to such an extent that no substantial injury of the kind referred to in paragraph (a) is caused.

Article III

(a) States should establish, as soon as possible, international standards for the control of sea-water pollution, having regard to all relevant factors, including the following:

- the geography and hydrography of the area (inland waters, territorial sea, contiguous zone and continental shelf);
- climatological conditions;
- quality and composition of affected sea waters;
- the conservation of the maritime environment (flora and fauna);
- the sources of the sea-bed and the subsoil and their economic value for present and potential users;
- the recreational facilities of the coastal area;
- the past, present and future utilization of the coastal area and sea water;
- the economic and social needs of the (coastal) States involved;
- the existence of alternative means for waste disposal;
- the adaptation of detrimental changes to beneficial human uses;
- the avoidance of unnecessary waste-disposal;

(*) Text in: The International Law Association, Report of the Fifty-Fifth Conference, New York 21-26 August 1972, (London 1974;), pp.

5.2.5.3 Articles on Marine Pollution - New York, 1972 (Concluded)

- (b) Until such standards are established, the existence of substantial injury from pollution shall be determined by taking into consideration all relevant factors, including those referred to in paragraph (a).
- (c) The weight to be given to each other factor is to be determined by its importance in comparison with that of other relevant factors.

Article IV

When it is contended that the conduct of a State is not in accordance with its obligations under these Articles, that State shall promptly enter into negotiations with the complainant with a view to reaching a solution that is equitable under the circumstances.

Article V

In the case of violation of the rules in Article II, the State responsible shall cease the wrongful conduct and shall compensate the injured State for the injury that has been caused to it.

Article VI

In case of a dispute, Articles XXXI to XXXVII of the Helsinki Rules are, so far as may be, applicable.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.4 Maintenance and Improvement of Naturally Navigable Waterways separating or traversing several States (*) - (New Delhi, 4 January 1975)

The following is the text of the Articles included in the report on Maintenance and Improvement of Naturally Navigable waterways separating or traversing several States, which are to be added to the "Helsinki Rules" as Article XVIII bis:

1. A riparian State intending to undertake works to improve the navigability of that portion of a river or lake within its jurisdiction is under a duty to give notice to the co-riparian States;
2. If these works are likely to affect adversely the navigational uses of one or more co-riparian States, any such co-riparian State may, within a reasonable time, request consultation. The concerned co-riparian States are then under a duty to negotiate;
3. If a riparian State proposes that such works be undertaken in whole or in part in the territory of one or more other co-riparian States, it must obtain the consent of the other co-riparian State or States concerned. The co-riparian State or States from whom this consent is required are under a duty to negotiate.

(*) Text in: International Law Association, Report of the Fifty-Sixth Conference, New Delhi, 29 December 1974 - 4 January 1975, Resolutions of the Conference, p. xiii.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.5 Resolution on the Protection of Water Resources and Water Installations in times of Armed Conflict (*) - (Madrid, 1976)

Article I

Water which is indispensable for the health and survival of the civilian population should not be poisoned or rendered otherwise unfit for human consumption.

Article II

Water supply installations which are indispensable for the minimum conditions of survival of the civilian population should not be cut off or destroyed.

Article III

The diversion of waters for military purposes should be prohibited when it would cause disproportionate suffering to the civilian population or substantial damage to the ecological balance of the area concerned. A diversion that is carried out in order to damage or destroy the minimum conditions of survival of the civilian population or the basic ecological balance of the area concerned or in order to terrorize the population should be prohibited in any case.

Article IV

The destruction of water installations containing dangerous forces, such as dams and dykes, should be prohibited when such destruction may involve grave dangers to the civilian population or substantial damage to the basic ecological balance.

Article V

The causing of floods as well as any other interference with the hydrological balance by means not mentioned in Arts. II to IV should be prohibited when it involves grave dangers to the civilian population or substantial damage to the ecological balance of the area concerned.

Article VI

1. The prohibitions contained in Arts. I to V above should be applied also in occupied enemy territories.
2. The occupying power should administer enemy property according to the indispensable requirements of the hydrologic balance.
3. In occupied territories, seizure, destruction or intentional damage to water installations should be prohibited when their integral maintenance and effectiveness would be vital to the health and survival of the civilian population.

(*) Text in: The International Law Association, Report of the Fifty-Seventh Conference, Madrid 30 August-4 September 1976, (London 1978), pp. xxv-xxxvi.

Adopting this Resolution the Conference of ILA stated that "these rules should be applied also with respect to other conduct intended to damage or destroy the water resources of a State or Area".

5.2.5.5 Resolution on Protection - Madrid, 1976 (Concluded)

Article VII

The effect of the outbreak of war on the validity of treaties or of parts thereof concerning the use of water resources should not be termination but only suspension. Such suspension should take place only when the purpose of the war or military necessity imperatively demand the suspension and when the minimum requirements of subsistence for the civil population are safeguarded.

Article VIII

1. It should be prohibited to deprive, by the provisions of a peace treaty or similar instrument, a people of its water resources to such an extent that a threat to the health or to the economic or physical conditions of survival is created.
2. When, as the result of the fixing of a new frontier, the hydraulic system in the territory of one State is dependant on works established within the territory of another State, arrangements should be made for the safeguarding of uninterrupted delivery of water supplies indispensable for the vital needs of the people.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.6 Resolution on International Water Resources Administration (*) (Madrid, 1976)

Article 1

As used in this Chapter, the term "international water resources administration" refers to any form of institutional or other arrangement established by agreement among two or more basin States for the purpose of dealing with the conservation, development and utilisation of the waters of an international drainage basin.

Article 2

1. With a view to implementing the principle of equitable utilization of the waters of an international drainage basin, and consistent with the provisions of Chapter VI [of the Helsinki Rules] relating to the procedures for the prevention and settlement of disputes, the basin States concerned and interested should negotiate in order to reach agreement on the establishment of an international water resources administration.

2. The establishment of an international water resources administration in accordance with paragraph 1 above is without prejudice to the existence or subsequent designation of any joint agency, conciliation commission or tribunal formed or referred to by co-basin States pursuant of Article XXXI [of the Helsinki Rules] in the case of a question or dispute relating to the present or future utilization of the waters of an international drainage basin.

Article 3

Member States of an international water resources administration in appropriate cases should invite other States including non-basin States or international organizations, which by treaty, other instrument or binding custom enjoy a right or have an interest in the use of the waters of an international drainage basin, to participate in the activities of the international water resources administration.

Article 4

1. In order to provide for an effective international water resources administration the agreement establishing that administration should expressly state, among other things, its objective or purpose, nature and composition, form and duration, legal status, area of operation, functions and powers, and financial implications of such an international water resources administration.

2. The Guidelines annexed to these Articles should be taken into account when an international water resources administration is to be established.

(*) Text in: The International Law Association, Report of the Fifty-Seventh Conference Madrid, 30 August-4 September 1976, (London 1978). pp. xxxvii-xli.

5.2.5.6 Resolution on International Water Res. Admin. - Madrid, 1976 (Contd.)

ANNEX

Guidelines for the Establishment of an International Water
Resources Administration

(In implementation of Article IV, paragraph 2 on International
Water Resources Administration)

In establishing an international water resources administration, Member States should consider, on the basis of the requirements of each particular case, the elements contained in the following guidelines:

1. Form and duration of an International Water Resources Administration will depend on all relevant factors identified in these guidelines, including:

- (a) its duration, which may be ad hoc or permanent, and
- (b) its constitution, which may take the form of: (i) separate national commissions or agencies; (ii) a joint commission or agency composed of national representatives, interest groups or representatives of users; (iii) a mixed commission or agency; (iv) a commission or agency vested with supranational decisionmaking powers.

2. Procedures for decision-making will include:

- (a) a quorum (for the validity of the meeting) which will depend on the importance of the decisions to be taken;
- (b) the principle of either unanimity, simple or qualified majority or an other combined form of decision-making.

3. The legal status of an International Water Resources Administration vis-à-vis both its Member States and other States not parties to the administration as well as vis-à-vis international and other organizations should be defined; such legal status will cover:

- (a) the managing body,
- (b) the staff,
- (c) assets, equipment and other properties,
- (d) the whole administration as such, including the powers to sue and to be sued.

4. The territorial competence (ratione loci) of an international water resources administration should be defined. The choice will depend on a number of factors, such as: the extent of the drainage area with respect to each Member State; the contribution of water by each basin State to the hydrology of the basin; the economic and social requirements of the basin States; local interests; the other relevant factors to be considered in each particular case, having regard to Article V of the Helsinki Rules.

Territorial competence may include:

- (a) the whole drainage basin, including surface water, underground waters or both;
- (b) more than one drainage basin (multi-basin);
- (c) part of a drainage basin (sub-basin);
- (d) an area otherwise defined and clearly delimited; and
- (e) all or part of boundary waters.

5.2.5.6 Resolution on International Water Res. Admin. - Madrid, 1976 (Contd.)

5. The functions and powers of an international water resources administration should be defined. These may vary from case to case, depending upon various factors, including:

- (a) the kind of co-operation envisaged;
- (b) the desired degree of involvement in international administration;
- (c) the specific fields for which it is proposed to establish the administration.

Such functions and powers may include, without being limited to, one or more of the following:

- A. Advisory, consultative, co-ordinating, or policy-making functions. In these cases, the agreement should specify the procedural rules for deciding on conflicting rights and interests, including notification, objections and timing.
- B. Executive function, which may include carrying out of studies, exploration, investigation and surveys, preparation of feasibility reports, inspection and control construction, operation, maintenance or financing.
- C. Regulatory function, including the implementation of the decisions of the administration, as well as lawmaking. Decisions in these matters may take effect directly or after acceptance by Member States.
- D. Judicial function, which may include arbitration or final dispute settlement.

6. As regards the objects and purposes (ratione materiae) of an international water resources administration, these may include one or more of the following:

- (a) collection and exchange of hydrological technical and other data, which may be undertaken by Member States separately or jointly, and their standardization;
- (b) plan formulation, which may include the exchange of plans prepared separately by Member States or jointly formulated plans;
- (c) co-ordination of plans;
- (d) construction of waterworks, which may be undertaken by Member States separately or jointly, or which may be entrusted to a non Member State or to some organization;
- (e) waterworks operation and maintenance, which may be entrusted to each Member State concerned separately or to joint administration;
- (f) control of one or more beneficial uses of water which may include: (i) domestic and community uses; (ii) agricultural uses, including the watering of animals and agro-allied industrial uses; (iii) industrial uses, including cooling; (iv) hydropower generation and transmission; (v) navigation; (vi) timber floating; (vii) fishing and (viii) other beneficial uses of common interest;
- (g) control of one or more harmful effects of water which may include: (i) flood control measures; which may imply flow regulations and river training; (ii) embankment construction and maintenance; (iii) drought warning, prevention, reduction and control; (iv) soil erosion control; (v) land reclamation, including salinity control and drainage; (vi) dredging, maintenance and improvement of the navigable sections of an international watercourse; (vii) siltation control; (viii) other harmful effects of common interest;

5.2.5.6 Resolution on International Water Res. Admin. - Madrid, 1976 (Concluded)

(h) water quality control including such coastal sea areas of the Member States, which may be adversely affected, and which may include: (i) prevention and abatement of water pollution resulting from one or more beneficial uses, and harmful effects, and the measures to be taken separately or jointly by Member States; (ii) health preservation, including human beings and genetic resources (animals and plants), and the measures to be taken separately or jointly by Member States; (iii) environment protection, with reference to the waters of the basin, including minimum standards and measures to be taken separately or jointly by Member States.

8. In establishing an international water resources administration, one or more of the following financial and economic matters should be considered:

- (a) internal financing of the administration, including cost sharing and sharing criteria; development financing of projects and works in particular including: (i) cost sharing and criteria for sharing (based on i.e. at-site benefit analysis, system development); procedures and criteria for compensation; (ii) sharing of benefits including the assessment and collection of revenues, and criteria for sharing;
- (c) external financing, with particular reference to the powers of the administration necessary to enter into agreement for this purpose.

9. The agreement establishing an international water resources administration should contain provisions for the settlement of disputes arising out of its interpretation and implementation.

5.2.5 The Helsinki Rules (Contd.)

5.2.5.7 Regulation of the Flow of Water of International Watercourses (*) (Beograd, 1980)

Article 1

For the purpose of these Articles, "regulation" means continuing measures intended for controlling, moderating, increasing or otherwise modifying the flow of the waters in an international watercourse for any purpose; such measures may include storing, releasing and diverting of water by means such as dams, reservoirs, barrages and canals.

Article 2

Consistent with the principle of equitable utilization, basin states shall cooperate in a spirit of good faith and neighbourliness in assessing needs and possibilities and preparing plans for regulation. When appropriate, the regulation should be undertaken jointly.

Article 3

When undertaking a joint regulation, basin states should settle all matters concerning its management and administration by agreement. When necessary, a joint agency or commission should be established and authorized to manage all relevant aspects of the regulation.

Article 4

Unless otherwise agreed, each basin state party to a regulation shall bear a share of its costs proportionate to the benefits it derives from the regulation.

Article 5

1. The construction of dams, canals, reservoirs or other works and installations and the operation of such works and installations required for regulation by a basin state in the territory of another can be carried out only by agreement between the basin states concerned.
2. Unless otherwise agreed, the costs of such works and their operation should be borne by the basin states concerned.

Article 6

A basin state shall not undertake regulation that will cause other basin states substantial injury unless those states are assured the enjoyment of the beneficial uses to which they are entitled under the principle of equitable utilization.

Article 7

1. A basin state is under a duty to give the notice and information and to follow the procedures set forth in Article XXIX of the Helsinki Rules.
2. When appropriate, the basin state should invite other basin states concerned to

(*) Text in: International Law Association, Belgrade Conference, 1980 - Committee on

5.2.5.7 Regulation of the Flow of Water of International Watercourses (Beograd, 1980)

Concluded)

Article 8

In the event of objection to the proposed regulation, the states concerned shall use their best endeavours with a view to reaching an agreement. If they fail to reach an agreement within a reasonable time, the states should seek a solution in accordance with Chapter 6 of the Helsinki Rules.

Article 9

The application of these Articles to regulation for controlling floods is without prejudice to the application of the relevant articles on Flood Control adopted by the International Law Association in 1972.

5.2.5 The Helsinki Rules (Concluded)

5.2.5.8 Articles on the Relationship between Water, Other Natural Resources and the Environment (*)
- (Beograd, 1980)

Article 1

Consistent with Article IV of the Helsinki Rules, States shall ensure that:

- (a) The development and use of water resources within their jurisdiction do not cause substantial damage to the environment of other States or of areas beyond the limits of national jurisdiction; and
- (b) the management of their natural resources (other than water) and other environmental elements located within their own boundaries does not cause substantial damage to the natural condition of the waters of other States.

Article 2

Articles XXVI and XXXVII of the Helsinki Rules, duly expanded with the addition of the consideration of acts or omissions concerning natural resources other than water and of other environmental elements in their reciprocal relationships with water resources, are applicable to the States referred to in Article 1.

(*) Text in: International Law Association, Belgrade Conference, 1980 - Committee on International Water Resources Law, pp. 17—18.

5.3 INTER-AMERICAN BAR ASSOCIATION

5.3.1 Declaration of Buenos Aires (*)

19 November 1957

THE TENTH CONFERENCE OF THE INTER-AMERICAN BAR ASSOCIATION

Resolves:

I. That the following general principles, which form part of existing international law, are applicable to every water-course or system of rivers or lakes (non-maritime waters) which may traverse or divide the territory of two or more States; such a system will be referred to hereinafter as a "system of international waters".

1. Every state having under its jurisdiction a part of a system of international waters, has the right to make use of the waters thereof insofar as such use does not affect adversely the equal right of the States having under their jurisdiction other parts of the system.

2. States having under their jurisdiction a part of a system of international waters are under a duty, in the application of the principle of equality of rights, to recognize the right of the other States having jurisdiction over a part of the system to share the benefits of the system taking as the basis the right of each State to the maintenance of the status of its existing beneficial uses and to enjoy, according to the relative needs of the respective States, the benefits of future developments. In cases where agreement cannot be reached the States should submit their differences to an international court or an arbitral commission.

3. States having under their jurisdiction part of a system of international waters are under a duty to refrain from making changes in the existing regime that might affect adversely the advantageous use by one or more other States having a part of the system under their jurisdiction except in accordance with: (i) an agreement with the State or States affected or (ii) a decision of an international court or arbitral commission.

4. The foregoing principles do not alter the norm of international law that if the territory over which flow the waters of an international system is of such a nature as to provide a particular benefit, that benefit may be enjoyed exclusively by the State having jurisdiction over that territory, it being understood that such enjoyment will be in conformity with principle 3.

Recommends:

II. That a permanent committee of the Inter-American Bar Association be established to examine further the general juridical principles in this field, which commission should correspond with other international associations and organizations (U.N., O.A.S., etc.) devoting their attention to the study of the principles of law governing the uses of international rivers.

(*) Text in: Inter-American Bar Association, Proceedings of the Tenth Conference, Buenos Aires 14-21 November 1957, (Buenos Aires 1958), Vol. I, pp. 246-248

5.3.1 Declaration of Buenos Aires (Concluded)

III. That this permanent committee study and prepare for the Eleventh Conference of the Inter-American Bar Association a report dealing, among other matters that it considers of interest, with the following:

1. The question of the rights, if any, of non-riparian States which may have interests dependent upon a system of international waters.
2. The question of indemnification and of preventing unlawful acts in the use of waters of international systems that might cause irreparable damage or might even lead to a situation likely to endanger the peace or constitute a threat to the peace.
3. The question of sharing costs in the operation, maintenance and development of a system of international waters,
4. The question of pollution and flood control.
5. The question of the priorities as between different uses of the waters of a system of international waters and the relation of these priorities to the specific characteristics of the system.
6. The question of the differences in legal treatment of the right of dominion over as distinguished from the right to the use of a system of international waters.
7. The possibility of systematizing the practical rules put into effect by the States to achieve the most advantageous use of systems of interstate or international waters.
8. The difference, if any, arising in the application of general principles of international law as between international boundary water systems and successive water systems.
9. The possibility of creating general and/or regional commissions and tribunals in order to facilitate the most advantageous use of the waters and the solution of conflicts relating to the régime of systems of international waters.

IV. That the Committee be requested to collect, classify and analyse the precedents from every part of the world evidencing practices accepted as law governing the use of international waters.

V. That States with an interest in an international water system ought to participate, as soon as possible, in the collection and exchange of physical and economic data essential for the planning and realization of the rational use of the waters.

5.3.2 Resolutions of San José (*)

April 1967

No. 1

Whereas:

1. International developments show, especially during the recent years, the permanent and gradual improvement of the laws governing the use of international rivers and lakes;
2. The above-mentioned improvement requires a continued study of the facts, of the agreements entered into and the attempts to establish general principles for the common use;
3. International waters have for America unique importance to the extent that it is difficult to imagine a social and economic development and integration of the continent without an equitable and adequate usage of such waters, in achieving which the law has a substantial function;
4. The "Permanent Committee on Use of International Rivers and Lakes", created at the X Conference in Buenos Aires, has produced important reports up to this present Conference, about studies in America and the Western Hemisphere on this subject;

Resolves

That the Permanent Committee on Use of International Rivers and Lakes continue its studies on the use of such waters for industrial, agricultural, commercial and other purposes and inform the XVI Conference as to the result of such studies.

No. 2

Whereas:

1. The work carried out by the Organization of American States in studying the juridical régime for the use of international rivers and lakes is worthy of prominence, and likewise made use of by statesmen, lawyers, or professors interested in the juridical problems and issues raised by the use of these rivers and lakes;
2. The task which the Organization of American States proposes to undertake in this connection has an extraordinary importance as it proposes to equip the American countries with adequate legal instruments for the solution of issues arising from the use of those waters;

Resolves

1. To suggest to the Organization of American States to call a Specialized Conference on the use of international rivers and lakes for industrial, agricultural and commercial purposes, at the earliest possible date, as called for by Resolution X of the Second Special Conference held in Rio de Janeiro in 1965.
2. To express the desire that the General Secretariat of the OAS continue the studies on the use of international rivers and lakes with the above-mentioned purposes, and that it publish up-to-date editions of the studies already prepared.

(*) Text in: Inter-American Bar Association, Resolutions, Recommendations and Declarations approved by the XV Conference, San José, Costa Rica, 10-15 April 1967, PP.1-2, 190

5.3.3 Resolution of Caracas (*)

8 November 1969

Whereas:

The industrial and agricultural use of international rivers and lakes can contaminate the waters of the same, causing damages and harm to the riparian States;

The increasing development of the countries of the Western Hemisphere will cause an increase in the industrial and agricultural utilization of international rivers and lakes, as well as of the underground waters related to them;

Said use will create social and economic problems in the affected countries, with serious repercussions on the health of human beings and animals, as well as on the productivity of the land;

The solution of these problems should be within the framework of the law, taking into consideration both the general principles and the standards that have been applied in regulating the utilization of said waters by the riparian States, and

The Inter-American Bar Association, concerned about this matter, established as early as 1957 a Permanent Committee on the use of international rivers and lakes in America,

Resolves

1. To recommend that the laws of the American countries on the industrial and agricultural utilization of rivers and lakes be unified or harmonized in order to avoid international controversies.
2. To recommend that in the law schools of the various universities of America there be established courses on comparative water law, especially in those countries which have rivers and lakes in common interest with others, so that better knowledge and comparison of existing legislation will result, with a view to obtaining in the near future the unification or harmonization of legislation.
3. To urge the American States to avoid the contamination of waters of international rivers and lakes, because this affects the health and economy of riparian states, and the avoidance of such contamination is indispensable for a peaceful international life.
4. To make this resolution known to the Organization of American States, to the Latin American Free Trade Association, and to the Secretariat of the Central American Common Market, suggesting to them that it be taken into consideration when said international organizations make studies on the subject.

(*) Text in: Inter-American Bar Association, Resolutions, Recommendations and Declarations approved by the XVI Conference, Caracas, Venezuela, 1-8 November 1969

5.4 INTERNATIONAL ASSOCIATION FOR WATER LAW

5.4.1 Recommendations of the Caracas Conference on
Water Law and Administration (*)

14 February 1976

(Extract)

...

II. RECOMMENDATIONS FOR INTERNATIONAL ACTION

48. It is recommended that international organizations:
- (a) Make every effort to support the creation of the appropriate legal régimes and of institutional machinery for the effective realization of the required multi-disciplinary data base with respect to water resources.
 - (b) Strengthen, by means of technical assistance, the national and regional centres dedicated to independent research, training and advisory services aimed at the achievement of integrated management of all water resources, suited to existing and anticipated future conditions, and support the publication and dissemination, on a worldwide basis, of the knowledge, techniques and experience acquired by such centres.
 - (c) In their assistance efforts of every kind to the various countries, with respect to the utilization of water resources special attention be given to the relevance of said activities to the environment.
 - (d) Adopt to the extent applicable by reason of their contents the recommendations formulated to Governments in the field of planning.
 - (e) Take into account recommendations No. 30 to 40 in implementing their technical assistance programs.
49. It would be desirable to recapitulate and systematize the legal norms pertaining to the use of international water resources.
50. It is recommended that the International Law Commission of the United Nations:
- (a) Continue its progress in its current codification work regarding the rules of international law applicable to "non-navigational uses of international watercourses".
 - (b) That the legal criteria identified by this Conference concerning national water laws and more effective water management be duly considered by the ILC in its aforementioned codification efforts particularly those referring to the interdependence of resources and to their use within international hydrologic systems.
51. It is recommended that the United Nations University and other pertinent international organs be invited to take note of recommendations 46 and 47.
52. With respect to their international action, it is recommended that governments, in the cases where they share international basins:
- (a) Try to establish agreements that contain common basic planning principles.

(*) Text in: International Association for Water Law, Recommendations of the Caracas Conference on Water Law and Administration, 8-14 February 1976, pp. 16-18.

5.4.1 Caracas Conference, 1976 (Concluded)

- (b) Establish mechanisms for cooperation among interested countries, which should include:
 - (i) The principle of non-discrimination in arriving at the solution of the problems of pollution and other harmful effects, as well as with respect to free access to justice for all interested parties.
 - (ii) The need to exchange information among interested States with respect to the projects and activities that may cause pollution or other harmful effects in another state.
- (c) Mindful of the fact that the total benefits to be obtained from international water resources are greater where cooperative arrangements among co-basin countries exist, governments may consider:
 - (i) That ways and means be sought to establish or improve international cooperation among co-basin countries in the form of appropriate legal and administrative institutions keeping in mind the principle of limited territorial sovereignty over international water resources.
 - (ii) Giving attention to improving avenues of conflict resolution where agreement between co-basin countries is difficult to attain.
 - (iii) That universities and other scientific institutions pay increasing attention to social science research in the fields of public administration, political science, law and economics concerning the specific management problems of international water resources.