



5. STUDIES AND DECLARATIONS MADE BY INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS

5.1 INSTITUTE OF INTERNATIONAL LAW

5.1.1. International Regulation on River Navigation^[138] - 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 régime as the rivers whose tributaries they are, in conformity with the agreement unclouded 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.

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 buoying, 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.

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.

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.

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^[139] - 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 utilization 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;
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^[140] - 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.

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.

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 its 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.

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^[141] - 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 watershed 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.

Article V

The works or uses referred to in the above-mentioned 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 above-mentioned 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 ^{[142],[143]} - 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.

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 goodfaith 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 ultrahazardous 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 efforts 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;
- (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^[144] - 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 effect 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 utilization of the water by another State, must first

consult with the other State. In case agreement is not reached through much 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.

5.2.2 Resolution on the Use on the Waters of International Rivers^[145] - 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.^[146]

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 amount 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 co-riparian 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

Agreed Recommendations

1. Co-riparian States should refrain from unilateral acts or omissions that affect adversely the legal rights of a co-riparian State in the drainage basin so long as such co-riparian State is willing

to resolve differences as to their legal 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 procedures (other than consultation) set out in the Charter of the United Nations and the procedures envisaged in Article 33 thereof.

2. The action of the United Nations and its specialized agencies looking towards the assembling, exchange and dissemination 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 dissemination of legal information.

3. Co-riparian States should make available to the appropriate agencies of the United Nations and to one another hydrological, meteorological and economic 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 competence 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 differences 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, demographic and economic 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-riparian should take immediate action to prevent further pollution and should study and put into effect all practicable means of reducing to a least harmful degree present uses which lead to pollution.

9. It is desirable that there be further study of the hydrological engineering, economic and legal matters bearing on the prospective operation of the existing and desired 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 this subject, and it should be considered how, and to what extent, the work can be carried further in harmony 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 the Non-Navigational Uses^[147] - 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.

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 execution.

5.2.4 Recommendation on Pollution Control^[148] - 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 basin, preliminary studies should be made by the appropriate agencies dealing with the control and abatement of water pollution.

5.2.5 The Helsinki Rules

5.2.5.1 The Helsinki Rules on the Uses of the Waters of International Rivers^[149] - Helsinki, 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

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 climate affecting the basin;

(d) the past utilization 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;

(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 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 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

(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.

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^[150]

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.

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 régime 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.

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 each 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 régime 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 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 régime 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.

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 XXIV

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.

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.

5.2.5.2 Articles on Flood Control^[151] - 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.
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 watercourses 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.

5.2.5.3 Articles on Marine Pollution of Continental Origin^[152] - New York, 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;

(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.

5.2.5.4 Articles on the Maintenance and Improvement of Naturally Navigable Waterways Separating or Traversing Several States^[153] - New Delhi, 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.

5.2.5.5 Resolution on the Protection of Water Resources and Water Installations in Times of Armed Conflict^[154] - 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 Articles 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 Articles 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.

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 each 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 dependent 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.

5.2.5.6 Resolution on International Water Resources Administration^[155] - Madrid, 1976

Article 1

As used in this Chapter, the term “international water resources administration” refers to any form of institutional or other arrangements 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 utilisation 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.

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 decision-

making 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 Members 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. 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;

(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;
- (b) 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.

5.2.5.7 Regulation of the Flow of Water of International Watercourses^[156] - Belgrade, 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 participate in the regulation.

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.

5.2.5.8 Articles on the Relationship between Water, Other Natural Resources and the Environment^[157] - Belgrade, 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.

5.2.5.9 Rules on the Water Pollution in an International Drainage Basin^[158] - Montreal, 1982

Article 1

Consistent with the Helsinki Rules on the equitable utilization of the waters on an international drainage basin, states shall ensure that activities conducted within their territory or under their control conform with the principles set forth in these Articles concerning water pollution in an international drainage basin. In particular, States shall:

- a) prevent new or increased water pollution that would cause substantial injury in the territory of another state;

b) take all reasonable measures to abate existing water pollution to such an extent that no substantial injury is caused in the territory of another state; and

c) attempt to further reduce any such water pollution to the lowest level that is practicable and reasonable under the circumstances.

Article 2

Notwithstanding the provision of Article 1, states shall not discharge or permit the discharge of substances generally considered to be highly dangerous into the waters of an international drainage basin.

Article 3

In order to give effect to Articles 1 and 2 above, states shall enact all necessary laws and regulations and adopt efficient and adequate administrative measures and judicial procedures for the enforcement of these laws and regulations.

Article 4

In order to give effect to the provisions of these Articles, states shall cooperate with the other states concerned.

Article 5

Basin states shall:

(a) inform the other states concerned regularly of all relevant and reasonably available data, both qualitative and quantitative, on the pollution of waters of the basin, its causes, its nature, the damage resulting from it, and the preventive procedures;

(b) notify the other states concerned in due time of any activities envisaged in their own territories that may involve a significant threat of, or increase in, water pollution in the territories of those other states; and

(c) promptly inform states that might be affected, of any sudden change of circumstances that may cause or increase water pollution in the territories of those other states.

Article 6

Basin states shall consult one another on actual or potential problems of water pollution in the drainage basin so as to reach, by methods of their own choice, a solution consistent with their rights and duties under international law. This consultation, however, shall not unreasonably delay the implementation of plans that are the subject of the consultation.

Article 7

In order to ensure an effective system of prevention and abatement of water pollution of an international drainage basin, basin states should set up appropriate international administrative

machinery for the entire basin. In any event, they should:

- (a) coordinate or pool their scientific and technical research programmes to combat water pollution;
- (b) establish harmonized, coordinated, or unified networks for permanent observation and pollution control; and
- (c) establish jointly water quality objectives and standards for the whole or part of the basin.

Article 8

States should provide remedies for persons who are or may be adversely affected by water pollution in an international drainage basin. In particular, states should, on a non-discriminatory basis, grant these persons access to the judicial and administrative agencies of the state in whose territory the pollution originates, and should provide, by agreement or otherwise, for such matters as the jurisdiction of courts, the applicable law, and the enforcement of judgments.

Article 9

In the case of a breach of a state's international obligations relating to water pollution in an international drainage basin, that state shall cease the wrongful conduct and shall pay compensation for the injury resulting therefrom.

Article 10

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 complaining state with a view of reaching a solution that is equitable under the circumstances.

Article 11

In the case of a dispute concerning water pollution in an international drainage basin, Articles XXXI to XXXVII of the Helsinki Rules shall, as far as possible, be applicable.

5.2.5.10 Rules on International Groundwaters^[159] - Seoul, 1986

Article 1

The waters of international aquifers^[160]

The waters of an aquifer that is intersected by the boundary between two or more States are international groundwaters and such an aquifer with its waters forms an international basin or part thereof. Those States are basin States within the meaning of the Helsinki Rules whether or not the aquifer and its waters form with surface waters part of a hydraulic system flowing into a common terminus.

Article 2

Hydraulic interdependence

1. An aquifer that contributes water to, or receives water from, surface waters of an international

basin constitutes part of that international basin for the purposes of the Helsinki Rules.

2. An aquifer intersected by the boundary between two or more States that does not contribute water to, or receive water from, surface waters of an international drainage basin constitutes an international drainage basin for the purpose of the Helsinki Rules.

3. Basin States, in exercising their rights and performing their duties under international law, shall take into account any interdependence of the groundwater and other waters, including any interconnections between aquifers, and any leaching into aquifers caused by activities in areas under their jurisdiction.

Article 3

Protection of groundwater

1. Basin States shall prevent or abate the pollution of international groundwaters in accordance with international law applicable to existing, new, increased and highly dangerous pollution. Special consideration shall be given to the long-term effects of the pollution of groundwater.

2. Basin States shall consult and exchange relevant available information and data at the request of any one of them:

(a) for the purpose of preserving the groundwaters of the basin from degradation and protecting from impairment the geologic structure of the aquifers, including recharge areas;

(b) for the purpose of considering joint or parallel quality standards and environmental protection measures applicable to international groundwaters and their aquifers.

3. Basin States shall co-operate, at the request of any one of them, for the purpose of collecting and analyzing additional needed information and data pertinent to the international groundwaters or their aquifers.

Article 4

Groundwater management and surface waters

Basin States should consider the integrated management, including conjunctive use with surface waters, of their international groundwaters at the request of any one of them.

5.2.5.11 Complementary Rules Applicable to International Water Resources^[161] - Seoul, 1986

Article I

Substantial injury

A basin State shall refrain from and prevent acts or omissions within its territory that will cause substantial injury to any co-basin State, provided that the application of the principle of equitable utilization as set forth in Article IV of the Helsinki Rules does not justify an exception in a particular case. Such an exception shall be determined in accordance with Article V of the Helsinki Rules.

Article II

Measures within the territory of other basin States

If an undertaking, to be executed by a basin State, requires works or installations within the territory of a co-basin State, or the utilization of water resources in that territory, all questions connected with these measures are to be determined by agreement. The States concerned shall use their best endeavours to reach a just and reasonable agreement in accordance with the principle of equitable utilization.

Article III

Notification and objection

1. When a basin State proposes to undertake, or to permit the undertaking of, a project that may substantially affect the interests of any co-basin State, it shall give such State or States notice of the project. The notice shall include information, data and specifications adequate for assessment of the effects of the project.
2. After having received the notice required by paragraph 1, a basin State shall have a reasonable period of time, which shall be not less than six months, to evaluate the project and to communicate its reasoned objection to the proposing State. During that period the proposing State shall not proceed with the project.
3. If a basin State does not object to the project within the time permitted under paragraph 2, the proposing State may proceed with the project in accordance with the notice.
4. If a basin State objects to the project, the States concerned shall make every effort expeditiously to settle the matter consistent with the procedures set forth in Chapter 6 of the Helsinki Rules. The proposing State shall not proceed with the project while these efforts are continuing provided that they are not unduly protracted. If these efforts become unduly protracted, or an objecting State has refused to have resort to third party procedures for settlement of the remaining differences, the proposing State may, on its own responsibility, proceed with the project in accordance with the notice.
5. The notice and other communications referred to in this Article shall be transmitted through appropriate official channels unless otherwise agreed.

5.2.5.12 Rules on Cross-Media Pollution^[162] - Buenos Aires, 1994

Article 1

Consistent with the Helsinki Rules and the rules on international water resources subsequently adopted by the International Law Association, States, in taking measures to prevent, reduce, or control water pollution in an international drainage basin, shall refrain from transferring, or allowing the transfer of, such pollution to land, air or other natural resources in such a way as to cause substantial injury beyond their territory.

Article 2

A State, individually or jointly with co-basin States, shall insofar as technically and economically feasible, manage the waters of an international drainage basin within their jurisdiction so that waste, pollutants and hazardous substances are handled, treated, and disposed of in the manner

which produces the least transboundary harm.

Article 3

States should co-operate to achieve integrated management of water and related resources, including prior assessment of ecological impacts.

5.2.5.13 Articles on Cross-Media Pollution Resulting from the Use of the Waters of an International Drainage Basin^[163] - Helsinki, 1996

Article 1