The Helsinki Rules*

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.

Comment
GENERAL

Under international law States may enter into agreements with respect to any matter unless in conflict with basic standards of international conduct accepted by the world community. Of course, this limitation would equally apply to the establishment of a binding custom among States. Thus, States may alter among themselves by agreement or binding custom the applicability of rules of international law so long as there is no conflict with these basic standards.

These principles of agreement and custom apply to the field of international rivers and international drainage basins.

Illustrations:

(1) States A and B conclude an international agreement whereby they terminate the immunity of the diplomatic premises of their missions in the territory of the other. This agreement is valid under the rule stated in this article although at variance with a rule of international law.

(2) States A and B conclude an international agreement whereby they will support acts of piracy to be committed by their nationals against the vessels of other States. This

*The Fifty-second ILA Conference held in Helsinki, 1966, adopted following:

RESOLUTION

The 52nd Conference of the International Law Association held in Helsinki in August, 1966,

Having received the Report of the Committee on the Uses of the Waters of International Rivers,

***1. Approves* the Articles on the Uses of the Waters of International Rivers set forth in that Report;**
***2. Resolves* that these rules shall be known as the Helsinki Rules on the Uses of Waters of International Rivers; ...**

- ILA, REPORT OF THE FIFTY-SECOND CONFERENCE, Helsinki, 1966, p. 477. The Helsinki Rules and the commentaries are given here as they have been published in the ILA publication HELSINKI RULES ON THE USES OF THE WATERS OF INTERNATIONAL RIVERS, London, 1967, at 7-55.

agreement is invalid because it conflicts with basic standards of international conduct accepted by the world community.

Rules of international law apply to relations among States involving international rivers or international drainage basins in the same manner as they apply to all other areas of interstate relationship.

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.

Comment

GENERAL

Historically, the concern regarding use of an international river was almost completely for navigation, and there was little necessity for dealing with any portion of an international drainage basin other than the navigable channel of the stream.

With the relatively recent multi-use development of international rivers, the concern is no longer limited to the navigable portion of the international river, but rather encompasses all waters included in the entire system comprising the international drainage basin.

The drainage basin is an indivisible hydrologic unit, which requires comprehensive consideration in order to effect maximum utilization and development of any portion of its waters. This conclusion is particularly significant when it is recognized that a State, although not riparian to the principal stream of the basin, may nevertheless supply substantial quantities of water to that stream; such a State thus is in a position to interfere with the supply of water through action with respect to the water flowing within its own territory.

Therefore, in order to accommodate potential or existing conflicts in instances of multi-use development and to provide the optimum rational development of a common resource for the benefit of each State in whose territory a portion of the system lies, the drainage basin approach has become a necessity.

BASIN ELEMENTS

An international drainage basin is the entire area, known as the watershed, that contributes water, both surface and underground, to the principal river, stream or lake or other common terminus.

Due to certain geological features, underground waters may occasionally flow in a direction different from, or have an outlet different from, that of the surface waters of the same area.

Furthermore, in rare instances underground waters appear to form indistinct underground fields without ascertainable limits.

The underground waters constituting a part of the drainage basin described in this article are those that contribute to its principal river, a stream or lake or other common terminus.

Article III

A "basin State" is a state the territory of which includes a portion of an international drainage basin.

Comment
GENERAL

Traditionally, those States territorially concerned with an international drainage basin have been referred to as "riparian", "co-riparian", "upper riparian", "lower riparian". These terms are based upon the view that the territory of the State so described touches a river flowing on the surface of the drainage basin.

Recognition of the fact that underground waters may flow from a State without reaching the surface in its territory into the territory of other States in an international drainage basin where they contribute substantially to the surface flow, demonstrates that the terms based upon the word "riparian" are inadequate to describe all States included within the international drainage basin.

These chapters therefore adopt the term "basin State" as a comprehensive one to include all States whose territories contribute waters to the international drainage basin, whether or not "riparian".

Illustration:
The International River Meander flows on the surface through States A, B, and C. An underground spring in State D contributes water to an underground stream that flows into the Meander in the territory of B. All of these States are basin States although only A, B, and C are riparian States.

Chapter 2
Equitable Utilization of the Waters of an International Drainage Basin

Article IV

Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin.

Comment
GENERAL

This Article reflects the key principle of international law in this area that every basin State in an international drainage basin has the right to the reasonable use of the waters of the drainage basin. It rejects the unlimited sovereignty position, exemplified by the "Harmon Doctrine", which has been cited as supporting the proposition that a State has the unqualified right to utilize and dispose of the waters of an international river flowing through its territory; such a position imports its logical corollary, that a State has no right to demand continued flow from co-basin States.

The Harmon Doctrine has never had a wide following among States and has been rejected by virtually all States, which have had occasion to speak out on the point. It is noteworthy that, in the recent international rivers dispute between Bolivia and Chile over the Lauca River, Chile, the upper basin State, despite the heat of the controversy, did not assert the Harmon Doctrine in an attempt to justify its conduct; on the contrary it recognized that Bolivia has certain rights in the waters.[1] Similarly in the Jordan Basin dispute between Israel and certain Arab States both sides have adhered to the position that each is entitled to a reasonable share of the basin waters.[2]

This Article recognizes that each basin State has rights equal in kind and correlative with those of each co-basin State. Of course, equal and correlative rights of use among the co-basin States does not mean that each such State will receive an identical share in the uses of waters. Those will depend upon the weighing of factors considered in Article V of this Chapter.

A use of a basin State must take into consideration the economic and social needs of its co-basin States for use of the waters, and *vice-versa.* This consideration may result in one co-basin State receiving the right to use water in quantitatively greater amounts than its neighbours in the basin. The idea of equitable sharing is to provide the maximum benefit to each basin State from the uses of the waters with the minimum detriment to each.

BENEFICIAL USE

To be worthy of protection a use must be "beneficial", that is to say, it must be economically or socially valuable, as opposed, for example, to a diversion of waters by one State merely for the purpose of harassing another.

A "beneficial use" need not be the most productive use to which the water may be put, nor need it utilize the most efficient methods known in order to avoid waste and insure maximum utilization. As to the former, to provide otherwise would dislocate numerous productive and, indeed, essential portions of national economies; the latter, while a patently imperfect solution, reflects the financial limitations of many States; in its application, the present rule is not designed to foster waste but to hold States to a duty of efficiency which is commensurate with their financial resources. Of course, the ability of a State to obtain international financing will be considered in this context. Thus, State A, an economically advanced and prosperous State which utilizes the inundation method of irrigation, might be required to develop a more efficient and less wasteful system forthwith, while State B, an underdeveloped State using the same method might be permitted additional time to obtain the means to make the required improvements.

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;

[1] See note from Bolivian Ambassador to the Chairman of the Council of the O.A.S., OEA/Ser. B/VI, April 15th, 1962.
[2] 31 Dept. State Bull. 132 (1954); see U.S. Security Council Off. Rec., Supp. January-March, 1962, at 87-88 (S/5084) (1962).

(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.

Comment
GENERAL

This Article provides the express, but flexible guidelines essential to insuring the protection of the "equal right" of all basin States to share the waters. Under the rules set forth "all the relevant factors" must be considered. An exhaustive list of factors cannot readily be compiled, for there would likely be others applicable to particular cases.

This Article states some of the factors to be considered in determining what is a reasonable and equitable share.

Stated somewhat more generally, the factor-analysis approach seeks primarily to determine whether:

(i) the various uses are compatible;

(ii) any of the uses is essential to human life;

(iii) the uses are socially and economically valuable;

(iv) other resources are available;

(v) any of the uses is "existing" within the meaning of Article VIII;

(vi) it is feasible to modify competing uses in order to accommodate all to some degree;

(vii) financial contributions by one or more of the interested basin States for the construction of works could result in the accommodation of competing uses;

(viii) the burden could be adjusted by the payment of compensation to one or more of the co-basin States; and

(ix) overall efficiency of water utilization could be improved in order to increase the amount of available water.

In short, no factor has a fixed weight nor will all factors be relevant in all cases. Each factor is given such a weight as it merits relative to all the other factors. And no factor

occupies a position of preeminence *per se* with respect to any other factor. Further, to be relevant, a factor must aid in the determination or satisfaction of the social and economic needs of the co-basin states.

By way of example, suppose that State A, a lower co-basin State, has, for many years, used the waters of an international river for irrigation purposes. State B upstream now wishes to utilize the waters for hydroelectric power production. The uses for hydroelectric power and irrigation purposes are in partial conflict because the storage period for the hydroelectric use overlaps the growing season. Neither State uses, or wishes to use, the water for any other purpose at this point in time. State A, while having made substantial economic progress and enjoying prosperity, continues, as it always has, to use the inundation method of irrigation. A study of the basin indicates that hydro-electric use would be more valuable than irrigation and the resulting dam would permit the introduction of conservation measures through the control of seasonal flooding, thus providing incidental benefit to all users. Study indicates that change to modern agricultural irrigation coupled with flow control afforded by the dam would permit, after some period of adjustment, reasonable agricultural productivity in State A, although probably less than that prevailing before. Moreover, while at one time several million people in State A depended upon the agricultural products produced in the basin area for survival, there are now alternative sources for obtaining food, at approximately the same cost, although not sufficient to satisfy fully all needs. A recent geological survey indicates the presence of substantial underground waters in the territory of State A. The contemplated uses in State B would benefit a new community of several hundred thousand people. Power would be obtained from other resources but at greater cost. On this facts the following factors are relevant to a determination of an equitable sharing: an existing reasonable use; dependence upon the waters; population; geographic; climatic and weather conditions; the existence of alternative sources of food supply; inefficient utilization; and the financial status of the respective co-basin states.

An existing reasonable use is entitled to significant weight as a factor and, as indicated in Article V, consideration must be given to protecting it. However, it is but one factor. In the foregoing illustration, there are other important factors: irrigation is not the more valuable of the competing uses in this instance; there are, moreover, alternative sources of food available; the availability of sources of underground water indicate that the need for water by State A may be satisfied from them, while State A has nevertheless continued to draw off the same amount of water from the international river utilizing an outmoded and wasteful process; the economic climate in State A favors growth. As regards State B, a key factor is that there are alternative sources of power.

A careful analysis shows that, despite the usual desirability of protecting existing reasonable uses, the competing factors indicate that some modification of the existing use is called for. The existence of alternative sources of agricultural products, the conservation benefits to the co-basin States, the employment of a wasteful and antiquated method of utilization and its potential for replacement by a less wasteful method within the financial ability of State A and the potential value of the proposed use—all dictate modification and accommodation.

Armed with this information, it may be possible to reconcile the conflicting uses. For example, reduction in appropriation for irrigation to the extent of the availability of usable water from the underground sources, or the abandonment of inundation in favor of a more efficient method, or the utilization of alternative sources of food supply (to the extent that it can reasonably do so) or any combination of these may be required of State A. On the other hand, State B may be required to bear some of the cost necessary to develop a modem irrigation system in State A, or in obtaining alternative food or water

supplies for State A. If State A were required to abandon any portion of a permanent installation, some compensation by State B might be appropriate.

The employment of anyone or some combination of the above measures may suffice to reconcile the conflict. If no other solution can be found, however, one of the uses may necessarily have to prevail to the impairment of the other use; the amount and kind of compensation, if any, to the State deprived of its use would then be determined. Irrigation, although an existing use, may nevertheless be required to give way since the weight of the factors favours the hydroelectric use. Under these facts, State B would, in all likelihood, be required to pay State A in part for discontinuance or impairment of the use.

There are alternative sources of electricity available to State B, but at a higher cost. State A may be required to compensate State B for all or a part of the cost differential, if the use of the waters for the production of power is precluded or limited.

This illustration shows how the several factors relevant to the particular case are to be considered and how the principle of equitable utilization is applied in order to achieve a fair and just settlement.

Article VI

A use or category of uses is not entitled to any inherent preference over any other use or category of uses.

Comment
PREFERENTIAL USE

Historically, navigation was preferred over other uses of water, irrespective of the later needs of the particular drainage basin involved. In the twenty-five years, however, the technological revolution and population explosion, which have led to the rapid growth of non-navigational uses have resulted in the loss of the former pre-eminence accorded navigational uses. Today, neither navigation nor any other use enjoys such a preference. A drainage basin must be examined on an individual basis and a determination made as to which uses are most important in that basin or, in appropriate cases, in portions of the basin. It has been said that domestic use has succeeded navigation as a preferential use. However, substantial authority supporting the proposition has not been found. Moreover, no artificial preference is necessary, and, indeed, the granting of such a preference would be inconsistent with a principle of equitable utilization, which relies on an inductive process of determination. Granting domestic uses an artificial preference can foster the very injustice in the uses of the waters of the basin, which its proponents fear will arise by its absence. The purpose in insuring domestic uses a preference is to make certain that these uses—the basis of all life—are assured a first charge on the waters. Here again, however, the proposition may be inappropriate in a particular basin, where the principle of equitable utilization is to be applied. State B, for example, uses the waters of an international drainage basin for domestic purposes. State A, the upper riparian, uses the water for important industrial purposes, which result in the rising of the temperature of the water so as to make it unsuitable for drinking. An investigation discloses that only a relative handful of State B's inhabitants use the water for domestic purposes; that another equally convenient source of adequate quantities of water is available a few miles away; that the State A is prepared to pay any costs involved in making the changeover. Is State B to be barred from its use merely because the conflicting use of State B happens to be a domestic use? A rule of artificial preference would dictate such a result, although manifestly unjust.

On the other hand, if a domestic use is indispensable—since it is, in fact, the basis of life—it would not have difficulty in prevailing on the merits against other uses in an evaluation of the drainage basin.

Article VII

A basin State may not be denied the present reasonable use of the waters of an international drainage basin to reserve for a co-basin State a future use of such waters.

Comment

This Article postulates the flexibility and future readjustment implicit in the principle of equitable utilization.

Here, it is necessary to make a choice between two conflicting principles with respect to the equitable sharing of water. The first is that every State whose territory lies within an international drainage basin ought to be assured the use of certain of the waters by reservation, even where such waters cannot presently be utilized. The second is that no water should be reserved for a future use since to do so might interfere with current uses of the water or uses, which come into being from time to time.

The former principle may have a visceral appeal because of what appears to be its fairness; also there is a danger that the State which commences its economic development later than its co-basin States may find such development inhibited by the existing uses of these co-basin States.[3] On balance, however, the limitation of protection to present uses is the more reasonable approach.

First, it is bad policy to say that State X is entitled to reserve certain waters when it has no present need for them and could conceivably make use of such waters, if at all, only at some time in the future. Reservation of water for a State intending future utilization could not be accomplished with any meaningful degree of certainty in the absence of detailed plans for future uses. Thus, for example, if a State were to demand and receive a fixed allocation, it might later find the amount to be inadequate, on the one hand or excessive and thus wasteful, on the other hand. Second, in a world where water is at a premium and shortages are widespread, it is unjust and wasteful to preclude a State from utilizing waters for a beneficial use where such waters would otherwise flow unused into the sea.

On the other hand, it is equally unfair to give the first user a vested right in perpetuity in all the waters, which it demonstrates it can presently use. Such a policy would in all likelihood lead to a "use race", resulting in haphazard planning and inefficiency. In addition, such a law might be so unjust and onerous that it would be ignored by States.

This Article is intended to insure that no current user's needs will go unsatisfied because waters have been reserved for uncertain future use by another State. When the later is ready to use the waters or to increase an existing use, then the entire question of equitable utilization of the waters is opened up for review under Article V and the rights and needs of the various States will be considered.

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

[3] See Article VIII.

conclusion that it be modified or terminated so as to accommodate a competing incompatible use.

2. **(a) A use that is in fact operational is deemed to have been an existing use from the time of the initiation of construction directly related to the use or, where such construction is not required the undertaking of comparable acts of actual implementation.**

   (b) Such a use continues to be an existing use until such time as it is discontinued with the intention that it be abandoned.

3. **A use will not be deemed an existing use if at the time of becoming operational it is incompatible with an already existing reasonable use.**

Comment

PROTECTION OF EXISTTNG USES

Some authorities take the position that, upon the initiation of a use, the user gains a vested right in the use and cannot be deprived of it except in rare cases and with full compensation. Other authorities take the contrary position that the fact that a use is an existing use is of no weight whatsoever in determining what is an equitable utilization. Neither approach seems persuasive because neither comes to grips with realities, including the dynamic character of water development by States and changing technology. The former freezes river development according to the requirement of the earlier user. Indeed, it is conceivable that, if a State moves quickly enough, it could appropriate all of the waters of a basin to the complete exclusion of its co-basin States. Such a result is hardly consistent with their equal status as co-basin States.[4]

On the other hand, failure to give any weight to existing uses can only serve to inhibit river development. A State is unlikely to invest large sums of money in the construction of a dam if it has no assurances of being afforded some legal protection for the use over an extended period of time. This is especially true since no State could possibly guess what is likely to constitute an equitable utilization at some future time when its prior appropriation is placed in issue.

The rule stated in this Article reflects the current international attitude in this matter—a middle ground between the two extremes. It gives protection to an existing use but only so long as the factors justifying its continued existence are not outweighed by factors showing the desirability of its modification or termination. A modification or termination, to be consistent with equitable utilization, may, in a particular case, require compensation to the user. There may also be instances where an existing use will be "phased out" over a period of time in order to give the user opportunity to develop alternative sources of water.

CREATION OF EXISTING USE

Paragraph 2(a) of this Article states that an existing use comes into being when its implementation begins. Implementation begins when actual construction or comparable acts of implementation commence. However, in order to avoid the danger of a State initiating taken construction in order to benefit from the provisions of this Article, a use is considered to be in existence only after it is in fact operational and only to the extent of the water actually appropriated in connection with such use. When the use does become operational, the use is deemed existing from the date when construction commenced or when comparable acts were undertaken. If, after the implementation is begun, due

[4] See Comment to Article I.

diligence is not exercised to bring it into operation, when it does become operational, its status as an existing use will date only from the time that due diligence was exercised.

The rule stated in Paragraph 3 of this Article precludes the status of existing use to a use which, when it becomes operational, conflicts with another use already in operation. If the use conflicts with the already existing use only in part, it is denied that status only to the extent of the conflict. Thus, a use may be an existing use with respect to a portion of the water, which it appropriates but not with respect to the remainder.

TERMINATION OF EXISTING USE

An existing use will lose its status as such through its abandonment, which results from the discontinuance of the use coupled with the intention to relinquish it. This intention may be expressed or it may be implied from the relevant conduct. Thus, the mere failure to use the water for a period of time will not necessarily constitute abandonment although it may be evidence of an intention to abandon.

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.

Comment

GENERAL

There are at least two approaches that could be taken in formulating a meaning or definition of water pollution: the first would deal only with the physical alteration in the natural quality or content of the water; the other, in addition, would deal with the legal effect of the alterations. Here the first approach is adopted because a definition of a term should be limited to a description rather than expanded to include legal incidents.

The concern is with changes that render the water either unusable or less usable for a beneficial use or other changes that are of a deleterious nature. The concern is not with changes that improve the content or quality of water.

Finally, as with the consideration of other topics in this study, the rules and principles are applicable to the waters of an international drainage basin. For a definition of a drainage basin, see Article II.

Currently, the most serious types of pollution are those incidental to the use of waters in diluting and carrying off sewage and industrial waste. Municipal sewage pollution presents serious dangers from the public standpoint, and the increasing urbanization of people, a global phenomenon, aggravates the problem of sewage disposal in almost all countries. This type of pollution creates the danger of transmission of intestinal diseases.[5]

Industrial waste is a serious problem in many countries where the rate of industrial growth has outrun techniques of waste disposal or interest in the problem.[6] Such wastes may endanger the health of subsequent consumers as well as render the water distasteful

[5] World Health Organization, *International Standards for Drinking Water* 14 (Geneva, 1958).
[6] See Hearings before the Committee on Public Works, H.R. 4036, 87th Cong., 1st Sess., p 323 (161) and Report of the International Joint Commission (U.S.—Canada) on the Pollution of Boundary Waters 17 (1951).

for drinking or recreational purposes.[7] By comparison with municipal sewage, the quantity of industrial waste is multiplying at a rapid rate.[8] Additionally, the costs of reducing or eliminating pollution from industrial uses are staggering and in many instances would price a product out of the market.

In addition to these major sources of pollution, there are other special problems, somewhat localized, such as, *e.g.,* timber floating.[9] New sources of pollution arise almost daily as new industries develop and older industries expand and discharge greater quantities of wastes into overloaded streams. The chemical industry has created new pollution problems in connection with new products. For example, household detergents, agricultural insecticides carried into stream by surface runoff and radio-active wastes pose present or potential problems. Unfortunately, in the case of many such new pollutants, the ultimate effects are not known.

Liquids, such as oil, gas, other petroleum products and coal slurry, when transported by pipe-line, may suddenly escape or seep therefrom and pollute the waters of the drainage basin where the escape or seepage occurs.

Because the nature and effect of pollutants are in such a state of change, it is advisable to adopt a definition of pollution comprehending any detrimental alteration in the natural composition or quality of the water irrespective of its effects on subsequent users. The relationship between pollution and its injury to, or adverse effects upon, other uses will be considered in connection with the rules of law with respect to pollution.[10]

HUMAN CONDUCT

As used in this Article, the term "human conduct" is intended to differentiate changes, within this context, from those resulting from purely natural occurrences of which international law takes no cognizance. Of course, the word "human conduct" refers to failure to act as well as to affirmative action.

Illustrations:

1. X, a cattle rancher in State A, waters his cattle daily in the waters of international drainage basin Pure, with the result that the wastes cause a detrimental change in the composition and quality of the water. Such conduct is pollution within the meaning of this Article.

2. Underground percolation of water in State A washes minerals lying in their natural state into the waters of international drainage basin Murky, causing a detrimental change in the composition and quality of the water. Such a change is not pollution within the meaning of this Article.

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 exiting water pollution in an international drainage basin which would cause substantial injury in the territory of a co-basin State; and

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[7] World Health Organization, *International Standards for Drinking Water* 14 (Geneva 1958); Report of the International Joint Commission (U.S.—Canada) on the Pollution of Boundary Waters 17 (1951).
[8] See: Report of I.J.C., *supra*
[9] See Report on Preliminary Investigation to the International Joint Comm. (U.S.—Canada) by International St. Croix River Engineering Board re pollution as a result of log driving, Appendix (vol. 2) F-4, and wastes incidental to inland waters navigation. See I.J.C. Report on Pollution of Boundary Waters 65-66 (1951).
[10] See Article X.

(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.

Comment
GENERAL

International law imposes general limitations upon action that one State may take, which would cause injury in the territory of another State. In the *Corfu Channel Case,* the International Court of Justice stated that international law obliges every State "not to allow knowingly its territory to be used for acts contrary to the rights of other States".[11] The Secretary General of the United Nations has expressed the view that "There has been general recognition of the rule that a State must not permit the use of its territory for purposes injurious to the interest of other States in a manner contrary to international law".[12] This statement is no more then a reflection of the principle *sic utere tuo ut alienum non laedas*—"one must so use his own as not to do injury to another". The same general thread of principle runs throughout the range of State-to-State relationships.

As to the law of water pollution, recently this general principle was favorably refereed to in the *Lake Lanoux Arbitration* between France and Spain.[13] In discussing the division of waters of Lake Lanoux and possible bases of France's responsibility, the Tribunal stated: "It could have been argued that the works would bring about a definite pollution of the waters of the Canal or that the returned waters would have a chemical composition or a temperature or some other characteristic which could injure Spanish interests."

Although not involving pollution of water, the *Trail Smelter Arbitration* between the United States and Canada illustrates the general international principle upon which the rules of this article are based.[14] There, Canada was held responsible for the injury and damage resulting in the United States from fumes emitted from a smelter located in British Columbia and deposited over a large area of the State of Washington.

The Compromise for the arbitration directed the Tribunal to "apply the law and practice followed in dealing with cognate questions in the United States of America as well as international law and practice …"[15] However, the Tribunal did not find it necessary to make a choice between the law of the United States and international law, as the former was found to be "in conformity with the general rules of international law".[16] Thus the Tribunal concluded "that, under the principles of international law, as well as of the law of the United States, no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or to property of persons therein …"[17]

The Supreme Court of Italy has had occasion to state: "If this [State], in the exercise of its sovereign rights is in a position to establish any regime that it deems most appropriate over the watercourse, it cannot escape the international duty ... to avoid that, as a

[11] [1949] I.C.J. Rep. 4, 22.
[12] Survey of International Law 34 (U.N. Doc. A/CN.4/1 Rev. 1) (1949).
[13] 24 Int'l L. Rep. 101, 123 (1957).
[14] Decision of the Tribunal, March 11, 1941 (United States—Canada), 3 U.N. Rep. Int'l. Arb. Awards 1905 (1949), 35 Am. J. Int'l. L. 684 (1941).
[15] Art. IV, Convention for Settlement of Difficulties arising from Operation of Smelter, T.S. No. 893 (1935); 30 Am. J. Int'l. L. Supp. 164 (1936).
[16] 3 U.N. Rep. Int'l. Arb. Awards at 1963, 35 Am. J. Int'l. L. at 713.
[17] 3 U.N. Rep. Int'l. Arb. Awards at 1965, 35 Am. J. Int'l. L. at 716. See also *Missouri v. Illinois,* 200 U.S. 496 (1906); *New York v. New Jersey* 256 U.S. 296 (1921); *New Jersey v. City of New York,* 283 U.S. 476 (1931).

consequence of such a regime, other (co-riparian) States are deprived of the possibility of utilizing the watercourse for their own national needs."[18]

Water treaties often incorporate provisions dealing with the pollution of waters by the signatory States.[19] Agreements may be concluded and administrative machinery created specifically to deal with pollution."[20]

EQUITABLE UTILIZATION

The optimum goal of international drainage basin development is to accommodate the multiple and diverse uses of the co-basin States. The concept of equitable utilization of the waters of an international drainage basin has the purpose of promoting such an accommodation. Thus, uses of the waters by a basin State that cause pollution resulting in injury in a co-basin State must be considered from the overall perspective of what constitutes an equitable utilization.

Any use of water by a basin State, whether upper or lower, that denies an equitable sharing of uses by co-basin State conflicts with the community of interests of all basin States in obtaining maximum benefit from the common resource. Certainly, a diversion of water that denies a co-basin State an equitable share is in violation of international law. A use that causes pollution to the extent of depriving a co-basin State of an equitable share stands on the same basis. By parallel reasoning, a State that engages in a use or uses causing pollution is not required to take measures with respect to such pollution that would deprive it of equitable utilization.

The rules stated in this Article are not confined to cases of pollution that interfere with or deny an equitable sharing by a co-basin State, but may also apply to cases of pollution that cause other types of injury in such a State.

Cross-reference:
See comment (e) *infra.*

The rules stated in this Article place duty upon a basin State, consistent with that State's right to an equitable utilization, to take the specified measures respecting pollution of water. Thus, the international duty stated in this Article regarding abatement or the taking of reasonable measures is not an absolute one. This duty, therefore, does not apply to a State whose use of the waters is consistent with the equitable utilization of the drainage basin.[21]

The principle of equitable utilization of the waters of an international drainage basin may require, in a particular case, that the several co-basin states participate jointly in the financing of pollution control measures.

Cross-reference:
For a full discussion of the rules of equitable utilization, see Chapter 2.

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[18] *Société Énergie Électrique v. Compagnia Imprese Elettriche Liguri,* 64 Foro Italiano, I, 1036, 9 Ann. Dig. 120 (Italy, Court of Cassation, 1939).
[19] *E.g.,* Treaty on the Moselle between France, Germany and Luxemburg, Art. 55, German Fed. Rep. Bundesgesetzblatt, 1956, II, p. 1838; Treaty between United States and Canada on Boundary Waters, Art. 4, Jan. 11, 1909, 36 Stat. 2448, T.S. No. 548 (1910); Treaty between Belgium and Great Britain, Art. 3, Nov. 22, 1934, 190 L.N.T.S. 103 (1938); Convention between Baden Württenberg, Bavaria, Austria and Switzerland concerning the Protection of the Waters of Lake Constance, Oct. 10, 1960; Convention between France and Switzerland concerning the Protection of the Waters of Lake Geneva against Pollution, No. 16, 1962. See also Manner, Water Pollution in International Law, in Aspects of Water Pollution Control, W.H.O. (Public Health Papers), pp. 53, 68, Nov. 13, 1963; Florio, Nota sull'inquinamento delle acque non marittime nel diritto internazionale, 46 Riv. Diritto Internazionale 588 (1963); Lester, River Pollution in International Law, 57 Am. J. Int'l. L. 828 (1963).
[20] *Cf.* Accord concernant la Commission Internationale pour la protection du Rhin contre la pollution (Federal Republic of Germany, France, Luxembourg, Netherlands and Switzerland), Apri1 29, 1963, [1963] Tractatenblad van der Koninkrijk der Nederlanden, No. 104; The Indus Water Treaty (India and Pakistan) Art. 3(2), Sept. 19, 1960, 55 Am. J. Int'l. L. 797 (1961).
[21] See generally 2 E. Jiménez de Aréchaga, *Curso de Derecho lnternacional Público* 532-534 (1961).

SUBSTANTIAL INJURY

Pollution as that term is used in this Chapter may be the result of reasonable and otherwise lawful use of the waters of an international basin. For example, the normal process of irrigation for the reclamation of arid or semi-arid land usually causes an increase in the salinity of the downstream waters. Modern industrial processes of a very valuable and useful nature may result in the discharge of deleterious wastes that pollute the water. Frequently rivers are the most efficient means of sewage disposal, thereby causing pollution of waters. Thus, as pollution may be a by-product of an otherwise beneficial use of the waters of an international drainage basin, the rule of international law stated in this Article does not prohibit pollution *per se*.[22]

However, where the effect of the pollution is such that it is not consistent with the equitable utilization of the drainage basin and causes "substantial injury" in the territory of another State, the conduct causing the pollution gives rise to a duty, as stated in this Article, on the part of the State responsible for the pollution.

Not every injury is substantial. Generally, an injury is considered "substantial" if it materially interferes with or prevents a reasonable use of the water. On the other hand, to be "substantial" an injury in the territory of a State need not be connected with that State's use of the waters. For example, the pollution of water could result in "substantial injury" in the territory of another State by transmission, through the evaporative process, of organisms that cause disease.

CONDUCT FOR WHICH STATE RESPONSIBLE

As stated in this Article, under international law a State's duty may arise in varying factual contexts.

The rule stated in this Article engages the responsibility of a State to take action with respect to all pollution causing substantial injury in the territory of a co-basin State regardless of whether the pollution results from public activity of the State itself, within or outside its territory, or from conduct of private parties within its territory.

Illustrations:

1. An irrigation district, an agency of State A, initiates an extensive reclamation and agricultural irrigation project within its territory utilizing the waters of international drainage basin X, which flows into the territory of State B. As a result of the irrigation process, the salinity of international drainage basin X is increased to such an extent that it substantially injures agriculture in State B, where the waters of X are used for irrigation. State A is under a duty to prevent injury in State B if its irrigation district is inconsistent with the equitable utilization of drainage basin X.

2. The facts are the same as in Illustration 1, except that the irrigation project in State A is privately owned. State A is under a duty to prevent injury in State B.

Under the rule stated in this Article, a State is also responsible for its conduct occurring outside its territory causing substantial injury in the territory of a co-basin State. Thus, the criterion of State responsibility is its conduct and not the situs of that conduct.

Illustration:

[22] *Cf.* 2 *Jiménez de Aréchaga, Curso de Derecho Internacional Público,* 529-530 (1961); Fenwick, *International Law,* 363-365 (4th ed. 1965).

3. States A and B, co-basin States with C in an international drainage basin, establish between themselves a joint irrigation district whose storage reservoir is located wholly in the territory of A on the River Calm. Both A and B take water and agricultural products from the project. The irrigation process increases significantly the salt content of Calm before it flows into C where it interferes substantially with agricultural development. State B, as well as State A, is under a duty to prevent substantial injury in C.

DANGER TO HUMAN LIFE

If the activity or conduct causes pollution that endangers human life in another State, such activity or conduct would probably be deemed inconsistent with the principle of equitable utilization and the duty referred to in paragraph 1(b) of this Article "to take all reasonable measures" could become an absolute duty to abate the pollution.

Article XI

1. In the case of a violation of the rule stated in paragraph l(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.

Cross reference

As to the procedures for the settlement of any differences or problems relating to the equitable utilization of the waters of an international drainage basin, including pollution, see Chapter 6. These procedures include reference to a joint agency, mediation, conciliation and, finally, arbitration.

Caveat

The Committee takes no position as to whether a co-basin State which is injured by existing pollution of the waters of an international drainage basin may be entitled to compensation from the polluting State for past injury, which the co-basin State has suffered, and also for future injury, if the taking of reasonable measures by the polluting State fails to reduce the pollution to a point where it does not cause substantial injury in the territory of the co-basin State.

Comment

GENERAL

Where there has been an injury to a State because of a violation of international law, there is a resulting obligation of the offending State to make reparation in an appropriate manner so as to do justice under the circumstances.[23] Indeed, in cases before the International Court of Justice, the Statute provides that the Court has jurisdiction in a proper case to determine "the nature or extent of the reparation to be made for the breach of an international obligation".[24]

It is also well settled that a State incurs liability under international law when it permits or fails to act reasonably to prevent conduct within its territory which causes injury in the

[23] *Case Concerning the Factory at Chorzow,* P.C.I.J., Ser. A, No. 9, 21 (1927).
[24] Art. 36(2)d.

territory of another State.[25] The nature of the reparation varies, of course, according to the facts and circumstances of the particular case.

NEW OR INCREASED POLLUTION

Conduct resulting in new pollution or an increase in the level of pollution in violation of the rule stated in paragraph 1(a) of Article X of this Chapter requires nothing less than a restoration of the conditions enabling equitable utilization by the States concerned.

Illustration:

1. A and B, adjacent co-basin States, have both heretofore used the waters of the basin for drinking purposes. State A, the upper co-basin State, builds a number of slaughter houses along the banks of a river in the basin. The discharge of effluents into the waters of the basin makes the water in State B no longer suitable for drinking. State A is required to abate the pollution to such an extent that it no longer causes substantial injury in the territory of State B.

COMPENSATION FOR INJURY

The recognized manner of reparation for injury of a physical nature is pecuniary compensation, and its measure extends at least to damages for the actual loss.[26] One of the earliest reported cases dealt with the serious damage to Galatia and Phrygia when the Euphrates River flooded after the King of Kappadocia, Ariarathes, "wantonly blocked the outlet of the river Melanus" which then broke through its dam. Ariarathes was made to pay 300 Talents as damages by decision of the Roman authorities.[27]

There is a division of opinion among the authorities as to whether the measures of such damages includes consequential damages for loss of future business profits. The weight of the authority supports such an award if the loss of the future profits can be proved, and this is probably the better view.

On the other hand, it is well settled that the award should include a sum representing interest on the amount of the loss, either for the period of time between the injury and payment of the award or for such other period as the tribunal determines is appropriate in the circumstances.

EXISTING POLLUTION

The principle *sic utere tuo ...* requires as a minimum that co-basin States involved in a dispute regarding pollution of the waters consult and negotiate with one another and undertake such other measures as may be required to resolve the problem.

It must be recognized that there are many uses of waters of international drainage basins that have resulted in pollution causing varying degrees of injury in the territory of co-basin States. Such pollution may well interfere with an equitable sharing in the uses of the waters of the drainage basin. Thus, rational development of the basin would appear to indicate that, in the common interest of all, reasonable methods of pollution control should be implemented. A general rule of abatement might result in undue hardship. In some cases the detriment to the responsible State would be out of all proportion to the benefit to be derived by the injured State. [A member of the Committee suggested that application of the rules of this Article would result in economic discrimination by lower

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[25] *Corfu Channel Case,* [1949] I.C.J. Rep. 4, 22; *Trail Smelter Arbitration,* Decision of the Tribunal, March 11, 1941 (United States—Canada), 3 U.N. Rep. Int'l. Arb. Awards 1905 (1949); Dept. State Arb. Ser. 8, pp. 31-32; 35 Am. J. Int'l. L. 684 (1941). See also 1 Oppenheim, *International Law* 290-91, 365 (8th ed. Lauterpacht 1955).

[26] See *Case Concerning the Factory at Chorzow,* P.C.I.J., Ser. A, No. 17, pp. 31, 46-48 (1928); Whiteman, *Damages in International Law,* (1937-43); 1 Oppenheim, *International Law,* 352-54 (8th ed. Lauterpacht 1955); Eagleton, Measure of Damages in International Law, 39 Yale L.J. 52 (1929).

[27] Grotius, *De jure belli ac pacis* (Carnegie Endowment for International Peace trans. of 1646 ed., 1925) II, Chap. XVII, Sec. 12, p. 434. Grotius used this case to illustrate the rule that "the one who is liable for an act is at the same time liable for the consequences resulting from the force of the act". *Id.* at 433.

basin States against upper basin States in that the former might be permitted to carry out a use causing pollution, whereas the latter would be prohibited from doing so.] Accordingly, in such cases, the responsible State should, in good faith, take all reasonable measures to eliminate substantial injury in the territory of a co-basin State. Such measures include research and study of relevant technology, utilization of engineering and other techniques for reduction of pollution and financial expenditures as may be necessary. Of course, under certain circumstances, reasonable measures could involve abatement.

Illustration:

2. State A has for many years utilized the waters of an international drainage basin for the disposal of sewage causing repeated typhoid epidemics in the territory of co-basin State B. As a result of urbanization, the level of the pollution is greatly increased. State A is required to abate the increase and should take reasonable measures to reduce the prior pollution to such an extent that the substantial injury does not result.

If a State fails to take reasonable measures in compliance with paragraph 1(b) of Article X, then it should enter into negotiations with its co-basin States to reach an agreement which would enable the States involved to use the waters in accordance with the principle of equitable utilization.

OTHER FORMS OF RELIEF

International law empowers a court or other tribunal to apply general principles of justice in reaching a decision when more settled rules of international law are inadequate to resolve the dispute.[28] Thus, if a State fails to prevent substantial injury in another State that is caused by the former's water pollution, a court, if resorted to, may grant injunctive relief including an order to the offending State requiring it to take appropriate measures to prevent such injury.[29] There, Judge Hudson discusses the derivation of equitable powers of the Permanent Court from "the general principles of law recognized by civilized nations". In a case of pollution contrary to the provisions of paragraph 1 of Article II, it is obvious that the payment of monetary reparation may not afford a complete remedy to the injured State if the offending State continues its wrongful conduct. To permit a State to continue to cause injury to another State through such pollution of a drainage basin and merely to pay monetary damages periodically would have the same material consequences as a servitude on the territory of a co-basin State. For these reasons, in a case where the party States have agreed to refer the case to arbitration or adjudication, an injunction may be granted to the injured State to ensure effective relief to that State.

Direct authority in support of injunctive relief by international tribunals is limited to the *Trail Smelter* decision in which the Tribunal recommended a permanent régime for future operation of the smelter, as damage through pollution of the air currents was likely to occur at any future time without some such method of control. The Tribunal established a system of control to be followed unless modifications were dictated by new scientific findings.

On three occasions, the International Court of Justice and its predecessor have issued orders in the nature of temporary injunctions, indicating that this type of remedy is not

[28] *Cf.* Stat. I.C.J., Art. 38(c).
[29] *Cf. Diversion of Water from the River Meuse*, P.C.I.J., Ser. A/B, No. 70, pp. 4, 73, 76 (1937) (Hudson, J., concurring).

inappropriate in international law.[30] The International Court derives this specific power to "indicate ... provisional measures" from Art. 41 of the Statute.[31]

On fundamental principles of justice and the limited authority of international tribunals, injunctive relief as stated in this Article would appear appropriate in cases of pollution of a drainage basin.

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.**

Comment

Rivers and lakes are navigable when their physical characteristics including depth and width are adequate to permit passage of a vessel. Other rivers and lakes may be navigable in part only, and it is only to the navigable portions that the rules stated in this Chapter apply.

The "basin State" concept, employed elsewhere in these Chapters in connection with non-navigable uses, is not applicable to uses by non-riparian basin States for navigation because international law accords no rights to non-riparian basin States to use rivers or lakes for navigation.

Although the black-letter definition set forth in this Article makes no reference to canals, they are nevertheless not excluded if navigable.

For purposes of this Chapter, a tributary is considered as a separate river. If a tributary lies wholly within the territory of one State it is without the scope of the definition set out in this Article.

Thus, a tributary wholly within the territory of one State but constituting a part of an international drainage basin would be subject to the rules of equitable utilization, as stated in Chapter 2, and to those of pollution, as stated in Chapter 3, but would not be subject to the rules stated in this Chapter.

[30] *Anglo—Iranian Oil Co. Case*, [1951] I.J.C. Rep. 89, 93-94, 95; *The Electricity Company of Sofia and Bulgaria Case*, P.C.I.J. Ser. A/B, No. 79, pp. 194, 199 (1939); *Belgian—Chinese Case*, P.C.I.J., Ser. A, No. 8, pp. 6, 7-8 (1927)
[31] *Cf. Case Concerning The Polish Agrarian Reform and The German Minority*, P.C.I.J. Ser. A/B, No. 58, pp. 175, 177-82, 187-88 (1933) where, in the particular circumstances, the application was denied.

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.

Comment

EQUAL RIGHT

The principle set forth in this Article reflects the interpretation of international fluvial law adopted by the Permanent Court of International Justice in the *River Oder Case*.[32] There the Court stated:

> It may well be admitted, as the Polish Government contend, that the desire to provide the upstream States with the possibility of free access to the sea played a considerable part in the formation of the principle of freedom of navigation on so-called international rivers.
>
> But when consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one State, and the possibility of fulfilling the requirements of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the problem has been sought, not in the idea of a right of passage in favour of upstream States, but in that of a community of interest of riparian States. This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others.

The Court's statement in the respect to the "perfect equality" of the co-riparian States is but a specific application of the principle of equality of rights in equitable utilization. The principle of free navigation insures that each co-riparian State may utilize the entire navigable course of the river for transportation or communication without regard to territorial boundaries. However, this principle does not assure navigation any priority over conflicting non-navigational uses.

NON-RIPARIAN STATES

Although some have advocated the extension of the principle of freedom of navigation to non-riparian States, the present state of the applicable law has not gone that far. This is not to say that free navigation for all would not be desirable in a trade-oriented-world. In some parts of the world, particularly in Latin America, there was a 19th century movement to extend freedom of navigation to no-riparians.[33] The treatment of portions of the Rhine, Danube, Elbe and Oder Rivers as bodies of water open to navigation by all States is widely known.[34]

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:

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[32] P .C.I.J., Ser. A, No. 23, pp. 26-27 (1929).
[33] See Sosa-Rodriguez, Le droit fluvial international et les fleuves de 1'Amérique latine (1935).
[34] See 1 Oppenheim, *International Law* 466-71 (8th ed. Lauterpacht 1955).

(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 trans-shipment, 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,

Comment

While freedom of navigation includes the movement of vessels to and from the see, it is not limited to such movement. Not only does the rule of this Article apply to ships passing through a sector of the river, but it also extends to ships coming in or leaving a port. The Permanent Court of International Justice so held in its advisory opinion concerning the jurisdiction of the *European Commission of the Danube between Galatz and Braila*.[35] Moreover, the concept of navigation includes contact with appropriate economic institutions and with means of communication in the host State. In this context the Permanent Court has stated:

> According to the conception universally accepted, the freedom of navigation referred to by the Convention comprises freedom of movement for vessels, freedom to enter ports, and to make use of plant and docks, and to load and unload goods and to transport goods and passengers.

Continuing, the Court observed:

> From this point of view, freedom of navigation implies, as far as the business side of maritime or fluvial transport is concerned, freedom of commerce also. But it does not follow that in all other respects freedom of navigation entails and presupposes freedom of commerce.[36]

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.

Comment

The right of free navigation is subject to the right of the State to enact and enforce within its territory reasonable measures which are necessary to police effectively its territory. Similarly, customs, public health and precautions against diseases fall within this area of regulation. Such measures must be applied to all the co-riparian States on a basis of absolute equality and must not unreasonably impede freedom of navigation.

[35] P.C.I.J. Ser. B, No. 14, pp. 64, 65 (1927).
[36] *The Oscar Chinn Case*, P.C.I.J., Ser. A/B, No. 63, p. 83 (1934).

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.

Comment

This Article deals with the important matter of "cabotage". Originally the word "cabotage" was used only with regard to the navigation along the coast of a littoral State. Early in the 19th century it began to be used to describe the navigation on an international river from one port in a State to another port in the same State. This in no way involved the application of the rules of the law of the sea.

The confusion was increased by Article 1 of the Elbe Convention of 1821 which read:

> Die Schiffahrt auf dem Elbstrome soll von da an, wo dieser Fluss schiffbar wird, bis in die offene See, und umgekehrt aus der offenen See in Bezug auf den Handel völig frei sein. Jedoch bleibt die Schiffahrt von einem Uferstaate zum andern (Cabotage) auf dem ganzen Strome ausschliessend den Unterthanen derselben vorbehalten.[37]

"Cabotage" in this sense, has been called "grand cabotage", whereas the "cabotage" on part of an international river within one State has been referred to as "petit cabotage". It is, at any rate, preferable not to use the expression "grand cabotage", and to use the word "cabotage" instead of "petit cabotage".

Article XVII

A riparian State may grant rights of navigation to non-riparian States on rivers or lakes within its territory.

Comment

SCOPE OF THE RIGHT

The rule stated in this Article is an expression of the desirability of freedom of navigation. The grant of access by a riparian to a non-riparian State does not require the approval of co-basin or even co-riparian States. On the other hand, the exercise of such access may not interfere with the rights of basin States, including riparians, to an equitable utilization of the waters. Thus, State Z, a lower riparian, may not permit navigation by vessels of State X, a non-riparian, on that portion of an international river within State Z's territory, if the result of such navigation would increase traffic to an extent which would interfere with the vessels of State A, an upper riparian exercising its right to equitable utilization, including navigation to and from the sea.

The extent of the right of a riparian State to an equitable utilization of the waters of a river or lake is not enlarged by its grant of a right of navigation within its territory to a non-riparian State.

[37] 5 De Martens, *Nouveau Recueil Général de Traités* 714.

Illustration

State A, a riparian State, permits vessels of State B, a non-riparian, to navigate within its territory on an international river. State C, a co-riparian which previously has not used the waters, seeks to initiate a use for irrigation and meets with State A to agree on an equitable utilization. State A takes the position that the use by State B for navigation be deemed a relevant factor in State A's favour in determining the rights of the co-riparians. The argument will fail. Only the uses of the waters of the riparian States are relevant in determining an equitable utilization.

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.

Comment

EXISTING FACILITIES

The right of free navigation includes the right to use the port facilities in the territory of a co-riparian State (Article XIV). Thus, the duty of maintenance extends to such facilities as well as to the river or lake itself. Maintenance includes the removal of any obstructions to navigation, dredging where required an other works necessary to preserve navigability. The obligation is limited, necessarily, by the financial ability of the riparian State.

Cross-reference:
See Chapter 2 on Equitable Utilization, Art. IV, comment (b).

SHARING OF COSTS

The riparian State may impose reasonable charges on the co-riparians using its port facilities or navigating waters in its territory, to pay the costs of maintenance. Such charges should be related to the extent and nature of the use of the river or lake.

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.

Comment

This Article is substantially identical to Article 17 of the Barcelona Statute. The principal purpose of freedom of navigation is to facilitate commerce. Police boats or vessels of war or other vessels engaged in non-commercial activity, therefore, do not fall within the scope of the rules stated in this Chapter.

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.

Comment
SCOPE

This Article restates the universally recognized right of a State to protect its existence in time of grave national emergency. Certainly, the freedom of navigation reflected in Articles XIII, XIV and XVII of this Chapter does not prevail when the riparian State and the State, whether or not a co-riparian, whose vessels seeks to navigate the international river or lake are engaged in war or armed conflict with one another. Although naval vessels are subject to denial of passage, any restriction upon the passage of purely commercial vessels should be limited to situations where the passage would be detrimental to the military effort of the riparian State. On the other hand, where humanitarian interests are involved, effort should be made to permit navigation by non-military vessels where the situation permits.

Article of the Barcelona Statute provides:

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

APPLICABLE INTERNATIONAL LAW

To the extent that rules of international law, including applicable conventional law and the law of neutrality and belligerency, impose obligations upon a riparian State in conflict with this Article, those rules will prevail.

Chapter 5
Timber Floating

Introduction

There are several different systems of floating timber: (1) the logs may be floated loosely; (2) they may be floated fastened together as rafts; (3) they may be tied in bundles or bundle-rafts.

The floating of loose timber has been and still is the most common form of timber transport in countries with great forests and long distances between those forests and the markets for timber. If the flow of the river can be used as propelling power, the floating of loose timber is in many instances the most economical system of timber transport. Where again the watercourse is confined with dams, the floating of loose timber often becomes impracticable and is replaced by floating in bundles or bundle-rafts. Bundles, which are usually prepared by means of special machines, are easy to take over dams and to tow across stretches of quiet water. Floating in bundles is the most modem system, but it requires extensive facilities, and the initial costs are considerable.

The floating of rafts, on the other hand, is, in many parts of the world, the original and practically the only known form of timber floating. In many countries the floating of rafts and navigation have been regarded as the same use. According to the Rhine regulations, a raft ("train de bois") usually means "any assemblage of floating timber". Also, a bundle of logs or a bundle-raft may be regarded as an assemblage, but there is, in fact, a difference between transporting common rafts and floating in bundles. A raft is usually regarded as a king of vessel and is subject to rules of navigation. On the other hand, the floating of bundles is an arrangement for transporting large quantities of timber, and none of the bundles, of which there may be thousands at the same time in the river, is thought of as a separate unit.

As a rule, rafts can only be used for the transportation of smaller quantities of logs in circumstances suitable for navigation. But if larger amounts of timber must be gathered from extensive areas around a drainage basin and floated during spring floods along brooks and creeks to rivers along which additional millions of logs of different size belonging to numerous other owners must simultaneously be conveyed further, rafts cannot provide a solution to the transport problem.

The floating of loose timber or bundles is in many cases the only practical method, but such floating often is impossible without extensive arrangements and facilities designed to accommodate the timber. Thus, a course may have to be "built" and it may prove necessary to dredge the bed of the basin, construct the dams, channels and lifting cranes, to put booms in the water, as well as to provide other facilities. If the quantity of water is insufficient, the flow of the river may have to be regulated. Furthermore, tugs and winches are often indispensable. The floating crew should be directed to go ashore and work along the shores of the waters where timber is floated. During the floating season the regular use of the watercourse and the nearby area may be restricted in certain respects. If such floating is allowed in a river basin which belongs to different States, all the problems and circumstances must be taken into consideration.

Moreover, floating uses and other uses of watercourses today conflict. The floating of loose timber and bundles may often have more far-reaching injurious effects than the transportation of common rafts. The interests of navigation and the development of hydro-electric power are in many cases in conflict with the interests of timber transport. It is obvious that such conflicts may be of very great significance to relations between the riparian States.

As the opinion that timber floating is merely a special kind of navigation is so wide-spread, it is rarely treated separately or even mentioned in the literature on international law. There are, however, many international agreements that deal with the floating of the timber. Most of the police regulations now in force on the international waterways in Europe contain provisions which state that rafts shall be regarded as vessels. Also the draft concerning navigation on international rivers adopted in 1932 by the "Institut de Droit International" includes rafts among the "moyens de transport par eau". Since the floating of loose timber is not normally mentioned in this context, one may assume that this kind of timber transport is not regarded as navigation. There are, especially in Northern Europe, conventions in force, which have reference to all methods of floating.

However, there are no generally accepted rules of international law regulating the floating of timber on international waters. The fact that the floating of rafts is commonly—but not universally—considered to be navigation is not of general significance, because of the types of floating to which this principle as such is not applicable. In countries where the forest industry depends on the water transport of timber, and the rules on floating form an essential part of water legislation—as in conventions between such countries—floating is regarded as an important special use of the watercourse which on principle cannot be treated as navigation. There are many factors, which support the opinion that the floating of timber, with the exception of rafts, should be considered one of the non-navigational uses of waters.

The economic importance of timber floating shows no signs of decreasing. In many parts of the world, the forest industry is experiencing a period of rapid development. Products of new forest areas will be made available for use. Questions regarding the use of international waterways for timber transport will not lose their significance. Therefore, a study of international water law should take into consideration the special problems attached to the 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.

Comment

In these Articles, floating refers to a method of transportation of timber by which the logs are moved directly on the surface of the water, are drifted down the river or are towed mechanically. If the timber is shipped loaded in a boat or a barge, the transport is not regarded as floating.

As regards the international legal regulation of floating, it should be noted that the floating of rafts on certain international rivers according to local customary law or treaty is considered navigation. On the other hand, the methods used, especially in the northern countries for transporting great quantities of timber, such as the floating of loose timber and the floating of bundles or bundle-rafts, are not suitable for regulation by the same rules of international law that apply to navigation. In a system of international river-law, the latter kinds of floating should be classified among the non-navigational uses of waters. This classification is suggested because of the following facts: Special arrangements and installations which are not used for navigation of vessels are needed for these kinds of floating; namely, permanent installations and control of the water-flow are often necessary and the floating crew must have the authorization to work along the shores of the waters in the territory of another State.

As the floating of loose timber would interfere greatly with other uses of the water-course, detrimental effects to other uses would be frequent.

Special rules thus are needed for the floating of timber on international rivers. However, it would not be reasonable to seek to change the legal status and regulation of such

floating which according to applicable law or custom binding upon the riparians is considered navigation. Therefore, this Article recognizes this status and excludes from the scope of this Chapter any agreement or binding custom that considers floating to be navigation.

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.

Comment

Historically "navigable waterways of international concern" were devoted primarily to navigational uses. With the exception of rivers on which the floating of rafts is regarded as navigation, there is no rule of international law according to which the riparian States to a watercourse used for navigation should be under an obligation to allow its use for timber purposes. If floating is already exercised on the river, there may be local agreements or customs regulating it; if not, the riparian States should decide by common accord whether floating— and what kind of floating—may be allowed. Such an accord should not, however, conflict with any existing conventional obligations nor with freedom of navigation as is indicated in Chapter 4.

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.**

Comment

Although this Article formally is a recommendation, it may be regarded as an application of the New York Principles of International Law (especially "Agreed Principles" 1 and 2). Because of the nature of the use, timber floating on international waters has historically been of concern only to the co-riparians. It is obvious that timber floating, as a use of the waters of an international drainage basin, is subject to the right of each co-riparian or co-basin State to a reasonable and equitable share in the beneficial uses of the waters of the drainage basin.

This Article should be considered in the light of any agreements that may be reached under the Article XXII in view of the importance of navigation on international waterways.

That the right of floating provided in this Article should also include all necessary activities and works carried out by the floating crew is obvious, for there is no reason to allow the floating but forbid the technical means for its exercise.

When permitting co-riparian States to use the watercourse for floating, the State should take into consideration other uses to which the watercourse is put.

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.

Comment

There is not sufficient factual difference between permanent floating installations and necessary hydraulic works established within the territory of a co-riparian State to require differences in applicable legal provisions. The same international legal regulation should be applicable to both.

The installations and measures referred to in this Article may be much more extensive than those referred to in Article XXIII. Therefore, an agreement between the States concerned seems to be necessary.

When timber is floated within the territory of another State, the logs, rafts or bundles, as well as the activities of the floating crew and their installations, may cause damage or injury. But, even if floating is not extended outside the national territory, detrimental effects, caused by floating installations or measures which alter the water-flow of the watercourse, may occur within the territory of a co-riparian State. In both kinds of case it is obvious that the damage or injury should be indemnified by the responsible State in accordance with general principles of international law.

Article XXV

Co-riparian States of a watercourse which is, or is to be used for floating timber should negotiate in order to come to an agreement governing the administrative regime of floating, and if necessary to establish a joint agency or commission in order to facilitate the regulation of floating in all aspects.

Comment

Because of the various kinds of floating and differences in economic, hydrological and technical circumstances, the conditions prevailing in various drainage basins differ so much that it is not reasonable to try to regulate all timber floating according to uniform rules. Experience has shown that a régime of timber floating is a typically local matter and in State practice is generally regulated on a regional basis. In the relations between riparian States enough room must therefore be left for regulations provided by bilateral or other regional treaties. It is also recommended that the States concerned jointly establish agencies for the regulation of floating and also undertake to construct, on a co-operative basis, necessary works in the watercourse. The principle of this Article should also be applicable to rivers mentioned in Article XXII.

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.

Comment

The present Chapter has application to all uses including navigation, timber-floating, and consumptive uses, of the waters of international drainage basins and to the pollution of such waters.

The expression "other interests" has been included because of the necessity of providing means of settlement for disputes which do not necessarily relate to an existing legal right. Consistently with Article 2, paragraph 3, of the Chapter of the United Nations, States are under an obligation to settle their disputes "by peaceful means" whether or not they turn on the existence of legal rights. The recommendations to exchange information (as provided by Article XIX), to negotiate (as provided by Article XXX), to form a joint agency (as provided by Article XXXI), to settle differences through good offices, mediation, conciliation, arbitration, or adjudication (as provided in Articles XXXII to XXXIV) are as important for the settlement of disputes not concerned with legal rights as they are for disputes relating to such rights. The peaceful resolution of all disputes has the further advantage of providing routes to peaceful change in instances in which legal rights cannot be established, are irrelevant or are in need of alteration in order to meet new circumstances.

It may also be observed that the expression "other interests" precludes a State from refusing to have regard to the provisions of this Chapter on the ground that in its view the dispute does not relate to a "legal right".

Both "basin States" and "other States" are mentioned because the latter may have an important interest in the navigation of certain rivers and may also be affected by river pollution.

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.**

Comment

Paragraph 1 draws upon the substance and language of Article 2, paragraph 3, of the United Nation Charter, which may be taken to reflect a principle applicable in inter-State relations even in the absence of the Charter.

The term "dispute" is not to be construed restrictively. It would embrace both a "difference" and a "dispute" within the meaning of Article IX of the Indus Waters Treaty between India and Pakistan, signed in Karachi, Sept 19, 1960.[38] Para. 2 of Article 36 of the Statute of the International Court of Justice justifies the assertion that a "dispute" under this Article may relate to "the interpretation of a treaty", "any question of international law" or "the existence of any fact which, if established, would constitute a breach of an international obligation".

Paragraph 2 of this Article is cast in the form of a recommendation; it is not intended to derogate from the binding force of legal obligations. The paragraph also calls attention to the fact that the means of settlement referred to are to be undertaken progressively.

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.

Comment

Since the present Articles do no more than codify the customary law and establish certain recommendations, it is important to emphasize that they do not diminish in any way the force of treaties by which the parties have agreed to resort to certain stipulated modes of settlement. The usual principle that *lex specialis derogat generaly* applies. Paragraph 2 is intended to suggest that States, after having unsuccessfully resorted to certain of the modes of settlement *(e.g.* conciliation, mediation) stipulated by treaty, look to other modes of settlement dealt with in this Chapter.

Article XXIX

1. With a view to preventing disputes from arising between basin States as to their legal rights or other interest, it is recommended that each basin State furnish relevant and reasonably available information to the other basin States concerning the waters of a drainage basin within its territory and its use of, and activities with respect to such waters.

2. A State, regardless of its location in a drainage basin, should in particular furnish to any other basin State, the interests of which may be substantially affected, notice of any proposed construction or installation which would alter the regime of the basin in a way which might give rise to a dispute as defined in Article XXVI. The notice should include such essential facts as will permit the recipient to make an assessment of the probable effect of the proposed alteration.

[38] 419 U.N.T.S 125.

3. A State providing the notice referred to in paragraph 2 of this Article should afford to the recipient a reasonable period of time to make an assessment of the probable effect of the proposed construction or installation and to submit its views thereon to the State furnishing the notice.

4. If a State has failed to give the notice referred to in paragraph 2 of this Article, the alteration by the State in the regime of the drainage basin shall not be given the weight normally accorded to temporal priority in use in the event of a determination of what is a reasonable and equitable share of the waters of the basin.

Comment

PARAGRAPH 1

This paragraph amplifies part of Agreed Recommendations No.2 of the Resolution on the Uses of Waters of International Rivers adopted at the Forty-eighth Conference of the International Law Association held at New York. That Agreed Recommendation provided:

> Co-riparian State should make available to the appropriate agencies of the United Nations and to one another hydrological, meteorological and economic information, particularly as to the stream-flow, quantity and quality of water, rain and snow fall, water tables and underground water movements.[39]

The exchange of such information can play an important rôle in the composition of disputes which may actually turn on nothing more than a question of fact. Even in those instances in which a question of law is presented, the provision of information by one party to the other can bring into focus and clarify the legal issues in the case.

The reference to "relevant and reasonably available information" makes it clear that the basin State in question cannot be called upon to furnish information which is not pertinent and cannot be put to the expense and trouble of securing statistics and other data which are not already at hand or readily obtainable. The provision of the Article is not intended to prejudge the question whether a basin State may justifiably call upon another to furnish information which is not "reasonably available" if the first State is willing to bear the cost of securing the desired information.

A similar obligation to give notice is incorporated in the "Montevideo Declaration", adopted by the Seventh Inter-American Conference in 1933.[40] The announcement by the State proposing the works must be answered within a period of three months. The subsequent action required of the parties is then laid out in the Declaration in some detail.

The Declaration was recognized by Bolivia and Chile to create obligations for both States in connection with the Lauca River dispute. The obligation to give notice was not disputed, but the parties could not agree on the adequacy of the notice which had been furnished.[41] It may also be observed that in the *Lake Lanoux Arbitration*[42], the Tribunal acknowledged that France had properly discharged its obligation under the Treaty of Bayonne of May 26, 1866, to give notice to Spain before commencing the works and utilization of water which were in issue.

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[39] Report of the Forty-eighth Conference, page ix (1958), found in Introduction to these Rules.

[40] Declaration on Industrial and Agricultural Use of International Rivers, Art. 7, in Seventh International Conference of American States, Final Act 113 at 114 (1933), Carnegie Endowment for International Peace, The International Conferences of American States, First Supplement 1933-1940, 88 at 89 (1940).

[41] See Council of the Organization of American States Docs. OEA/Ser. G/VI, C/INF-47, 15 April 1962, and 20 April 1962, and OEA/Ser. G/VI, C/INF-50, 19 April 1962.

[42] *France* v. *Spain,* [24 I.L.R. 101 at 103 and 138 (1957)]

PARAGRAPHS 2-4

The Committee found that the question dealt with in these paragraphs was one of the most difficult encountered in connection with the settlement of disputes. In view of the importance of the recommended procedure in the avoidance of disputes, the Committee considered it appropriate to include these paragraphs in a chapter otherwise given over to the settlement of disputes which may already have arisen.

Some members of the Committee were of the view that the Committee should adopt the same formula with respect to advance notice, abstention from action, and the consequences of non-abstention as was adopted by the Institute of International Law at its Salzburg session of 1961. The pertinent portions of the Resolution on Utilization of Non-maritime International Waters (except for navigation) are as follows:

Article 5

> Les travaux ou utilisations visés à l'article précédent ne peuvent être entrepris qu'après avis préalable donné aux Etats intéressés.

Article 6

> En cas d'objection, les Etats entreront en négociations en vue de parvenir à un accord dans un délai raisonnable.
>
> A cet effet, il est désirable que les Etats en cause aient recours aux expertises techniques et éventuellement aux commissions et organismes appropriés pour arriver à des solutions assurant les plus grands avantages pour tous les intéressés.

Article 7

> Durant les négociations, tout Etat devrait, conformément au principe de 1a bonne foi, s'abstenir de procéder aux travaux ou utilisations faisant , l'objet du différend, ou de prendre toutes autres mesures susceptibles de l'aggraver ou de rendre l'entente plus difficile.

Article 8

> Si les Etats intéressés n'arrivant pas à un accord dans un délai raisonnable, il est recommandé de soumettre à un réglement judiciaire ou arbitral la question de savoir si l'aménagement projeté est contraire aux règles ci-dessus.
>
> Si 1'Etat qui soulève des objections aux travaux ou utilisations projetés se refuse à tout réglement judiciaire ou arbitral, l'autre Etat est libre, sous sa responsabilité, d'y procéder tout en restant soumis aux obligations qui découlent des dispositions des articles 2 à 4.[43]

These members were of the view that the absence of such a formulation would be tantamount to condoning a change in an international river system even when the objecting basin State might be affected physically and when the harm to the latter might be serious and even irreparable.

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[43] [Referring to the limitation of rights by international law, settlement on the basis of equity in case of disagreement and the obligation of a State to assure to other States the enjoyment of the advantages to which they are entitled]. 49 Annuaire de l'Institut de Droit International, Part II, p. 370 at 372 (1961); and see Jiménez de Aréchaga, Normas Juridicas Internacionales que Regulan el Aprovechamiento Hidráulico, 2 Inter-American Law Review 317 at 324-28 (1960), taking a similar view. [Following is the full text of Salzburg Resolution, translated in English (taken from: FAO, SOURCES OF INTERNATIONAL WATER LAW, Rome, 1998, pp. 275-76):

It was, on the other hand, contended by other members of the Committee that while it was desirable that a State should give notice of any proposed change in the utilization of the basin which might give rise to a dispute, a State should not be required to give notice. Moreover, according to this way of thinking, the failure of a State to give notice or to abstain from
making the change, either while the recipient of the notice considered the implications of the change or after the recipient had objected to the change, should not entail any adverse consequences for the State proposing the change. It was further the contention of certain members of the Committee that to require the moving State to abstain from making the change unless the objecting State refuses to submit to judicial settlement or arbitration, as is provided by Article 8 of the Resolution of the Institute, has the effect of *requiring* the moving State to resort to judicial settlement or arbitration and of affording an unlimited

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RESOLUTION
ON THE USE OF INTERNATIONAL NON-MARITIME WATERS
Salzburg, 11 September 1961

The Institute of International Law,

Considering that the economic value of the use of waters has been modified by modern techniques and that the application of said techniques to the waters of a river basin extending upon the territory of several States generally affects the whole of these States, and that this evolution requires an adjustment in the legal field;

Considering that there is a common interest in maximizing the use of available natural resources;

Considering that the obligation not to cause an unlawful prejudice to a third party is one of the basic principles governing general relations between neighbouring countries;

Considering that this principle also applies to relations deriving from the various uses of waters;

Considering that, for the use of waters involving several States, each of the above mentioned States may obtain, through consultations, joint planning and reciprocal concessions, the benefits of a more efficient development of natural resources;

Notes the existence of the following rules in international law and makes the following recommendations:

Article 1

The present rules and recommendations apply to the use of waters which are apart of a river or of a watershed extending upon the territory of two or more States.

Article 2

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 3

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 4

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 3 as well as adequate compensation for any losses or damages incurred.

Article 5

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.

means of obstruction to the objecting State. So to provide is, moreover, inconsistent with Article XXXIV of the present text, reflecting the general principle of international law that there is no duty to arbitrate or to submit to judicial settlement in the absence of agreement thereto.

The compromise which was arrived at within the Committee was to cast the governing principle in the form of recommendations and to eliminate any notion of sanctions applying to a State which fails to give notice or to a State which fails to give adequate time to another to consider the notice. Paragraph 2 looks to notification only if the interests of another riparian State may be "substantially" affected, thereby excluding any recommendation of notice in cases in which the changes proposed will have an insignificant or slight impact upon the other riparians. The recommendation is further qualified by confining it to cases in which a dispute might arise under Article XXVI. It is also recommended that a State providing the notice afford the recipient a reasonable period of time in which to assess the impact of the proposed changes and to furnish its views to the State proposing the change, but the State furnishing the notice is not penalized in any way by its failure to provide the stipulated period of time to the recipient of the notice. The only consequence of a failure to give notice is that the State concerned cannot avail itself of any right which may flown from temporal priority in use. To what extent a State does secure a legally recognized advantaged through pri-

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Article 6

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 organisations to reach solutions ensuring maximum benefits for all concerned.

Article 7

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 8

If the States involved cannot reach an agreement within a reasonable time, it is recommended to submit to judicia1 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 obligation by the provisions of Articles 2 to 4.

Article 9

It is recommended to the States concerned by particular watersheds to consider whether it would not be appropriate to set up joint organisations for the preparation of water utilization plans to facilitate their economic development, as well as to prevent or settle any disputes that might occur.]-Ed.

The desirability of agreement was also emphasized by the "Rau Commission" in connection with the dispute between Sind and Punjab concerning the waters of the Indus River Basin. In 1941, the Commission stated:

> The most satisfactory settlement of disputes of this kind is by agreement, the parties adopting the same technical solution of each problem, as if they were a single unified community undivided by political or administrative frontiers.[46]

The Institute of International Law required in Article 6 of its Resolution on the Utilization of Non-maritime International Waters (except for navigation), *supra*, that if an objection is made to works or utilization of the waters of a watercourse or basin "the States will enter into negotiations with a view to reaching an agreement within a reasonable time".

If the negotiations are successful, it can be expected that the adjustment of interests arrived at by the parties will be reflected in a treaty. As put by a member of the Committee in an important work on this subject, "the conclusion of specific and specialized water treaties remains far and away the best solution".[47]

It may be observed that there is a special provision with respect to an *obligation* to negotiate in connection with the suppression of pollution, as provided in Article XI, paragraph 2, of Chapter 3.

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 Stases 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 maters 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.**

Comment

PARAGRAPH 1

This paragraph is a restatement in somewhat different terms of the first part of Agreed Recommendation No. 4 adopted at the New York Conference.[48] Emphasis has been placed on the creative function of the joint technical agency in planning the utilization of the basin.

The highly intricate and specialized nature of disputes concerning international rivers makes it desirable that the membership of the joint agency includes engineers, hydrographers and other technical experts, as well as diplomats and lawyers.

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[46] Report of the Indus (Rau) Commission and Printed Proceedings 10 (Simla, 1941; reprinted in Lahore, 1950), as quoted in Laylin and Bianchi, The Rôle of Adjudication in International River Disputes, 53 Am. J. Int'l L. 30, 32-33 (1959).

[47] Berber, Rivers in International Law 270 (Batstone transl. 519).

[48] See Introduction to these Rules.

In international practice highly successful use has been made of joint bodies in connection with the preparation of technical studies and recommendations on the exploitation of a river or river system. A noteworthy example is the International Joint Commission, established pursuant to Article VII of the Treaty between the United States and Great Britain relating to Boundary Waters between the United States and Canada, signed at Washington, Jan. 11, 1909.[49] Article IX of the Treaty provides for the reference to the Commission of "any other questions or matters of difference arising between them involving the rights, obligations or interests of either in relation to the other".[50] The Treaty between the United States of America and Canada relating to Co-operative Development of the Water Resources of the Columbia River Basin, signed at Washington, January 17, 1961,[51] was based in large measure upon a report prepared by the Commission on "principles for determining and apportioning benefits from co-operative use of storage waters and electrical interconnection within the Columbia River system."[52]. The services of the Commission were also utilized in connection with co-ordination of plans for the exploitation of the waters of the St. Lawrence River for the generation of hydroelectric power.[53]

In 1957, Cambodia, Laos, Thailand and Viet-Nam formed a Commission for Co-ordination of Investigations of the Lower Mekong Basin, which has played an important part in planning the development of the Mekong River.[54]

The establishment of a "mixed technical commission" to pass judgment on disputes arising from the construction of works on "international rivers" was recommended in the "Montevideo Declaration", adopted by the Seventh Inter-American Conference.[55] It is important to observe that the stages of settlement recommended in the Declaration run parallel in large measure to the system of peaceful settlement set forth in this Chapter. The Declaration calls for the facilitation of studies and the furnishing of information (articles 1 and 7), the establishment of mixed technical commission (article 8), diplomatic negotiations followed by conciliation (article 9), and finally arbitration (article 10).

Ambassador Cano, a member of the Committee, has prepared for the United Nations Economic Commission for Latin America two highly informative studies of the "joint technical agencies" which have been established to deal with rivers and river basins. These are "Preliminary Review of Questions relating to the Development of International River Basins in Latin America"[56], and "Systems of Administrative Organization for the Integrated Development of River Basins; Outline of the different types of institutional structure used in Latin America and the rest of the world."[57]

Mixed commissions for co-operation and to a certain extent for the resolution of differences have also been recently established between Italy and Yugoslavia (for water supplies of the town of Gorizia), between Italy and Switzerland (for regulation of the

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[49] 36 Stat. 2448, T.S. No. 548.
[50] Concerning the work of the Commission, see Chacko, The International Joint Commission (1932), and Bloomfield and FitzGerald, Boundary Waters Problems of Canada and the United States (The International Joint Commission, 1912-1958) (1958).
[51] [1965] 2 U.S.T. & O.I.A 1555, T.I.AS. No. 5638
[52] See 42 Dep't State Bull. 126 (1960)
[53] See International Joint Commission: In the Matter of the Application of the Government of Canada and the Government of the United States of America for an Order of Approval of the Construction of Certain Works for Development of Power in the International Rapids Section of the St Lawrence River—Order of Approval, Oct. 29, 1952, in Baxter, Documents on the St. Lawrence Seaway 36 (1960).
[54] See report to the U.N. Economic Commission for Asia and the Far East on its Twenty-ninth Session (Special) (1966), U.N. Doc. No. E/CN. 11/WRD/MKG/L. 157 Rev. 1 (1966).
[55] Declaration on Industrial and Agricultural Use of International Rivers, arts. 7 and 8, Final Act *supra*, at 114
[56] U.N. Doc. No. E/CN. 12/511 (1959)
[57] U.N. Doc. No. CN 12/503 (1959). The existing commissions are also dealt with in Kenworthy, Joint Development of International Rivers, 54 Am. J. Int'1. L. 592 (1960).

Lake Lugano), between Italy and France (for the utilization of the Roja River).[58] Other mixed commissions have been established between Switzerland and France (for the Doubs River and the Emosson Hydro-electric Development), between Switzerland and Austria (for the common section of the Inn River), and between Germany and Switzerland (for Upper Rhine Development).

PARAGRAPH 2

This is the second sentence of Agreed Recommendation No. 4 of the New York Conference, with the necessary drafting changes. The paragraph relates to a matter of detail which would not have been included here were it not for the fact that it appeared in the New York Resolution, which the present Chapter amplifies.

PARAGRAPH 3

This provision has deliberately been cast in a weak form. It constitutes no more than a "recommendation", to be given effect only "in appropriate cases", that non-basin States be "invited" to participate in the work of the joint agency if they have a legally recognized interest in the river, *i. e.*, a right conferred or recognized by a treaty.

The one treaty applicable to international rivers in general, the Statute on the Régime of Navigable Waterways of International Concern, annexed to the Convention opened for signature at Barcelona, April 20, 1921,[59] referred specifically to international commissions on which non-riparians are represented (Article 2).

Non-riparians because of their interest in the navigation of the lower Danube, participated in the European Commission of the Danube under the Convention Instituting the Definitive Statute of the Danube, signed at Paris, July 23, 1921.[60] It is not without significance that the Council of Foreign Ministers invited both riparian and non-riparian States to take part in the Danubian Conference of 1948, which was to establish a new régime for the River. For present purposes, it is unnecessary to decide whether the invited non-riparians or non-riparians previously represented on the Commissions had a "right" to participate in the new Danube Commission, constituted by the Convention regarding the Régime of Navigation on the Danube, signed at Belgrade, August 19, 1948.[61] Non-riparians are in fact members of the Danube Commission.

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.

Comment

If the question or dispute is not one which relates to the future exploitation of an international drainage basin (the dispute relating, for example, merely to diversion of certain waters from one branch of the river system as to which no other difference exists), or if the parties prefer not to employ the method recommended in Article XXXI, there is still room for the utilization of the recognized institutions of good offices and mediation.

The recommendation that "good offices" be sought looks to action by one or the other of the parties or to joint action, while mediation must be sought by two States acting jointly.

[58] They are referred to in Caponera, Lo Status Giuridico dei Fiumi e Bacini Internazionali in Italia, 15 La Communità Internazionale 3 (1960).
[59] 7 L.N.T.S. 50, 1 Hudson, International Legislation 645 (1931)
[60] 26 L.N.T.S. 173.
[61] 33 U.N.T.S. 196. See also Ministère des Affaires Etrangères de Ja République Populaire Fédérative de Yougoslavie, Conférence Danubienne, Beograd 1948 (1949).

The reason for the latter requirement is that the mediator, whether a State, an international organization or a person, must be acceptable to both parties.

The efficacy of the settlement of an international river dispute through the good offices or mediation of a third party has been demonstrated by the success with which the efforts of the International Bank for Reconstruction and Development have been crowned in the resolution of the long-standing dispute between India and Pakistan concerning the Indus River Basin. The activities of the Bank lasted for a decade, beginning in 1951 and extending to the signature of the Indus Waters Treaty on September 19, 1960. When India and Pakistan accepted the good offices of the Bank, the institutional framework become a tri-partite negotiation in which engineers and consultants representing India, Pakistan, and the I.B.R.D. attempted to draw up a comprehensive plan for the development of the River. Agreement between the two governments proved impossible of attainment, and the Bank was accordingly called upon to suggest possible bases for settlement. A number of these were proposed by the Bank and rejected by one or the other of the parties to the dispute. The last of these plans was submitted by the President of the Bank to Prime Minister of India and the President of Pakistan, and it was on the basis of these new proposals of the Bank that it become possible for the two governments to agree on the general principles to be observed and to draft the ultimate treaty.

The provision of financial assistance by foreign States or by international institutions may constitute a healthy stimulus to the resolution of a river dispute through co-operative development of the river basin.

The exercise of good offices by the President of the United States led to the solution of the problem of Tacna-Arica between Peru and Chile.[62]

It should scarcely be necessary to mention that, in the event of unreasonable delay by one or the other party in carrying out any stage of the process of adjustment recommended in this Chapter, the other party or parties to the dispute would be justified in seeking implementation of the next procedure recommended. Thus, if a State should postpone unreasonably the resort to good offices or mediation under Article XXXII, the aggrieved nation would have a sufficient basis for seeking the establishment of a conciliation commission under Article XXXIII.

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.**

Comment

Since the present Chapter speaks of method of settlement of disputes, it has been though desirable to place the detailed provisions concerning the composition and appointment of the commission of conciliation in a separate annex, as referred to in Paragraph 2. There would otherwise be a certain incongruity between the generality of the provision, which appear above, and the extremely specific stipulations concerning the establishment of the

[62] 23 Am. J. Int'l. L. Supp. 183 (1929).

commission. This has not been done with any thought of minimizing the importance of these detailed provisions, which, by their very specificity, remove a possible procedural barrier to the constitution of the body.

Treaty clauses on the appointment, procedure and functioning of commissions of conciliation are collected and analyzed in United Nations, Systematic Survey of Treaties for the Pacific Settlement of International Disputes 1928-1948 at 130-280.[63] This work should also be of utility in the establishment of procedures for the settlement of disputes through adjudication or arbitration.

Article XXXIV

It is recommended that the States concerned agree to submit their legal disputes to an *ad hoc* arbitral tribunal, to a permanent arbitral tribunal or to the International Court of Justice if:

(a) A commission has not been formed as provided in Article XXXIII; or

(b) The commission has not been able to find a solution to be recommended; or

(c) A solution recommended has not been accepted by the States concerned; and

(d) An agreement has not been otherwise arrived at.

Comment

There are numerous instances in treaties establishing a régime for an international river in which the parties have agreed to submit disputes concerning the interpretation or application of the agreement to arbitration. The following treaties may be mentioned by way of example:

> Convention between Switzerland and Italy on the Subject of the Utilization of the Hydraulic Power of the Spöl, signed at Berne, May 27, 1957, art. 18 (1959).[64]
>
> Agreement between Syria and Jordan concerning the Utilization of the Yarmuk Waters, signed at Damascus, June 4, 1953, art. 10.[65]
>
> Convention regarding the Régime of Navigation on Danube, signed at Belgrade, Aug. 18, 1948, art. 45 (referring to a "conciliation commission" but providing that its decisions are to be accepted by the parties to the dispute as final and binding").[66]

The obligation to submit a water dispute to arbitration may also arise from a treaty calling for the arbitration of disputes in general, such as the General Treaty of Inter-American Arbitration, signed in Washington, Jan. 5, 1929, art. 1.[67] States may also become obliged to submit water disputes to the International Court of Justice through acceptance of its jurisdiction under Article 36, paragraphs 1 and 2, of the Statute of the Court.

Article XXXV

[63] U.N. Sales No. 1949.V.3 (1948).
[64] Switzerland, Recueil Officiel des Lois et Ordonnances de la Confédéracion Suisse 432 (1960).
[65] 184 U.N.T.S. 15.
[66] 33 U.N.T.S. 196.
[67] 49 Stat. 3153, T.S. No. 886. 130 L.N.T.S. 135.

It is recommended that in the event of arbitration the State 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.

Comment

The Model Rules on Arbitral Procedure are to be found in the Report of the International Law Commission covering the work of its tenth session April 28-July 4, 1958.[68] The Model Rules were commended by the General Assembly to the attention of members of the United Nations for adoption in appropriate cases.[69]

After attempting to formulate its own rules for the conduct of arbitrations, the Committee concluded that it would be preferable to recommend the employment of the Model Rules on Arbitral Procedure. These Rules have been drafted with extreme care by a body of the highest competence, charged with responsibility for the codification of international law. The Commission also had the benefit of discussion of the draft by the Sixth Committee of the General Assembly and of governmental comments on the proposed text. Inconsistency between the Model Rules and the views of this Committee would cast doubt on the validity of the work of both bodies. In the light of these considerations, the Committee considered it superrogatory to attempt to improve on the work of the International Law Commission.

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.

Comment

Article 52 of the United Nations Charter recognizes the competence of regional arrangements or agencies to deal with "such matters relating to the maintenance of international peace and security as are appropriate for regional action" (para. 1) and requires the members to "make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies" before taking them to the Security Council (para. 2). For example the Inter-American treaty of Reciprocal Assistance (the "Rio Pact"), signed at Rio de Janeiro, September 2, 1947[70], provides that the members will "endeavour to settle any such controversy (*i.e.*, 'every controversy') among themselves by means of the procedures in force in Inter-American System" before taking the dispute to the United Nations. Under Article 5 of the Pact of the League of Arab States, signed at Cairo, March 22, 1945,[71] certain disputes may be submitted by members to the Council of the League of Arab States for obligatory settlement by that body.[72]

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[68] U.N. Gen. Ass. Off. Rec. 13th, Sess., Supp. No. 9, at 5 (A/3859) (1958).
[69] Gen. Ass. Res. No. 1262 (XIII) (A/3983) (1958).
Gen. Ass. Res. No. 1262 (XIII) (A/3983) (1958).
[70] 62 Stat. 1681, T.I.A.S. No. 1838, 21 U.N.T.S. 79
[71] 73 U.N.T.S. 237
[72] As to the settlement generally of conflicts through regional arrangements, see Sohn, The Rôle of International Institutions as Conflict-Adjusting Agencies, 28 U. Chi. L. Rev. 205, 239-257 (1961).

Annex

MODEL RULES FOR THE CONSTITUTION OF THE CONCILIATION COMMISSION FOR THE SETTLEMENT OF A DISPUTE

(In implementation of Article XXXIII of Chapter 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.