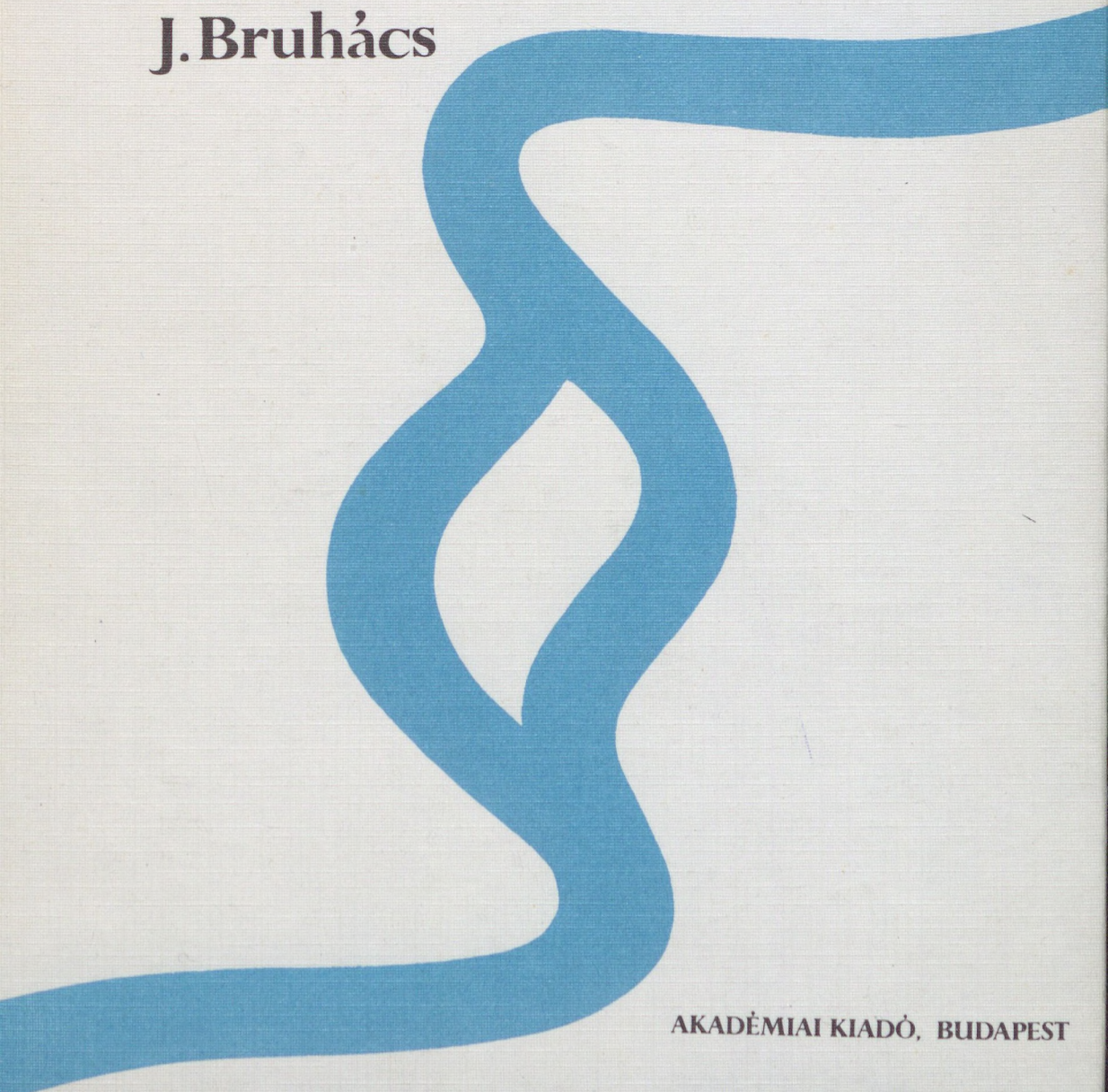


THE LAW OF NON-NAVIGATIONAL USES OF INTERNATIONAL WATERCOURSES

J. Bruhács



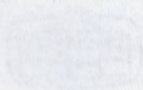
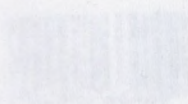
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The law of non-navigational uses of international watercourses

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Akadémiai Kiadó, Budapest 1993

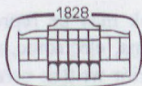
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Introduction

1. Outline of the development of regulations relating to the non-navigational uses of international watercourses

In times past, rivers (*aqua profluens*) were classified in Roman law as being within the group of *res extra patrimonium*, being so broad a field that their exclusive possession was beyond doubt; in fact, their utilization was available to anybody and to any extent.

This legal thesis became, however, untenable in modern times. As a result of their manifold utilization and the concurrent pollution, watercourses became increasingly rare and valuable resources. The significance of water management, i.e., the activity aimed at the coordination of fresh water, with its limited availability in terms of space and time, and the respective demands, increased beyond belief. In addition, this activity took on international dimensions in many cases as a considerable volume of the resources concerned could be found in so-called international watercourses.

The appearance of problems related to water management at an international level as well as the efforts aimed at their solution can be traced back to antiquity.¹

International treaties regulating river utilization were concluded way back in ancient history. Thus, Umma and Lagas, two cities in Mesopotamia, settled a dispute that resulted from the distribution of irrigation water, by means of an international treaty in the third millennium B. C.² In the form of a religious document twelve Hellenic states which founded an amphictyony, pledged themselves not to change a river bed or to impede the use of watercourses, either in times of peace or war.³

Nevertheless, the said facts have a significance more from the point of view of legal history than anything else, as no continuity can be seen and identifying any real international relations is also out of the question. In view of this, the starting point for our analysis should be the period following the birth of the modern international community and the rise of classic international law.

The regulation of international relations in the field of water management under international law started at the end of the 18th century. Actually, the treaties delimiting borders and concluded in this period contained dispositions by the contracting parties providing for the use of border watercourses. Thus, Austria concluded treaties of this kind with Bavaria and Venice in 1764, and the Netherlands followed this example with neighbouring countries after 1785.⁴ Treaties dealing with border watercourses did not attract major attention at that time and for some time to come, on account of their limited number, on the one hand, and of the insignificant interests expressed in these treaties, on the other. Accordingly, the treaties concerned were concluded by simple diplomatic agreements, and it was hardly necessary to draw attention to the legal aspects of conflicts resulting from the use of watercourses.⁵

At the beginning of the 20th century the *number of international problems originating from the uses of international watercourses started to increase* almost exponentially. The occurrence of a particular international watercourse proved to be increasingly insufficient to meet the demands of the territories of the states concerned; in addition, the rate of pollution also increased. In fact, the increased technical and economic possibilities of human intervention in the natural conditions of watercourses in general, and the building of gigantic establishments in particular have coincided with the growth of the frequency and gravity of transnational consequences.

The changes referred to above, however, also have an *external cause* as well. As a result of the territorial changes occurring in the 20th century—the increased political disintegration in East-Central and Eastern Europe and the Near East following World War I and the appearance of new states that came into being as a result of decolonization—the number of international watercourses and, associated with them, international problems, increased *ipso facto*.

The uses of international watercourses resulted in conflicts among the interested states and the requirement of cooperation simultaneously. With all these circumstances, the presence of international law became imperative⁶ for, in terms of the Judgement of the Permanent Court of International Justice concerning the Case of the S. S. “Lotus”, the function of international law was “established in order to regulate the relations between these co-existing independent communities with a view to the achievement of common aims”.⁷

While emphasizing the actual influence of international law, its limits must not be forgotten, as it has appeared as only one, and even then not a perfect means for the settlement of international problems, and its establishment and application have been subjected to extra-juridical factors.

The *over-estimation of international law* in inter-state relations connected with the utilization of international watercourses is reflected in various data.

International law-making aimed at the settlement of inter-state relations resulting from the non-navigational use of international watercourses has been

characterized by the dominance of international treaties from the very beginning. The contractual process, which started in the 18th and 19th centuries, has experienced a considerable acceleration in our time;⁸ 35 treaties of this kind were concluded during the inter-war period⁹ and their number has increased to as many as several hundred in modern times.¹⁰ The subject-matter of these treaties (*ratione materiae*) appeared more and more diverse. Apart from the traditional agreements on border watercourses, agreements regulating specific methods of utilization, e.g., flood control, irrigation, production of hydraulic or hydro-electric power or protection from pollution also appeared. "... Conventions organizing cooperation in the development of water resources of entire basins or sub-basins begin to be characteristic of the modern approach to the problems of international waters."¹¹

The tendency mentioned in the foregoing entailed the necessity to surpass the habitual bilateral framework of treaties regulating the use of watercourses; in particular, multilateral approaches or, more often, efforts aimed at the conclusion of multilateral conventions of a general nature, also appeared in this field. The first indication here was the Barcelona Convention and Statute, signed in 1921, principally regulating navigation in international waterways; nevertheless, they constituted a very important step in the development of international law dealing with the non-navigational uses of international waterways. The interests related to non-navigational uses are acknowledged in Article 10 of the Statute; navigation and other uses of watercourses are also laid down in the minutes of the conference.¹² Thus, the unconditional priority of navigation in international waterways could not be claimed following the Barcelona Conference. Besides, the importance of this conference has been emphasized by another, even more striking circumstance. Earlier, the law of international watercourses was determined by the volition of the non-riparian states which, making use of the principles of the freedom of trade and free navigation, internationalized watercourses running through the territory of two or more states, i.e., they opened them to the ships of all states and established an international administration for them. Nevertheless, the special rights and interests of the riparian states were acknowledged by the Barcelona Conference.¹³ Apart from the Barcelona Convention, another effort was made which was aimed at the regulation of problems concerning the utilization of water power affecting more than one state, within the activity of the League of Nations, by the signing of the Geneva Convention in 1923. This form of general regulation proved to be inadequate, however, as compared to the expectations, i.e., it never entered into force. In spite of its failure it was a sign, however, of the sensitivity of the international community as a whole towards problems connected with the uses of international watercourses. Later on, this was conducive to a new phase, i.e., the initiation of codification in this particular field of law.

As is usual, the contents of the treaties, agreements, and conventions experienced important modifications on account of the broadening range and the great variety of the contracting parties, the subject-matter of the instruments and the forms of the agreements. Thus, simple solutions were replaced by a complicated mixture of rights and obligations, the variety of the nature and formulae of legal norms, and the predominance of the purpose of cooperation by laying down precise ways of procedure and the institutionalization of relations. Upon the effect of the preponderance of administrative law over civil law regulations in municipal law,¹⁴ treaties and agreements became directly binding on states¹⁵ and obtained, as a rule, a non-self-executing nature.

As opposed to the high number of international treaties, no more than nine judicial decisions have been delivered by international courts in legal disputes concerning the non-navigational uses of international watercourses. They comprise the Helmand River Delta case (1872 and 1905), the San Juan River case (1888), the Kushk River case (1893), the Faber case (1903), the Diversion of Water from the Meuse case (1937), the Trail Smelter case (1938 and 1941), and finally the Lake Lanoux case (1957).¹⁶

As for the said decisions, it is *prima facie* the judgment taken by the Permanent Court of International Justice in the Belgian-Dutch dispute concerning the Diversion of Water from the Meuse which is worth mentioning. Regarding the details, the Dutch government requested the Court to state that by building the Albert Canal or other canals, already completed or still to be built, Belgium used or would use the waters of the river Meuse in a manner contrary to the provisions of a treaty concluded by the Netherlands and Belgium on May 12, 1863. In addition, the Netherlands also requested the Court to oblige Belgium to cease all anti-contractual activity and make an end to the relevant construction. In its counterclaim, Belgium demanded that the Court should state that the functioning of the Borgharen dam and the sluice system built by the Dutch government close to Maastricht was contrary to the dispositions of the 1863 treaty, and the prohibitive rules affecting the canals to be built by Belgium on the left-hand side of the river were equally applicable to the Juliana Canal built by the Dutch government. This legal dispute contains several elements of the problems related to international watercourses; nevertheless, the judgment did not contain any statement of a general nature which could be used for any argument in another international dispute concerning the uses of watercourses. The Court declared that its competence was limited to the interpretation of the treaty in question,¹⁷ and it abstained from taking a stand in connection with the general principles to which references were made by the parties in the course of the procedure and in the preceding phase.¹⁸

The judgment delivered by a board of arbitration in the Franco-Spanish dispute concerning Lake Lanoux is worthy of particular attention among the judicial settlement of international disputes on the uses of watercourses.¹⁹ The

essence of the international legal dispute, resulting from the utilization of the hydraulic power of the said lake, on French territory in the Pyrénées, but belonging to the river-basin of the Spanish Ebro, can be summed up by the following: whether or not the French hydraulic power utilization project, i.e., conducting the water of the lake to the northern, Atlantic side and then returning it to its original bed through another subterranean tunnel, was contrary to international law; whether or not Spain's interests were violated by bringing about qualitative and quantitative changes in an international watercourse; and whether or not procedural obligations were violated in view of the fact that France had failed to ask for Spain's preliminary consent for the realization of the hydraulic power utilization project. The board of arbitration decided in favour of France, but the significance of the case results from the fact that the judgment was not limited to examining whether or not the provisions of the relevant Franco-Spanish treaties were violated; other sources of international law were duly taken into consideration as well. Consequently, the statements in the judgment constitute a contribution to the clarification of some rules of international law concerning the uses of international watercourses.

The judgment in the Trail Smelter case²⁰ between Canada and the United States did not directly deal with legal problems of the utilization of international watercourses; nevertheless, it constituted an analogy between legal norms enforced in this field and air pollution,²¹ on the one hand, and laid down general responsibility for facts occurring in a foreign state's territory in connection with the utilization of water resources, on the other.²²

Apparently, international judicial practice has failed to contribute to any great extent to the development of the law of non-navigational uses of international watercourses. This circumstance gives rise to the problem of the justifiability of disputes related to the regime of international watercourses, on the one hand, and, in order to increase precedents, gives an incentive for utilizing the decisions of the supreme courts of various countries, principally federations, on the other, thus setting serious theoretical and practical problems.

For the sake of justice it should be added that, reflecting the actual development of international law in the settlement of various legal cases, the International Court of Justice has made statements, *obiter dicta*, that could also be extrapolated to the field of non-navigational uses of international watercourses, e.g., in connection with the legal institution of reasonable and equitable participation,²³ and the interpretation of conflicting rights of territorial sovereignty.²⁴

As a matter of fact, the scarcity of precedents²⁵ does not mean a shortage of disputes on the non-navigational uses of international watercourses. The abundance of international treaties and agreements on this subject, already mentioned in the preceding paragraph, is a counter-argument, taking into consideration that their conclusion and application are self-explanatory for

some sort of release from the conflicts between the differing interests. Besides, the existence of unresolved international problems or failed contractual arrangements cannot be denied.

When giving an outline of the development of the international legal regulation of the non-navigational uses of international watercourses, one cannot omit to mention the *role of international organizations*, constituting one of the fundamental elements of modern international legal order. The international organizations deal with different aspects of international water management, comprising preparation of studies, holding scientific consultations and international conferences, and elaborating and financing various programmes. For the viewpoints expressed in this book, emphasis should be laid upon the participation of these organizations in the international codification and application of the law. The codification and progressive development of the law of non-navigational uses of international watercourses, the adoption of recommendations, resolutions, operating programmes, and legislative concepts related to the complex problems in question directly or indirectly, and the checking of their implementation are worthy of particular interest.

With a general approach to the effects of the functioning of the international organizations concerned, reference should be made to the fact that the problems of international water management are thus relieved, to some extent, from the bonds of traditional bilateral handling, and new considerations and approaches are offered. In fact, the said effects "... placent la coopération internationale sur des bases juridiques précises, mais permettent surtout de lui conférer une continuité et un dynamisme autrement inaccessible".²⁶

2. The international legal order of the non-navigational uses of international watercourses in international jurisprudence

The problems of interstate relations originating from the uses of international watercourses, i.e., the international relations of water management, had already been discussed by the classics of international jurisprudence. Thus, GROTIUS applied the right of non-harmful utilization to river waters, regarding the river proper as running water which was public property.²⁷ Nevertheless, the Italian jurist, DECLEVA, was right in stating in his work published in 1939 that the science of international law failed to pay due attention to the particular international law which regulated the conditions of international water management.²⁸ Jurisprudence was interested in the 19th century in free navigation in international watercourses to be precise, and it was hardly concerned with the established practice in the field of non-navigational uses of international water-

courses which, anyway, was not significant. If problems of this kind were dealt with at all, the approach was of a completely abstract nature, i.e., in connection with the institution of natural international servitudes²⁹ (*servitudes juris gentium naturales*).

The development of international law-making relating to the non-navigational uses of international watercourses is already adequately reflected in the theory of international law, together with the higher interest in problems associated with international water management; the preceding thoughts were aimed at sensible abstract solutions. The above statement can be illustrated by the fact that almost 300 entries had already been listed in a bibliography compiled in 1974³⁰ which, as a matter of fact, could not be completed. Moreover, this volume increased considerably during the last decade.

The contents and methods of processing the publications in question, as well as their comparison with other branches of international law, are highly variable; accordingly, a fluctuation in the theory can be seen which, naturally, can be attributed to various factors.

In spite of what has been mentioned above, the development of distinct prominent points can be observed in scientific research in this field.

a) The relevant authors considered it their fundamental task to collect, systematize, and interpret international treaties, conventions, and agreements regulating the non-navigational uses of international watercourses, together with an exploration of the parameters of international legal disputes occurring in this field. With advancing development, a disintegration of the non-navigational uses, formerly treated as a quasi-unit, took place. Analyses of distinct international water basins became more and more characteristic, e.g., the international legal regimes of the rivers Columbia, La Plata, Indus, Colorado,³¹ the Nile,³² the Amazon,³³ the Niger, and Senegal.³⁴ In addition, the examination of the international legal regulation of the various methods of water utilization also came to the foreground, e.g., the production of hydraulic power³⁵ and, with more emphasis, protection against pollution.³⁶ Sectoral approaches of this kind, however, cannot bring about a non-consideration of general problems.

b) Starting from disputes concerning water management within federations, HUBER, a Swiss scholar outlined the relationship and characteristics between international water management problems as early as the beginning of the 20th century, placing territorial sovereignty in the foreground.³⁷ Tendencies in jurisprudence have still been determined by many authors on the basis of their relation to territorial sovereignty. Thus, BERBER from the Federal Republic of Germany made a distinction between the principles of absolute territorial sovereignty, absolute territorial integrity, limited territorial sovereignty, limited territorial integrity, and the water management community.³⁸

c) VON BAR, a German scholar of international law, claimed as early as the beginning of the 20th century that interstate relations resulting from the non-

navigational uses of international watercourses were also regulated by the general principles of international law.³⁹ SMITH gave a further, positive contribution to this view.⁴⁰ The dispute associated with general international law is reflected in practically all works dealing with international water management problems, not only as regards the acknowledgement by the international community of the application of the principles in question in this particular branch of international law but also as regards the meaning that can be attributed to this term (*terminus technicus*), its legal nature, the problem of searching for the source, the identification and functions of the general principles, and the formation of their internal systems. As a matter of fact, the replies to the said questions vary considerably, which results from the established method of international law-making in this field of international law, the dominance of bilateral treaties, the complexity of international water management problems⁴¹ and, last but not least, the different theoretical concepts of international law.

d) *Differences of approach* are striking. Thus, the theory in North America, an area of large distances, has been the outcome of geopolitical realities and interests of economic geography differing from those prevailing in Europe.⁴² The frontier between the US and Canada encompasses 150 rivers and lakes from Maine to Alaska. Plainly, this means different demands, and a sharper response to water management problems. At the same time, the application of a single solution is as a rule excluded; instead, efforts should be concentrated towards the possible coordination of the respective interests. Besides, the structure of the federative state, the clouding of the border between international law and municipal law, and the system of precedents also had their particular roles within the complex problems. The factors mentioned above induced the formation of the institution of reasonable and equitable sharing.

Contrary to this, problems of minor importance, connected with the utilization of border waters, were pushed to the background in Western Europe by the principle of free navigation in international watercourses; accordingly, the maintenance of the *status quo* proved to be the most important interest in respect of bordering waters. In addition, the tradition of Roman law had a strong influence,⁴³ and international water management problems were thus examined not separately, but integrated within the framework of other institutions of international law, first and foremost the international law concerning vicinity. This then resulted in the preponderance of responsibility for prohibitions and damage caused.

There is, however, a much more important point, i.e., the consequences of the *different attitudes* of the three main actors of the international community *in respect of international law* that can be perceived in this particular branch of international law.⁴⁴

From the 1960s onwards, the *socialist theory of international law* proceeded to thoroughly examine the law of non-navigational uses of international water-

courses, with a strong emphasis on the key role of sovereignty, the importance of the fundamental principles of international law, and the priority of conventional law-making. The requirement of cooperation, between socialist countries in particular, almost absolute in this field, has had more far-reaching consequences in this area.

Discovering specific features in the works of international lawyers from the developing countries dealing with non-navigational uses of international watercourses seems, however, to be much more problematic. The criticism of the classical variant of international law has had no definite purpose in this context, apart from the problem of the cancellation or prolonged subsistence of treaties or contracts concluded during the colonialist era. Beyond doubt, the extrapolation of certain concepts to this field, e.g., that of divided natural resources, developed in the new international economic order, constitutes a novelty.

To sum up the foregoing, a surprising stability can be seen in the field of international law regulating non-navigational uses of international watercourses, when confronted with various theories of international law. Accordingly, terms such as "new tendency", "fundamental change" or "new horizon" can hardly be mentioned in connection with this branch of international law. This continuity can indeed be explained by various factors. The duplicity of coercion, resulting from the assurance of territorial sovereignty and "*des relations de voisinage déterminées par la géographie*",⁴⁵ the overwhelmingly bilateral forms of international law-making,⁴⁶ and the definitely technical character of international cooperation,⁴⁷ have to be included among them.

The reasons just mentioned, completed by the demand of the necessity for cooperation which, in fact, can be eliminated only by grave political arguments, result in, *prima facie*, a close relationship, and even more, some kind of identity can be revealed in the legal principles and models of solution in some aspects. The same holds true for the achievements of the activities of international scientific organizations. On the other hand, it still seems doubtful whether or not the indicated unity actually results from the process of interpretation and application of the rules of international law regulating the non-navigational uses of international watercourses.

3. Resolutions of international scientific associations

From a logical point of view, an investigation of the resolutions of international scientific associations would be linked to the theory of international law dealing with the non-navigational uses of international watercourses. There are, nevertheless, at least two arguments favouring its separation: first, the scientific elaboration of this particular branch of international law appears more as an

element of target antecedents, i.e., restating actually existing rules or principles of international law applicable to non-navigational uses of international watercourses; secondly, their practical effects as subsidiary means for the determination of rules of law, appears to be far greater.

Although the problem arose in other scientific fora as well,⁴⁸ it was, in fact, the Institut de Droit International (IDI) and the International Law Association (ILA) which, beyond doubt, undertook most of the work in this field.

This was initiated by the IDI which, on the basis of a report by VON BAR, adopted a resolution at its Madrid session in 1911 on international regulations regarding the use of international watercourses.⁴⁹ Fifty years later, the resolution concerning the "Utilization of non-maritime international waters (except for navigation)" was adopted in Salzburg, following preparatory work by ANDRASSY.⁵⁰ The acknowledgement of the increasing importance of protection against pollution was revealed by the fact that, following a report by SALMON, the Athens session of the organization adopted a resolution on "The Pollution of Rivers and Lakes and International Law" in 1979.⁵¹

The activities of the ILA over more than three decades in the field are worthy of particular attention. A report submitted by EAGLETON in 1954⁵² resulted in the elaboration of a series of resolutions.

Following the clarification of the principles regarded as an acceptable starting point⁵³ and the adoption of the term "international drainage basin",⁵⁴ the *Helsinki Rules on the Uses of the Waters of International Rivers*,⁵⁵ containing 37 articles and, officially, unaccepted comments,⁵⁶ could well be regarded as crowning the work. The Helsinki Rules contain the most important aspects of the law of non-navigational uses of international watercourses, such as equitable utilization, pollution, procedures for the prevention and settlement of disputes, with simultaneous references to several problems in need of international legal regulation.⁵⁷

The respective gaps were filled by the resolutions concerning protection against floods,⁵⁸ the Administration of International Water Resources, Protection of Water Resources and Water Installations in Times of Armed Conflict,⁵⁹ the Regulation of the Flow of Water of International Watercourses,⁶⁰ and the Law of International Groundwater Resources.⁶¹

When a summary presentation of the work of the ILA is given, two important elements of *recent development* have to be emphasized.

Realizing the imperfections of previous resolutions, the ILA Committee on International Water Resources Law aimed at a more thorough elaboration of the Rules on Water Pollution in an International Drainage Basin⁶² and, subsequently, with a view to their improvement, the Complementary Rules to the Helsinki Rules.⁶³

With the emergence of international environmental law, regulated by the ILA Montreal Rules,⁶⁴ the problem of non-navigational uses of international water-

courses and the relationship with the said rules was raised (see in detail point 4).

The functioning of the international scientific associations failed to obtain a uniform response from the very beginning. Thus, the Madrid Resolution of 1911 was simultaneously criticized for the negative approaches it contained, the imprecisions of, and the gaps in, its provisions,⁶⁵ on the one hand, while being highly thought of for its important impact, on the other.⁶⁶ As for the Helsinki Rules, their scientific values were acknowledged as almost *communis opinio doctorum*; besides, they were positively interpreted because of the approximately correct codification of the rules of customary international law.⁶⁷

In spite of the aforementioned, the Helsinki Rules received, *in practice*, an ambivalent *response* from the international community. Although the Helsinki Rules have been recognized, explicitly⁶⁸ or tacitly,⁶⁹ as authentic sources of customary international law by individual states, the majority of states, however, took a stand against them. This criticism was expressed in the dispute of the 6th Commission of the General Assembly of the UN in 1970 in respect of their codification. The Helsinki Rules were first mentioned in the actual dispositions of the draft resolution. Facing opposition, the supporters of the rules integrated them into the Preamble of the resolution. Nevertheless, mention of the Helsinki Rules was deleted by the majority, first from the Preamble and then from the report of the Commission. In fact, an approach concerning the merits of the case, to be taken into due consideration, lies beyond the formal problem of the amendments to the draft resolution. Indeed, no one supported the compulsory character of the Helsinki Rules on their own; nevertheless, it was clear from the debate that the majority of the relevant states were unwilling to recognize the Helsinki Rules as a basis for the debate, whether consciously or cautiously. It is a fact, at the same time, that the impact of the rules upon the initial phase of codification can apparently be demonstrated in several aspects.

In assessing the achievements of international scientific associations from a general approach, it can be stated that the reports submitted to the IDI⁷⁰ seem to have made more progress in elaborating the theoretical bases. On the other hand, the ILA was more successful in systematizing, codifying, and interpreting the principles of international law. Needless to say, the comparison of the resolutions giving rise to the identification of general international law has hardly been a very great assistance for the elaboration of the problem.

4. Relations between the law of non-navigational uses of international watercourses and international environmental law

Although the protection of the various elements of the natural environment has long since been established under international law,⁷¹ the birth of international environmental law can be traced back to the 1960s, due to the conceptualization of the dangers menacing the environment and the recognition of the relationship existing among the various elements thereof. Subsequently, the following decade was to experience a dynamic development.

This branch of international law is highly sectorized,⁷² i.e., divided according to the various elements of the environment. The *integration* of the law of non-navigational uses of international watercourses into international environmental law is reflected not only in the recent scientific elaboration of the subject-matter, but it is also supported by thorough theoretical considerations.⁷³ The international legal regulation of transfrontier pollution and other environmental damages constitutes the heart of international environmental law.⁷⁴ These problems were first characteristics in international relations originating from non-navigational uses of international watercourses.⁷⁵ The richest international practice developed in this context. It is thus perfectly justifiable to state that the relevant elements of the problems of international environmental law can indeed be perceived in this particular field.⁷⁶ Similarly, it is not by chance that the law of international watercourses has been applied, by analogy, in connection with transfrontier air pollution or the protection of migratory species of animals or birds.⁷⁷ Besides, international environmental law comprises not only rules for protection against pollution but, beyond this concept and due to Rousseau, it regulates the reasonable utilization of natural resources as well.⁷⁸

The appearance of intersectorial norms,⁷⁹ e.g., in relation to sea pollution originating from land-based sources⁸⁰ or the protection of migratory species of animals or birds,⁸¹ also reflect a sort of thaw in uniform environmental law. An accomplished integration would have several legal consequences; thus, incentives ought to be provided for the reconsideration of the rules,⁸² in respect of both international legislation and the application of the law. Nevertheless, ambiguities could not be eliminated completely, taking into consideration the attitude of the states concerned in connection with the sources of international law, and the lack of unanimity and coherence of the *de iure condito* rules.⁸³ The relationship of the law of non-navigational uses of international watercourses to the international legal order of navigation in international watercourses may result in additional difficulties.

The summary presentation of the historical development and the scientific elaboration of the international law regulating non-navigational uses of international watercourses might well exemplify the richness of this branch of international law. Following the principle of *nemo ultra posse obligatur*, the author of the present book is not, understandably, in a position to reveal completely the theoretical and practical problems in this field of international law.

As to the point of international treaties and agreements concerning water management, special attention should be given to the international treaties and agreements concluded by Hungary as one of the Danube states. The role of general international law in this particular field of international relations, the acceptance thereof by the international community, its legal nature, functions, contents, and codification, will all be examined. Finally, an outline of the institutions of international cooperation will be given.

Essentially, the concept of the present work is concentrated on the rules of international law *de iure condito*, i.e., extra-judicial problems are dealt with only to the minimum and most necessary degree. The main purpose has been less of a completion of the already accomplished elaborations; instead, the principal effort has been to reveal the inherent possibilities of international law.

In compliance with the division of international law into primary and secondary norms,⁸⁴ suggested by the International Law Commission (ILC), the law of non-navigational uses of international watercourses is here regarded as containing rules that impose specific obligations on states in this sector of inter-state relations. Nevertheless, the aspect of international responsibility cannot be omitted completely, taking into consideration the arguments for the efficiency of the legal order relation to non-navigational uses of international watercourses, on the one hand, and the assistance that it may give to the clarification of the nature of these norms of international law, on the other.

The traditional term, i.e., the law of non-navigational uses of international watercourses is used here in the introductory chapter.⁸⁵ With a view to simplification and in the absence of more appropriate wording—*faute de mieux*—the expression *international water law*,⁸⁶ according to *das internationale Wasserrecht*, will be used as well, with no difference in interpretation.

Notes

¹ See: KORBUT—BASKIN: op. cit. 1979, pp. 266—273.

² TECLAFF: op. cit. p. 21.

³ LA PRADELLE: op. cit., p. 1057.

⁴ DECLEVA: op. cit. p. 18.

⁵ ANDRASSY: op. cit. 1959, p. 133.

⁶ Ibid. p. 134.

⁷ PCIJ, Series A, No. 10, p. 18.

⁸ For a list of previous treaties on water management see: SCHULTHESS, Appendix; SMITH: op. cit. pp. 159—165.

⁹ For their enumeration see: DECLEVA: op. cit. p. 21, note 62.

¹⁰ See: Systematic Index of International Water Resources Treaties. Declarations, Acts and Cases by Basin. FAO, Legislative Study. No. 15. The list, compiled in 1978, has to be completed, of course, by the treaties concluded since then.

¹¹ TECLAFF: op. cit. p. 110.

¹² Conférence de Barcelone, Comptes-Rendus, Genève, 1922, pp. 16—17, 20, 77, 76, 130, 151, 229, 335.

¹³ WINIARSKI: op. cit. p. 188; STOJKOVIC: op. cit. p. 125.

¹⁴ UN Doc. ST/ESA/154, pp. 255 et seq.

¹⁵ For previous treaties regulating the uses of water, concluded by individuals, see the 1780 agreement between the King of France and the Archbishop of Basel, Switzerland, the Franco-Dutch treaty of 1820, and the Franco-Spanish Complementary Act of 1866. For the time being, remnants of earlier arrangements can be found in treaties or agreements relating to fishing and timber-floating.

¹⁶ For a summary of decisions see: Yearbook ILC, 1974, Vol. II, Part 2, pp. 187—199, paras. 1022—1068.

¹⁷ PCIJ, Série A/B, No. 70. p. 16.

¹⁸ CPJI, Serie C, No. 81, pp. 44—45, 96—97.

¹⁹ For the text of the judgment see: RGDIP, 1958, pp. 79—119.

²⁰ UN, Reports of International Arbitral Awards, Vol. III, pp. 1905—1982.

²¹ Ibid. p. 1963. For a criticism see: VISSCHER: op. cit. p. 87.

²² Ibid. p. 1965.

²³ See the North Sea Continental Shelf cases (ICJ Reports, 1969, pp. 50 et seq.), Fisheries Jurisdiction case (United Kingdom v. Iceland), (Merits), (ICJ Reports, 1974, paras. 67—72).

²⁴ Nuclear Tests case (ICJ Reports, 1974, p. 256, p. 427: Dissenting Opinion of Sir. G. Barwick).

²⁵ GAJA: op. cit. p. 358.

²⁶ VIRALLY: op. cit. 1983, p. 251.

²⁷ GROTIUS: Book II, Chap. II. XII. A similar theory was put forward by VATTEL: op. cit. I. paras. 271—272.

²⁸ DECLEVA: op. cit. p. 5.

²⁹ E.g. MARTENS-BERGBOHM: op. cit. p. 365; HEFFTER: op. cit. p. 85.

³⁰ Yearbook ILC, 1974, Vol. I, Part 2, pp. 220—223; pp. 362—365.

³¹ GARRETSON—HAYTON—OLMSTEAD: op. cit. pp. 167—255 and pp. 298—607; KISS: op. cit. 1984.

³² FAHMI: op. cit. pp. 51—70.

³³ CAUBET: op. cit. pp. 803—818.

³⁴ GODANA: op. cit. pp. 169 et seq.

³⁵ E.g. DUPUY: op. cit. 1978, pp. 866—889; KNAPP: op. cit. pp. 161—186.

³⁶ E.g. LAMMERS, SETTE-CAMARA, BALLENEGGER: op. cit. 11—73; KISS: op. cit. 1977, pp. 861—867; — 1984, pp. 773—385.

³⁷ HUBER: op. cit. pp. 29—52.

³⁸ BERBER: op. cit. p. 12.

³⁹ VON BAR: op. cit. pp. 281—288.

⁴⁰ SMITH: op. cit. pp. 144—158.

⁴¹ OLMEAD: op. cit. p. 10.

⁴² MAXWELL-COHEN: op. cit. p. 232.

⁴³ DECLEVA: op. cit. p. 7.

⁴⁴ CASSESE: op. cit. p. 98.

⁴⁵ VIRALLY: op. cit. p. 39.

⁴⁶ New problems are arising at the level of multilateral legislation. See: LACHARRIÈRE: *op. cit.* p. 27.

⁴⁷ For the efficiency of international statutes of a technical character see: *ibid.* p. 113.

⁴⁸ E.g. Inter-American Bar Association. See: Yearbook ILC, 1974 Vol. II, Part 2, pp. 208—209, and pp. 356—357.

⁴⁹ AIDI, 1911, Vol. 24, pp. 365—367.

⁵⁰ AIDI, 1961, Vol. 49, Part 2, pp. 370—373.

⁵¹ AIDI, 1979, Vol. 58, t. II, pp. 198—203.

⁵² ILA, 46th Report (1954), p. 324.

⁵³ See the Dubrovnik Resolution, ILA, 57th Report (1956), pp. 241—243.

⁵⁴ See the New York Resolution, ILA, 58th Report (1958), pp. VIII—X.

⁵⁵ ILA, 52nd Report (1966), pp. 478—533.

⁵⁶ *Ibid.* p. 483.

⁵⁷ *Ibid.* p. XI.

⁵⁸ ILA, 55th Report, 1972, pp. XIV—XVIII.

⁵⁹ ILA, 67th Report, 1976, pp. 213—266.

⁶⁰ ILA, 59th Report, 1980, pp. 362—373.

⁶¹ ILA, 62nd Report, 1986, pp. 251—274.

⁶² ILA, 60th Report, 1982, pp. 535—548.

⁶³ ILA, 62nd Report, 1986, pp. 275—294.

⁶⁴ ILA, 60th Report, 1982, pp. 158—177. The Resolution on the Relationship between Water, other Natural Resources and the Environment, ILA, 59th Report, 1980, pp. 374—393 can be regarded as an antecedent.

⁶⁵ SAUSER-HALL: *op. cit.* p. 527.

⁶⁶ CUTH: *op. cit.* p. 114.

⁶⁷ BILDER: *op. cit.* p. 169; KLIMENKO: *op. cit.* p. 54.

⁶⁸ E.g. Argentina. See: ILA, 54th Report, p. 54.

⁶⁹ On the basis of the Helsinki Rules, India proposed to convene a diplomatic conference, with a view to concluding an international treaty (UN Doc. A/C.6/L.814). The draft of the Asian—African Legal Consultative Committee of 1974 (Vol. II, YILC, Part 2, pp. 339—340) has also been based on the Helsinki Rules.

⁷⁰ In particular: ANDRASSY (AIDI, 1959, Vol. I, pp. 131—358) and SALMON (AIDI, 1979, Vol. I, pp. 193—380).

⁷¹ See e.g. The 1902 Paris Convention on the protection of birds, the Convention for the regulation of salmon fishing in the Rhine basin of 1885, and the 1933 Convention on the protection of nature in Africa.

⁷² KISS: *op. cit.* 1981, p. 500.

⁷³ E.g. BALLENEGGER, BARBERIS, JOHNSON, KISS, KOLBASOV, UTTON.

⁷⁴ See ILA, 58th Report, 1978, pp. 383—385.

⁷⁵ YILC, 1980, Vol. II, Part 1, para. 33, p. 253.

⁷⁶ BILDER: *op. cit.* pp. 166—167.

⁷⁷ BANKS: *op. cit.* pp. 285—300.

⁷⁸ TIMOSHENKO: *op. cit.* p. 95, with reference to the Stockholm Declaration of 1972 and the Final Act of Helsinki of 1975.

⁷⁹ KISS: *op. cit.* 1981, p. 500.

⁸⁰ ILA, 55th Report, 1982, pp. XVII—XVIII.

⁸¹ KLEMM: *op. cit.* p. 88.

⁸² KISS: *op. cit.* 1981, p. 500.

⁸³ LACHARRIÈRE: *op. cit.* pp. 27 et seq., pp. 90 et seq., pp. 181 et seq.

⁸⁴ YILC, 1980, Vol. II, Part 2, para. 23, p. 26.

⁸⁵ See YILC, 1976, Vol. II, Part 2, p. 153.

⁸⁶ Cf. SCHULTHESS, DECLEVA, BERBER, GODANA.

The concept of international watercourses

1. Preliminary remarks

Several references may be found in the theory of international law to the unclear position of the concept of international watercourses.¹ Looking at the codification efforts concerning the non-navigational uses of international watercourses it seems, indeed, that the most striking disputes arose in respect of the definition of the concept of international watercourses, to the extent that other problems were actually pushed into the background. These facts are highly indicative, i.e., much more has been at stake than the mere exploration of the content of a specific term in this context: what one is faced with here appears to be one of the key problems of this particular field of international law.

On the basis of a resolution of the IDI, adopted in Salzburg,² a distinction should be made between seas and non-maritime waters which, with some inaccuracy, can be termed as fresh waters.³ Taking into consideration that the scope of the present work covers only the latter group, it should anyhow be noted that to make a distinction between seas and fresh waters is not always an easy task.⁴ Furthermore, some consequences resulting from the unity of the hydrosphere cannot be neglected in the currently investigated field either.

A considerable number of fresh waters, i.e., 214 in total,⁵ are situated in drainage basins extending to the territories of two or more states, consisting of the relevant main river, its subtributaries, lakes, groundwaters, etc. As a matter of fact, there are also water-collecting basins lying exclusively on the territory of single states, with main rivers and their subtributaries which flow through the territory of the same state from their source to their tributary to the sea.

Considering these purely geographical criteria, a *distinction can be made between national and binational or multinational (pluri-national) fresh waters or drainage basins*. Nevertheless, the international legal relevance of the said division is influenced by two circumstances: a) the reality of the situation which is at least on a par with hydrological unity,⁶ i.e., a political division: in spite of the

principle that "waters know no frontiers",⁷ waters are utilized within the practical context of individual states; b) "Que les concepts juridiques aient un sens purement conventionnel est particulièrement évident lorsque le droit fait mine de se référer à la nature";⁸ in fact, the geographical situation in itself cannot constitute a legal source. Instead, it is "a factor influencing or, the more, determining the will of the sovereign states which create international law, so that its effect presents itself indirectly, through the legislative volition of the states, in the formation of the rules of customary international law and the provisions of bilateral or multilateral international agreements or conventions, respectively".⁹

One can conclude two points from the preceding: first, the dissolution of a hydrological unit into its constituent elements, i.e., the separate handling of a main river, its subtributaries, lakes, underground waters, etc., cannot be excluded; second, there is no absolute connection (*iunctim*), accordingly, between pluri-nationality in its geographical sense, and international character. Hence, the latter is applicable to fresh waters which became the object of international law-making.¹⁰

In view of the aforementioned, the first question is *whether or not the physical differences between rivers, lakes, channels, underground waters, etc., have an international law relevance*. In spite of actual differences in the utilization of fresh waters and lakes and their protection from pollution,¹¹ and the fact that interested riparian states used to conclude separate treaties or conventions concerning lakes in connection with fresh waters flowing through their territories quite frequently, as was the case with Lake Constance and Lake Geneva, there has been an established opinion that, for international law, lakes have to be judged in the same way as rivers.¹² Anyhow, the possibility of extrapolating this view to man-built channels, underground waters, and other elements of the hydrographic system is at least doubtful, and a separate examination is imperative.

There is, however, a more difficult problem than those dealt with above, i.e., the clarification of the *source of the term "international"*: as to whether this source can only be an international treaty, an agreement, or a convention, general international law can be referred to. A possible reply is influenced by several factors, i.e., the general attitude concerning general international law, the historical development of international fluvial waters, including the appearance of new concepts, and, finally, actual differences in the interpretation of the term.

As to the last point, it can be said in principle that the term "international fresh water" can *express only the territorial scope of international statutes*, without any prejudice to the contents of the relevant norms.

Essentially, *two principal tendencies*, i.e., a traditional and a modern approach, have been established in respect of the definition of the term interna-

tional fresh waters, both in theory and in international practice,¹³ comprising different views. The problem of the viability and applicability of some sort of compromise has also arisen.

The logical division outlined above reflects the development of the law of non-navigational uses of international watercourses, on the one hand, and the difficulties of solving the antinomy between hydrological unity and political division, on the other.

2. The traditional approach

The view which holds watercourses to be international and which separate or traverse two or more States has been shared, explicitly or tacitly, by many authors in the theory of international law.¹⁴ The starting point for the traditional definition of international watercourses is found in Article 108 of the Final Act of the Vienna Congress of 1815, which reads as follows: "Les Puissances dont les Etats sont séparés ou traversés par une même rivière navigable, s'engagent à régler d'un commun accord tout ce qui a rapport à la navigation de cette rivière."

It has to be pointed out at the same time that the criteria of a river to qualify as an international watercourse have changed several times in practice. Thus, some rivers were declared to be international watercourses by the Versailles Peace Treaty of 1919¹⁵ which, in terms of the Vienna Congress provision referred to above, would not have been considered so. Furthermore, the concept of "international water systems" was introduced. It should be also mentioned that, retreating from the previous systematization in several aspects, e.g., the problem of internationalization, not only a new term but, even more, a new element was introduced to the law of international watercourses in terms of the Barcelona Statute of 1921. According to Article 1 of the said Statute, "seront considérés comme voies navigables d'intérêt international: 1. toutes parties naturellement navigables vers et depuis la mer, d'une voie d'eau qui, dans son cours naturellement navigable vers et depuis la mer, sépare ou traverse différents Etats, ainsi que toute partie d'une autre voie d'eau naturellement navigable vers et depuis la mer reliant à la mer une voie d'eau naturellement navigable qui sépare ou traverse différents Etats". Besides, it is also put down in the said Statute that "les affluents doivent être considérés comme des voies d'eau séparés".

Taking into account the documents referred to above, one can argue that an *international treaty or agreement is a constituent element of the concept of an international watercourse*, i.e., the international legal status of rivers traversing or separating the territories of two or more states has to be determined by an international treaty or agreement.¹⁶ Needless to say, the authors in question

start from the correct view that there was no universal rule of international law which would guarantee free navigation for any state in rivers traversing the territory of more states, consequently this was only practicable by virtue of an international treaty or agreement.¹⁷ It should also be noted that the provision of Article 108 of the Final Act of the Vienna Congress, mentioned above, is based on the concept of *pactum de contrahendo*, while the Barcelona Statute took as a basis the principle *res inter alios acta nec nocere nec prodesse potest* (Article 24).

Considering the view qualifying a watercourse as having international character depending on the existence of an international treaty or agreement applicable to it, one can easily reveal the general attitude concerning the sources of international law, on the one hand, and, on the other, the self-defence of the riparian states against excessive demands raised by non-riverside states. So, Decleva was right in stating: "La dottrina ... sette l'influsso di tendenze giusnaturalistiche, attribuire a tale categoria di fiumi una condizione giuridica tutta particolare: associando arbitrariamente al concetto di fiume internazionale il principio delle libertà di navigazione..."¹⁸

The said interpretation of the concept of international watercourses did not remain, however, within the frame of theory, i.e., from time to time it appeared in practice as well. Thus, the following is laid down in Article 2 of the Convention regarding the regime of navigation on the Danube, concluded in Belgrade in 1948: "The regime set up by the present Convention is applicable to the navigable section of the Danube ranging from Ulm to the Black Sea..." As is known, the Federal Republic of Germany did not adhere to the said Convention, accordingly it considers it as *res inter alios acta*. On the basis of the above-mentioned, it goes without saying that the section of the Danube above Passau, i.e., that which is on the territory of the Federal Republic of Germany, qualifying as a national watercourse according to the Federal Republic government, can be considered as a critical point in the Belgrade Convention.¹⁹ Similar views presented themselves in the UN General Assembly²⁰ and at international conferences.²¹

The view claiming a relationship (*iunctim*) between the existence of an international treaty or agreement bearing upon a watercourse traversing the territories of two or more states and its international qualification is entangled by internal controversies, on the one hand, while it is not in harmony with the general tendency of international practice, on the other.

a) A report classifying the treaties relating to international watercourses with treaties relating to contiguous, to contiguous and successive, to one or more specific rivers, and to one or more parts of these rivers²² also reflects that conventional law-making hardly followed the 1815 pattern. Besides, it has frequently occurred that several international treaties are concerned with the same watercourse which would thus be declared international, but with different regulations.

b) Taking the view that the international character of a watercourse can be based exclusively on an international treaty, some circumstances cannot be explained.

— It has been an established view that the riparian states of an international watercourse have the right of free navigation even if the international situation of the watercourse concerned is not regulated by an international treaty or agreement.²³

— Although Chile's argument against the international character of the Rio Mauri was based on the non-navigable nature of the river,²⁴ there is now a general agreement that navigability as a conceptual criterion has to be omitted.²⁵

— References to the Vienna definition of 1815 are still frequent in international practice. Thus, slightly more than half the governments addressed by the ILC with a questionnaire²⁶ expressed the view in the answers that the concept of an international watercourse had to be identified with the traditional definition of international watercourses.²⁷ As it was justified by the governments concerned, this view was in compliance with international practice; in fact, problems would necessarily arise if major areas were taken into consideration. Political and economic interests, determined by the geographical situation, can be easily perceived as being behind this view.

Similar to the changes in the previous definition, a hint or reference can only be interpreted in the respect that the definition of the term is also inherent in general international law. One could hardly suppose, indeed, that the Final Act of 1815 would constitute an international treaty in force for the contemporary international community; rather, its provisions became transformed into norms of customary law.²⁸

Summing up the aforementioned, the *international character of watercourses* traversing two or more countries *follows from general international law*. Furthermore, this concept is also supported by the point, to be proved in the following paragraphs, that the existence of general international law regulating the non-navigational uses of international watercourses has been acknowledged by the international community.

One single reservation should be made in this context, and this concerns the possibility of extrapolating the above statement to man-made channels connecting individual international watercourses.²⁹

The greatest problem of the traditional approach, however, has been its neglect of the hydrological units of watercourses. Thus, the concept of an international watercourse does not comprise the subtributaries of international watercourses that traverse the territory of only a single riparian state, and underground waters are simply excluded from it. Having perceived these problems, the supporters of the traditional definition came to accept a further broadening of the category of international watercourses to some extent. So,

France proposed using the concept of the international drainage basin in the protection against pollution; in Canada's view, the optimal area coincides with that in which an interdependence exists between the uses of waters by two or more states.³⁰ The views of some South American states are also worth mentioning, i.e., they explicitly acknowledge the prohibition of causing damage to other states by means of the use of waters. Nevertheless, these views fail to explain the case of when behaviour causing damage occurs not in a river that either forms the frontier or is crossed by it, but presents itself in the respective drainage basin, and the harmful effects are transferred to another state by the flowing water. It should also be mentioned that Brazil and the Federal Republic of Germany, i.e., the supporters of the traditional approach, had already concluded an international treaty covering water drainage basins as well.³¹

3. The modern approach

The most important experiment replacing the traditional concept of international watercourses has been the introduction of the categories of international drainage basins and akin terms such as international river basin, international water system, shared water resources, all resulting from the observation that, for international cooperation, "this early, minimal approach proved insufficient".³²

A water drainage basin constitutes a natural unit. So, TECLAFF is right in stating that a river basin "is by no means always a stable or well-delineated area, but neither this fact nor the complexity of surface and underground flows vitiates the general proposition that the waters which find their way to the basin's outlet form an independent system... Climate, topography, soils, and vegetation combine to maintain the river in a state of delicate equilibrium. If there is a change in any of these factors, the entire river system... reacts at once to restore that equilibrium".³³

Not without precedent,³⁴ the said hydrological or water management approach reached the level of international law mainly as a result of an ILA resolution, adopted in New York in 1958, which reads: "A system of rivers and lakes in a drainage basin should be treated as an integrated whole."³⁵

The wording of the Helsinki Rules was based upon a still broader scope: "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."³⁶ (Article II). This approach was also accepted by the IDI in its resolutions adopted at Salzburg and Athens.³⁷

As a matter of fact, the concept of international drainage basins has had several supporters in international law literature. By way of example, one may mention COLLIARD, GRIFFIN, GARRETSON-HAYTON-OLMSTEAD, MANNER, O'CON-

NELL, TECLAFF, UTTON, and WOLFROM³⁸ from Western states, and CHAHUAN and GODANA from the developing countries.³⁹ Other scholars, e.g., SAUSER-HALL, PATTY, SETTE-CAMARA, for various reasons took an opposing view.⁴⁰

As to socialist literature in international law, no uniform approach can be perceived, and the views of the individual authors are not free from ambiguity either. Thus, some international lawyers⁴¹ cannot accept the concept that the rules of international law would be applicable to the entire water drainage basin, or that this could be practicable only *de lege ferenda*.⁴² In a report prepared for the Lagonissi Conference, KOUTIKOV claimed that the concept of an international water drainage basin was not accepted by international law. Subsequently, in his remarks summing up the work of the conference, he spoke of it as having been established in continents other than Europe.⁴³ Contrary to this, KLIMENKO wrote in support of the concept of the international water drainage basin, stating that a territorial limitation on the effect of the rules of international law was not justifiable as the connection between watercourses brought about mutual interests, "attributing to the states specified rights and obligations".⁴⁴ As he did not criticize the Helsinki Rules in this context and, in addition, considered international watercourses as including underground waters,⁴⁵ this also implies acceptance of the concept of international water drainage basins.

The *division of views*, demonstrated above, and the continued dialogue between the supporters and opponents of the modern approach can be traced back, essentially, to two causes, i.e., the different interpretation of the legal concept of international water drainage basins, on the one hand, and, on the other, the lack of unanimity in international practice.

a) As to the *interpretation of the concept*, the differences soon became apparent in the following problems: whether or not the concept was related to the fundamental elements of hydrological unity or whether an excessively technical character was attributed to it, on the one hand,⁴⁶ and whether or not it was considered as having a merely territorial scope of international regulation or comprising specified methods of usage, on the other.⁴⁷

The latter concept is worthy of particular consideration. Following the ILA resolution adopted in New York, the unity of an international water drainage basin can be identified with the so-called *integrated utilization*⁴⁸ which, as ANDRASSY pointed out,⁴⁹ has not been acknowledged by general international law.

The appearance of the category of *divided natural resources* gave a new impulse to the "legal unity" mentioned above, and the process reached its zenith as the term was embodied in Article 5 of the ILA's Montreal Rules.⁵⁰ Evidently, the scope of the concept of divided natural resources is broader than that of international water drainage basins. At the same time, an indivisible, biophysical unity is reflected in it, whose interactions cannot be changed or terminated by the existence of state borders; consequently, a strict interdependence of state interests is conceptualized here.⁵¹

b) The actual application of the concept of international water drainage basins, together with its related ideas, is rather limited and ambiguous. What was stated as early as 1958, i.e., relating to the "inadequacy of relevant international law"⁵² is still valid today, although this statement was concerned with integrated drainage basins.

The draft text of the 1923 *Geneva Convention* on hydrological power mentioned the term "waters forming part of a basin extending to the territories of several states". Furthermore, it was pointed out in the report of the relevant committee that "the term concerned an area from which waters have been drained by a river and its subtributaries". Although a reference to international water drainage basins was omitted from the text of the Convention, one can deduce a tacit acceptance of the concept from the wording of Article 5 providing for searching technical solutions independent of state borders. A generalization can, however, be excluded by two circumstances: a connection (*iunctim*) is established between an international water drainage basin and integrated utilization, on the one hand, and, on the other, the practical significance of this provision is negligible in view of the fact that the Convention was accepted by a very limited number of states. On the impact of the Helsinki Rules, it is laid down in Article 1 of a 1973 draft of the Asian-African Legal Consultative Committee that the drafted rules concerned the utilization of the waters of an international drainage basin but that no international treaty or convention was yet concluded on the basis of the said draft.

The territorial scope of some international treaties or conventions covers the entire international water drainage basin concerned. The number of treaties and conventions of this kind increased from three to ten in the period from 1950 to 1960, and then to 25 by 1971;⁵³ as a matter of fact, this number has continued to increase since then.

The concept of international water drainage basins appeared in international judicial practice as well. So, the Permanent Court of International Justice (PCIJ) declared in the Case Relating to the Territorial Jurisdiction of the International Commission of the River Oder that the term "international watercourse" was applicable to the entire water system, including its purely national subtributaries.⁵⁴ Commenting on the judgement, SAUSER-HALL questioned whether or not the said statement was relevant in respect of the international water drainage basin as it was pronounced in terms of the right of free navigation, and limited by nature itself.⁵⁵ With a counter-argument one may claim, however, that the general principles of the law of international watercourses was explicitly acknowledged by the Court, which did not differentiate between navigational and non-navigational uses of the watercourses in question.⁵⁶

In spite of the continuous increase of cases in international practice, *one cannot claim, however, that the concept of international water drainage basins, included within the territorial scope of general international law, was acknowl-*

edged by the international community. Here it has been an important counter-argument that, based on the principle of hydrological unity, the concept of international water drainage basins was accepted only by a minority of the replies received to a questionnaire of the ILC, mentioned above,⁵⁷ and more than fifty percent of the states which forwarded their replies⁵⁸ opposed the said concept, insisting on the traditional term of international watercourses. A confrontation of view within the ILC and the 6th Commission of the General Assembly of the UN can in this context, however, be assessed as a revelation.⁵⁹

The term *divided natural resources* has been applied less often in international treaties or conventions⁶⁰ than in the resolutions of international organizations. One only has to look at Article 3 of the Charter of Economic Rights and Duties of States,⁶¹ and then, subsequently, the broad-range refusal of the term in the course of the codification of the law of non-navigational uses of international watercourses, as will be demonstrated later.

The *negative attitude* of the majority of the international community in respect of international water drainage basins and divided natural resources can be traced back to several causes. While admitting its reasonableness, another, opposing views considered as having equal importance, i.e., the acknowledgement of the concept would involve additional important restrictions of territorial sovereignty.⁶² In addition, the relevant geographical area could be further broadened by artificial means, i.e., the building of channels, resulting in a considerable increase in the number of interested states.

4. A compromise between traditional and modern approaches

Due to its specific function, the task of finding a compromise within the different definitions of international watercourses has been incumbent on the ILC⁶³ which, however, can refer back to some precedents.

First of all, one could start from general considerations. Thus, the PCIJ pronounced, in its judgement in the *Lotus case*, the following: "Now the first and foremost restriction imposed by international law upon a State is that, failing the existence of a permissive rule to the contrary, it may not exercise its power in any form in the territory of another State. In this sense jurisdiction is certainly territorial; it cannot be exercised by a State outside its territory except by virtue of a permissive rule derived from international custom or from a convention."⁶⁴ Two conclusions can be drawn from this statement of principle. First, any action by a state having effect only within the territory of that state has to be regarded as conforming to the law.⁶⁵ Second, if the effects of the relevant action transgress the state border, they will be subject to adjudication under international law.⁶⁶ Taking these statements into consideration, one can

duly consider the wording of the judgement pronounced in the *Lake Lanoux* case, which reads as follows: "The unity of a basin is . . . ported at the legal level only to the extent that it conforms to the realities of life."⁶⁷ Accordingly, physical geography and the hydrological unity of watercourses by themselves are not factors which create law; on the other hand, international relations come into existence if the utilization of any part of a water drainage basin would involve transfrontier effects. *Hence, the international character of watercourses cannot be decided from the outset, i.e., on the basis of geographical criteria. Thus, the effects transmitted through the mobility of the water require a declaration that the respective watercourses are international, and subject to international legal norms.*

This should not in any case mean that the geographical factor has no role at all. On the contrary, the frequency of the effects in question evidently depends on the distance between the relevant state border and the place of interference with watercourse relations. Accordingly, watercourses constituting a border, or the border sections of watercourses traversing the territory of more than one state, are principally taken into account; the more important the water utilization in question is, than the probability of a transfrontier effect will increase in direct proportion to it. The acknowledgement of the significance of the transfrontier effect has already arisen, as *obiter dictum*, in the works of some authors,⁶⁸ but more as an argument against the traditional definition. According to CUTH, the geographical situation of a river forms no prejudgement, attributing to it a national or international character; rather, "the relations established as a result of its uses are predominant".⁶⁹

International practice has also offered examples in which transfrontier effects are taken into consideration for regulation by international law. Thus, in terms of Article 1 of the 1967 Austrian-Czech treaty on frontier watercourses, watercourses crossing the frontier or situated in the area of the state frontier in which water management works or actions carried out in the territory of one of the parties may result in prejudicial effects upon water-related uses in the territory of the other party, are regarded as being within the scope of the treaty. The scope of the 1962 Franco-Swiss convention on the protection against pollution of Lake Geneva also covers the respective subtributaries provided that they contribute to the pollution of the lake.

The statement concerning the international character of watercourses based upon transfrontier effects results in the consequence that, as ANDRASSY noted, the theoretical problem of international watercourses which aroused several disputes became transformed into the simpler problem of mere evidence.⁷⁰

As a matter of fact, the international character does not appear to the same extent when the various sections of a hydrological unit are divided among several countries. It is appropriate here to refer to a problem, intensively disputed in jurisprudence, when a different legal status for border waters is

claimed, in particular watercourses constituting a state frontier or crossed by it, respectively.⁷¹ As to the first category, it is practically beyond reality to imagine a water utilization activity that would have no effect on the territory of the relevant neighbouring state, and the same can be said for the border sections of watercourses of the second category. It is thus perfectly justified to claim the establishment of a specific international legal regime for the said categories of international watercourses. This view was explicitly supported by some governments.⁷²

Our view concerning the definition of international watercourses can be summarized by saying that the emphasis should be laid on the transfrontier character of the effects of interference with water regimes, acknowledging the due significance of geographical factors. In fact, *transfrontier effects bring about interstate relations in the field of international water management which require regulation under international law*. Furthermore, it has to be pointed out that technical development and the extension of economic possibilities have resulted in effects of this kind being taken into consideration for increasingly larger areas.

The codification work of the ILC can be traced and interpreted on the basis of the precedents mentioned above. In the beginning, the ILC preferred to postpone the determination of the notion of international watercourses,⁷³ although individual reporters were unequivocally in favour of the concept of international water drainage basins. Thus, SCHWEBEL's opinion was as follows: "... in order to be in harmony with the physical laws governing water, the drainage basin is the unit for which legal rules governing the use of fresh water should be formulated".⁷⁴ Nevertheless, the ILC could not omit from consideration the fact that an important number of states were reluctant to accept the concept of international water drainage basins. It was in this way that the working hypothesis, of a provisional character, came into existence⁷⁵ and, taking this into consideration, the term "international watercourse system" "as applied by the present draft convention"⁷⁶ was thus formulated in Article 1 of J. EVERSEN's first approach. As the above-mentioned definition had to face heavy objections in both the ILC⁷⁷ and in the 6th Commission of the UN General Assembly,⁷⁸ the *definition of J. EVERSEN's second draft was formulated as follows*:

"1) For the purposes of this Convention, an 'international watercourse' is a watercourse—ordinarily consisting of fresh water—the relevant parts or components of which are situated in two or more States (watercourse States).

2) To the extent that components or parts of the watercourse in one State are not affected by or do not affect the uses of the watercourse in another State, they shall not be treated as being included in the international watercourse for the purposes of this Convention.

3) Watercourses which in whole or in part are apt to appear and disappear (more or less regularly) from seasonal or other natural causes such as precipita-

tion, thawing, seasonal avulsion, drought or similar occurrences are governed by the provisions of this Convention.

4) Deltas, rivermouths and other similar formations with brackish or salt water forming a natural part of an international watercourse shall likewise be governed by the provisions of this Convention."⁷⁹

Taking into consideration that the above text had not yet taken on a final formulation, on the one hand, and the question of whether or not it expressed the consent of the ILC members, on the other, we prefer to make some *brief comments* instead of giving a more thorough interpretation.

— The definition of the concept of international watercourses became simplified by omitting the enumeration of the relevant hydrological elements, on the one hand, although the internal balance was upset by maintaining the extension of the term to exceptional phenomena, and, on the other, by equally omitting the term "international water system", that aroused many disputes and, possibly, also contained a prejudgement. In our view, it is still not clear whether or not some special situations, such as the glacial waters of the Andes,⁸⁰ are covered by the definition referred to above.

— The structure of the precited article raises the problem of the burden of evidence (main rule vs. exception) as, essentially, the *international character is relative*⁸¹ and dependent on transnational effects, thus creating a functional concept.⁸² In view of the fact that a differentiation of transnational effects is out of question, two problems present themselves. One could argue with the preclusion of *de minimis* effects but there would be no harmony even in this case between the contents of this article and Article 9, to be dealt with later, linking a prohibition on effects causing appreciable harm. Furthermore, the effect may be also positive, i.e., favourable to the other state, and this could justify laying claim at the international level, e.g., on account of unlawful enrichment.

— A functional approach has other problems of an inherent nature which cannot be dealt with in detail here, resulting mainly from the view that territorial delimitation used to be considered as an actual premise of international law.⁸³

— In spite of the reservations set forth above, we are of the view that the result achieved within the framework of the ILC so far constitutes an *important step towards the purpose of surmounting the controversy between the traditional and modern concepts of international watercourses, and this compromise has been built upon the de iure condito rules of international law*. In fact, it is in accordance with the actual nature of international law⁸⁴ and within the inductive approach to the problems of international law.⁸⁵

5. Pending problems

a) Permissibility of maintaining a distinction between national and international watercourses

It is permitted to assert that the distinction between national and bi- or multinational watercourses, those of international character included, is *in statu morendi*. It can thus be indicated that some obligations are imposed, under positive international law, upon the riparian states with purely national rivers in order to prevent or eliminate sea pollution from land-based sources.⁸⁶ In view of the efforts to preclude the effects of so-called acid rain, the conventions dealing with air pollution⁸⁷ have a direct influence on the state of rivers and lakes of national character, and international interests coupled with the preservation of the same have been acknowledged by international conventions.⁸⁸

b) International groundwaters

In the 1970s it just so happened that the problem of subterranean waters (groundwaters) was recognized. Thus, international conventional practice on the subject-matter was collected,⁸⁹ international aquifers or international groundwater basins were surveyed,⁹⁰ and the necessity for cooperation was declared.⁹¹

Nevertheless, the respective experts are of the opinion that international problems are scarce and international law-making still meagre.⁹² Although a rapid development can be anticipated, the facts referred to above suggest that general international law could be extended to underground waters only by means of the doubtful use of *analogy*.

The withdrawal of the ILC from the concept of international watercourse systems resulted unequivocally in the preclusion of the so-called independent subterranean (underground) waters; accordingly, only underground waters proper were qualified as an important element of international watercourses.⁹³

In view of the aforementioned, the idea of the ILA to formulate the Rules on the Law of International Groundwater Resources⁹⁴ seems to be premature, although it would be logical in terms of the Helsinki Rules.

c) International water resources

The possibilities of human interference with water recycling have become broader as a result of techno-scientific development. The term "international water resources", understood to comprise all surface, subterranean, and atmo-

spheric waters which traverse the territory of more than one state, are located under the territory of several states or are to be found above it,⁹⁵ was introduced for this reason. The term "international water resources" is also embodied in the Helsinki Resolution and, even if the investigation of the international legal problems of atmospheric waters is not explicitly mentioned among the tasks of the reorganized commission, the non-exhaustive enumeration may well comprise it.⁹⁶

As a matter of fact, it cannot be claimed that the concept of international water resources is recognized to the extent that it would give birth to rights and obligations under international law for the states concerned. The definition of international watercourses as formulated here is not regarded as applicable in this context either for, *in the absence of a comprehensive regulation in international law relating to the modification of climatic and weather conditions*, the application of analogy could not be avoided. It should be mentioned as a characteristic circumstance that the extension of a prohibition on causing damage, generally recognized in the law of international watercourses, to the field of modification of weather conditions was not unequivocally favoured by an experts commission.⁹⁷

Notes

¹ WINIARSKI: op. cit. p. 98; KORBUT-BASKIN: op. cit. 1968, p. 251.

² AIDI, 1961, Vol. II, pp. 381—384.

³ Non-maritime waters can also have a saline content, e.g. the Caspian Sea, the Dead Sea, and the estuaries of rivers.

⁴ For La Plata see: ESPIELL: op. cit. pp. 725—737.

⁵ UN Doc. E/C.7/71. p. 4, para. 4.

⁶ LAMMERS: op. cit. p. 18.

⁷ European Water Charter, point XII (YILC, 1974, Vol. I, Part 2, p. 343).

⁸ SALMON: op. cit. 1982, p. 281.

⁹ HERCZEGH: op. cit. 1982, p. 14.

¹⁰ OPPENHEIM—LAUTERPACHT: op. cit. Vol. I, p. 365; ROUSSEAU: op. cit. Tome IV, p. 485; SAHOVIC and BISHOP: op. cit. p. 324.

¹¹ PONDAVIN: op. cit. pp. 50, 204, 346.

¹² Ibid. pp. 313—314; cf. the Madrid Resolution of the IDI, article II, point 6 (AIDI, 1911, pp. 365—367).

¹³ Cf. LAMMERS: op. cit. pp. 18—22.

¹⁴ Resolution of the Inter-American Bar Association in 1957 (YILC, 1974, Vol. II, Part 2, p. 208); CUTH: op. cit. p. 9; DAHM: op. cit. Vol. I, p. 621; PATRY: op. cit. p. 173; SAUSER—HALL: op. cit. p. 481; SETTE—CAMARA: op. cit. p. 128.

¹⁵ WINIARSKI: op. cit. p. 100.

¹⁶ CUTH: op. cit. p. 126; KIPPELS: op. cit. pp. 93—99; SCHWARZENBERGER: op. cit. 1957, Vol. I, p. 128.; WINIARSKI: op. cit. p. 98.

¹⁷ KOUTIKOV: op. cit. p. 11; idem: Helsinki Rules, Article XIII and comments on it (ILA, 52nd Report, 1966, pp. 506—507).

- ¹⁸ DECLEVA: op. cit. p. 53; *ibid.*: WINIARSKI: op. cit. p. 126. For more details see: RAUX: op. cit. pp. 643—659.
- ¹⁹ Doc. CD, T. 37. p. 149. Similar views were also expressed by the Yugoslav (p. 15), Austrian (p. 17), and Romanian (pp. 146 et seq.) delegations.
- ²⁰ E.g. GDR. UN Doc. A/C.6/35/SR 52, para. 1. *Id.* A/CN.4/348. p. 16.
- ²¹ E.g. Turkey. UN Doc. E/CONF.70 29./168.
- ²² UN Doc. A/5409.
- ²³ See: Helsinki Rules, Article XIII; KLIMENKO: op. cit. p. 14; MOSLER: op. cit. pp. 253—254.
- ²⁴ SMITH: op. cit. p. 69.
- ²⁵ CUTH: op. cit. pp. 12—13; KLIMENKO: op. cit. p. 8; SAUSER—HALL: op. cit. p. 476. *Ibid.* replies to the ILC questionnaire. See Notes 27 and 57.
- ²⁶ ILC, 1976, Vol. II, Part 1, p. 149.
- ²⁷ FRG (ACDI) 1976, Vol. II, 1^{ère} partie, p. 160, Austria (*ibid.* p. 161), Brazil (*ibid.* p. 162), Canada (*ibid.* p. 163), Colombia (*ibid.* p. 162), Ecuador (*ibid.* p. 163), Spain (*ibid.* p. 162), Poland (*ibid.* p. 169), Yugoslavia (ACDI, 1979, Vol. II, 1^{ère} partie, p. 192).
- ²⁸ See the 1832 Declaration of the "European Concert" (MARTENS, XII. op. cit. pp. 312—313) or the Preamble to the Danube Treaty, signed in Paris in 1856.
- ²⁹ See BRUHÁCS: op. cit. pp. 20—22.
- ³⁰ ACIDI, 1976, Vol. II, 1^{ère} partie, pp. 165 and 172.
- ³¹ See the 1976 Convention on the Protection of the Rhine against Chemical Pollution, and the 1978 Amazon Cooperation Convention.
- ³² UN Doc. E/C.7/2. § 1.
- ³³ TECLAFF: op. cit. pp. 11—12. For the various problems: *ibid.* pp. 9—14.
- ³⁴ DECLEVA: op. cit. pp. 104—105; KAUFMAN: op. cit. pp. 390; for the relationship between water community and coherence theories see: CHAHUAN: op. cit. pp. 53—55.
- ³⁵ ILA, 48th Report, 1958, p. 99.
- ³⁶ ILA, 52nd Report, 1966, pp. 484—485.
- ³⁷ AIDI, 1961, T. II. p. 381; 1979, T. II. p. 198.
- ³⁸ COLLIARD: op. cit. p. 386; GRIFFIN: op. cit. p. 77; GARRETSON—HAYTON—OLMSTEAD: op. cit. p. 34; MANNER: op. cit. p. 326; O'CONNELL: op. cit. Vol. I, p. 616; TECLAFF: op. cit. p. 193; UTTON: op. cit. pp. 171 and 185; WOLFROM: op. cit. pp. 7—8.
- ³⁹ CHAHUAN: op. cit. pp. 67 and 90; GODANA: op. cit. pp. 1 and 28—29.
- ⁴⁰ SAUSER—HALL: op. cit. p. 481; op. cit. p. 173; SETTE-CAMARA: op. cit. p. 130.
- ⁴¹ CUTH: op. cit. pp. 8 and 16; DUCULESCU: op. cit. p. 168; GLASER: op. cit. p. 147.
- ⁴² HERCZEGH: op. cit. 1968, p. 36.
- ⁴³ KOUTKOV: op. cit. pp. 33 and 76.
- ⁴⁴ KLIMENKO: op. cit. pp. 13, 15—16 and 23.
- ⁴⁵ *Ibid.* p. 25.
- ⁴⁶ See ROUSSEAU's triple division (T. IV, pp. 498—499).
- ⁴⁷ For this duplicity see: GARRETSON—HAYTON—OLMSTEAD: op. cit. pp. 4 and 12.
- ⁴⁸ DUPUY: op. cit. 1979, pp. 175 and 197; BOLINTINEANU—STEFANESCU: op. cit. p. 166, with refusal on this basis.
- ⁴⁹ AIDI, 1959, Vol. I, p. 166.
- ⁵⁰ ILA, 60th Report, 1982, pp. 168—170.
- ⁵¹ TIMOSHENKO: op. cit. pp. 15—16; cf. TCHITCHVARIN: op. cit. p. 9.
- ⁵² UN Doc. E/3066, Chap. 4.
- ⁵³ UN Doc. E/C.7/46, p. 6.
- ⁵⁴ PCIJ, Series A, No. 23, p. 28.
- ⁵⁵ SAUSER—HALL: op. cit. p. 478.
- ⁵⁶ PCIJ, Series A, No. 23, p. 27.

⁵⁷ USA (ACDI, 1965, Vol. II, 1^{ère} partie, p. 164), Finland (*ibid.* p. 165), Hungary (*ibid.* pp. 155—156), the Philippines (*ibid.* p. 168), Sweden (*ibid.* p. 169), Argentina (*ibid.* p. 171), Barbados (*ibid.* p. 172), Indonesia (*ibid.* p. 173), Pakistan (*ibid.* p. 173), the Netherlands (*ibid.* p. 173).

⁵⁸ See Note 27.

⁵⁹ See UN Doc. A/CN.4/348, paras. 10—14.

⁶⁰ For an exception, see, e.g., the Ramsar Convention on Wetlands, Art. 5.

⁶¹ Furthermore, see UNGA Res. 34/186 (December 18, 1979), and the working programme of the conference on environment protection and water management.

⁶² SAUSER-HALL: *op. cit.* p. 481.

⁶³ AGO: *op. cit.* 1968, p. 175.

⁶⁴ PCIJ, Series A, No. 10, pp. 18—19. The objection claiming that the transfrontier consequences of the uses of international watercourses would not result from the exercise of jurisdiction can be counterclaimed with the argument that water uses have an internal legal regulation.

⁶⁵ North Atlantic fisheries case (RSA, T. XI, p. 167).

⁶⁶ British-Norwegian fisheries case (CIJ, Rec. 1951, p. 132).

⁶⁷ RGDIP, 1958, p. 103.

⁶⁸ DECLEVA: *op. cit.* pp. 103—104; DRÄGER: *op. cit.* p. 93; ANDRASSY: *op. cit.* 1959, p. 211.

⁶⁹ CUTH: *op. cit.* p. 16; *ibid.* KLIMENKO: *op. cit.* p. 9.

⁷⁰ ANDRASSY: *op. cit.* 1959, p. 147.

⁷¹ As for support for this distinction, see e.g. SMITH: *op. cit.* pp. 155—156; this is also the Latin-American view, reflected e.g. in the Montevideo Declaration of 1933, the draft convention of 1965 and the Asunción Act of 1971. The distinction was opposed by e.g. KLIMENKO (*op. cit.* p. 18), LIPPER (*op. cit.* p. 17), and CUTH (*op. cit.* p. 13), and their views can be supported e.g. by the judgement of the Permanent Court of International Justice (PCIJ) in the Odera case (CPJI Serie A, No. 23, pp. 5 and 27).

⁷² E.g. Hungary (ACDI, Vol. II, 1^{ère} partie, p. 167), Poland (*ibid.* p. 169).

⁷³ YILC, 1976, Vol. II, Part 2, p. 162.

⁷⁴ UN Doc. A/CN.4/332, p. 1.

⁷⁵ ACDI, 1980, Vol. II, 2^{ème} partie, p. 105, § 90.

⁷⁶ UN Doc. A/CN.4/367, para. 66.

⁷⁷ For a summary see UN Doc. A/CN.4/399, paras. 61—63.

⁷⁸ UN Doc. A/CN.4/L. 3/69, Chap. 7.

⁷⁹ UN Doc. A/CN.4/381, para. 23.

⁸⁰ See UN Doc. ST/ESA/5, p. 14.

⁸¹ See the working hypothesis of 1980 (GAOR, Thirty-Fifth Session, Supplement No. 10/A/35/10), p. 248.

⁸² This solution coincides with Article 1 of a draft, prepared by R. Quentin-Baxter on International Liability for Injurious Consequences arising out of Acts not Prohibited by International Law (UN Doc. A/CN.4/383, para. 1).

⁸³ ANZILOTTI: *op. cit.* p. X. and BIERZANEK: *op. cit.* p. 603.

⁸⁴ BERBER: *op. cit.* 1975, Vol. I, p. 22.

⁸⁵ FRIEDMAN: *op. cit.* p. 47.

⁸⁶ See Article 207 of the 1982 UN Convention on the Law of the Seas and other conventions on regional sea rules, e.g. the Paris Protocol of 1974, the Athens Protocol of 1980, the Abidjan Convention of 1981 (Article 7), the Cartagena Convention of 1983 (Article 7), and the Nairobi Convention of 1985 (Article 7). For a detailed discussion see: BURCHI: *op. cit.* pp. 115 et seq.

⁸⁷ E.g. the Geneva Convention of 1979.

⁸⁸ The Ramsar Convention of 1971, the World Heritage Convention of 1972, and the Bonn Convention of 1979.

⁸⁹ TECLAFF and TECLAFF: *op. cit.* pp. 84—95.

⁹⁰ UTTON: *op. cit.* 1983, p. 9; UN Doc. ST/ECA/147/1973. The large aquifers beneath Lake Fertő in the Carpathian Basin are of this kind.

⁹¹ E.g. UN Doc. A/CONF.74/36/1977, pp. 20—21 and 56.

⁹² UTTON: *op. cit.* pp. 16 and 26.

⁹³ UN Doc. A/CN.4/381, paras. 26 and 30.

⁹⁴ ILA, 62nd Report, 1986, pp. 21—43.

⁹⁵ UN Doc. ST/ESA/5, p. 14.

⁹⁶ ILA, 52nd Report, 1966, p. 476.

⁹⁷ UN Doc. UNEP/GC/61, Annex I, p. 9.

The problem of territorial sovereignty in international relations arising from the non-navigational uses of watercourses

1. Territorial sovereignty as a key element in international relations arising from the non-navigational uses of watercourses¹

It has been beyond doubt, both in international practice and in legal opinion in general² that, irrespective of their national or international character, the watercourses belonging to the fluvial territory of a state are subject to the sovereignty of the riparian state, i.e., the state within the territory of which they are found.

The said *quasi-axiom* needs no special confirmation and constitutes no source of problems by itself. Indicative are the statements in documents of international relevance in which either the sovereignty of the riparian states, their freedom, or their sovereign rights are declared in general terms in connection with the international watercourses on their territory,³ or they are particularly emphasized when minor or major restrictions by virtue of an international treaty or convention⁴ have a purely declarative nature or they reflect general tendencies of international law.

Sovereignty over the watercourses of the riparian states, meaning principally the right of utilization, appears in various forms.⁵ Accordingly, various allusive enumerations of the methods of utilization and the relevant measures and activities have been made.⁶ The codification taking place within the framework of the ILC demonstrates a very broad interpretation of the term "non-navigational uses" by the international community,⁷ with an all-embracing nature, except for navigation proper.⁸ So, there are uses in the actual sense of the term, such as water utilization for communal and industrial purposes, irrigation, hydro-electric power generation, and fishing. Besides, non-navigational uses taken as a collective term include protection against pollution, measures taken against damage caused by watercourses such as floods, erosion, or with a view to ensuring the conditions of utilization, e.g., the regulation of watercourses, and indirect uses such as tourism and the protection of wildlife sites as well.

A riparian state always aims to take maximum possession of watercourses through their various uses,⁹ being anxious to ensure complete independence for its water management. If international watercourses are concerned, the full enforcement of national interests is hindered principally by *material circumstances*. As stated in the minutes of the 1921 Barcelona Conference: "Un fleuve ne devient pas international, c'est-à-dire il ne perd pas son caractère national de partie intégrante d'un pays, du fait que l'utilisation de ce fleuve intéresse l'ensemble des autres pays—but—Chaque fleuve de ce genre est, en effet, comme divisé en morceaux qui sont respectivement incorporés aux territoires des Etats où il se trouvent",¹⁰ i.e. "each riparian State is sovereign only with regard to that section of international watercourse which is located on its side of the frontier".¹¹

With this state of affairs, the effects of using watercourses by one state may result¹² in, for example, a decrease or increase in their volume, a change of flow, the transfer of pollution, the occurrence of generally harmful consequences on the territory of another country, limiting the possibilities of utilization, causing damage to various structures or construction works, and increasing the costs of protection, etc. All these possibilities can be attributed to the fact that the waters in question are permanently changing,¹³ there is an interdependence among the individual elements of an international watercourse, and the functioning of a hydrological system, following the laws of nature, may bring about transfrontier effects. On account of the mobility of a watercourse and its inseparability from natural processes, it cannot be absolutely subjected to the sovereignty of a riparian state,¹⁴ and this sovereignty can only be of a provisional character.¹⁵

Accordingly, parallel or co-existent territorial rights of sovereignty enter into an actual relationship, and international relations arise from the use of watercourses, then constituting one of the elements of the system of interstate relations.

The question formulated by DUPUY, which reads: "dans quelle mesure et à quelles conditions sont compatibles des exercices concomittants de deux ou plusieurs souverainetés",¹⁶ then arises in this context:

The first consideration is that *territorial sovereignty shows a Janus face* in these international relations: it may equally serve as an argument of legitimation, i.e., justifying the unlimited utilization of waters by the respective state proper; nevertheless, an activity of the same kind by another state may be contested with reference to the above-mentioned point. As a result, the first problem originating from the uses of international watercourses is concerned with the absolute interpretations of sovereignty and the relevant disputes, as well as the possibilities of solving this antinomy. Following this, the various consequences of territorial sovereignty should be examined within the context of international relations arising from the uses of the respective watercourses.

2. Extreme concepts of territorial sovereignty

As is known from M. HUBER's works, two absolute concepts of territorial sovereignty, with extreme interpretations which are opposed to each other, exist as regards international relations arising out of the uses of international water-courses.¹⁷

The best-known formulation of *absolute territorial sovereignty*¹⁸ comes from J. HARMON, a former Attorney-General of the US, who gave the following expert's view in an American-Mexican legal dispute which occurred at the end of the last century: "The fact that the Rio Grande lacks sufficient water to permit its use by inhabitants of both countries does not entitle Mexico to impose restrictions on the United States which would hamper the development of the latter's territory or deprive its inhabitants of an advantage with which nature had endowed them and which is situated entirely within its territory. To admit such a right would be completely contrary to the principle that the United States exercises full sovereignty over its natural territory..." The case presented is a novel one. Whether the circumstance makes it possible or proper to take any action from considerations of comity is a question which does not pertain to this Department; but that question should be decided as one of policy only, because, in my opinion, the rules, principles and precedents of international law impose no liability or obligation upon the United States.¹⁹

Starting from the inequality of states, following on from the order of nature and favouring the upstream country, the Harmon doctrine expresses total freedom resulting from sovereignty and the possibility of discretionary decisions, related to the various methods of water uses, irrespective of their effects beyond its border,²⁰ on the one hand, and the fact that the international relations arising from the uses of watercourses are not regulated by general international law, on the other. With regard to this latter point, it seems doubtful²¹ whether one may conceptualize the doctrine so as to qualify it as a principle of international law.²² Some inspiration from the Hegelian philosophy of law may also be presumed although any precedent is derived from its starting point.²³

With the existence of an extreme approach, the birth of its antithesis is an almost regular occurrence, such as in the concept of *absolute territorial integrity* in our actual case, even if a classical formulation were not so well-known as with *absolute territorial sovereignty*; accordingly, its content remained somewhat ambivalent. The concept may mean that "every State must allow rivers ... to follow their natural course; it may not divert the water ... interrupt, artificially increase or diminish its flow..."²⁴ It may also pronounce that "L'Etat dont le territoire est parcouru par un fleuve qui passe ensuite par le territoire d'un ou plusieurs Etats étrangers ... est tenu de conserver intégralement à ce cours d'eau son débit et sa qualité".²⁵ In addition, the claim for the unchangeability of the

natural conditions of the territory of a neighbouring state²⁶ is also considered within this context, as in the "decisional aspect",²⁷ as formulated in the Nuclear Tests Case: "Australia's independent right to determine what acts shall take place within its territory. . ."²⁸ Actually, a right of veto is reserved here for the downstream country,²⁹ and this can be coupled with the theory which says that the prior consent of the state concerned is required for any change in the regime of international watercourses.³⁰

Nevertheless, a common element can be found in the different interpretations of the principle of absolute territorial integrity, favouring the downstream State, concluding that the existence of a principle of general international law substantially restricts the water uses of the upstream State.

When assessing the extreme concepts of territorial sovereignty, the fundamental approach can only concern their *actual enforcement in international practice*. Notwithstanding this, their *inherent contradictions* have to be taken into consideration as well.

As the length of this present work does not allow a full presentation of the relevant international practice, we have to limit the following comments to *summary remarks*.

— Considering the practice following both the Harmon doctrine and the principle of absolute territorial integrity, it seems to be, *prima facie*, *scattered, limited to some states, and fractional*. Thus, the USA,³¹ Austria,³² Chile,³³ the Federal Republic of Germany,³⁴ Ethiopia,³⁵ and India³⁶ referred to the Harmon doctrine, and Argentina,³⁷ Egypt,³⁸ Spain,³⁹ Bangladesh,⁴⁰ and the Arab countries⁴¹ tried to enforce the absolute territorial integrity principle mentioned above.

— It is also reflected in the preceding point that a unilateral emphasis upon extreme concepts of territorial sovereignty is concerned here, i.e., a *unilateral demand* claiming actual interests, related to the various uses of a watercourse, as concealed by an abstract term, on the one hand, and also a means of negotiation tactics, on the other.⁴² Unilateral demands used to be rejected by the opposing party. Although the Harmon doctrine seems to be incorporated into some international treaties, conventions, and agreements,⁴³ it is questionable, nevertheless, whether this amounts to its recognition or, rather, the preclusion of the occurrence of a precedent, or even the habitual suspension of controversies, placing them in parentheses.⁴⁴ Not even traces of the principle of absolute territorial integrity can be identified in the treaties on the Nile; its application was unequivocally rejected by the arbitration award in the case of Lake Lanoux.⁴⁵ In a given sense, the Montevideo Declaration from 1933 and a clause of the Helsinki Final Act of 1975 ("to ensure that activities do not cause degradation of the environment") may be assessed as acceptance of the principle referred to above.⁴⁶ Nevertheless, it has to be taken into consideration that the documents in question do not lay down international legal obligations; as to the

second reference, the declaration concerned cannot be extracted from the formula of international legal cooperation.

— Although it was declared that the principle of absolute territorial sovereignty was lucidly stated by Harmon,⁴⁷ its practical enforcement was not free from *uncertainty* or, even more, intentional and not accidental *ambiguity*. The Lauca case⁴⁸ presented a characteristic example. It is also relevant that, in respect of the US, there has been no harmony between the individual branches of power.⁴⁹ In fact, the principle of absolute territorial integrity allowed various interpretations from its very outset as is clear from the foregoing.

— Although consistency is not an absolute demand in international law,⁵⁰ one cannot here omit some pertinent observations, i.e., states taking a stand for one of the extreme concepts mentioned above, first and foremost the Harmon doctrine, have demonstrated actual *flexibility*⁵¹ or more and more reluctance to observe it;⁵² a *double standard approach*⁵³ or even more, a dramatic *volte-face* (changing face)⁵⁴ are not rare either. It may be mentioned, furthermore, as a point of recent development, that in some instances it has been fully renounced;⁵⁵ somewhat surprisingly, KEARNEY thus claimed that the Harmon doctrine was never the official standpoint of the United States.⁵⁶ Not being a position of *beati possidentes*, the downstream countries were obliged, as a rule to make concessions.

— Finally, the *role of the time factor* cannot be omitted from consideration, as it is a consequence of a development, to be elaborated upon later, which occurred in general international law.⁵⁷ With this trend, the bases of the extreme concepts of territorial sovereignty were nullified or at least considerably disturbed.

Besides the reality of international practice, which hardly allows generalization, *theoretical considerations* equally do not favour the extreme concepts of territorial sovereignty.

— It has been inappropriate from the very outset to approach international relations arising from the uses of international watercourses with an isolationist view, and to provide excessive emphasis on differences resulting from the geographical situation. The very system of interstate relations has made it impossible, as a rule, to make use of the inherent advantages of an upstream country, being in the position of *beati possidentes*; on the other hand, the defencelessness of the downstream country can be thus counterbalanced.

— The *atomized, unilateral interpretation of sovereignty* is reflected in extreme concepts, which is absolutely inadequate with regard to the relative character of the term,⁵⁸ which says that "absolute sovereignty has been non-existent, and each state can enforce her own sovereignty only by respecting the sovereignty of other states".⁵⁹ Taking this context to serve as a basis for the present investigations and then assuming accordingly, that both absolute territorial sovereignty and absolute territorial integrity are based upon sovereignty, form-

ing the two different sides of the same term, and considering furthermore that not a single rule of international law gives a preference to any of them, then both are to be regarded as lawful.⁶⁰ The occurrence of two equivalent but controversial rights results in mutual restrictions thereon. With this basis, the view which claims that under international law, an upstream state is entitled to rights, but only interests, at most, are recognized for a downstream state, and these cannot be placed as a common factor, is incorrect.⁶¹ Additionally, it may also be mentioned that a consistent enforcement of extreme claims would lead to an *absurd result*. Accordingly, BALLENEGGER was right in noting that an upstream state would exercise a dereliction in allowing the flow of unutilized waters into the territory of the downstream state. Under what principle, then, could the latter be obliged to remove the volume of water if the neighbouring country were to renounce it? If this would lead to problems for the respective state, e.g., on account of polluted water, it ought to be reasonably entitled to construct a dam on the frontier with a view to prevent the watercourse in question from entering its territory.⁶²

Taking into account the image offered by international practice, it has hardly been accidental that, apart from past authors, the Harmon doctrine has few supporters in the *theory of international law*, and their number has been decreasing.⁶³ Moreover, some of them moderated their views with various reservations,⁶⁴ provided of course that they concerned positive consequences, or expressed an ambiguous opinion, respectively.⁶⁵

Nevertheless, the majority of the authors concerned has explicitly rejected absolute territorial sovereignty,⁶⁶ mainly following SMITH who called it an "intolerable" doctrine which was "radically unsound",⁶⁷ qualifying it as a "legal nihilism"⁶⁸ or simply declaring it dead.⁶⁹ Accordingly, it was rare if the Harmon doctrine, when recalled, was not followed by a negative assessment.⁷⁰

At the same time, the concept of absolute territorial integrity still has numerous supporters.⁷¹ Within this framework, it is of particular interest that, in terms of a resolution taken in Athens, the IDI established a very strict obligation in relation to transfrontier pollution, which reads as follows: "States shall be under a duty to ensure that their activities or those conducted within their jurisdiction or under their control cause no pollution in waters of international rivers and lakes beyond their boundaries." (Article II). While assessing the various views one cannot omit to mention, however, that, in the absence of a consensus on the meaning of territorial integrity related to international watercourses,⁷² the theses as formulated contained controversies,⁷³ and consequently it was difficult to come to definite conclusions concerning their content. Accordingly, the point was frequently limited to the acceptance of a strict ban on causing damage, such as the proclamation of an objective responsibility. According to the views of several authors, the postulate of the absolute unchangeability of a watercourse had, for the time being, no real chance as, ultimately,

it meant nothing else but the maintenance of a given *status quo* for the uses of a watercourse.⁷⁴ Consequently, the problem to be solved was whether or not it was prohibited or admitted as causing damage to them, and this would be the subject-matter of future examination.

Nevertheless, some *considerations of a general nature* could offer some orientation. In particular,

- absolutization would not be a correct step, the principle of *quieta non movere*,⁷⁵ however, may be of some significance;

- not accidentally, the old principles of sovereignty and equality have been coupled in the Charter of the United Nations (Article 2/1), thus prescribing a specific interpretation of sovereignty, i.e., to provide compensation for the restriction of actual inequality in the enforcement of sovereignty;⁷⁶

- as a result of the increased value of the interests coupled with environmental protection, stricter rules are required in respect of pollution.

The said considerations favour downstream countries more, being generally in a less favourable and defenceless situation, thus supporting the acceptance of milder variants of the principle of absolute territorial integrity in the theory of international law.

3. Solving the clash between extreme concepts of territorial sovereignty and its consequences

As has been evidenced by international practice, the extreme concepts of territorial sovereignty, i.e., the Harmon doctrine and the principle of absolute territorial integrity, failed to reach actual enforcement,⁷⁷ apart from specific cases. On the contrary, important efforts were made which were aimed at dissolving the controversy in question and the coordination of parallel sovereignties existing in international watercourses.

Hence, a middle course had to be found between the two possible absolute poles of territorial sovereignties,⁷⁸ resulting in the mutual limitation of the degree of water uses.⁷⁹

The general obligation of states interested in using international watercourses to respect the territorial sovereignty of each other does not mean a limitation in sovereignty, on the one hand, as this is an inherent element of the concept;⁸⁰ but on the other hand, it has a *negative character* and is *ipso facto* uncertain. Hence, it is evident that a prerequisite of a general character such as this is hardly sufficient on its own to solve the complicated problems resulting from the uses of international watercourses. Accordingly, several authors noticed this anomaly. CUTH, for example, observed the following: "The coordination and mutual respect of sovereign rights constitutes a fundamental postulate. In order to prevent the deterioration of harmony between these relations, a balance has to

be established among the sovereign riverside states concerned . . . and this state of balance is then fixed by a settlement under international law.”⁸¹ A remark made by MAXWELL-COHEN, and reflected by the law of international rivers, on the acceptable accommodation by the parties, points in this direction.⁸²

The right of disposition in a legal sense, i.e., the prerequisite of *participating in international law-making*, constituting an important element of parallel sovereignties over international watercourses can be coupled with this field.⁸³ This is examined in detail in the following chapter. With this in view, I will only refer here to the fact that the regulation of an international watercourse or a sector thereof under international law, without the participation of the riparian countries concerned, constitutes a grave violation of the sovereignty of the said country or countries, and consequently it is unacceptable.⁸⁴ Nevertheless, this is not the case if, in compliance with the formula of the Wimbledon case,⁸⁵ the interested states limit their rights of utilization and freedom of disposition by means of an international treaty or another appropriate legal form.⁸⁶ Accordingly, it is out of the question to conclude that there is the existence of a general international law regulating international relations originating from the uses of watercourses from the negation of the extreme concepts of territorial sovereignty, although it might be a fairly logical conclusion.⁸⁷ To this end, further evidence is required. Some other problems are equally investigated in the following chapter: the degree of limitation of the territorial sovereignty of the interested states, the extent of deference of this limitation to the factors of integration and cooperation,⁸⁸ the conditions of a joint enforcement of sovereignty, and the concept of a divided natural resource in this context.

The double character of state authority over a given territory, i.e., its source not only of rights but of obligations as well, is a further point that has to be taken into account in relation to territorial sovereignty.⁸⁹ Accordingly, territorial sovereignty is the basis of international responsibility,⁹⁰ entitling a demand of indemnity for transfrontier damage by water uses or pollution.

Notes

¹ In conformity with the *obiter dictum* of the Corfu Channel case (ICJ Reports, 1949, p. 35).

² ENGELHARDT's suggestion to consider rivers as *res communis omnium* or *res nullius*, respectively (see: ENGELHARDT: op. cit. p. 3; *ibid.* FIORE: op. cit. p. 475) was never accepted.

³ E.g., the Additional Act to Boundary Treaties, signed by France and Spain in 1866, Article VIII; the Geneva Convention on the Development of Hydraulic Power (1923), Article 1; the Draft Convention of the Organization of American States, Article 4; the Act of the Niger Basin (1963), Article 2; Principle 21 (first formula) of the Declaration and Recommendation 51/a of Action Plan of the UN Conference on the Human Environment; the Action Plan of Mar del Plata, para. 90; Meuse Case (PCIJ, Série A/B, No. 70, p. 16).

⁴ E.g., the Treaty on Boundary Waters, concluded by Canada and the USA in 1909, Article II; the Argentine-Uruguay agreement on Salto Grande (1946), Article 10; the Indus Treaty, Article IV, para. 15; the Garonne Convention, Article 2; the Gandak Agreement (1959), Article 5; the Sure Treaty, Article 4. In this context reference should be made to the Advisory Opinion of the PCIJ, given in the case concerning Jurisdiction of the European Commission of the Danube (Série B, No. 14, p. 36) stating that even the maximum degree of "internationalization" would not mean the extinction of territorial sovereignty.

⁵ AJTAY: op. cit. p. 27.

⁶ E.g., KNAUTH Report (ILA, 48th Report, 1958, p. 88); CUTH: op. cit. p. 19; CHAHUAN: op. cit. p. 105.

⁷ UN Doc. A/CN.4/295, paras. 45—46; A/CN.4/332, paras. 40—47.

⁸ See Article 2 of EVERSON's 2nd draft, which reads as follows: "The present articles are applicable to the non-navigational uses of international watercourses and to the administrative, handling, and conversion measures related to the uses of these watercourses" (UN Doc. A/CN.4/381, para. 32). As a result of its similarity to navigation, problems may arise in this context only with the insertion of timber floating.

⁹ FAUCHILLE: op. cit. I/2, p. 425.

¹⁰ Reports of the 1921 Barcelona Conference, p. 28.

¹¹ LAMMERS: op. cit. p. 92.

¹² For the classification of water uses see: AIDI, 1959, Vol. I, pp. 222—224. (ANDRASSY's Exposé préliminaire). Nevertheless, as McCaffrey put it, the rate in which the methods of use are divisible, and to what extent are they localized, also has to be taken into consideration (ACDI, 1984, Vol. I, p. 250).

¹³ BERBER: op. cit. p. 4.

¹⁴ PATRY: op. cit. p. 174; *ibid.* OLMSTEAD: op. cit. p. 1.

¹⁵ KEERNEY: op. cit. pp. 272 and 286.

¹⁶ DUPUY: op. cit. 1978, p. 384.

¹⁷ HUBER: op. cit. p. 163.

¹⁸ Earlier e.g. KLÜBER: op. cit. I, p. 128; HEFFTER: op. cit. p. 150.

¹⁹ Ops. Attys. Gen. (1985), p. 274. In: MOORE: op. cit. Vol. I, p. 654.

²⁰ MENON: op. cit. p. 445.

²¹ ANDRASSY: op. cit. 1959, p. 241.

²² In this sense e.g. BERBER: op. cit. p. 14; LAMMERS: op. cit. p. 361.

²³ The *Schonner Exchange v. McFADDON*, see: LIPPER: op. cit. p. 21.

²⁴ HUBER: op. cit. p. 160; *ibid.* WOLFROM: op. cit. p. 30; LIPPER: op. cit. p. 18.

²⁵ BALLENEGGER: op. cit. p. 59.

²⁶ OPPENHEIM—LAUTERPACHT: op. cit. Vol. I, p. 474.

²⁷ LAMMERS: op. cit. p. 321.

²⁸ ICJ, Pleadings, (1974), Vol. I, p. 14.

²⁹ SAUSER—HALL: op. cit. p. 54.

³⁰ LAMMERS: op. cit. p. 361.

³¹ The State Department in 1905, in the Rio Grande case (BERBER: op. cit. p. 110); in the Chicago diversion case (DECLEVA: op. cit. pp. 106—114; SIMSARIAN: op. cit. pp. 16—18, 26—34, 38); ACHESON in 1944 in the Colorado salinity (LAMMERS: op. cit. p. 261).

³² As a rule, in successive rivers (LIPPER: op. cit. p. 21; UN Doc. E/ECE.136, p. 51).

³³ In the Rio Mauri case (SMITH: op. cit. pp. 69—70).

³⁴ For the Federal Republic of Germany, this was the reasoning at the conclusion of the Frontier Treaty with the Netherlands in 1960, and in relation to the Danube section upstream Passau (*supra*) (Chapter II).

³⁵ In relation to the Blue Nile in 1957 and 1978 (GODANA: op. cit. pp. 35—36.; OKIDI: op. cit. p. 440).

³⁶ In the course of the Indus water dispute (SIKRI: op. cit. pp. 13—14; KRISHNA—RAO: op. cit. p. 50), and the Farakka dam across the Ganges river case (LAMMERS: op. cit. pp. 312—313).

³⁷ In the Itaipu case (DUPUY: op. cit. 1979, p. 870).

³⁸ Claiming the entire natural flow of the Nile in 1925 during the meetings of the Nile Commission (SMITH: op. cit. p. 80; LIPPER: op. cit. p. 18), and recently during the Dakar seminar in 1981 (Country Report, Egypt's Paper, para. 3).

³⁹ E.g. in the Lake Lanoux case (RGDIP, 1958, p. 103). According to Dulery (op. cit. p. 504), commenting on the Spanish viewpoint, the latter considered the concept of delivering the water from a lake pertaining to the Mediterranean water system to the Atlantic side as scandalous and contrary to common sense.

⁴⁰ UN GAOR, 31st Session, Special Political Committee, 20th Mtg, pp. 3—4.

⁴¹ Presenting the requirement of prior consent in the Jordan water dispute (LAMMERS: op. cit. pp. 305—307).

⁴² VAN ALSTYNE: op. cit. p. 317; DICKSTEIN: op. cit. p. 491.

⁴³ The Rio Grande Convention of 1906, Article V; the Boundary Waters Treaty of 1909, Article II; the Indus Treaty of 1960, Article 4, para. 14; the Ganges Waters Agreement of 1977, Preamble, in fine.

⁴⁴ SALMON: op. cit. 1982, p. 351.

⁴⁵ RGDIP, 1958, p. 103.

⁴⁶ In this sense LAMMERS: op. cit. pp. 361 and 259.

⁴⁷ SIMSARIAN: op. cit. p. 14.

⁴⁸ Meaning either compliance with, or rejection of, the Harmon doctrine (ROUSSEAU: Chronique, 1962, p. 588, and ILA, 52nd Report, 1966, p. 487, respectively).

⁴⁹ The American Supreme Court held in *Wyoming v. Colorado* as early as 1922 that the Harmon doctrine was inapplicable (Documents on the Use and Control of the Waters of Interstate and International Streams, p. 593); the President twice vetoed the Act on the Chicago Channel, accepted by Congress, in the 1950s, arguing that a unilateral procedure was not allowed by international law (ASIL, 1957, pp. 38—39).

⁵⁰ LACHARRIÈRE: op. cit. pp. 24, 181.

⁵¹ Chile in the *Lauca* case (ROUSSEAU: Chronique, 1962, p. 588), and Brazil in the *Parana* case (LAMMERS: op. cit. pp. 294—296); this indeed testifies that an international treaty came into being in the majority of the cases.

⁵² E.g. *Austria* (SAUSER—HALL: op. cit. pp. 563—565).

⁵³ In other respects, e.g. the case of the *Grand Canal d'Alsace*, the principle of integrity was taken as a basis on the German Federal Republic's part (MOSLER: op. cit. p. 255); *ibid.* *Austria* in the *Lech* and *Drava* cases (LAMMERS: op. cit. p. 209) or *Italy*, taking the opposite side in the *Italian—French* dispute relating to the *Spöll*, contrary to the statements of the *Cour de Cassation*, which is close to the principle of integrity (LAMMERS: op. cit. p. 235).

⁵⁴ The most characteristic case was the *American—Canadian* legal dispute relating to the *Columbia* (ROUSSEAU: Chronique, 1961, p. 819; TECLAFF: op. cit. p. 168).

⁵⁵ *India* (LAMMERS: op. cit. p. 319).

⁵⁶ *ACDI*, 1976, Vol. I, p. 286.

⁵⁷ LIPPER: op. cit. p. 23.

⁵⁸ HERCZEGH: op. cit. 1972, pp. 67 et seq.

⁵⁹ HARASZTI—HERCZEGH—NAGY: op. cit. p. 81; *ibid.* TIMOSHENKO: op. cit. p. 12; VIRALLY: op. cit. 1983, p. 78.

⁶⁰ FLORIO: op. cit. p. 154.

⁶¹ POP: op. cit. p. 48.

⁶² BALLENEGGER: op. cit. p. 58.

⁶³ E.g. BRIGGS: op. cit. p. 274; FENWICK: op. cit. p. 391; BAINS: op. cit. p. 38; RAJU: op. cit. p. 370.

- ⁶⁴ E.g. HYDE: op. cit. Vol. I, pp. 565—566; SCHWARZENBERGER: op. cit. p. 78.
- ⁶⁵ See e.g. the differing views on the affiliation of BERBER by BOURNE: op. cit. 1965, p. 206; and the opposite by WOLFROM: op. cit. p. 40.
- ⁶⁶ SMITH: op. cit. p. 8.
- ⁶⁷ SAUSER—HALL: op. cit. p. 540; BASKIN: op. cit. 1961, p. 260; KLIMENKO: op. cit. p. 33.
- ⁶⁸ CUTH: op. cit. p. 26.
- ⁶⁹ SEIDL—HOHENVELDERN: op. cit. p. 192.
- ⁷⁰ So BOLINTINEANU—STEFANESCU: op. cit. pp. 137—139, 142; POPESCU: op. cit. pp. 222—223.
- ⁷¹ Judgment in this sense by LAMMERS: op. cit. p. 533; e.g. HUBER: op. cit. pp. 39 and 160; OPPENHEIM—LAUTERPACHT: op. cit. pp. 474—475; GUGGENHEIM: op. cit. pp. 39, 383; VERZIJL: op. cit. Vol. III, pp. 213—214; BRAMSEN: op. cit. pp. 271, 281; MANNER: op. cit. Vol. II, p. 450.
- ⁷² Already emphasized by DECLEVA: op. cit. p. 84.
- ⁷³ E.g. in connection with OPPENHEIM—LAUTERPACHT see: LIPPER: op. cit. p. 20; *ibid.* GUGGENHEIM by LAMMERS: op. cit. p. 535.
- ⁷⁴ KLIMENKO: op. cit. p. 49; *ibid.* BOURNE: op. cit. 1965, pp. 197—198.
- ⁷⁵ See the Grisbadarna case from 1909: Under the law of nations, it is an established principle to refrain, as far as possible, from modifying the state of long-established principles (11 RIAA, p. 146). *Ibid.* the Island of Palmas case in 1928 (2 RIAA, p. 829).
- ⁷⁶ VIRALLY: op. cit. 1983, pp. 84—85.
- ⁷⁷ This is stated by the ILA. See the 60th Report in 1982, p. 162. For not considering it as part of the international law see: LAMMERS: op. cit. pp. 362 and 528. It is also reflected in Principle 21 of the Declaration on the Human Environment, to be analyzed in the following chapter.
- ⁷⁸ WOLFROM: op. cit. p. 143.
- ⁷⁹ Article 2 of a resolution of the IDI, taken at Salzburg; see DRÄGER: op. cit. pp. 111—112; HANDL: op. cit. 1978—79, p. 43.
- ⁸⁰ CUTH: op. cit. p. 24.
- ⁸¹ *Ibid.* p. 27.
- ⁸² MAXWELL—COHEN: op. cit. p. 236.
- ⁸³ This is an opposite consequence of the statement formulated in the Legal Status of Eastern Greenland (PCIJ, Series A/B, No. 53, pp. 68—69).
- ⁸⁴ As for this point see BRUHÁCS: op. cit. pp. 6—8, in connection with the European Commission on the Danube.
- ⁸⁵ PCIJ, Series A, No. 1, p. 25.
- ⁸⁶ This is formulated in the judgment on the Lake Lanoux case (RGDIP, 1958, p. 99; *ibid.* ANDRASSY: op. cit. 1959, p. 175; LIPPER: op. cit. p. 36.
- ⁸⁷ *Ibid.* HARTIG: op. cit. pp. 33—35.
- ⁸⁸ In this sense see VIRALLY: op. cit. p. 75 and Hambro/Colloque: op. cit. 1973, pp. 535—537; for the opposite view see ARANGIO—RUIZ (*ibid.* p. 544), earlier SEVETTE (UN Doc. E/ECE/EP/98/rev. 1, p. 44).
- ⁸⁹ Island of Palmas case from 1928, 2 RIAA, p. 828.
- ⁹⁰ BROWNIE: op. cit. p. 1; for a different reasoning of responsibility under international law see AGO: Second Report (ACDI, 1970, Vol. II, p. 192).

International law-making establishing the regime of non-navigational uses of international watercourses

1. Specific features of the international law-making process in the field of non-navigational uses of international watercourses

Taking into consideration that the law of non-navigational uses of international watercourses belongs to the international law system, international law-making has to be exercised in the same way here as in other fields of international law. As an examination of the international law-making process would by far exceed the framework of this present investigation, only some references are made in the following points, without any claim of being all-embracing.

— The forces forming international law, i.e., the sociological background of international law-making, have been insufficiently elaborated; instead, their examination is still in the “coming into existence” phase.¹

— Evidently, states try to enforce their own goals and recognized national interests (leurs intérêts nationaux tels qu'ils les apprécient)² and this is also the case in the process of international law-making leading to the establishment of a regime regulating non-navigational uses of international watercourses.³

— International law-making has been based on the consent of sovereign states, resulting not only in the fact that a state is under a certain obligation created only by the norms of international law which came into existence with its participation or agreement;⁴ also, efforts aimed at the harmonization of interests used to lead to a series of compromises. Accordingly, matters which do not, or hardly, see eye to eye have to be brought into harmony in the course of international law-making; similarly, a less important point cannot be subjected to another, as would be normal, following the rules of logic.⁵ This starting point was left unaltered with the integration of international organizations into the international law-making process at an universal level, even if it was concurrent with substantial changes in other respects.⁶

— International law-making used to lead to the emergence of international legal norms⁷ appearing in various sources of international law. Hence the complex problems of international legal sources have been embodied in each branch

of international law.⁸ Apart from this, other problems used to appear as well, such as the determination of the predominant legal source in a given field, the relationship of various sources to each other in the case of pluralism between them, their interactions, etc.

Following the aforementioned general remarks concerning international law-making, the problem to be investigated concerns the *particular characteristics of international law-making* in the field of the usage of international watercourses. The following points should then be emphasized: a) the so-called specificity of international watercourses, b) the assessment of international relations coming into existence as a result of non-navigational uses from the point of view of reciprocity, and c) some specific features of the interests in this field. *Mutatis mutandis*, these factors affect the application of the relevant rules of international law.

a) The specific character of international watercourses

The claim that each international watercourse constitutes a specific unit without an equal counterpart and with disparate types of hydrologic, economic, and political conditions, seems to be generally accepted.⁹ In other words, international watercourses have a particular character from a geographic, economic, social, political, and legal point of view.¹⁰

This is the unequivocal formulation of the premise, defined by the ILC, and reading, e.g., "... each watercourse is unique. Each has a special congeries of uses which differs from that of any other watercourse".¹¹ The immense diversity of international watercourses is also illustrated by various examples.¹² The particular character is evidenced by the fact that different problems always used to arise for each international watercourse, depending on the physical, geographical conditions, the number of interested states, the existing or planned methods of usage, the magnitude of the economic interests in question, the available technical and financial means and resources, the development of the general relations between interested states, the course of their efforts in the field of foreign policy, etc.

The particular character of international watercourses requires the conclusion of international treaties, preferably *bilateral or restricted multilateral treaties*.¹³ Apart from other causes, the difficulties which exist in the coming into effect of multilateral treaties or conventions, in particular of universal interest, are attributable to this point. As will be demonstrated below, international practice is almost incomplete, in accordance with this supposition. The degree to which the contents of the distinct treaties or conventions are influenced by the particular nature of the conditions of utilization of international watercourses, and the rate to which the coherence of the various treaties or conventions are affected, also constitute the subject-matter of further examination.

The *heterogeneity of the utilization regimes* of individual international watercourses,¹⁴ being in compliance with the general demand for a special regulation under international law, corresponding with actual situations,¹⁵ is the result of positive law-making. On the other hand, the degree to which a far-reaching abstraction is required by other factors, in respect of the content of the international regime in particular, is an open question.¹⁶

The consequences of international law-making, realized under particular conditions, also have to be taken into account in the *codification* of the law of non-navigational uses of international watercourses. Being aware of this fact, the ILC suggested that "... attention should be devoted to beginning the formulation of general principles applicable to legal aspects of the uses of these watercourses. In so doing, every effort should be made to devise rules which would maintain a delicate balance between those which were too detailed to be generally applicable and those which were so general that they would not be effective".¹⁷ These principles, stated by EVENSEN, were generally accepted.¹⁸ Nevertheless, the question remained whether or not the correct prerequisite¹⁹ could be realized in practice or whether the draft test, to be prepared by the ILC was influenced by it.

b) The problem of reciprocity

International law-making concerning the regime for utilizing international watercourses has been substantially influenced by the fact that, admitting legal equality, the *respective riparian states actually used to be in an unequal situation, as a consequence of the relative unidirectional character of the relevant transfrontier effects*. This upstream/downstream relationship creates a permanent situation of conflict, on the one hand, and, on the other, makes international law-making difficult, as an upstream state does not need the establishment of international legal rules on account of its favourable situation (*beati possidentes*), i.e., taking into account the conclusion of international treaties or conventions in particular. International law has been based upon a symmetry of obligations, on mutual advantages granted by the states to each other on the basis of reciprocity. The unequivocal character of the principle *do ut des* is counteracted if one of the interested states "... must make sacrifices while the benefits are passed on downstream at no cost or obligation to the downstream country".²⁰

Although the absence or limitation of reciprocity, resulting from the geographical situation, cannot be invalidated or concealed by means of routine-like references to the interdependence of the riverain countries concerned,²¹ the *validity of the above-mentioned statement cannot be made absolute*; on the contrary, it is badly in need of being made more precise.

Interference with the natural and utilization conditions of international watercourses, such as the withdrawal of water, the regulation of rivers, storage, pollution, and the deforestation of the water basin have a unilateral effect, causing general harmful changes in the territory of the downstream country. On the other hand, there are transfrontier effects from the opposite direction as well, although occurring less frequently, such as a backwater, acceleration of flow, the building of engineering structures impeding or hindering navigation or the migration of fish.

In any event, the upstream-downstream situation is not absolutely unequivocal. First, an international watercourse may also be contiguous (a boundary river) over some sections. Second, not only the main river should be taken into consideration when in the case of more than one riverain state, all of them form upstream and downstream states at the same time, apart from the first and the last state within the course of the river concerned: the tributaries are to be taken into account as well. Thus, Austria is an upstream country as regards the Federal Republic of Germany in respect of the right-hand side tributaries of the Danube, but it is a downstream country when considering the Danube proper. For Hungary and Romania, the situation is the same: the latter is an upstream country in respect of the River Tisza and its tributaries, and it is a downstream country for the Danube.

The development phase of international law in which a relationship was established between rivers and seas has a high importance for the assessment of reciprocity.²² The obligation to take measures against pollution is now not only binding on the upstream states: thus, the country comprising the estuary or mouth of the river concerned is not allowed to simply tolerate unlimited pollution, in compliance with the rules referring to pollution from land-based sources.²³ Accordingly, a balance of the international obligations by the riverain states has been established or is taking shape, at least in respect of protection against pollution.

It would be an improper approach only to examine reciprocity within the function of the geographical situation or water uses. As has already been mentioned in the foregoing, interstate relations resulting from the uses of international watercourses constitute only one of the components of the system of relations between the states concerned, and they may equally result in the compensation of the one-way character of transfrontier effects, or the under- or over-assessment of the problems originating from them.

With the relative unidirectional character of the said effects, the element of stability has been incorporated into the relevant international relations, inducing not only the claim for international legal regulation, according to the course of events, but also constituting one of its conditions.

As a matter of fact, the limited nature of reciprocity is also reflected in the field of international law-making. Cases when the interested states were unable to

conclude the envisaged international treaty or convention or the latter failed to function, so that a legal gap presented itself, have not been rare, at least in the conventional field. Even more frequently, it has occurred that the asymmetry of the positions of the parties has influenced the content of the respective treaty or convention which could be represented by the lowest common denominator in relation to the middle range of objectives,²⁴ the territorial scope, the regulated activities, and the undertaken obligations. Admittedly, the provisions of the treaties or conventions bearing upon the regime of the usage of international watercourses stipulate reciprocal and not parallel obligations²⁵ but, as a consequence of the causes referred to, reciprocity has been formal in many cases. It may be added that, as there is a causal link between the water uses of an upstream country and the damage occurring in a downstream country, the renunciation by the former of the totality of possible uses and of unlimited utilization, together with the inherent losses, would not amount to the consequences of the activity of the latter.

The situation as outlined above increases the importance of *overcoming bilateral frameworks* in this field of international law-making. There is a particular problem in this respect, which is worthy of special attention, i.e., the extent to which the inter-state relationships originating from the uses of international watercourses have been incorporated in the range of general international law regulation, and whether this trend of regulation has been directed at the protection of downstream countries, to grant them some preference.²⁶

A contradiction to this point has to be promptly noted, i.e., the particular character of international watercourses essentially requires bilateral law-making but the absence or limits of reciprocity here constitute a serious obstacle. To eliminate this in order to ensure balanced relations between the members of the international community, international law-making at a universal level is imperative. Ultimately, the solution depends on the actual existence of the interests of cooperation among the states concerned,²⁷ hence, it is justified to reveal the interested relationships beyond the regime of the uses of international watercourses.

2. Interests linked to the regime of international watercourse usage

Looking at the regulation of non-navigational uses of international watercourses by international law, it is clear *prima facie* that the problems presenting themselves are not of a "purely" legal nature; instead, they represent actual material interests and, in addition, they cannot be separated from natural processes.²⁸

The fact that the mechanism of transfrontier effects is determined by the laws of nature represents the sound foundations of the premise that regulation by

international law has to be also based upon respect for the said laws.²⁹ SCHWEBEL had no doubt about the harmony between legal norms and the laws of nature when he stated that "... in order to ensure harmony between the physical laws governing water and the legal rules governing the use of fresh water, the drainage basin must be taken as the unit for the formulation of such rules".³⁰ As reference was made to this postulate in Chapter II, the international community was reluctant to accept it as a universal regulation.

The decisive role of physical laws, however, also has another, no less important consequence for international law-making. This concerns collecting, assessing, and exchanging *information* on the subject to be regulated, and to ensure the *pre-visibility* of transfrontier effects by these means.³¹ This consideration is reflected by the fact that several international treaties or conventions contain dispositions on the organization of scientific research in respect of a given international watercourse, quite apart from conventional clauses of this kind.³²

The said disposition implies that the importance of *prevention* is recognized, as formulated in international environmental law in general and with particular emphasis.³³ There is another factor increasing the momentum of prevention, i.e., some engineering structures constructed for water usage, such as the dams of hydro-electric power stations have a very long life, or transfrontier effects may bring about irreversible damage.

The considerations indicated above have influenced international law-making towards encouraging cooperation³⁴ and, also, to lay down detailed and precise rules of procedure.

Although the law of international watercourses has always been placed within the framework of traditional international law,³⁵ the increased momentum of water usage drew attention to the economic content of the international relationships which then came into existence.³⁶ There is no need to prove that the various methods of water usage comply with economic demands. Besides, the effects of the protection of water and the water environment emerge in the field of international trade, in particular in the form of the "Polluter Pays" Principle.³⁷ Accordingly, some specific elements of international economic law, i.e., the absence of strict formularity, the preference for compromise, and the spirit of cooperation³⁸ have influenced the process of international law-making, bringing about the regime of international watercourse usage. The reasonable approach, required by economic interests, may also be considered with due emphasis when the respective international legal norms are formulated.

Nevertheless, *some circumstances set limits* on the full-scale satisfaction of economic needs. Evidently, a marginal role for sovereignty would be out of the question in this field, even if it could be imagined in international economic law.³⁹ On the contrary, lack of confidence, suggesting a preference for unilateral actions,⁴⁰ here carries important weight, just as does preparation for the worst alternative. With this in mind, it is convenient to set limits on the dependence

of one country on another, in order to eliminate or reduce the said worst occurrence, e.g., constructing engineering structures of strategic importance so as to ensure a check on those of vital significance for the interested party or parties.⁴¹

The considerations mentioned above already affect the essential problems of international law-making on the subject-matter in question. For the majority of cases and in compliance with generally acknowledged views, the law-making issues, i.e., the sources of international law thus coming into existence, can be classified as norms of international law which establish a well-functioning cooperation of a technical character;⁴² nevertheless, it is not excluded that the uses of water would affect vital interests⁴³ with all the respective consequences in the sphere of both international law-making and the application of the law.

Having overcome the serious obstacles in the large majority of cases, the process of international law-making is made complete with the coming into existence of *sources of international law* establishing the regime of international watercourse usage. When these were examined, references used to be made to Article 38 of the Statutes of the International Court of Justice (ICJ).⁴⁴ The difficult and disputed problems involved in the study of the sources of international law in this respect concern the qualification of the items enumerated therein, i.e., whether or not they are to be regarded as sources of international law, whether or not international law has sources other than those mentioned in the said Article 38, the meaning of the term general principles of law, the incorporation of equity into the system, etc. However, a more thorough investigation of these problems would exceed the boundaries of the present work.

Accordingly, our interest is essentially concentrated on two fields: first, *international* treaties or conventions regulating the regime of international watercourse usage; second, an examination of whether or not general international law has norms affecting this field; to consider the principles that can be identified, their function and their legal nature.

In view of the aforesaid, decisions of international organizations have been taken into consideration only to the extent of their role in the formation of general international law. This approach should not mean, of course, the negation of the significance of the resolutions of some international organizations in settling problems arising from non-navigational uses of international watercourses, especially those taken by the European Communities.

3. International treaties or conventions regulating the regime of international watercourse usage

The conclusion of international treaties or conventions has been the most important method of international law-making, hence the primary means for the establishment of international rights and obligations.⁴⁵ The preponderance of the conventional form in the field of uses of international watercourses was so emphasized by ANDRASSY: in his opinion, an international treaty or convention is needed to ensure the most reasonable utilization of international watercourses.⁴⁶

The decisive role of international treaties or conventions in this field has been unequivocally confirmed by practice. As to the number of treaties and/or conventions concluded in this field, it amounted to 32 for the period 1820—1870, to 58 between 1871 and 1920, and to 215 from 1921 to 1970, respectively,⁴⁷ i.e., it almost doubled in the second period as compared to the first, and it experienced an almost quadruple increase during the third phase. More than 2000 treaties and/or conventions were concluded in the period from 805 to 1977.⁴⁸ A document compiled by the UN Secretariat⁴⁹ contains a summary of 305 treaties and/or conventions still in force.

Actually, the compilation in question may never be complete. The point here is not only that some agreements are excluded from the summary, on account of the inaccessibility of the relevant sources,⁵⁰ but it is also difficult to follow up the changes and, what is more, it is simply impossible to ensure a completely up-to-date register. Later on, additional compilations were compiled, one on behalf of the Economic Commission for Europe (ECE),⁵¹ another for the Committee on Natural Resources (CNR) for the assessment of the implementation of the operating programme as formulated in Mar del Plata,⁵² and a further one was also compiled in respect of Africa,⁵³ all noting the additional increase of the number of treaties and/or conventions.

As regards treaties, conventions, and agreements on the regime of international watercourse usage concluded during the last decade, the following are particularly *worth mentioning*:

- Convention creating the Niger Basin Authority 1980
- Agreement concerning the management and the development of the basin of the River Kagera 1977
- Amazon Treaty 1978
- Agreement on Parana River Projects 1979
- Colorado Salinity Agreement 1973
- Great Lakes Water Quality Agreement 1978
- Ganges Agreements, concluded in 1977 and 1982
- Selenga Agreement 1974

— Two Conventions on the Protection of the Rhine against Chemical Pollution and Pollution by Chloride 1976

— Tisza Convention 1986

Taking the various documents as a basis, the number of treaties, conventions, and agreements regulating the regime of international watercourse usage can be estimated, *de lege lata*, to be approximately 500. Accordingly, the predominance of these documents in this branch of international law can hardly be doubted.

Obviously, it would not be a good idea to submit all the complete materials of the relevant treaties, conventions, and agreements to a thorough scholarly elaboration, taking into consideration that when interpreting the said documents, the physical geography, economic, and political background could not be discounted, and the same is true for the terminated treaties of the same subject-matter and the preparatory materials (*travaux préparatoires*). It is also clear that a treaty or convention by itself represents only the tip of the iceberg of international relations between the interested states, which result from water usage, i.e., the process of the actual application of the agreements in force has at least the same momentum.

Following an outline of the general features of treaties, conventions, and agreements on the regime of international watercourse usage, the forthcoming analyses are limited to the assessment of the single multilateral treaty concluded so far, and then, in the following sub-chapter, to the presentation of the treaties and concluded in respect of the Danube basin. Nevertheless, this approach does not mean that the various other agreements are neglected as, when considering the trends of international practice in this field, a decisive role is attributed to these sources of law.

In view of the statements set out in the preceding point, and having in mind the comparison of the various treaties and conventions, the conclusion *claiming that treaties and conventions concerning the regimes of international watercourse usage have a great variety of territorial scope and subject-matter (ratione materiae)* cannot be surprising. Considering that the first point has already been dealt with in Chapter II, it need only be emphasized here that some treaties, conventions, and agreements set out various methods of utilization, such as conventions on border waters, or treaties or conventions regulating complex or integrated uses; others provide only for a specific or preferred method of usage, e.g., hydro-electric power production, irrigation, protection against flooding or pollution, so that other methods of use, provided that they are included in the document, are regulated only *per tangentem* and *subject* to the principal means of utilization. Provisions for the withdrawal of water for communal or industrial purposes appear only indirectly in the documents in question, embodied in the protection against pollution clauses.

As regards the *content of treaties or conventions*, i.e., the form, extent, and nature of the rights and obligations of the parties, the differences are significant-

ly larger. With this in mind, only the following statements of a general character may be mentioned:

— As for the declaration of general principles, the treaties or conventions are somewhat moderate, aiming more at pragmatic solutions.

— There is a correlation between the content and the purpose of a treaty or convention for the coordination of individual or national utilization, or the realization of joint utilization induces different obligations. In the former, it is sufficient to lay down some prohibitions, while the latter requires very detailed regulation.

— The prohibitions and obligation to take measures seem to be sufficiently flexible for a significant number of the agreements concerned, and several ways and means can be observed, aimed at making obligations more uncertain. On the other hand, opposite examples exist as well, i.e., the quantitative specifications of obligations are laid down in some treaties or conventions or precise technical arrangements are prescribed.

— It is a further characteristic feature that procedural aspects are in abundance, e.g., the regulation of the prescribed methods of notification and consultation. Furthermore, the institutionalization of cooperation became decisive by setting up joint committees or international organizations; in this respect, organizational and procedural rules are laid down as well.

The *sources of the regime* of international watercourse usage are, *essentially, bilateral treaties*, although there are *restricted multilateral treaties* as well.⁵⁴ Taking into consideration the reasons outlined in the preceding point and the preference given to the bilateral solution,⁵⁵ this is simply a result of the fact that only two states are involved in 70% of all the treaties concerning the uses of international watercourses.⁵⁶ Multilateral treaties are more prevalent in Africa and Latin America, due to the technical and financial conditions of UN assistance.⁵⁷ Their use, however, is also gaining more and more ground in Europe, i.e., both in the Rhine and the Danube Basin.

The image outlined above will change to some extent if, apart from the treaties and conventions on the utilization regime, the sources of international wildlife law are also to be taken into consideration.⁵⁸ In view of the regions to be protected, hydro-areas appear here *ipso facto*; mention should thus be made of the Nuclear Test Ban Treaty of 1963 and the Long-Range Transboundary Air Pollution Geneva Convention of 1979.

On account of the *bilateral or restricted multilateral character* of the utilization regime of international watercourses, this field seems to be less exposed to recent developments as regards international legal sources.⁵⁹ This conclusion is modified, however, by the fact that the force of the 1969 Vienna Convention on the Law of Treaties beyond doubt comprises these agreements; consequently, it exercises a decisive impact and influence on the growth and development of treaty-making practices.⁶⁰

Even if it cannot be disputed that the treaties and conventions on the utilization regime of international watercourses are subject to the provisions of the Vienna Convention as regards their conclusion, observance, application and interpretation, modification, invalidity, termination, etc., the laid down broad-scale autonomy⁶¹ makes it possible or, even more, justifies a brief look at *some of the particularities of treaties and conventions governing this field*. Thus references should be made, in particular, to the following:

— The problem of distinguishing between texts of a legal or non-legal nature also affects the subject-matter of the present work,⁶² taking into consideration the provisions of the Helsinki Final Act of 1975 also covering international watercourses, or the great number of concessionary treaties related to the utilization of hydro-electric power, the foreign participation in investments destined to improve water uses, the export of hydro-electric power produced, etc. True, these problems are in principle regulated by agreements not having an inter-state character; nevertheless, they may have some relevance in international law.

— The treaties and/or conventions on the utilization regime of waters form an exception to the general rule of territorial scope,⁶³ i.e., having an explicitly territorial character, and unquestionably do apply to a specific geographical area.⁶⁴

— Furthermore, the exclusion of reservations, the termination of a treaty as a result of the physical subsequent impossibility thereof (Article 61 of VCLT), and the problem of whether or not the permissibility of the right of denunciation may be implied by the nature of these treaties (Article 56 of VCLT), may also be mentioned.

Three groups of problems, however, need to be analyzed in somewhat more detail.

a) There are several international treaties or conventions on the utilization regimes of international watercourses, mainly affecting Africa,⁶⁵ which were concluded prior to attaining independence from colonial rule. Nevertheless, the explicit declaration invalidating these *agreements, concluded during colonial times*, only took place in the field of navigation.⁶⁶ As to other treaties or conventions, the continued application of regimes established by colonial powers was simply unacceptable and new African states sought to establish their own legal regimes to manage their water resources, as GODANA put it.⁶⁷ The correctness of the second part of the statement can hardly be questioned; nevertheless, it appears as if the succession of states was realized⁶⁸ in conformity with Article 12 of the Vienna Convention on Succession of States in respect of Treaties (1978). Also, an indirect indicator may be that the register prepared for the CNR⁶⁹ also comprising the treaties and conventions concluded during the colonial era, did not involve any remark in this respect.⁷⁰

b) The wording of Article 26 of the Vienna Convention on the Law of Treaties reiterates the basic *pacta sunt servanda* principle; consequently all treaties,

including those on the utilization regime of international watercourses as well, are binding upon the parties to it and must be performed by them in good faith. Beyond this stipulation, its significance may also be realized by the fact that it may also bring about some international obligations in relation to international watercourses not falling within the territorial scope of treaties. The *pacta sunt servanda* principle is clearly implicit in this field, requiring the contracting parties to abstain from acts calculated to frustrate the object and purpose of the treaty.⁷¹

c) It has frequently occurred in international practice that several treaties or conventions, forming almost a chain of agreements, regulate the utilization regimes of some international watercourses. This involves the problem of a *possible clash between such treaties or conventions*. Article 30 of the Vienna Convention on the Law of Treaties,⁷² generally considered as insufficient,⁷³ causes additional difficulties unless two states are interested in the uses of watercourses in question. If the contracting parties are not in the same position, then the problem is connected to the principle of *res inter alios acta nec nocere nec prodesse potest*.⁷⁴ If one of the parties were the same in the case of clashing treaties, it may still be questionable whether or not treaties relating to the same subject-matter apply, as the territorial and subject scopes of the clashing treaties do not coincide with each other unconditionally.

Furthermore, it is a new dimension to the problems referred to above that Article 4 of the draft prepared by the ILC on watercourse agreements reads as follows:

“Nothing in this Convention shall prejudice the validity and effect of a special watercourse agreement or special watercourse agreements which, taking into account the characteristics of the particular international watercourse or watercourses concerned, provide measures for the reasonable and equitable administration, management, conservation and use of the international watercourse or watercourses concerned or relevant parts thereof.

The provisions of this article apply whether such special agreement or agreements are concluded prior to or subsequent to the entry into force of the present Convention for the watercourse states concerned.

A special watercourse agreement should define the waters to which it applies. It may be entered into with respect to an international watercourse in its entirety, or with respect to any part thereof or particular project, programme or use, provided that the use by one or more other watercourse states of the waters of such international watercourse is not, to an appreciable extent, affected adversely.”⁷⁵

The above text of the draft watercourse agreement covers the simultaneous existence of more than one treaty or convention, on the one hand, and consequently the possibility of a clash between them as well, and on the other hand, the possible occurrence of a controversy between a general and a particular

norm. What is, then, the consequence of a situation if a watercourse agreement affects adversely, and to an appreciable extent, the uses of another watercourse state? In fact, the draft failed to give a direct reply.⁷⁶

The rules accepted by the ILA⁷⁷ start from the possibility of abrogation of general international law reserving, however, that "the agreement cannot dispose of the rights of other States".⁷⁸ This statement is inadequate, however, to clarify the relevant legal consequences.

Needless to say, a violation of the rights and legal interests of another watercourse state involves an obligation under international law, but the problem remains whether or not this point may have an effect upon the validity of any of the colliding treaties or conventions. According to some views, there is a possible duty upon States under general international law, deriving from the principle of non-intervention, not to hinder the execution of valid treaties concluded by other States.⁷⁹ This formula implies, however, the conclusion that it is not applicable to invalid treaties which impair the rights of, or impose obligations upon, third States,⁸⁰ but there is no exhaustive catalogue of all possible grounds of invalidity.⁸¹

In view of the above, a clash between treaties cannot affect the validity of the respective treaties, i.e., it gives rise only to responsibility under international law.⁸²

The definition of the *scope of the contracting parties* constitutes a further problem in connection with watercourse agreements. Article 5 of the draft agreement referred to above reads as follows:

"1) Every watercourse State is entitled to participate in the negotiation of, and to become a party to, any watercourse agreement that applies to that international watercourse as a whole.

2) A watercourse State whose use of the waters of an international watercourse may be affected to an appreciable extent by the implementation of a proposed watercourse agreement that applies only to a part of the watercourse or to a particular project, programme or use is entitled to participate in the negotiation of such an agreement, to the extent that its use is thereby affected."⁸³

The provisions of this article start from the correct postulate that the regime of an international watercourse affecting more than two states has to be jointly regulated by the respective watercourse states. It has to be added, however, that the open character of bilateral treaties is excluded by their very meaning, and the possibilities of accession to multilateral treaties are limited as well.⁸⁴

The status of a contracting party to the watercourse agreements is ensured by the draft for the watercourse states, thus unequivocally meeting an old demand of these states, mentioned mainly in the field of navigation, i.e., to exclude *non-watercourse states* from the utilization regimes of the respective watercourses.⁸⁵

In view of the aforesaid one may then raise the question of whether or not the precited rule implies a prohibition on non-watercourse states from concluding any international treaty or convention related to watercourse uses with any watercourse state so that, in the case of the conclusion of such an agreement, other watercourse states would be right to consider it illegal or, even more, invalid. Even CUTH, definitely opposed to the participation of non-watercourse states, had to accept that "such states were not entitled to vindicate rights for themselves that would be coupled to a sovereign situation since claims of this kind would not be justified neither actually nor legally".⁸⁶ Applying *argumentum a contrario*, they may have rights of another nature. References to rights of this kind may be found in point 3 of Article XXXI of the Helsinki Rules,⁸⁷ or in Article 3 of the 1976 Madrid Resolution of the ILA. Nevertheless, these provisions seem to be excessive and, besides, their correctness may also be doubted *de lege ferenda*, i.e., whether or not non-watercourse states should be entitled to participate in the administration of international water resources.

The following serves the purpose of summarizing the *most important interests of non-watercourse states* that may be regulated by a treaty or convention relating to the uses of international watercourses.

— If the freedom of navigation in an international watercourse is ensured for all states by an international treaty or convention,⁸⁸ this right must not be violated by watercourse agreements;⁸⁹ in other words, the non-watercourse states are entitled to demand the observance of their rights.

— Watercourse states may receive, and accept, technical and financial assistance for ensuring the conditions of water uses, and the relevant methods of procedure may then be laid down by an international treaty or convention. Thus, the Soviet Union and Egypt concluded an agreement of this kind on the building of the Nile dam at Aswan;⁹⁰ furthermore, we may also look at the agreements concluded by international organizations within the UN framework and various states.⁹¹

— Agreements providing for the export of self produced hydro-electric power by a watercourse state to a non-watercourse state, are also acceptable.

— Joint companies with foreign participation, destined to exploit the uses of an international watercourse may also be established.⁹²

To complete the survey of international agreements on the utilization regime of international watercourses, the only agreement of a general nature concluded so far, the 1923 *Geneva Convention relating to the development of hydraulic power affecting more than one State*, should be analyzed.

It is emphasized in the report prepared on the conference⁹³ that the utilization of hydraulic or hydro-electric power appeared in international law as a relatively new problem. With this in mind, the Convention aimed only to set in motion a development to formulate common and initially flexible principles which could then be accepted without dispute.

The Convention, consisting of 22 articles and a Protocol, was based upon two fundamental concepts:⁹⁴ the recognition and assurance of state sovereignty, on the one hand, and the establishment of some kind of international cooperation, on the other.

Article 1 of the Convention confirms the freedom of action of states, for the uses of hydraulic power, resulting from their sovereignty, and it reads as follows: "The present convention does not modify in any way, under international law, the freedom of all States to execute any kind of hydraulic power management work on its territory as it desires." Paragraph 3 of Article 2 contains the rule that the implementation of a jointly fixed programme of the utilization of hydraulic power is only binding for the respective state if it explicitly accepts that programme. In Articles 3 and 4 it is declared that, within some limits, the relevant state is entitled to utilize hydraulic power.

The concept of international cooperation is limited, first and foremost, to the provision that, upon the request of any interested state, the contracting states are obliged to agree to the preparation of an internationally based study on the utilization of hydraulic power or the supervision of accomplished studies, respectively.⁹⁵ In Articles 3 and 4 obligations of negotiation are laid down for when works related to the management of hydro-electric power are to be carried out partly on the territory of another, i.e., a non-contracting state, or where these works would involve changes in the state of the sites concerned on the territory of this state, on the one hand, or that the implementation of the works in question could result in grave damage or harm for the other state, on the other. It should be noted here that a draft convention prepared by a consultative and technical commission of the League of Nations, charged with transport and transit problems, provided for an obligation to conclude a treaty or convention in the cases enumerated above;⁹⁶ nevertheless, this proposal was rejected by the conference on account of cogent arguments.⁹⁷ At the same time, a very important statement was incorporated into the protocol which formed an annex to the convention, which reads as follows: "The terms of the Convention modify the responsibility and obligations of the States for any kind of prejudice which would arise from the implementation of projects related to the management of hydraulic power." Furthermore, connected with cooperation is the fact that the convention includes directives and advice on the content of agreements concerning the management of hydraulic power (cf. Articles 5 and 6) from which the following provision is worth mentioning: "Technical arrangements . . . are to be determined apart from political frontiers." (Article 5)

It is not necessary, in our view, to give a thorough analysis of the provisions of the convention,⁹⁸ taking into consideration that the 1923 Geneva Convention has been condemned by international practice, i.e., it was rejected. The convention was ratified by as few as 11 states,⁹⁹ and among them only Austria and Hungary have a common frontier, which is essential for the practical imple-

mentation of the convention. Accordingly, the numerous authors qualifying the convention as a "dead text"¹⁰⁰ are right, and it can be ranked among the groups of frustrated agreements. It should also be noted that the Geneva Convention did not figure among the agreements, enumerated in a resolution of the UN General Assembly in 1965, inviting states to adhere to them.¹⁰¹ All this does not mean, however, that some solutions in the 1923 convention were not adopted by conventional practice. In this sense, the said convention contributed to the development of international law.

4. General international law

a) Importance

International treaties and conventions are only partially appropriate to meet the challenges of international relations originating from the uses of international watercourses.¹⁰² Thus it may occur that the interested states are not, ultimately, in a position to conclude an agreement as envisaged, the application of concluded treaties or conventions may be frustrated, important items may be omitted from an agreement, the legal arrangement may be achieved only minimally,¹⁰³ and changes in respective circumstances may give birth to new demands. It is as a consequence of all these circumstances that general international law comes to the fore.

The general international law function of *filling gaps in the law*¹⁰⁴ has been generally recognized. Similarly, it goes without saying that its principles and rules provide an appropriate *framework* for negotiations aimed at the establishment of utilization regimes for international watercourses.¹⁰⁵

Nevertheless, there has been no mention of the application of general international law in the *interpretation of treaties* and/or conventions in force in the documents of the International Law Commission (ILC). Thus, in the Meuse case "the Court at the outset discards the application to the dispute of the general rules of international river law in favour of the interpretation and application of the Treaty of 1836".¹⁰⁶ However, as regards the Lake Lanoux case, the Arbitral Award declared that the disputed international treaties had to be adapted to international law.¹⁰⁷ This latter stand complies, in fact, with the provision on point 3/c, Article 31 of the Vienna Convention on the Law of Treaties,¹⁰⁸ to which the ICJ has lent its support.¹⁰⁹

The possible functional variations by themselves justify an examination into whether *general international law has rules applicable for the utilization regimes of international watercourses*. The necessity for this examination was strongly supported by theoretical efforts which continuously presented themselves and a trend for codification that started in 1970.

In terms of the Mar del Plata Action Plan, international cooperation in the field of shared water resources had to be realized in accordance with the Charter of the United Nations and the principles of international law.¹¹⁰ Nevertheless, this formulation could be interpreted in various ways.

b) *Basic or fundamental principles of international law*

General international law was understood in the socialist doctrine of international law to comprise, principally and decisively, the basic or fundamental principles identified with the peremptory norms of international law (*ius cogens*).¹¹¹ Accordingly, the essence of international law was expressed by the fundamental principles referred to above, forming the criteria of just regulation,¹¹² and, at the same time, meaning the basis of the interpretation and application of the law.¹¹³

The fundamental principles of international law comply with the seven principles of the Declaration on Friendly Relations and Cooperation among States, in accordance with the Charter of the UN, of October 24, 1970 (G. A. Res. 2625 (XXV)), and the ten guiding principles of the Helsinki Final Act of 1975.¹¹⁴

Without a further thorough investigation of the fundamental principles of international law, emphasis here has to be restricted to the following:

— Although some of the respective authors place the conclusion of a treaty or convention above all others in the international legislation on the utilization regime of international watercourses, even the supporters of this view do not dispute the fact that the fundamental principles of international law also have to be enforced in this field;¹¹⁵ accordingly, a gap in the law is out of the question, even in the absence of an international agreement or agreements. According to OUCHAKOV, "in principle, the regime applicable to international *fleuves* and, *a fortiori*, that applicable to multinational *rivières* was established by co-riparian States. It was incumbent on them to conclude international agreements for that purpose. Consequently, the only rules of international law applicable in the matter were completely general rules and principles which the co-riparian States must take into account when concluding such agreement."¹¹⁶ The formula "must take into account" can be interpreted as a reference to the peremptory norms of international law which, in terms of the socialist concept of international law, mentioned above, is identified with the fundamental principles of international law.

— Even if the differences in the enumerations and formulae of the 1970 Declaration and the 1975 Helsinki Final Act and the non-existent definition of the scope of *ius cogens* are not considered, attention has to be given to the economic content of the utilization regime of international watercourses and, hence, it should at least be taken into account whether the scope of the said

fundamental principles ought not to be extended by the principles of international economic law.¹¹⁷

— Furthermore, it has to be also examined whether or not some of the general principles applicable to the utilization regime of international watercourses have an imperative character. On this point, HAYTON states: "An example of a *ius cogens* norm applicable to the members of a basin community might be formulated as follows: all states enjoy equality of right. Therefore, any agreement between or among co-basin states to deprive any co-basin state of its equality of right in the uses of waters of the basin is void as in derogation of a fundamental or peremptory norm of international law."¹¹⁸ A special aspect of this view appears in the ILA Resolution on the Protection of International Watercourses and Water Management Constructions in Case of Armed Conflict, which reads as follows: "Peace treaties must not deprive a people of its water sources to the extent that this measure could cause damage to public health or the economic or physical conditions of its survival. When new frontiers are delimited, the volume of water that is indispensable for the vital needs of the population has to be taken into consideration." (Article VIII)¹¹⁹

Although the starting point of the principle contained in the preceding paragraphs can hardly be disputed, some factors have to be taken into account here, i.e., the gap between the fundamental principles of international law and the interstate relations arising from the uses of international watercourses, on the one hand, and the interdependence of the various fundamental principles, on the other, such as the existence of pairs of norms, either complementing each other or opposing each other, respectively,¹²⁰ resulting in ambiguity. Accordingly, treaties or conventions in which one of the parties renounced its right to water uses in favour of the other party,¹²¹ or had allowed damage to be caused on its territory,¹²² were not declared void. Thus *general international law applicable to a water usage regime has a dispositive character*.¹²³

— As is clear from the aforementioned, the principal function of international law-making relating to the utilization regimes of international watercourses has been to respect the sovereignty of the riparian states and to resolve the conflicting rights resulting from it, and this can be realized, first and foremost, by concluding international treaties or conventions. With the principles of respect for sovereign equality and the *bona fide* fulfilment of obligations, other fundamental principles of international law have been incorporated in this field as well, since these principles have been closely connected to each other, "each of them being interpreted taking into account the others".¹²⁴ As a matter of fact, it can easily be admitted that the various fundamental principles of international law have had different impacts upon the utilization regimes of international watercourses. For example, the principle of the self-determination of peoples which occurred only exceptionally, in connection with the Cabora Bassa dam,¹²⁵ to be built on the river Zambezi, when considering different interpreta-

tions of this principle¹²⁶ and its relative distance from this branch of international law. Similarly, it cannot be doubted that the disputes relating to the uses of international watercourses have to be settled by the interested states by peaceful means; as to the actual methods, however, no individual aspect can be determined, e.g., polemics connected to the eventual judicial settlement of disputes are not out of question.¹²⁷

Contrary to the above, the *principle of international cooperation*, appearing in innumerable forms, has been predominant in interstate relations originating from the uses of international watercourses.¹²⁸ A reference to this can be found, among other points, in a provision of the Helsinki Final Act, also applicable to the field of water pollution control and fresh water utilization, which reads: "problems can be solved effectively only through close international cooperation".¹²⁹ As to the modalities of cooperation, a thorough examination of the very nature of the matter, is required and this will be dealt with in Chapter IX.

The relationship between the fundamental principles of international law and the utilization regime of international watercourses¹³⁰ has also to be taken into consideration within the context of the *principle of refraining from the threat or use of force*. It has to be regarded as a legally established principle that the use and threat of force for the settlement of disputes relating to the uses of international watercourses are prohibited. It is a further essential conventional disposition that some rules of environmental protection are to be observed in the course of an armed conflict.¹³¹

The most important aspect of the problem in question, however, is whether or not *some forms of interference with the regimes of international watercourses can be differentiated from the use or threat of force*.¹³² Several examples of this qualification may be found in international practice:¹³³ the Lauca case,¹³⁴ the Parana case,¹³⁵ and the *dispute on the river Jordan* are all worth mentioning. As to the last mentioned case, the facts may be summed up as follows. The problem of the uses of the river Jordan was on the agenda of the Security Council as early as in the 1950s,¹³⁶ and projects on the division of the waters of the Jordan were prepared, to be utilized for irrigation.¹³⁷ The dispute took a new course when Israel built a large water drainage system between 1958 and 1965, using it for transporting substantial volumes of water from Lake Tiberias to the Negev desert through channels and underground pipelines. This was declared to be an aggressive act by a resolution of the Arab League in 1960;¹³⁸ the opposing project, elaborated by the League in 1964-65, was in turn declared *casus belli* by Eskhol, the Israeli premier.¹³⁹ The matter outlined above is essentially appropriate to highlight the fact that the principle of the prohibition of the use of force cannot be separated from the utilization regime of international watercourses. Taking into consideration, however, the special political background, it does not form a basis for legal conclusions.

The relationship between the ban on force and the utilization regime of international watercourses was also adopted as a principle, e.g., at a meeting of the Asian-African Legal Consultative Committee, held in Accra. Water usage, causing particularly grave injury, was declared to amount to an act of aggression by the Pakistani representative, laying emphasis on the right to self-protection; contrary to this, the risks inherent in this concept were highlighted by the Indian representative.¹⁴⁰

As the problems raised within this context lead to a dispute concerning the meaning of the term "force",¹⁴¹ any further discussion would exceed the limits of the present work. Nevertheless, this is worth mentioning because of a *special aspect*, i.e., whether or not a state is entitled, in the case of extraordinarily severe pollution or threatened flooding, to prevent the occurrence of grave damage by means of a measure or measures taken in the territory of another state, for the protection of its own vital interests. This right is acknowledged, e.g., by STEIN, by analogy to the 1969 Brussels Convention on intervention.¹⁴² There is as yet, however, no explanation of what would be acceptable or could be done if the state from which the danger originates refused to take any preventive measures. An extrapolation of the settlement under the law of the sea was prevented here, in my view, by the fact that the region in question was under national jurisdiction. Nevertheless, it seems beyond doubt that the rule as stated by the ILC in the case of an emergency¹⁴³ at least did not exclude the violation of territorial sovereignty of another state.¹⁴⁴

c) Customary international law

There have been several difficulties involved in clarifying the problem of whether or not a practice having the criteria of customary law exists in the field of non-navigational uses of international watercourses. As to the sources of indecisiveness related to the possible solution to this problem, some of them are not that exceptional, such as the more negative attitude of the international community towards international customary law,¹⁴⁵ doubts about the role of customary law, a dispute-charged approach to its constituent elements,¹⁴⁶ etc., but the special nature of this branch of international law here had considerable weight as well.

The first constituent element of customary international law, to be analyzed below, concerns *general state practice*. In compliance with the broad concept of the formation of international customary law, WOLFROM considered as relevant doctrine, jurisprudence, general principles of law, and international agreements.¹⁴⁷ Contrary to this, CUTH restricted his evaluation to agreements as established state practice.¹⁴⁸ At the same time, LAMMERS stated that "... treaty provisions as such must be considered as neutral or ambiguous material for the

establishment of customary international law...¹⁴⁹; hence, his research was concentrated on relevant state conduct and statements as evidence of customary international law,¹⁵⁰ and the general principles of law recognized by civilized nations were examined separately.

The questions requiring actual replies have already been indicated by the viewpoints summarily presented. Of course, it can hardly be disputed that the theory here also serves only as a subsidiary means for the determination of rules of law. Similarly, it cannot be doubted that the actual behaviour of the states concerned in respect of international relations resulting from the uses of international watercourses has been of decisive importance.¹⁵¹ As regards international case law, some decisions¹⁵² acknowledge customary law for the settlement of utilization regimes of international watercourses or declare principles that can also be extrapolated to this field.¹⁵³ Nevertheless, the number of precedents is too insignificant to form sufficient evidence for providing a basis for ultimate conclusions concerning the existence of international customary law. Apart from any other theoretical approach, this fact stimulates the broadening of the range of evidence, i.e., to take into consideration the Supreme Court's decisions concerning federations.¹⁵⁴ In the absence of an appropriate regulation under internal law, the courts concerned had recourse to international law to settle the cases in question. Nevertheless, the difference between international and national courts cannot be disregarded. Thus, an international court applies, in principle, international law as established by states; on the other hand, an internal court is only authorized to express the viewpoint of the state in which it is functioning as it relates to international law, even if reference is made to international law in the judgement of the court,¹⁵⁵ unless this is excluded on account of the division of the branches of power. In addition, it should also be mentioned that the Supreme Court of the United States, in particular, exceeded the limits of legal settlement, i.e., it laid down the rights of the individual member states in the field of water usage on the basis of technical and economic valuations comprising detailed problems.¹⁵⁶ Evidently, this method cannot be adopted in the sphere of international law.

As is clear from the foregoing, *international treaties or conventions* have had the lion's share in establishing utilization regimes for international watercourses. The point is now whether or not these can be taken into account in the process of the formation of international customary law. It goes without saying that powerful arguments counteract this possibility. One can thus argue whether the preponderantly conventional character of this branch of international law is not *ipso facto* contradictory to the existence of international customary law. Furthermore, the difference between the nature of the twofold norm-creating processes¹⁵⁷ and the principle *res inter alios acta nec nocere nec prodesse potest*¹⁵⁸ cannot also be taken out of consideration. The ICJ acknowledged the importance of a general multilateral treaty in the formation of customary law¹⁵⁹

in the North Sea Continental Shelf Cases, and the treaties on the utilization regime were of a bilateral or restricted multilateral character. Although the judgement referred to did not exclude the possibility of the formation of international customary law on the basis of treaties as mentioned above, and it has been laid down in Article 38 of the Vienna Convention on the Law of Treaties that rules in a treaty become binding through international custom, these provisions have a less positive aspect; rather, they have a right-reserving character, precluding any avoidance of the application of customary law.¹⁶⁰

In spite of the said reservations, the role of international treaties in the process of the formation of customary law cannot be disregarded. Besides, this possibility has been accepted by several theorists as well.¹⁶¹ This seems to be in compliance with the extensive interpretation of state practice in the Statute of the ILC, which does not raise any restrictive condition.¹⁶²

An overestimation of the role of treaties or conventions, as evidence of customary law, can be observed in the process of codification.¹⁶³ Additionally, some treaties or conventions¹⁶⁴ contain *expressis verbis* or implicit references to general international law. The most important feature of this high number of agreements, however, is a remarkable similarity between provisions relating to the same subject-matter, inspired by identical principles.¹⁶⁵

The *opinio iuris sive necessitatis* constitutes the second basic element of customary international law. The traditional problem, i.e., consent or recognition as *conditio sine qua non* might have occurred in the utilization regimes of international watercourses in a less striking way since, apart from the island countries, all members of the international community had to take a stand concerning the international law aspects of international relations resulting from the uses of international watercourses. In spite of their contested nature from several viewpoints, the acts of international organizations appear in this context, *prima vista*, sufficient for considering consent in relation to the *opinio iuris*.

Taking the above into consideration, it may not be surprising that *the majority of the representatives of jurisprudence prefer to interpret the situation concerning the arrangement of the uses of international watercourses as customary law*, even if some reservations and ambiguous formulations appear.

As to international scientific associations, they unequivocally recognize the existence of the rules formulated by them in international law.¹⁶⁶

In spite of diverging methods of approach, the formulation of rules, and the exclusivity thereof, the *academic views* conclude, in general, that international customary law does exist in respect of the utilization regimes of international watercourses.¹⁶⁷

There have been stronger divisions or differences in this matter within the socialist doctrine of international law. Thus, both the explicit negation and the recognition of the existence of international customary law may be found.¹⁶⁸

According to KLIMENKO, the states admit general principles regulating water usage, and a substantial part of the Helsinki Rules conforms with international practice.¹⁶⁹ Similarly, CUTH accepts the formation of principles (*zasady*) having the character of customary law, in spite of their limited number; he also favours their codification.¹⁷⁰ TIMOSHENKO came to the same conclusion within the broader context of international environmental law.¹⁷¹

Nevertheless, the views enumerated above have not been free from ambiguity. As was once considered, the general principles in question derive from the fundamental principles of international law, but their application at the same time seemed to be untenable without actual treaties or conventions.¹⁷² It is easy to recognize the contradiction between the said two postulates as, on account of their imperative character, the basic or fundamental principles of international law have to be absolutely enforced, even if this is contrary to conventional provisions.¹⁷³ Or should this lead, on the other hand, to the conclusion that the principles in question would have lost not only their cogent character but also their compulsory force in the course of the said derivation? There are, of course, other authors for whom international customary law, in its traditional sense, unequivocally constitutes the basis of the rights and obligations of riverain states.¹⁷⁴

In view of the fact that no rules of customary law have been established so far concerning the utilization regimes of international watercourses, some adherents of the doctrine of international law have found it unsatisfactory (or insufficient) to state this and have steered towards another approach. According to one of the relevant variants, this field is also subject to the *principle of international legal responsibility*.¹⁷⁵ This concept has, in fact, a reasonable base. First, it demonstrates a concrete approach to the problems of international watercourses¹⁷⁶ and takes into account the fact that, for some rules of international law, their content appears in a completely definite form only in the course of the actual enforcement of responsibility.¹⁷⁷ Second, reference has to be made to the point that the general institution of international legal responsibility is necessarily inherent in the utilization regime of international watercourses; accordingly, it is also imperative to study it. In spite of the recognition of the said facts, this approach is contrary to the concept of international legal responsibility as formulated by the ILC, i.e., the distinction between primary and secondary means.¹⁷⁸ In terms of the concept in question, "in principle a State will incur international responsibility only in the case of a breach of an international obligation incumbent upon that State, i.e., in the case of an internationally wrongful act". Accordingly, the declaration of responsibility for water uses involves the recognition of the respective primary rules, general international law included. Furthermore, while interpreting it not as responsibility for an internationally wrongful act but as international liability for injurious consequences arising out of acts not prohibited by international law, then this act is

again subjected to the primary rules of international law as formulated in an unequivocal stand by the special rapporteur of this subject-matter.¹⁷⁹ To put it plainly, I am against the point which claims that there is no gap in the law, i.e., rules of general international law can be found in this branch of international law as well.

Other authors might consider the evidence of customary international law in this field as insufficient or conceding to theoretical considerations, and these authors have turned to the *general principles of law* recognized by civilized nations.^{180, 181} Without venturing into a theoretical labyrinth, reference need only be made to the point that there was no enthusiasm shown in practice for "general principles of law", similar to that demonstrated in the theory, on the one hand,¹⁸² and, in respect of the content and nature of the problem, no common denominator was found in the theory either. The socialist concept of international law denied its character as an independent source of law¹⁸³ so that (supposing but not admitting) only general ideas of the law or norms of produce can be mentioned.¹⁸⁴

In spite of the above, it seems to be necessary to give a brief outline, with particular attention to the connection of this complexity of problems to the point of whether or not the customary law norms of this branch of international law are *exclusive or may also be extrapolated to other fields of international law, or whether they originate from other areas*, respectively.

First, *international servitudes* seem to form an appropriate basis to solve the utilization problems of international watercourses.¹⁸⁵ Nevertheless, this legal institution is inappropriate for this role *ab ovo*; a servitude can only be established by an international treaty,¹⁸⁶ consequently it cannot be placed in general international law on account of its very concept, on the one hand; furthermore, the obligation here infers first and foremost, not accepting the inflow of water, on the other hand, but to tolerate harmful transfrontier consequences, and this cannot be identified with a so-called positive servitude claiming that the relevant state is acting on its own territory and not on that of the other state; accordingly, the territories under the jurisdiction of the first-mentioned state are affected only by the consequences of its acts. To claim a duty not to act from the other state as compensation for the enjoyment of the rights of water uses would be unfounded.¹⁸⁷ As a matter of fact, the above statement would not pertain if international treaties or conventions on water management regimes did not contain servitude rights concerning, e.g., entry, the use of the other watercourse shore or bank, the collection of data, etc.¹⁸⁸

Since the publication of HUBER's views¹⁸⁹ the opinion that international relations originating from the uses of international watercourses should be regulated by the international law of neighbourly relations, or international neighbourhood law as it is sometimes called (*droit international de voisinage*) has gained broad ground.¹⁹⁰ It can hardly be denied that the beginnings of the

management regimes of international watercourses appeared in regulations concerning bordering waters, and these rules could be rightly qualified as parts of neighbourhood law; what is more, the two fields became associated with one another for a long time.¹⁹¹ Nevertheless, this link later became more tentative. First, the scope of transfrontier effects fitting the image of neighbourhood law became extended; second, with the extension of the consequences of water management in the geographical sense of the term the maintenance of this concept became increasingly artificial as not only the neighbouring countries were affected, and territorial contiguity was no longer a condition. Besides, objections may also be raised as to the content. Neighbourhood law has been concentrated on the regulation of transfrontier damage,¹⁹² and the emphasis has been laid more and more on prevention and co-operation in the course of legal development. Finally, reference has to be made to the controversies relating to international law of neighbourly relations as well; in particular, it may appear within international law not only as a general principle of the law, but it may be qualified as part of customary international law as well.¹⁹³ The usual identification with the general principle of good neighbourliness in the sense of the Preamble and Article 74 of the UN Charter¹⁹⁴ cannot be easily accepted. The Charter's content is of a decisively political character;¹⁹⁵ besides, the views in respect of the relationship to the *maxim sic utere tuo* are also different. Although doubts may arise on the basis of the said considerations in connection with the use of the concept of the international law of neighbourly relations,¹⁹⁶ some important elements of the international law regime of transfrontier effects are, however, expressed, in it, and the link to various sectors of international environmental law are at the same time also made evident.

Apart from good neighbourliness, *good faith* is also declared to be a basis for equitable sharing in Article 7 of EVENSEN's second draft. The general validity of this principle cannot be doubted;¹⁹⁷ nevertheless, one may raise the question of whether the consequence is then that the *prohibition of the abuse of rights* would constitute the general principle of the utilization regimes of international watercourses.¹⁹⁸ It is not only that this principle lacks general acceptance, its criteria are not uniform either. Thus it appears only arbitrarily as the intention to cause damage, or there are also other limits to the use of rights. It should also be noted that the *maxim sic utere tuo* is now identified with customary international law and the prohibition of abuse with general international law, depending on the views of the individual authors. Thus, WOLFROM is probably right when claiming that a prohibition of this kind would be insufficient, even in municipal law, to solve the complex problems caused by water usage,¹⁹⁹ particularly if it is taken into consideration that, as a rule, one of the confronted countries utilizes the waters of an international watercourse to satisfy its demands, and not to cause harm to the other riverain state when so doing; accordingly, damages are the inevitable consequence of such utilization.²⁰⁰

Even if it is not accepted, for various reasons, that the general principles of law outlined in the foregoing amount to general international law affecting the utilization regime of international watercourses, I support the view that this branch of international law is closely linked to the rules which govern other fields,²⁰¹ thus having no exclusivity.

d) New aspects of general international law

I share the view that international practice has formed the general principles of international law governing the utilization regime of international watercourses, in spite of all the differences in approach, and the existing contradictions, incoherence, and ambiguities.

The old problem concerning the existence of relevant general international law as was, by analogy, formulated by Hamlet, received attention as a consequence of several new elements which, by the very nature of things, ought to result in a reassessment of the previous concepts.

The *codification* of the law of non-navigational uses of international watercourses commenced in 1970.²⁰² This will mean "the more precise formulation and systematization of rules of international law in fields where there already has been extensive State practice, precedent, and doctrine".²⁰³

Even if codification is inseparable from the progressive development of international law and, when looking at its result, it is almost impossible to make a distinction between them, the work so far performed by the ILC can already be considered decisive evidence that the *utilization regime of international watercourses has rules which form part of customary international law*.²⁰⁴

The correctness of this conclusion has also been confirmed by another formulated codification of the ILC, on international liability for injurious consequences arising out of acts not prohibited by international law, although it covers, needless to say, a broader scope.²⁰⁵ It reads as follows: "These draft articles apply with respect to activities and situations which are within the territory or control of a State, and which do or may give rise to a physical consequence affecting the use or enjoyment of areas within the territory or control of any other State."²⁰⁶

The conclusions in connection with the codification brought about the consequence that it was *no longer the existence of general international law on the utilization regimes of international watercourses* that was concerned *but*, rather, the *statement of some of its principles of rules that came to the fore*. Accordingly, it was hardly by accident that more and more resolutions or draft projects on this subject-matter came into existence in the 1970s within the context of international organizations.²⁰⁷ Actually, this process was substantially promoted by an upgraded assessment of problems affecting environmental protec-

tion on an international scale; for this reason, the formulations affecting international watercourses were, as a rule, integrated into the broader context of international environmental law.

The results of efforts made by international organizations offer additional evidence for the existence of general international law concerning the utilization regime of international watercourses. If the respective resolutions or drafts are taken into account not only as documents reflecting *opinio iuris* but that a separate significance is attributed to them, the problem of *soft law* will appear.

According to this concept, guidelines or codes of conduct,²⁰⁸ formulated by international organizations, replace customary international law, and "... ils peuvent être considérés tous comme faisant partie de la réglementation internationale... la différence entre textes formellement obligatoires et les textes qui, par leur forme n'ont pas cette nature, tend à s'effacer".²⁰⁹

It is as a result of this phenomenon that international organizations make efforts to check the implementation of their acts.²¹⁰ Also, the formulae elaborated by international organizations infiltrate the texts of international treaties or conventions.²¹¹ Apart from this concept of soft law, considering it as a pre- or sub-law, i.e., non-binding norm, it also has another meaning, i.e., expressing the weakness and quasi-inconceivability of obligations laid down in a formal source of international law²¹² when, actually, the provisions of treaties or conventions "... ne constituent pas un engagement pouvant mis en oeuvre, mais seulement traduisent l'acceptation par les gouvernements signataires d'orienter leur action dans une direction donnée".²¹³ When examining the individual components of general international law relevant to this subject-matter or the respective international treaties or conventions, this aspect must not be omitted.

With both its general meanings outlined in the foregoing, soft law very frequently appears in contemporary international practice even if it presents a serious challenge to the system of international law.²¹⁴ Nevertheless, to go into further detail is beyond the bounds of this present work. In any event, the conclusion can be drawn that, when studying some principles of general international law, the acts of international organizations must not be neglected, and the consequence of the existence of soft law must be taken into account when investigating international responsibility for damages caused by water management.

The efforts aimed at the formulation of principles of general international law regulating the uses of international watercourses were extended and, in addition, their content also experienced a transformation. Thus, the work of learned societies, carried out since 1911, was thrown into the background behind the codification activity of the ILC and the acts of the relevant international organizations, even if this work continued to exert an important influence on the latter element. Nevertheless, the efforts to clarify and formulate the rules inherent in general international law failed to produce a generally accepted guide. When

making comparisons, important differences can be revealed not only in the number and structure of the respective principles but, in particular, in their content. So, SMITH found 9 interpretations that could reasonably be deduced from the principle of "the positive duty of every government concerned to cooperate";²¹⁵ BRIERLY summed up the obligations of riparian states in 6 principles.²¹⁶

The Helsinki Rules, with the core of the entire system expressed as a single element, i.e., a reasonable and equitable share in beneficial uses of waters,²¹⁷ may appear to be the other extreme. On the other hand, some authors place the prohibition on causing damage in the foreground, qualifying it as decisive,²¹⁸ as is laid down in the Salzburg Resolution of the IDI, which reads: "... Considering that the obligation not to cause unlawful harm to others is one of the basic general principles governing neighbourly relations. Considering that this principle is also applicable to relations arising from different utilizations of waters..."²¹⁹

Additionally, the problems of existing juridical norms on the order of priority of different uses of water,²²⁰ or of principles protecting future utilization,²²¹ also occurred. For the time being, the ban on pollution has come to the fore.²²²

In spite of the aforementioned, the most approved approach seems to be the acceptance of two certain principles. Thus, these two general principles are laid down in the codification of the ILC, the first ensuring a reasonable and equitable share and the second a prohibition on causing damage.²²³

Following the presentation of international treaties and conventions in connection with the Danube basin, the present work is dedicated, first and foremost, to the analysis of the said two principles. It has to be noted, however, that also in this context the *two principles* in question cannot be completely identified with the general principles applicable to the subject-matter. Even if the territorial sovereignty of the riverain states can be integrated with the formulation of reasonable and equitable share, the principle of international cooperation is regarded as having a more general nature, when considering its sources and legal nature. With this in mind, it seems illogical that the special rapporteurs of the ILC failed to mention the obligation of cooperation among the general principles in their draft. The significance of the procedural obligations forming the content of cooperation derives from the said interpretations. In addition, the problem of whether or not the ban on pollution amounted to a general principle in contemporary international law may also be mentioned. Furthermore, practical considerations may also justify that this latter point should be dealt with separately.

Notes

¹ HERCZEG: op. cit. 1987, p. 34.

² LACHARRIÈRE: op. cit. p. 13.

³ An effort was made to provide an outline of this by LEMARQUAND (op. cit. pp. 7—23 in particular); see also the FOX—LEMARQUAND Report (UN Doc. E/Conf.70.A.3). Nevertheless, the conditions influencing negotiations, the favourable and disadvantageous circumstances for agreements, with the possibilities of achieving them, such as hydrologic-economic incentives, foreign policy and ensuring the right image within it, the attitude towards international law, the possibility of linkage, reciprocity, the importance of national sovereignty, domestic policy-making, and consensus formation were determinedly mapped out. All this amounts to a necessity for the realization of joint uses, and this can only constitute one form of the uses of international watercourses.

⁴ LACHARRIÈRE remarked, however (op. cit. p. 24), that, in this respect, states are inclined to make a distinction between their own consent as a condition *sine qua non* and that of others which, however, is not absolutely obligatory.

⁵ HERCZEGH: op. cit. 1987, p. 23.

⁶ BOKOR—SZEGŐ: op. cit. 1978, pp. 49—51 and 69—88.

⁷ Also it cannot be disregarded that international legislation is not terminated in some cases, i.e., perfect norms of international law do not come into existence; these are qualified by TUNKIN (op. cit. 1970, p. 101) as auxiliary processes of international legislation.

⁸ TUNKIN: op. cit. 1962, p. 66.

⁹ LEMARQUAND: op. cit. p. 3.

¹⁰ See SMITH: op. cit. p. 87; QUINT: op. cit. p. 320; SEVETTE: op. cit. p. 44; SAUSER—HALL: op. cit. p. 471; BERBER: op. cit. p. 273; BEDARD: op. cit. p. 129; KOUTIKOV: op. cit. p. 31; CUTH: op. cit. p. 38; BOLINTINEANU—STEFANESCU: op. cit. p. 132.

¹¹ Yearbook ILC, 1979, Vol. II (Part 1), p. 159.

¹² Ibid.

¹³ In the same sense, see the Vienna Convention on the Law of Treaties of 1969. Article 20/2; tacitly Art. 9.

¹⁴ The term “international regime” is often used in the sense of “international regulation”, by which is meant all the international rules concerning the regime and the administration of a river. But “the regime” and “the administration” of a navigable waterway in reality denote different matters. . . . These are quite distinct matters. . . . (VITANYI: op. cit. p. 3). With some reservations, e.g. in respect of the exclusion of the entire formal law, the said statement can also be extrapolated to non-navigational uses of international watercourses.

¹⁵ LACHARRIÈRE: op. cit. pp. 63—54. In the reverse sense see: SALMON: op. cit. 1982, pp. 278—280.

¹⁶ “La pratique de la généralisation est poussée jusqu'à la manie” (ibid. p. 278).

¹⁷ SCHWEBEL's First Report (Yearbook ILC 1979, Vol. II, Part 1, p. 151, para. 35).

¹⁸ EVENSEN's First Report (UN Doc. A/CN.4/367, p. 8, para. 7).

¹⁹ Recalling Horace: “Aureum quisquis mediocritem diligit” (Carminum, II/10).

²⁰ LEMARQUAND: op. cit. pp. 14 and 120.

²¹ In this sense, see the Preamble of a Madrid resolution of the Institut de Droit International from 1911, and the stand of the Committee on Natural Resources (UN Doc. E/C.7/2, para. 4).

²² See GAJA: op. cit. p. 354; ibid. UN Doc. E/C.7/2/Add. 6. paras. 22—25.

²³ Article 207 of the 1982 Convention on the Law of the Sea, the 1974 Paris Convention, the Athens Protocol of 1980, and the Protocol signed in Quito in 1983.

²⁴ LEMARQUAND: op. cit. p. 11.

²⁵ For the distinction see: FITZMAURICE: op. cit. pp. 125—126.

²⁶ For this see FLITAN's critical remark on the ILC draft (Annuaire CDI, 1983, Vol. I, p. 219). In this sense see the FOX—LEMARQUAND Report, para. 14.

²⁷ Ibid. paras. 5, 20.

²⁸ "La nature du sujet est tributaire à la fois de la nature et des intérêts économiques et politiques." BEDARD: op. cit. pp. 118—119.

²⁹ Vizgazdálkodási Lexikon (Dictionary of Water Management), pp. 804—805.

³⁰ Yearbook ILC, 1980, Vol. II, Part 1, p. 160, para. 2.

³¹ FOX—LEMARQUAND's Report, para. 23, but the insecurity factor in connection with the future of the enterprise has to be taken into consideration as well (ibid., para. 9).

³² E.g., Uganda—Egypt's Exchange of notes on Equatorial Lakes of the River Nile (1950); Canada—US's Exchange of notes on the Columbia River Basin (1944) and on the St. Lawrence River (1952); Argentina—Paraguay's Agreement on the Parana (Apipe Falls) (1958 and 1971); Bolivia—Peru's Convention on Lake Titicaca (1955); Agreement concerning the International Committee for the Protection of the Rhine against Pollution (1963); Greece—Yugoslavia's Agreement on the Axios/Vardar Basin (1970); and furthermore, UNEP's Zambezi Project (RUMMEL—BULSKA: op. cit. 1985, pp. 75—83).

³³ KISS: op. cit. 1980, p. 522; Nairobi Declaration of 1982.

³⁴ See Action Programme of Mar del Plata, paras. 89—93.

³⁵ CARREAU—FLORY—JULLARD: op. cit. p. 11.

³⁶ The term given by SMITH: Economic Uses of International Rivers, is acceptable in this sense; for more details see: COLLIARD: op. cit. 1968, pp. 353 et seq.

³⁷ See the OECD Recommendation on the Implementation of the Polluter-Pays Principle (1974), especially the actual practice of polluted countries.

³⁸ CARREAU—FLORY—JULLARD: op. cit. pp. 20—21.

³⁹ Ibid. p. 15.

⁴⁰ FOX—LEMARQUAND's Report, para. 6.

⁴¹ Ibid. paras. 40—41.

⁴² LACHARRIÈRE: op. cit. pp. 113 and 150.

⁴³ Ibid. p. 207.

⁴⁴ E.g. JOHNSON, B.: op. cit. pp. 9—12; LAMMERS: op. cit. pp. 89, 149, 503, 531. On the other hand, international organizations of a universal character have made efforts principally in favour of general integration, equally incorporating international law and municipal law, i.e., the national legal systems of various states. See the Water Management Action Programme of the UN from 1977; in respect of environmental protection, in UNEP Decision 8/II/ Section A/III/5; for more details, see AGNU, 30e Session, supp. 25/1975/p. 55.

⁴⁵ See the Preamble of the Vienna Convention on the Law of Treaties. Ibid. e.g. HARASZTI—HERCZEGH—NAGY: op. cit. pp. 29 and 200; LACHARRIÈRE: op. cit. p. 27; TALALAEV: op. cit. p. 4.

⁴⁶ ANDRASSY: op. cit. 1959, p. 182.

⁴⁷ UN Doc. E/C.7/46, p. 6.

⁴⁸ FAO, Legislative Study, No. 15 (Foreword, p. iii).

⁴⁹ Yearbook ILC, 1974, Vol. II, Part 2, pp. 57—187. For the texts of these treaties see: UN Doc. ST/LEG/SER/B.12 and pp. 289—32. As many as 286 treaties and conventions are enumerated in a document compiled for the Committee on Natural Resources.

⁵⁰ The following agreements are not included in the document published by the UN Secretariat, within the context of agreements on frontier watercourses: the Hungaro—Romanian (1969), the Czechoslovakian—Soviet (1968), and the GDR—Polish (1965) treaties; the French—Spanish agreement on the hydraulic power management of the Upper Garonne (1964); the agreement concerning the Gambia Basin (1968); the French—FRG agreement on the Rhine (1969); the Italian—Swiss agreement on the protection of the Lago Maggiore and Lake Lugano (1972); and the Brazilian—Paraguayan treaty on the Itaipu hydraulic power plant (1973).

⁵¹ UN Doc. E/ECE/WATER/R.57 (25 treaties) and 85 (113 treaties).

⁵² The treaties and/or agreements already concluded or currently being negotiated are included

in the following documents: UN Doc. E/C.7/118, Table 7, UN Doc. E/C.7/1983/11, pp. 10—12; UN Doc. E/C.7/1985/5, pp. 7—8.

⁵³ Natural Resources/Water Series No. 13.

⁵⁴ For the definition see: SINCLAIR: op. cit. pp. 33—34 (similarly BASTID: op. cit. pp. 36 and 74), where one example merely concerns a treaty relating to the development of a river basin or a treaty relating to the building of a hydro-electric dam.

⁵⁵ E.g., Romania and the socialist countries in general. See: UN Doc. A/Conf.70/29, paras. 169 and 202.

⁵⁶ See: UN Doc. E/C.7/85.

⁵⁷ BOUTROS GHALI: op. cit. p. 66.

⁵⁸ E.g., Ramsar Convention (1971), World Heritage Convention (1972), Migratory Species Convention (1979), and regional conventions (Africa of 1933/1968, America of 1940, Europe of 1979).

⁵⁹ See: LACHARRIÈRE: op. cit. p. 27.

⁶⁰ SINCLAIR: op. cit. p. 252.

⁶¹ BASTID: op. cit. p. 9; SINCLAIR: op. cit. pp. 6 and 245.

⁶² VIRALLY: op. cit. 1980, pp. 159, 172; VIRALLY's Report of 1983, *Annuaire IDI*, 1983, Vol. I, pp. 283—374, and Vol. II, p. 284.

⁶³ Vienna Convention on the Law of Treaties. Art. 29.

⁶⁴ SINCLAIR: op. cit. pp. 87—88.

⁶⁵ In Europe this is of interest in the case of navigation on the Danube. See: COSTA: op. cit. pp. 203—246.

⁶⁶ With the Niger Act of 1963, the abrogation of treaties concerning the River Niger was realized (Article 1). Actually, the effect of the 1885 General Act of Berlin was also terminated in respect of the river Congo. For more details see: YAKEMTCHUK: op. cit. pp. 480—515; FERNANDEZ ROSAS: op. cit. pp. 127—176.

⁶⁷ GODANA: op. cit. pp. 326—327.

⁶⁸ See: WALDOCK's Fifth Report. *Annuaire CDI*, 1972, Vol. II, pp. 61—62, paras. 36—38. The adverse precedent connected with the Jordan can supposedly be attributed to political considerations and not to those coupled with international law.

⁶⁹ UN Doc. E/C.7/35.

⁷⁰ For these, see UN Doc. E/C.7/49. In connection with a recent compilation of treaties concerning Africa, one may arrive at a similar conclusion, i.e., 8 treaties of this kind are laid down in the Natural Resources/Water Series, Document No. 13, pp. 74—81.

⁷¹ Yearbook ILC, 1966, Vol. II, p. 211.

⁷² It is connected with Articles 41 and 59, and also with the rules of international responsibility.

⁷³ BASTID: op. cit. p. 166; SINCLAIR: op. cit. p. 98.

⁷⁴ ROUSSEAU: op. cit. I, p. 163.

⁷⁵ EVENSEN's Second Report (UN Doc. A/CN.4/381, para. 27). Item 3 of Article 4 contains the *pactum de contrahendo*, to be dealt with below.

⁷⁶ In this phase the special rapporteur did not examine to what extent the codification treaty may be regarded as *ius cogens* in respect of watercourse agreements (*Ibid.*, para. 38).

⁷⁷ Helsinki Rules, Article 1 (ILA, 52nd Report, 1966, p. 484); Montreal Rules, Article 1 (ILA, 60th Report, 1982, p. 158).

⁷⁸ *Ibid.* p. 158.

⁷⁹ CAHIER: op. cit. p. 598. The existence of such a rule has, however, been doubted by e.g. SINCLAIR: op. cit. p. 99. See also: BRUHACS: op. cit. pp. 7—8.

⁸⁰ BARBERIS considers e.g. the principle "*pacta tertiis nec nocent nec prosunt*" as having a cogent character (op. cit. p. 36).

⁸¹ SINCLAIR: raised doubts concerning the success of this enumeration; op. cit. p. 165.

- ⁸² ROUSSEAU: op. cit. Vol. I, p. 163. In an adverse sense see: HARASZTI: op. cit. 1973, p. 114.
- ⁸³ UN Doc. A/CN.4/381, para. 44.
- ⁸⁴ See BASTID's analysis (op. cit. p. 64) of Article 15 of the Vienna Convention on the Law of Treaties.
- ⁸⁵ E.g. GODANA: op. cit. p. 326; CUTH: op. cit. p. 162; in general, RAUX: op. cit. pp. 660—682.
- ⁸⁶ CUTH: op. cit. pp. 25 and 162.
- ⁸⁷ An examination has been recommended by the KNAUTH Report (ILA, 48th Report, 1958, p. 90) and the Inter-American Bar Association's Resolution of 1957, point III/1 (Yearbook ILC, 1974, Vol. II, Part 2, p. 208).
- ⁸⁸ On the possibility of cancelling this right see: BRUHÁCS: op. cit. pp. 20—22.
- ⁸⁹ HARASZTI: op. cit. 1973, p. 78.
- ⁹⁰ KORBUT—BASKIN: op. cit. p. 254.
- ⁹¹ For details see: UN Doc. ST/ESA/5, point IV/D.
- ⁹² In an adverse sense see: CUTH: op. cit. p. 158. This view is not in conformity with the facts and, besides, it is now obsolete in the contemporary socialist concept of international law.
- ⁹³ Société des Nations: Deuxième Conférence Générale des Communications et du Transit. Instruments officiels. p. 4.
- ⁹⁴ In WOLFROM's view, the convention was destined to "realize a compromise between two seemingly antagonistic concepts, i.e., the traditional legal and diplomatic principle of the sovereignty of states, and the technical demand for the optimum use of watercourses for hydraulic power" (op. cit. 1963, p. 72).
- ⁹⁵ As KLIMENKO states this was meant to serve the correct purpose of complex development. Op. cit. p. 67.
- ⁹⁶ Yearbook ILC, 1974, Vol. II, Part 1, p. 58. SAUSER—HALL: op. cit. pp. 532—536. Reference was also made to this by the board of arbitration in the Franco-Spanish dispute relating to Lake Lanoux. RGDIP 1958, p. 108.
- ⁹⁷ The counter-arguments are enumerated by: SAUSER—HALL: op. cit. pp. 533—534.
- ⁹⁸ Some points could thus be examined, i.e., the meaning of the formulation "within the limits of international law", laid down in Article 1, whether or not an abstraction from state boundaries was acceptable (Article 5) or to what extent the recognition of the primacy of navigation was expressed within the terms of Article 8.
- ⁹⁹ Yearbook ILC, 1974, Vol. II, Part 2, p. 58.
- ¹⁰⁰ SAUSER—HALL: op. cit. p. 536; DECLEVA noted that this kind of regulation of hydraulic power uses failed to comply with the general interests of the states concerned (op. cit. p. 26). According to CUTH, the convention lost force as it was not applied by the states concerned (op. cit. p. 72).
- ¹⁰¹ Resolution No. 2021/XX of November 5, 1965.
- ¹⁰² See e.g. the assessments of the Hungarian (Annuaire CDI, 1976, Vol. II, 2^{ème} partie, p. 150) and the Yugoslav (UN Doc. E/CONF.70/AB.57) governments, respectively.
- ¹⁰³ BILDER: op. cit. p. 124.
- ¹⁰⁴ UN Doc. A/CN.4/348, para. 2.
- ¹⁰⁵ UN Doc. A/CN.4/320, paras. 85—91, and A/CN.4/132, para. 65.
- ¹⁰⁶ PCIJ, Series A/B, No. 70, p. 16.
- ¹⁰⁷ RGDIP, 1958, p. 100.
- ¹⁰⁸ Conforming to the draft commentary: Yearbook ILC, 1966, Vol. II, p. 222.
- ¹⁰⁹ ICJ, Report (1971), p. 31. Report (1978), p. 31. The scope of "any relevant rules of international law" is limited to the basic principles by e.g. HARASZTI: op. cit. 1973, pp. 193 and 195; TUNKIN: op. cit. 1970, pp. 326—327. There are hints on the difficulties by: SINCLAIR: op. cit. p. 140.
- ¹¹⁰ UN Doc. E/CONF.70/29/ para. 90. Ibid.: Stockholm Declaration on Human Environment, Principle 21 and Action Plan, Recommendation 51. There is a somewhat different formulation in

the Helsinki Final Act of 1975, which reads: "... in accordance with the principles of international law" ... "in a spirit of co-operation..."

¹¹¹ TUNKIN: op. cit. 1970, p. 181; SZLOVAR: op. cit. p. 138; HARASZTI—HERCZEGH—NAGY: op. cit. p. 23; in an adverse sense see e.g. OUCHAKOV: op. cit. p. 221 and particularly ALEXIDZE: op. cit. pp. 314—315, who claims that not all fundamental principles have a cogent character.

¹¹² OUCHAKOV: op. cit. p. 221; IGNATENKO—OSTAPENKO: op. cit. p. 64; KURS: op. cit. pp. 11—12.

¹¹³ USENKO: op. cit. p. 11. Having principally in mind the relations between the socialist countries.

¹¹⁴ SZLOVAR: op. cit. p. 138; TUNKIN: op. cit. 1970, p. 180, who refers to the extension of the scope of the fundamental principles of international law.

¹¹⁵ E.g. BOLINTINEAU—STEFANESCU: op. cit. pp. 133, 137 and 169; DUCULESCU: op. cit. pp. 169—170; DZUNOV: op. cit. pp. 256—257; GHEMELGEANU: op. cit. p. 142; KURS III. op. cit. p. 146.

¹¹⁶ Yearbook ILC, 1974, Vol. I, p. 274.

¹¹⁷ For more details see: BENEDEK: op. cit. pp. 289—328.

¹¹⁸ HAYTON: op. cit. pp. 835—836; *ibid.* GLASER: op. cit. p. 151; KLIMENKO: op. cit. pp. 42 and 49, regarding the ban on causing damage of this nature also (*ibid.*, p. 143).

¹¹⁹ ILA, 57th Report, 1976, p. 239. For the cogent character of the precited provision see: BERBER's Report ILA, 56th Report, 1974/75, p. 142.

¹²⁰ LACHARRIÈRE: p. 96.

¹²¹ E.g. Kunene River Agreement (1926); Salto Grande Agreement (1946); Kosi River Agreement (1954); Nile Agreement (1959); Brazil-Paraguayan Convention on the Parana's hydro-electric power (1973).

¹²² E.g. Nile Agreement (1959), Article 2/6; Drava Agreement (1954); Paatsojoki's water power Agreement (1957).

¹²³ Thus the Helsinki Rules, Article I; ANDRASSY: op. cit. 1959, pp. 168, 187, 221.

¹²⁴ Cf. Helsinki Final Act, p. 82; Declaration on Friendly Relations and Co-operation among States (GA. Res. 2625/XXVI).

¹²⁵ RED: 1972, pp. 279—280.

¹²⁶ COT—PELLET: op. cit. pp. 39—54.

¹²⁷ For jurisdiction clauses, including the assumption of obligations of a general character see: CLAGETT: op. cit. pp. 645—669. Some resolutions of international scientific organizations contain recommendations of this kind, e.g. the Helsinki Rules, Article XXXIV, the Salzburg Resolution, Article 8, Inter-American Bar Association, point 2. Their applicability is doubted by e.g. BALLENEGGER: op. cit. pp. 266 et seq., BILDER: op. cit. p. 224. The socialist standpoint concerning the judicial settlement of disputes (see: HARASZTI: op. cit. 1964, pp. 24—41) and the reservation in the face of arbitration became somewhat modified (USTOR: op. cit. 1987, pp. 114—115).

¹²⁸ KOUTIKOV: op. cit. p. 31; UN Doc. E/C.7/2, para 3.

¹²⁹ Final Act, p. 102.

¹³⁰ The right to a healthy environment as a human right could be also raised, in conformity with Article 1 of the Stockholm Declaration on Human Environment.

¹³¹ See: ENMOD Convention (1976); First Geneva Protocol (1977), Articles 54—56.

¹³² In this sense see: ANDRASSY: op. cit. 1959, pp. 199—200; REVILLARD: op. cit. p. 45; SANDEVOIR: op. cit. p. 410.

¹³³ For old cases see: ANDRASSY: op. cit. 1951, pp. 77 et seq.; CHAHUAN: op. cit. p. 294.

¹³⁴ Ríos y lagos internacionales, p. 138.

¹³⁵ VON DER HEYDTE: op. cit. pp. 207 et seq.

¹³⁶ See the resolution adopted by the UN Security Council on May 18, 1951, prohibiting Israel from carrying out drainage work in the demilitarized zone (Yearbook UN, 1951, pp. 290—291). Although the Security Council failed to adopt a resolution in respect of a complaint submitted by Syria in 1953 (see: Yearbook UN, 1953, pp. 224—233), Israel ceased drawing-off water in the area concerned (LOUIS: op. cit. p. 841).

- ¹³⁷ E.g. the Johnston plan (SANDEVOIR: op. cit. pp. 400—401; ALEXANDER—KITTRIE: op. cit. p. 284; LOUIS: op. cit. pp. 846—847).
- ¹³⁸ LOUIS: op. cit. p. 843.
- ¹³⁹ BLOOMFIELD: op. cit. p. 188; ALEXANDER—KITTRIE: op. cit. p. 285.
- ¹⁴⁰ Report of the Eleventh Session (1970), pp. 226—230.
- ¹⁴¹ E.g. Vienna Conference (1969). See: SINCLAIR: op. cit. pp. 177—181.
- ¹⁴² STEIN: op. cit. 1974, p. 304; *ibid.* 1972, pp. 99—100.
- ¹⁴³ See the Draft Articles on State Responsibility, Article 33 (State of necessity), Yearbook ILC, 1980, Vol. II, Part 2, p. 33.
- ¹⁴⁴ For more details and criticism see: SALMON: op. cit. 1974, pp. 235—270.
- ¹⁴⁵ See: LACHARRIÈRE: op. cit. p. 34.
- ¹⁴⁶ SINCLAIR: op. cit. p. 253.
- ¹⁴⁷ WOLFROM: op. cit. pp. 21 and 142.
- ¹⁴⁸ CUTH: op. cit. p. 40.
- ¹⁴⁹ LAMMERS: op. cit. p. 155; *ibid.* BERBER: op. cit. pp. 128—137; HAYTON: op. cit. p. 870.
- ¹⁵⁰ LAMMERS: op. cit. p. 165.
- ¹⁵¹ For the most instructive investigation see: LAMMERS: op. cit. pp. 165—318.
- ¹⁵² Case Relating to the Territorial Jurisdiction of the International Commission of the River Oder (PCIJ Series A, No. 23, pp. 29, 30), Lake Lanoux case (RGDIP, 1958, p. 100).
- ¹⁵³ Trail Smelter case (RIAA, Vol. III, p. 1965), The Corfu Channel Case (ICJ Reports 1949, p. 22) on the ban on usage causing damage; North Sea Continental Shelf Cases (*ibid.* 1969, pp. 22 and 46—47) on the principle of equity.
- ¹⁵⁴ In respect of the USA see: Documents on the Use and Control of Waters of Interstate and International Streams; in the case of Switzerland e.g. see: SAUSER—HALL: op. cit. pp. 503—505; the Danube sinking case (*Donauversinkung*) (*ibid.* pp. 501—502), further: LAMMERS: op. cit. pp. 387—440).
- ¹⁵⁵ ANDRASSY: op. cit. 1959, p. 250, DECLEVA: op. cit. pp. 34—35; KLIMENKO: op. cit. p. 90.
- ¹⁵⁶ DRÄGER: op. cit. p. 131.
- ¹⁵⁷ AKEHURST: op. cit. p. 3, BAXTER: op. cit. pp. 96—97.
- ¹⁵⁸ For a rare exception, see: e.g. the Argentina—Uruguay Agreement on the Salto Grande (1946), Article 11; Nile Agreement, 1959, Article 5.
- ¹⁵⁹ ICJ Reports, 1969, pp. 41 and 56—60.
- ¹⁶⁰ See UN Doc. (A/CONF.39) SP, p. 217, CP, para. 43.
- ¹⁶¹ D'AMATO: op. cit. p. 51; BAXTER: op. cit. pp. 75—92; TUNKIN: op. cit. 1970, p. 32.
- ¹⁶² Statute of ILC, Article 15.
- ¹⁶³ See: SCHWEBEL's Third Report (UN Doc. A/CN.4/348, pp. 35—50, and 155—161 in particular) and QUENTIN—BAXTER's Fifth Report (UN Doc. A/CN.4/373).
- ¹⁶⁴ E.g. Norwegian—Swedish Convention (1905), Art. 1; Federal Republic of Germany—Netherlands Boundary Waters Treaty (1960), Art. 72; Exchange of notes between Guatemala and Mexico; Rio de la Plata Treaty (1969), Art. V; Lake Constance Agreement (1966), Art. 4; Austria—Czechoslovakia Boundary Waters Treaty (1967), Art. 19.
- ¹⁶⁵ DECLEVA: op. cit. p. 24; DRÄGER: op. cit. p. 85, KOUTIKOV: op. cit. p. 32; LIPPER: op. cit. pp. 34—35; SEVETTE: op. cit. pp. 204—205; WOLFROM: op. cit. p. 142.
- ¹⁶⁶ See: IDI, Salzburg Resolution (1961), Preamble; ILA Helsinki Rules, Article I; Montreal Rules, Article 1. According to the Comments, "the rules are formulated as binding rules" (ILA, 60th Report, 1982, p. 158); the Inter-American Bar Association "resolves that the following general principles which form part of existing international law..." (Yearbook, 1974, Vol. II, Part 2, p. 208).
- ¹⁶⁷ Cf., BEDARD: op. cit. pp. 129—130; BO BRAMSEN: op. cit. pp. 271 and 284; BOURNE: op. cit. 1971, p. 138; COLLIARD: op. cit. p. 357; DUPUY: op. cit. 1976, pp. 30—37; GODANA: op. cit. pp. 7, 36

and 65, 66; LAMMERS: op. cit. pp. 381—385, 496—502 and 583; LIPPER: op. cit. pp. 63 and 66; UTTON: op. cit. p. 157; WOLFROTH: op. cit. p. 142. For still more details see: LAMMERS: op. cit. pp. 538 et seq.; ILA, 60th Report, 1982, p. 161.

¹⁶⁸ BOLINTINEANU—STEFANESCU: op. cit. pp. 168—169; DUCULESCU: op. cit. p. 193; GHEMELGEANU: op. cit. p. 168; POPESCU: op. cit. p. 233; STAINOV: op. cit. p. 115 (somewhat in an adverse sense: *ibid.* p. 107). In this respect also OUCHAKOV speaks very categorically (*Annuaire CDI*, 1983, Vol. I, pp. 203—204).

¹⁶⁹ KLIMENKO: op. cit. pp. 25, 47 and 61.

¹⁷⁰ CUTH: op. cit. pp. 58 and 74.

¹⁷¹ TIMOSHENKO: op. cit. pp. 49 et seq.

¹⁷² KLIMENKO: op. cit. pp. 25 and 64; TIMOSHENKO: op. cit. p. 51.

¹⁷³ The controversy between the theory of volition co-ordination and the existence of cogent norms can be indicated here (ALEXIDZE: op. cit. p. 174).

¹⁷⁴ MILENKOVIC: op. cit. 1980, p. 70; WOLFKE: op. cit. p. 44.

¹⁷⁵ SETTE-CAMARA: op. cit. pp. 131, 161, 173 et seq., 190. For simultaneously reserving the negation of the existence of customary law see: op. cit. pp. 160, 188, 198, 201—202. The principle of international responsibility is also emphasized by: BROWNLIE: op. cit. 1973, pp. 267, 279; KLIMENKO: op. cit. p. 143; TIMOSHENKO: op. cit. p. 50.

¹⁷⁶ The so-called Trail Smelter approach. See: RIPHANGEN: op. cit. 1980, p. 344.

¹⁷⁷ REUTER: op. cit. p. 173; similarly: HANDL: op. cit. 1975, p. 60; ZEMANEK: op. cit. 1980, p. 323.

¹⁷⁸ Yearbook ILC, 1973, Vol. II, p. 169.

¹⁷⁹ See: QUENTIN-BAXTER's Second Report (UN Doc. A/CN.4/346. paras 15—21).

¹⁸⁰ Statute of the ICJ, Art. 38, para. 1/c.

¹⁸¹ E.g. ANDRASSY: op. cit. 1951, p. 100; BERBER: op. cit. pp. 210 and 254 (with a regional character); CANO (ILA, 59th Report, 1980): op. cit. pp. 386—387; DESPAY: op. cit. p. 143; LAMMERS: op. cit. pp. 159 and 160—165; WOLFROTH: op. cit. pp. 62—67. For a summary see: MILENKOVIC: op. cit. 1982, pp. 528 et seq. also mentioned other concepts.

¹⁸² LACHARRIÈRE: op. cit. p. 60.

¹⁸³ HERCZEGH: op. cit. 1969, pp. 98—98. For limited acceptance see: *Mezhdunarodnoe pravo*, 1982, p. 54.

¹⁸⁴ *Ibid.* p. 54; Repertoire, I, 2, pp. 24—26.

¹⁸⁵ HEFFTER: op. cit. p. 85; MARTENS—BERGBOHM: op. cit. p. 365, and particularly REID: op. cit. pp. 119—132. References of this nature may also be found in: DECLEVA: op. cit. p. 66.

¹⁸⁶ VALI: op. cit. p. 325.

¹⁸⁷ DECLEVA: op. cit. p. 92.

¹⁸⁸ E.g. Douro Convention (1927), Article 5; exchange of notes on the Iron Gate (1963); Norway—USSR Agreement (1957), Articles 7 and 8; Amur Agreement (1956); exchange of notes between Iraq and Turkey (1946), Article 1.

¹⁸⁹ HUBER: op. cit. pp. 163, 214.

¹⁹⁰ E.g. ANDRASSY: op. cit. 1951, pp. 78—80; BERBER: op. cit. pp. 191, 257; BUZA, L.: op. cit. pp. 112—114; COSTANZA: op. cit. pp. 11—178; DIEZ: op. cit. pp. 9—33; FAUCHILLE: op. cit. Vol. II, p. 449; SAUSER—HALL: op. cit. p. 543; QUINT: op. cit. p. 328 et seq.; TIMOSHENKO: op. cit. p. 49; WINIARSKI: op. cit. pp. 81—82.

¹⁹¹ ANDRASSY: op. cit. 1951, p. 99; THÄLMANN: op. cit. p. 73.

¹⁹² *Ibid.* p. 78.

¹⁹³ In this sense e.g. DINTELMANN: op. cit. pp. 144—146. It is a counter-argument in favour of general principles of law that municipal water laws became transformed into state administrative law.

¹⁹⁴ In this sense: EVENSEN's Second draft, 381, Article 7, para 52. (UN Doc. A/CN.4/381, para. 52).

- ¹⁹⁵ COT-PELLET: op. cit. pp. 1087—1088; POP: op. cit. p. 277.
- ¹⁹⁶ Ibid. CUTH: op. cit. p. 30; KLIMENKO: op. cit. p. 37; completely rejecting: LESTER: op. cit. 98.
- ¹⁹⁷ See the stipulation contained in the judgement pronounced in the Lake Lanoux case concerning the presumption of good faith (RGDIP, 1958, p. 104).
- ¹⁹⁸ In this sense: KISS: op. cit. pp. 179 et seq.; OPPENHEIM-LAUTERPACHT: op. cit. Vol. I, pp. 345—347; REUTER: op. cit. 1960, p. 600; SCHWARZENBERGER: op. cit. I, pp. 150—152.
- ¹⁹⁹ WOLFROM: op. cit. p. 67.
- ²⁰⁰ VAN ALSTYNE: op. cit. pp. 327—328.
- ²⁰¹ See, furthermore, the principles of equity formulated in the recent judgements taken by the International Court of Justice. Cf. UN Doc. A/CN.4/348, pp. 22—25.
- ²⁰² GA/RES/2669/XXV, December 8, 1970.
- ²⁰³ Statute of ILC, Article 15.
- ²⁰⁴ See also the quasi-equivocal standpoint of the General Assembly. UN Doc. A/CN.4/348 pp. 20—24. For some contrary views (Brazil, German Democratic Republic, Romania, Turkey) *ibid.* See those also in UN Doc. A/CONF.70/29, paras. 168—169.
- ²⁰⁵ GA/RES/32/151, December 19, 1977, 3315/XXIX/, December 1, 1974.
- ²⁰⁶ See: QUENTIN-BAXTER's Draft, Article 1 (UN Doc. A/CN.4/383, para. 1).
- ²⁰⁷ E.g. Declaration of a UN Conference on Human Environment, Principles 21—25, and Action Plan for the Human Environment, Recommendations 51, 71—72; UN Water Conference, Action Plan, International Co-operation; World Charter for Nature (1982), Draft Principles on Natural Resources Shared by Two or More States (GA/RES.34/186, of December 18, 1979), ECE Draft Principles of International Co-operation in the field of Transboundary Waters (ECE/WATER/R. 132, 18 September, 1985); OECD, Recommendation on Principles concerning Transfrontier Pollution (C/74/224).
- ²⁰⁸ LANG: op. cit. p. 284.
- ²⁰⁹ KISS: op. cit. 1981, p. 525; similarly KOLBASOV: op. cit. pp. 212 et seq.
- ²¹⁰ See the Report of the Secretary-General on the Progress in the Implementation of the Mar del Plata Action Plan (UN Doc. E/C.7/118; E/C.7/1983/11; E/C.7/1985/4—5); for the Draft Principles on Shared Natural Resources, see: UN Doc. UNEP/C C.) 10/8.
- ²¹¹ In particular, the Stockholm Declaration on Human Environment, Principle 21. More details in Chapter VI, point 1.
- ²¹² BAXTER: op. cit. 1980, pp. 549 et seq.; WEIL: op. cit. pp. 8 et seq.
- ²¹³ KISS: op. cit. 1981, p. 525.
- ²¹⁴ For more details on this topic see: SEIDL-HOHENVELDERN: op. cit. 1979, pp. 190 et seq. In particular: TAMMES: op. cit. pp. 187—195; WEIL: op. cit. pp. 7—13; KOLODKIN: op. cit. pp. 95—99.
- ²¹⁵ SMITH: op. cit. pp. 150—152.
- ²¹⁶ BRIERLY: op. cit. 1963, pp. 231—232.
- ²¹⁷ ILA, 52nd Report, 1966, p. 486. (Although it was completed by a ban on causing damage in the Seoul resolution!) Ibid. DRÄGER: op. cit. pp. 88 et seq., 119 et seq.; GRIFFIN: op. cit. p. 77; LIPEER: op. cit. pp. 62—63.
- ²¹⁸ COLLIARD: op. cit. p. 358; DECLEVA: op. cit. p. 95; CUTH: op. cit. p. 96; KLIMENKO: op. cit. p. 91; BOURNE: op. cit. 1965, p. 188; KISS: op. cit. 1978, p. 22; KURS III: op. cit. p. 146; KOLBASOV: op. cit. p. 215; SAUSER HALL: op. cit. pp. 557—558; TIMOSHENKO: op. cit. p. 39; WOLFROM: op. cit. p. 143; DUPUY: op. cit. 1976, p. 30.
- ²¹⁹ Annuaire IDI, Vol. 49, Part 2, p. 381.
- ²²⁰ CHAHUAN: op. cit. p. 142 (negating: *ibid.* p. 159).
- ²²¹ OLMSTEAD: op. cit. p. 10.
- ²²² LAMMERS: op. cit. pp. 342, 381—386, 583.
- ²²³ SCHWEBEL's Third Report (UN Doc. A/CN.4/348, paras. 86 and 156); EVENSEN's Second Project (UN Doc. A/CN.4/381, paras. 52 and 57). Similarly: UN Water Conference, Action Plan, para. 90).

The water management regime of the Danube basin

1. Background

Along its course of 2842 km from its source in the Black Forest to the Black Sea, the Danube flows through the territory of eight countries, i.e., the Federal Republic of Germany, Austria, Czechoslovakia, Hungary, Yugoslavia, Romania, Bulgaria and the USSR. Beyond these countries, four additional states, i.e., Switzerland, Italy, Poland and Albania belong, although only marginally so, to the whole Danube water system area which amounts to 817 000 sq. km, thus covering twelve states in total. The Danube, therefore, ranks as the most important international watercourse in this respect and can be duly qualified as the most international of watercourses.

In contrast to the long and changing history of the international regulation of navigation on the Danube which essentially started in 1856,¹ international law-making concerning non-navigational uses started later, on the one hand, but also produced specific solutions, on the other. As to the reasons for this, the following may be mentioned:

— From the point of view of physical geography, the Danube is divided into three parts, i.e., the upper section, the central course which is identifiable by the Carpathian Basin, and the Lower Danube which follows along the Iron Gate.

— At the commencement of modern water management, i.e., the second half of the 19th century, the major section of the Danube water system belonged to the sovereign territory of a single state, i.e., the Austro-Hungarian Empire. Accordingly, almost no international relations whatsoever came into existence in this context.² Nevertheless, a decisive change occurred following the break-up of the Monarchy in 1918, first of all in the Carpathian Basin. The demands resulting from the unification of the water system were not taken into consideration, however, when the state boundaries were delimited by the terms of the Paris Peace Treaties; consequently, frontiers formed by watercourses made up as much as almost 700 km in length and the new frontiers were crossed by more

than 100 smaller or larger watercourses. As a result of this, more than 96% of the surface water resources of Hungary—its entire territory situated within the Danube Basin—have their origin in other countries. Furthermore, international tensions resulting from the delimitation of the new frontiers also affected the field of technical cooperation.

— In order that international relations originating from non-navigational uses be duly established and appropriately energetic, important transfrontier effects resulting from the intensity of these uses and measures taken in their favour were needed. In conformity with the amount of development in the area, flood prevention first came to the fore and water use remained at a low level. Then, priority was given to hydraulic power production, communal and industrial water utilization and, for some tributaries, irrigation also acquired importance. In spite of this, the Danube is still more of a waterway, and the exploitation of its water system as a natural resource is still limited. Only pollution became a general international problem;³ the hydraulic power plants on the Austrian section of the Danube have been exerting a more favourable effect to make up for fluctuations in the water flow;⁴ fishing has, however, lost a large part of its previous significance due to watercourse regulation and, in recent times, pollution.

The gradual development of the relevant constituent forces and international law-making produced a *specific management regime* in the Danube Basin. Instead of uniform regulations, almost 40 agreements currently in force are concerned with distinct problematic areas relating to the Danube water system, regulating, amongst other things, its different uses. As a matter of fact, this number increases on account of its relevant past history and the agreements that have become ineffective. As is natural, the conventional arrangements and the assumed international obligations are differentiated. Nevertheless, common elements can already be found *prima facie*. First of all, we should mention the concept of not claiming that the purpose of international law-making is to establish joint utilization but, instead, to create satisfactory coordination between national water management regimes while not sacrificing the independent element of water uses.

The preponderance of bilateral agreements has been characteristic, and their replacement by multilateral treaties or conventions has only recently started. At the same time, various types of bilateral agreements also took shape. An institutional unification is so far out of the question, i.e., there is no international organization whose field of activity would cover the major part of realized water uses in the Danube basin.

As for the following remarks, preference will be given to an analysis of international legal regulation as established in the Carpathian Basin, not only on account of its simplification but, more so, with respect to the multilateral relations existing in this area, with six interested countries, and the many-sided solutions under the guidance of international law.

2. The recent history of the Danube water management regime: the Commission technique permanente du régime des eaux — CRED (Permanent Technical Hydraulic System Commission of the Water Regime)

The regulation of the Danube and its tributaries was planned in Hungary as early as 1831,⁵ primarily for the purpose of flood prevention, i.e., it was not influenced by international aspects.⁶ International treaties of this kind came into existence only in respect of the upper section of the Danube.⁷ Watercourse regulation carried out for the benefit of navigation involved, however, remarkable international law-making: thus, the Paris Treaty concluded in 1856 established the European Danube Commission specifically for this purpose. It was also in this context that the Austro-Hungarian Monarchy received a mandate for the regulation of the Iron Gate from the Berlin Congress in 1878 (Article LVII).

Apart from the problem of watercourse regulation, mention may also be made here of the 1908 Romanian-Serbian agreement on fishing.

Presumably influenced by the intention of moderating the consequences of newly drawn frontiers, the Paris Peace Treaties called for the regulation of watercourses⁸ and recommended the conclusion of agreements in order to maintain the *status quo* in the field of water management.

The Trianon Peace Treaty, concluded with Hungary, had, however, important additional provisions in one respect. Reference has to be made here to a Note by the Hungarian delegation in relation to Article 292 of the draft peace treaty⁹ which emphasised first and foremost the controversy between the new frontiers and water uses, pointing out that the draft text failed to take into consideration the unity and special character of Hungary's river system, failed to give sufficient protection against possible catastrophes arising from floods and, while preventing the reasonable utilization of watercourses, it inevitably implied important economic disadvantages. Besides these arguments, it suggested setting up an international commission with wide-ranging powers, in order to bring the respective interests into harmony. This was the only Hungarian modification proposal which was, even if not in its entirety, accepted by the peace conference,¹⁰ and so the final wording of Article 293 of the Trianon Peace Treaty was formulated, which reads, in its original English version, as follows:

"In view of the application of Article 292 to the territories of the former Kingdom of Hungary forming the Basin of the Danube, excluding the Basin of the Olt, as well as for the exercise of the powers provided for below, there shall be set up, in the common interest of the States possessing sovereignty over the territories in question, a Permanent Technical Hydraulic System Commission,

composed of one representative of each of the States territorially concerned and a Chairman appointed by the Council of the League of Nations.

This Commission shall bring about the conclusion, and supervise and, in urgent cases, ensure the carrying out, of the agreements provided for in Article 292; it shall maintain and improve, particularly as regards deforestation and afforestation, the uniform character of the hydraulic system, as well as of the services connected therewith, such as the hydrometric service and the service of information as to the rising of the waters. It shall also study questions relating to navigation, excepting those falling within the competence of the Commission for regulating the navigation of the Upper Danube, which it shall refer to the said Commission, and it shall give special consideration to fishery interests. The Commission shall in addition undertake all works or schemes and shall establish all services with which it may be charged by the unanimous consent of the interested States.

The Hydraulic System Commission shall meet within three months from the coming into force of the present treaty; it shall draw up a regulation as to its functions and procedure, which will be subject to approval by the States concerned.

Any disputes which may arise out of the matters dealt with in this Article shall be settled as provided by the League of Nations."

The functioning of the Permanent Technic Hydraulic System Commission of the Water Regime was regulated by the Paris Convention of May 27, 1923. The Commission had six members, i.e., representatives of Austria, Hungary, Romania, Yugoslavia, and Czechoslovakia, and a chairman appointed by the Council of the League of Nations.¹¹ The statutes laid down the jurisdiction of the Commission (Article 3) and pronounced the obligation of the member states to compile an annual report, to communicate the respective inter-state treaties as well as "the acts and statutes bearing upon the order of water management, the utilization of forests, reafforestation, and fishing" (Article 5).

In addition, the statutes provided for substantive obligations. Thus, the problem of a sensible change in the existing order of water management could be submitted to the Commission (Article 6); following the appropriate decision of the Commission, the respective state was duty-bound to accept the implementation of work to be carried out on its territory by another state (Article 8). The statutes also contained provisions on the establishment of fluvimeter and flood warning services and the exchange of data (Article 10).

Finally, the statutes fixed the methods and means of taking decisions (Article 11) and, by setting up a secretariat and acknowledging privileges and exemptions ensured that the Commission had the character of an international organ.

The conventional system outlined above was completed by Article XIV of the 1921 *Paris Convention on the Danube* which limited the significance of the provisions of Articles 292 and 293 of the Trianon Peace Treaty. In terms of

stipulation, the International Commission of the Danube was only authorized to prohibit hydrotechnical work of a non-navigational character "if it were harmful to the navigational use of the river by its very nature". On the strength of the Convention on the Danube, the river and its most important tributaries (Articles I and II) became subject to the authority of the International Commission of the Danube. Article XIV of the Convention stipulated the priority of navigational interests. The supervisory power of the Commission (Article X) and its authority for the settlement of disputes (Article XXXVIII) should also be mentioned in this context.

Thus the Trianon Peace Treaty and the conventions of 1921 and 1923, which related to it, laid down some fundamental principles on matters of international relevance occurring in connection with water utilization and flood prevention, taking into account the territorial changes. Furthermore, the formulation of the respective detailed rules was coupled with the obligation to conclude bilateral international treaties to this effect.¹²

Accordingly, the *bilateral regulation of cooperation in the field of water uses and management*, designed to lay down the precise outlines drawn by the Trianon Treaty within the relations of the contracting states, was soon put into practice.¹³

It was Romania with which the establishment of conventional relations was first realized. Thus, an *agreement was signed in Bucharest on April 14, 1924 concerning the regulation of water uses and management in the border area, and the liquidation of dike companies whose field of operation was crossed by the new Hungarian-Romanian frontier.*

The agreement was concluded for an unlimited period, but the possibility of denunciation in subsequent periods of five years was stipulated (Article 16); the provisions of Articles 292—293 of the Trianon Treaty were explicitly taken as a basis. The agreement consisted of a general and a special section, this latter part dealing with dike companies in particular, and the provisions of the general part are worthy of attention. In Article 1 the ban on causing damage is confirmed. i.e., the obligations of the contracting parties to refrain from any unilateral measure which could cause harm to water uses and management conditions of the boundary area, and from any work susceptible to causing a change in the existing conditions to the detriment of the other party. Furthermore, the parties undertook to keep all structures and equipment serving the purposes of water usage and management conditions in good order; emphasis was here laid upon flood prevention and the drainage of inland waters. An obligation of notification was prescribed if a dike were breached or other similar unforeseen events were to occur. In terms of Article 2, a preliminary agreement had to be concluded in the case of unusual operations or work susceptible to influencing the conditions of water uses or management, in accordance with the provisions of the preceding article. Under the stipulations of Article 4, Romania was bound

to provide notification of daily reports on the water level. The subsequent Articles 5—13 regulated problems in connection with the liquidation of dike companies.

Providing for the appointment of an expert by both parties, charged with the settlement of various problems and kinds of work within the scope of Article 1, an interstate committee was to be set up, essentially, on the strength of Article 8. The respective protocols had to be approved by the governments which would then take appropriate measures. In the absence or failure of any agreement, the CRED would take the decision. Practice testified that the contracting states were anxious to settle the disputed matters on their own, so that they notified the committee of the relevant results, and no recourse had to be made to a board of arbitration.¹⁴

The next step was the *conclusion of an agreement by Hungary and Austria regulating water use and management in the border area*, signed in Vienna on March 11, 1927. In a protocol dealing with water uses and management conditions in the border area, the signatories assumed the obligation, first and foremost, not to carry out work in their own territory that could influence the uses and management of waters in the territory of the other contracting party, furthermore to keep existing water usage facilities in good order, and, finally, to conclude an agreement with the other party in respect of kinds of work that could influence usage and management conditions of waters in the territory of the neighbouring state, and not to proceed to the implementation of such work prior to having concluded the agreement in question. The functions of the Regulating Company of the Rába (Raab) river waters were finalized, and separate protocols were drawn up on the communal water supply of the cities of Sopron, Szombathely, Rohonc (Rechnitz) and Kőszeg, the maintenance of the Locsmánd (Lutzmannsburg) sluice, and the utilization of the waters of the Smaller Lajta (Leitha) river for irrigation.

Cooperation between Hungary and Czechoslovakia in the field of water use and management started when an agreement was signed in Prague on November 24, 1928, dealing with the settlement of problems resulting from the delimitation of the state frontier between the two countries. The rules concerning the legal relations linked to the border rivers are contained in Table III of the agreement. The validity of established rights was acknowledged, and an obligation was laid down aimed at the prevention of any violation of relevant civil rights. Article 25 stipulated that, while maintaining established rights, both parties were free to dispose of half of the watercourses; in case of a possible change in the water usage conditions of the bordering watercourses as a result of the existence of a structure related to water utilization, the contracting parties would take into consideration, as far as possible, the lawful demands of the interested parties in both countries. In terms of Article 31, all matters in connection with water uses and management rights had to be settled by means of agreements between the

administrative authorities of the two States concerned. In case of failure, the issue had to be submitted to the supreme competent authority, and the ultimate decision would be taken by a board of arbitration. The formulation of Article 33 permitted the conclusion of a partnership, as the text provided for a direct relationship between the competent administrative organs.

There had been actual cooperation between the competent authorities in the field of hydraulic engineering since 1929. As a result, a *convention on the regulation of technical-economic problems on the common Hungarian-Czechoslovak border sections of the Danube and the downstream course of the Tisza following the mouth of the river Szamos* was signed in Budapest on August 24, 1937. The convention, divided into three parts, contained provisions on the Danube, the Tisza, and the joint technical commission. The obligations relating to the Danube concerned flood prevention, the regulation of the medium and low-level watercourse, dredging, maintenance, and the securing of navigable waterways, and can be summed up by the fact that they were to be carried out on the basis of a jointly formulated plan. The state of the territory on which the relevant works were performed was charged with the execution and costs of the related plans. Essentially, these stipulations are reiterated regarding the river Tisza, in a much more expedited form. The joint technical commission, consisting of one representative from each party along with their deputies in the case of need, and experts assisting them, had a very important role in terms of the convention. Thus, the commission commented on all plans falling within the scope of the convention, it gave an expert opinion on structures to be set up or already accomplished, it examined the construction costs of common works, carried out inspections, etc. The decisions of the commission were taken unanimously, but they came into force only after having been accepted by the competent central authorities. The convention was concluded for an unlimited period, but each contracting party was authorized to repudiate it before the expiration of one calendar year, with effect from the end of the forthcoming year.

As is clear from the above, *no agreement came into existence between Hungary and Yugoslavia on water uses and management*. Negotiations aimed at the conclusion of a general agreement commenced as early as 1924 but the text of a draft agreement was not approved by the Yugoslav government.¹⁵ As a result of subsequent negotiations in 1932, another draft agreement was formulated but its acceptance was handicapped by a draft closing Protocol, put forward by the Hungarian party to be attached to the agreement which would have excluded the application of the provisions of the agreement to be concluded on issues relating to the Ferenc (Big) Channel.¹⁶

The multilateral and bilateral agreements on water uses and management, concluded during the inter-war period and dealt with in the foregoing paragraphs, ceased to be effective. The first reason for this was the succession of

states — watercourses forming or crossing the border to which the agreements of 1924 and 1937 were applicable came under Hungarian sovereignty in terms of the first and second Vienna Awards. There is an apparent contradiction in this respect, i.e., the Czechoslovak government continued to consider as effective the Hungarian–Czechoslovakian agreement of 1937, making use of its right laid down in Article 10 of the Paris Peace Treaty of 1947. This can be explained by the fact that the First Vienna Award, coupled with the Four-power Munich Agreement, was considered to be null and void in 1947, consequently the 1937 agreement ceased to be effective as a result of World War II. The functioning of the CRED was handicapped by World War II and its validity was not maintained by the Paris Peace Treaty of 1947 which replaced the Trianon Peace Treaty of 1920, and consequently its validity was repudiated as a result of the conclusion of a new treaty.

The conventional systems of the inter-war period did gain some achievements; thus, the faultless functioning of the water level and flood warning service was ensured by the CRED.¹⁷ The system promoted the conclusion of bilateral treaties or conventions on water uses and management between interested states. Some degree of unity in this field could be maintained. The actual agreements laid down remarkable principles of international law in connection with water utilization and flood prevention; the first steps for the institutionalization of cooperation in the field of water uses and management were taken; the joint commission as a form of cooperation appeared in terms of the Hungarian–Czechoslovakian agreement of 1937; furthermore, the multilateral approach cannot be doubted either, e.g., with the fairness of the 1923 agreement and the setting up of the CRED, respectively.

On the other hand, it cannot be denied that the agreements in question had deficiencies in many aspects, and they served the maintenance of existing conditions, with minor improvements, more than the dynamic development of water utilization and flood prevention. Rules calling for protection against pollution could not be found either in the multilateral nor in the bilateral treaties or conventions, as a consequence of the simple fact that this issue was not a self-asserting problem. Taking into consideration the fact that the agreements in question ceased to be effective, it is only of theoretical concern whether or not the prohibition of changing the conditions of water uses and management, stipulated in all treaties or conventions in one form or another, could be extended to this case. Also, it goes without saying that the cooperation of the interested countries in the field of water uses and management was not always faultless, and the question whether or not the parties availed themselves of all possibilities provided for in the conventional provisions can be doubted as well. The participation of the League of Nations in cooperation in this field, as realized in the Carpathian Basin, cannot be judged unequivocally. It cannot, in fact be doubted that the possibility of some kind of a compensating function by

the CRED between Hungary and the Little Entente was provided, and its significance was evident in the international situation at that time. It is true, at the same time, that the interested states made efforts to reduce the importance of the CRED, carrying out their actual cooperation within a bilateral framework. Furthermore, an objection to the principle can be raised as well, i.e., the interference of the great powers in the affairs of the Danube Basin states presented itself through the CRED and the International Commission of the Danube.

3. The water utilization regime in the Danube *Basin de lege lata*

a) Survey of treaties

Contrary to the Paris Peace Treaties ending World War I, the peace treaties of 1947 did not provide for non-navigational uses of the Danube. In its Note addressed to the three Great Powers on November 12, 1945, the Hungarian government mentioned the rivers concerned and problems relating to the unity of the water system in the Carpathian Basin. The claim for frontier modifications was given preferential emphasis, in the note but, alternatively, various possible measures in the field of international water management were also suggested. The necessity for some guarantees for Hungarian interests in this domain was thus raised, e.g., the construction or building of some establishments on the territory of the neighbouring countries, destined for water uses and management, such as water storage works, hydraulic power plants, installations for flood prevention, or the protection of Hungarian interests in existing installations of this kind on the territory of the countries in question, by means of international treaties or conventions. Additionally, it was also proposed in the Note that the functions of the previous CRED be transferred to the authority of the uniform Danube Commission.¹⁸ There was no reaction at all to the Hungarian proposal in the course of the peace conference. Accordingly, the finalized peace treaty only contained a single provision in connection with international watercourses, i.e., the freedom of navigation on the Danube set out in Article 38.¹⁹

Following the failure of the efforts directed at multilateral arrangements, the riverain states concentrated their cooperation on the already successful system of *frontier watercourse agreements*.

In this field *Hungary* concluded the agreements listed below:

— Hungarian-Yugoslav agreement on questions of water economy, signed in Belgrade on August 8, 1955.

— Hungarian–Austrian agreement on the regulation of questions of the water economy in the frontier region, signed in Vienna on April 9, 1956, replacing the protocols of 1927 which had been suspended as from May 1, 1945 (Article 21).

— Hungarian–Czechoslovak agreement on the regulation of questions of the water economy of frontier waters, signed in Budapest on May 31, 1976, replacing the agreement regulating the technical and economic problems of border watercourses, signed in Prague on April 16, 1954.

— Hungarian–Soviet agreement on questions of the water economy of frontier waters, signed in Moscow on June 22, 1981, invalidating the agreement regulating the prevention of flood damage and watercourse conditions on the Hungarian–Soviet frontier, i.e., the river Tisza region, signed in Ungvár (Uzhgorod) on June 9, 1950.

— Hungarian–Romanian agreement on the regulation of water uses and management questions relating to watercourses forming the frontier and crossed by it, signed in Bucharest on June 26, 1986. The subject-matter was previously regulated by agreements signed in Bucharest on December 5, 1950, in Budapest on July 2, 1962, and in Budapest on November 3, 1969.

The agreements on frontier watercourses have also played an important role in cooperation between the other countries of the Danube Basin.²⁰ Although the scope of the regulation (*ratione materiae*) set out in the agreements on frontier watercourses are different, the tendency for continuous extension can, however, be evidenced. Thus, cooperation formerly limited to flood prevention²¹ has been complemented by protection against the inundation of inland waters and pollution.²²

The provisions of the Hungarian–Yugoslav agreement of 1955, mentioned above, cover all problems of water management and the relevant institutions and works, in particular: a) the regulation and canalization of watercourses, and the preservation of river beds; b) water drainage and related measures; c) flood and ice-flow prevention; d) storage and retention of water; e) water supplies and canalization; f) protection against water pollution; g) problems concerning inland waters; h) utilization of hydraulic power; i) protection against soil erosion; j) water utilization in agriculture; k) preparation of studies and projects in hydrology, and the execution of works; l) the division of research, planning, and execution of works and the costs of operation and maintenance; m) exchange of data and plans concerning the said matters between the parties; and n) the exchange of water level data (Article 1, point 2).²³

The agreements on frontier watercourses were finalized by *treaties or agreements on the order of state frontiers*. They have, however, a subsidiary character so that they are applicable only in the absence of a special agreement.

The treaties or agreements concluded by *Hungary* in this field are the following:

— Hungarian–Czechoslovak treaty on the regulation of order in the state frontier, signed in Prague on October 13, 1956, and the Hungarian–Czechoslovak agreement on cooperation and mutual assistance on the Hungarian–Czechoslovak state frontier, signed in Prague on November 19, 1976.

— Hungarian–Soviet treaty on the establishment of order in the Hungarian–Soviet state frontier and mutual assistance and cooperation in frontier matters, signed in Budapest on October 3, 1961.

— Hungarian–Austrian treaty for keeping visible the common state frontier and regulating the questions relating thereto, signed in Budapest on October 31, 1964, and the Hungarian–Austrian treaty on the procedure for the investigation of incidents occurring at the common state frontier, signed in Budapest on October 31, 1964.

— Agreement on the prevention and settlement of violations to the order of the frontier on the Hungarian–Yugoslav state frontier, signed in Budapest on March 29, 1978.

— Agreement on the order of the Hungarian–Romanian state frontier, and cooperation and mutual assistance in frontier matters, signed in Budapest on October 28, 1983.

Taking into consideration the existence of agreements on frontier watercourses, the treaties or agreements on the order of state frontiers only regulate particular matters, such as the preservation of river beds, fisheries, the scope of violations to the order of the frontier and remedies thereto.

As some specific methods of water utilization, the *production of hydraulic or hydro-electric power* in particular, exceeded the bounds of cooperation in the field of frontier watercourses, *separate treaties or agreements* were concluded in this respect. Nevertheless, there are important differences between these documents. Thus, as the treaties relating to the upper section of the Danube²⁴ concern the conditions for concessions to be granted to private companies, and individual utilization was maintained in terms of the series of treaties concluded in 1963 on the establishment of the Hydraulic Power Plant and Navigation System of the Iron Gate, providing for the building and operation of separate Yugoslav and Romanian hydraulic power plants and navigation sluices,²⁵ the Hungarian–Czechoslovak treaty on the establishment and operation of the Bős/Gabčíkovo—Nagymaros System of locks signed in Budapest on September 16, 1977,²⁶ envisaged power plants as common property and in joint operation, with integrated utilization. Furthermore, there are other treaties on the elaboration of construction plans for hydraulic power plants and other additional problems.²⁷ As a matter of fact, technical details are preponderant in the agreements on hydraulic power utilization as against legal norms.

Bilateral treaties failed to become preponderant within the cooperation of the states of the Danube Basin in hydro-economic matters; *multilateral regulation*

had already become established, however, in the water utilization regime, and a turning-point in this respect can be observed over the last few years.

Although the *Belgrade Convention* of 1948 is only concerned with navigation on the Danube,²⁸ the effort to exclude non-navigational uses completely from the scope of its provisions was condemned to failure, as a result of limited interdependence between navigation and non-navigational uses. The problem of non-navigational uses had already been raised, in a disguised form, at the Belgrade Conference.²⁹ Although the text proper has no stipulation concerning the problem, some restrictions are, however, inherent in certain provisions. Thus, in Article 3 the riverain states undertook the obligation to preserve and develop the navigational course of the Danube and to refrain from hindering navigation. This meant, in plain words, taking this aspect into consideration when realizing water management projects. So it could hardly be contested that any member state was allowed under Article 8, point a), to submit any hydro-economic problem to the Danube Commission concerning, e.g., the coordination of water drainage and the prescribed depth of the river, whether or not navigation was hindered by engineering structures, or possible problems of fluvial transport resulting from water pollution, and all this in view of the fact that this method of interpreting the Belgrade Convention was partly confirmed by the actual practice of the Commission. Accordingly, there was no objection in the Commission when some aspects of flood prevention³⁰ and hydraulic power utilization³¹ were put on the agenda, and no protest was raised when the problem of international legal responsibility, arising out of the transfrontier effects of hydraulic structures or installations, was mentioned in principle.³² It also occurred that several member states of the Danube Commission contested its competence in other fields,³³ such as the hydraulic balance problem in hydrological cooperation, as a consequence of their differing interests and various judicial traditions. Thus the respective decision was taken by the Commission in the absence of consent.³⁴

In this context a stipulation of the *Fundamental provisions* relating to navigation on the Danube,³⁵ accepted by the Danube Commission, can be mentioned. In terms of the said rule, it is prohibited to allow some materials which are susceptible to causing damage to navigation or polluting the waters used for navigation to be discharged into the water from ships. Similarly, it is prohibited to allow oil derivatives to enter the water or to mix with it, respectively. If materials of this kind should be discharged into the water as a result of an accident, the competent authorities have to be advised immediately (Article 15). The actual significance of this provision is considerably reduced, however, by the following points: i) the pollution which has occurred as a consequence of the presence of ships has been insignificant;³⁶ ii) the rules concern only the navigable section of the Danube; iii) the details of its implementation have not been laid down, and Article 17 of the Convention provides only for an obligation of

notification affecting the member states and the Danube Commission, when the offences are of a navigational, police, and sanitary nature.

Taking the preceding into account, the conclusion can be drawn that, contrary to the previous "final" Act on the Danube, the Belgrade Convention did not grant preference to navigation. Accordingly, when discrepancies between the distinct treaties or conventions are solved, the rules of the law of treaties have to be applied.

The *Convention concerning fishing in the waters of the Danube*, signed at Bucharest on 29 January, 1958, concluded by Bulgaria, Czechoslovakia, Hungary, Romania, the Soviet Union, and Yugoslavia³⁷ is explicitly within the scope of the regime of non-navigational uses. The Convention contains provisions concerning the protection of fish stocks, scientific-technical cooperation in connection with fishing, the limitation of polluted waters, and mutual information.

The efforts aimed at the conclusion of multilateral treaties or conventions were intensified in the 1980s as a result of the increasing danger of pollution. Thus, a five-party convention on the *protection of the river Tisza and its tributaries against pollution* came into existence in 1986, with Hungary, Czechoslovakia, Yugoslavia, Romania, and the Soviet Union as contracting parties. Even if diplomatic negotiations lasting for almost a decade failed to lead to the conclusion of an agreement,³⁸ a *Declaration on the cooperation of the riparian states of the Danube in the hydro-economic matters of the Danube and its protection against pollution in particular* was adopted in Bucharest in 1986. Although this Declaration cannot directly involve obligations of international law, the setting up of an international organization could not be carried out; nevertheless, some aspect of international law cannot be denied. Protection against pollution constitutes the primary content of both the Tisza Convention and the Danube Declaration, but this aspect has in principle been connected with the reasonable utilization of the waters concerned.

b) Principal elements of the water utilization regime of the Danube

In spite of the lack of cohesion in the treaty-system relating to the water utilization regime of the Danube, the great conventional variance and the preponderance of the bilateral form, some common elements, solutions of a general nature and, more so, guiding principles, can however, be traced. The investigations to be carried out should thus consider (aa) the limited territorial effect of the treaties or conventions, (bb) a general obligation formulated *expressis verbis*, (cc) the ways and means of cooperation, (dd) the utilization and

the division of the respective water volumes, (ee) protection against pollution, (ff) flood prevention and, finally, (gg) the application of the agreements in question.

(aa) *The limited territorial effect of treaties*

Formally, a *frontier watercourse agreement* includes the limitation of the territorial scope *ipso facto*, and this may mean, in some cases, contiguous rivers,³⁹ but in most cases, it means all watercourses which form or cross the frontier.⁴⁰ In the latter case the scope of the treaty or convention covers the so-called frontier section, and the parameters of this are laid down in the treaty or convention proper,⁴¹ or by a commission.⁴² In the recent generation of frontier watercourse agreements, underground waters are also included in the term "frontier waters".⁴³

The territorial scope of frontier watercourse agreements may produce curious results. Thus, the Hungarian–Austrian agreement of 1956 does not affect the Danube as, for the states in question, it is not a frontier watercourse. Actually, the Danube does not cross the Hungarian–Austrian frontier at all and, although flowing from Austria, it in fact enters Hungarian territory from Czechoslovakia.⁴⁴

As is the nature of things, the territorial scope of *multilateral agreements* is completely different. Thus, the 1958 Convention concerning fishing in the waters of the Danube is applicable to the following waters: the waters of the river Danube, including its mouth, the tributaries of the Danube to the maximum extent of its flood waters, to lakes, estuaries and pools permanently or temporarily connected with the Danube, in the Danube flood-basin in the territory of the Contracting Parties, including the area adjoining the mouth (Article 3).

The Convention on the river Tisza, signed in 1986 and providing for protection against the pollution of the Tisza and its tributaries, has even more far-reaching provisions (Article 2).⁴⁵

Contrary to this, the Bucharest Declaration of 1985 only has general rules on the protection of the waters of the Danube against pollution, without being precise (Article 1).

Accordingly, the utilization regime of the Danube is and has been composed of a mosaic of treaties and conventions, relating to distinct sections of its water system. Although a material connection between the individual treaties and conventions has been established, in principle, by hydrological unity, the various agreements are independent of one another from a legal point of view, or they have only limited legal relationships, respectively. This is expressed, e.g., by a reference to the Belgrade Convention on the order of navigation,⁴⁶ or the fact that one of the contracting parties is the same state in several treaties or conventions.

(bb) *A general obligation formulated in treaties or conventions*

The agreements on frontier watercourses have been designed to realize the preservation of the *status quo* in the field of water use and management *prima facie*. Essentially, their provisions are based on the concept that the parties will refrain from activities or measures unfavourably influencing the regime of frontier waters, i.e., causing damage to the other party. This obligation is completed by a positive element, i.e., the regime can be varied only by consent.⁴⁷

The general obligation as laid down in the relevant agreements concerns only active behaviour and positive action, as is found, by way of example, in the 1976 Hungarian–Czechoslovak agreement, mentioning the regulation of watercourses, the building of storage installations and dikes for flood prevention, improving the purposes of water economy, the utilization of waters, protection against pollution of surface and underground waters, utilization of hydraulic power, the maintenance and mapping of waterways, the designation of navigation course, protection against flooding, inland waters, and the movement of ice (Article 2).⁴⁸

The *status quo* in the field of water use and management is identified with natural hydraulic conditions in terms of the Hungarian–Czechoslovak agreement, mentioned previously (*ibid.*).⁴⁹ Nevertheless, it is contradictory that, according to Article 3, para. 1) of the agreement, they have to be stated by mutual consent, on the one hand, and it is hardly possible to envisage the existence of regions free from water utilization, on the other.⁵⁰ In view of this, the formulation of the 1955 Hungarian–Yugoslav agreement mentioning hydro-economic conditions, seems to be more precise. This category is more narrowly interpreted in the 1986 Hungarian–Romanian agreement, relating to damage caused on the territory of the other party by considerably reducing or increasing the established volumes of water flow (Article 2).⁵¹

With this general obligation, the agreements on frontier watercourses reflect the *hydro-economic concept enforced in the Danube Basin*, i.e., the existence of national water uses and management, reducing the international legal regulation of the contact surfaces in order to eliminate or limit transfrontier consequences. It is no contradiction to this approach that, according to the stipulations of the individual treaties or conventions, the parties are in general also obliged to take *positive measures*, such as respecting the maintenance of installations and equipment related to water uses and management.⁵² According to the provisions of the treaties or conventions dealing with state frontiers, the contracting parties must take certain measures to keep the frontier watercourses in an appropriate good order, namely to strengthen the embankments, to clean water beds, to preserve the conditions and courses of frontier waters in an unchanged state, etc.⁵³ The Convention concerning fishing in the waters of the Danube obliges the parties to apply a plan of action to safeguard the migratory

movements of fish (Article 5). The somewhat ambiguous formulation applied in the treaties on the order of frontiers, concluded by the socialist countries, laying down that the rights and interests of the other parties are always respected,⁵⁴ seems to be even more far-reaching.

As is clear from the above, the claim for maintaining the freedom of action in field of water uses and management is also reflected in some agreements referring to the exploitation of hydraulic power. Exceptions were made in the agreements prolonging concessions in the upper section of the Danube and the 1977 treaty on the Bős/Gabčíkovo–Nagymaros hydraulic power plant.

Although almost all agreements on frontier watercourses formulate the general obligation *expressis verbis* to *prohibit causing damage* to another riverain state *by means of unilateral interference* with hydrological conditions, this general condition has been limited from the very outset by restricting its enforcement to frontier watercourses which constitute *ipso facto* an area of only modest use. Nevertheless, the agreements reflect the intention to *reduce the territorial limitation* of the prohibition on causing damage *to some degree*. This is ensured by the provisions providing for joint examination and coordination of water economy plans relating to the water system area of the watercourses covered by the scope of the agreements in question,⁵⁵ obliging the parties to inform each other of the effects of their activities in the field of water economy upon frontier watercourses, to discuss the relevant problems⁵⁶ and, what is more, to solve them by consensus.⁵⁷

It is an important feature of the above “general obligation” that it is not restricted to *essential* damage,⁵⁸ i.e., *no distinction is made between the various categories of damage*. Nevertheless, this concept does not imply that all damage be considered relevant; rather, it means the tacit acceptance of the principle *de minimis non curat praetor*. Notwithstanding this, the consequences resulting from the preceding standpoint have not been consistently enforced in respect of protection against pollution, as will be mentioned below.

The general character of the obligation to avoid damage is also demonstrated by the fact that it is not limited to agreements on frontier watercourses or treaties or conventions on the order of state frontiers, but it also appears in *agreements on the utilization of hydraulic power* as well. Thus, this is laid down in the 1963 Iron Gates Agreement, which reads as follows: “Each Party undertakes to refrain from any action which might hinder the use of structures and works of the system belonging to the other Party. Any alteration in the structures and works of the system which might have the effect of changing the parameters of structures and works belonging to the other Party may be undertaken only by prior agreement between the Parties” (Article 10, paras. 7–8). Furthermore, the purpose of the 1954 Drava River Convention has been to prevent any harmful effects resulting from the operation of Austrian power stations, and it contains waivers in claims for compensation arising out

of the operation of the water economy in the past and established by the Convention (Article 3).

Finally, it should be examined in connection with the so-called general obligation whether or not it means the establishment of a connection with general international law⁵⁹ which, in fact, can be claimed unequivocally only in the case of the 1967 Czechoslovak–Austrian Treaty (Article 19). Multilateral approaches went far further in this field. Thus, the text of the 1986 Convention on the river Tisza takes into consideration the “generally recognized fundamental principles and purposes of international law, including the Charter of the United Nations”, making reference to the resolution laid down in the Helsinki Final Act, concerning regional cooperation in the field of environmental protection and the fight against water pollution in particular, and also making reference to the recommendations of the Stockholm UN Conference on environmental protection, and the proposals laid down in the Mar del Plata programme of action (Preamble).⁶⁰

(cc) *Methods of cooperation*

Although cooperation as a purpose has not been formulated *expressis verbis* in all treaties and conventions, this is an unequivocal point resulting from the spirit of the distinct solutions.

As to the agreements on frontier watercourses, the exclusion of unilateral action and the change in the watercourse regime are subject to a common decision of the parties concerned, and this implies the *coordination of watercourse utilization and certain works in the field of water uses and management*. This is realized, first and foremost, by bringing into harmony the plans for water economy⁶¹ and the joint formulation of the guiding planning principles.⁶² Within fixed bounds, the preparation and formulation of actual plans and the execution of works constitute the duties of the relevant contracting parties on their own territory, except in the case of works affecting the territories of both countries concerned which are indivisible, in which case a common procedure has to take place.⁶³ The costs are to be borne by the party carrying out the works; in case of works which are of a common interest or serve (also) the interests of the other party, they have to be divided in proportion to the ratios of the various interests of the parties.⁶⁴

The conditions for cooperation are established by obligations which state the extent of the exchange of information to be provided, including the communication of the necessary technical data, the safeguarding and maintenance of the so-called basic points, and hydrological and hydrometeorological data.⁶⁵

The realization of cooperation is promoted by provisions which deal with the crossing of the frontier and border exemptions.⁶⁶

The obligation relating to preliminary notification seems to have been left in the background among the methods of cooperation. This can be explained, first and foremost, by the general obligation of restraint connected with frontier watercourses as its utterance *expressis verbis* becomes unnecessary with the provision of a common decision, and it is *ipso facto* involved with the institutionalization of the respective relations. Accordingly, this obligation is coupled with the so-called extraordinary dangers, such as flood and pollution.

(dd) *The division of the volume and uses of water*

The *quantitative division* of the volume of water is placed firmly in the foreground in terms of the agreements on frontier watercourses. Thus, the 1976 Hungarian–Czechoslovak convention provides for an equal fifty–fifty division of the waters by the respective parties.⁶⁷ The 1956 Hungarian–Austrian convention provides a share of between one third and two thirds in the case of the rivers crossing the frontier, in favour of downstream Hungary (Article 2, para. 6). According to the 1986 Hungarian–Romanian convention, the Romanian party ensures a distinct volume of water flow for the Hungarian party in eight major rivers crossing the frontier, measured in cubic metres per second, for maintaining the healthy condition of the riverbeds and for water uses (Article 8 and Annex 2).

A *territorial division* of the responsibility for maintaining the waterway is stipulated in the 1955 Bulgarian–Romanian convention, which instead of taking water output as a basis, states that each of the parties is responsible for a specific segment of the sector of the Danube which constitutes the frontier between the two countries (Article 1).

An equal division is to be applied to hydraulic power produced,⁶⁸ even if the hydraulic power plants situated in the territory of the parties have different capacities.⁶⁹

(ee) *Protection against pollution*

The increasing importance of protection against pollution is reflected in the conventions on frontier watercourses;⁷⁰ with this in view, explicit obligations are laid down in them. Nevertheless, a *difference is made between existing and future pollution* in the clauses of the respective conventions on pollution. In the case of future pollution, the provisions concern the prevention of its occurrence and its increase, while, for existing pollution, the aim is to reduce it.⁷¹ The obligations as formulated are not very strict, i.e., several exemptions are laid down so that they more constitute guiding principles or a declaration of intention rather than precise legal obligations; as a result, it is certainly justified to qualify them as *soft law*. This is evidenced by the following formulae: i) the parties shall make

efforts;⁷² ii) they will take measures, in compliance with their economic and technical possibilities; iii) the parties guarantee that sewage purification installations, in conformity with their national standards will be built.⁷³

Some agreements on frontier watercourses have particular provisions concerning extraordinary and exceptional pollution;⁷⁴ an immediate obligation to notify the other parties is prescribed in this prospect, on the one hand,⁷⁵ and an obligation is imposed upon the state regarded as the source of this kind of pollution, on the other, i.e., to take prompt measures in order to terminate the cause of the pollution, and to prevent its repeated occurrence.⁷⁶

The inclusion of a clause concerning pollution in the treaties or conventions concluded in respect of the production of hydraulic power cannot be considered as actual practice. Accordingly, the 1977 Hungarian–Czechoslovak treaty on the Bős/Gabčíkovo–Nagymaros hydraulic power plant system may well qualify as an exception. In it, it is not only stipulated that “the Contracting Parties” take care, by means of arrangements provided in a common coordinated plan, that the quality of the waters of the Danube should not deteriorate as a consequence of the realization and operation of the hydraulic power plant system (Article 15, para. 1), but this obligation is extended to the field of nature protection as well (Article 19).

As a matter of fact, the documents dealing with protection against pollution have broader formulated provisions. Thus, the relevant provisions of the 1986 *Szeged Convention* read as follows: “In conformity with their own legal order and technical and economic possibilities, the Contracting Parties will take measures on their own territory to prevent the pollution of the river Tisza and its tributaries” (Article 2, para. 1). Similarly, it is provided that the Contracting Parties, “. . . within the framework of their national programme on the protection of watercourses and in conformity with their technical/economic possibilities, will take measures aimed at the reduction of pollution in the frontier sections of the river Tisza and its tributaries, starting from the actual state of watercourse quality as observed in the frontier sections” (Article 5). Essentially, an identical approach can be found in the 1985 Bucharest Declaration on the Danube (Point 1).

Clearly, common formulations of the conventions on frontier watercourses all appear in the provisions mentioned in the foregoing, i.e., a differentiation between existing and future pollution, and the limitation and moderation of obligations. The Tisza convention also provides for extraordinary pollution (Article 6, para. 1),⁷⁷ but with the difference, however, in that the obligation of mutual assistance is also stipulated in the case of specific conditions (Article 6, para. 3). The category of particularly dangerous pollution appears in the Bucharest Declaration (Point 1, indent 2).

Apart from actual similarities, some *differences* may be observed as well:

— The scope of the clauses stipulating exemption was extended with a

reference to the "national legal order", and this involved some problems. If it means a requirement aimed only at the harmony of municipal law and an international obligation, it would not be absolutely necessary to put this down. If its content, however, allowed the state to withdraw from fulfilling the said obligation, referring to its municipal law, then it would hardly be in conformity with the rules of *de iure condito* of international law.⁷⁸

— The term pollution is clearly determined in the 1986 Tisza convention, reading as follows: "Any process leading directly or indirectly to the deterioration of the composition or of a characteristic feature of watercourses constitutes the pollution of waters. Thus, watercourses can be considered as polluted if, as a result of human interference, their composition or any of their characteristic features have changed in a way that, on account of this fact, they became, partly or completely, inappropriate for a specific utilization." (Article 1)

— The organization of the observation and assessment of the quality of watercourses is to be considered as an important step forward. Within this context, the areas of observation and the indices of the quality of watercourses are specified by common agreement, the methods of analysis are laid down in the observation projects, the quality of watercourses in the frontier sections is determined at regular intervals, and the values obtained are coordinated.⁷⁹

A survey of the conventional provisions relating to protection against pollution shows the absence of provision for compensation for pollution damage.⁸⁰ Taking into consideration the general character of pollution, the increase of the frequency and gravity of transfrontier effects, the international law-making in this area seems to be inadequate, both as regards its territorial validity and its formulae; accordingly, the need to improve international law-making is clear.⁸¹

(ff) *Flood prevention*

Floods, together with fluid inundation by inland waters, constitute a grave problem in the Hungarian–Czechoslovak section of the Danube, and the eastern area of the Hungarian Plain in particular. As a result, it is not by accident that implied obligations in this field are found mainly in the treaties or conventions covering these regions. The respective contractual elements are the following:

— According to the 1976 Hungarian–Czechoslovak convention, work aimed at anti-fluvial inundation is to be carried out while still observing sufficient depth at a uniform level in the territory of both states (Article 9, para. 1). This formula appears in the 1986 Hungarian–Romanian convention in a modified form, stating that the parties "... shall not carry out work or take measures in their own (national) territory which might bring about fluvial inundation, the growth of marshland or bogs, or other harmful effects" (Article 3, para. 1).⁸²

— The parties will assume the task of flood prevention separately, ensuring, however, some kind of cooperation.⁸³

— Each party undertakes to secure the unimpeded flow of the water, to carry out bed maintenance, and to keep flood prevention dikes in good order.⁸⁴

— Some treaties or conventions provide for mutual assistance when there is a danger of flooding,⁸⁵ while other only stipulate the obligation of immediate notification.⁸⁶

As this matter is outside the model agreements on frontier watercourses, no rules or dispositions can be found in the provisions dealing with cooperation in flood prevention concerning the problem of the continuous increase of the so-called standard flood level and the resultant costs.

(gg) *Applying the agreements*

In principle, the implementation of the obligations undertaken in terms of the distinct types of treaties or conventions is ensured by the rule of *pacta sunt servanda*.⁸⁷ Nevertheless, the requirement of cooperation in the field of water economy and securing its fulfilment has led to the institutionalization of relations between riparian states.

The main organizational body here has been the *committee*, i.e., a common organ created by the interested parties. Nevertheless, it has a multilateral character only in terms of the 1958 Convention on fishing in the waters of the Danube (Article 8), otherwise the committee is composed only of the representatives of the two parties in question. The only body having the status of an international organization is the Danube Committee which has, however, merely a marginal role in the field of non-navigational uses. As for the recent multilateral arrangements, these provide for periodic consultations between the parties or signatories, respectively.⁸⁸

The situation outlined above justifies, needless to say, highlighting the examination of the activities of these committees. Clearly, the structure of the committees,⁸⁹ the preparation, frequency, and nature of their sessions reveal differences in terms of the individual agreements; nevertheless, these differences then disappear in respect of the scope of their tasks and their authority.

Taking a general approach, the *scope of these committees' tasks* can be characterized by stating that they are obliged to realize the dispositions of the respective agreements, adapting them to actual situations, on the one hand, and the importance of this requirement is multiplied by the character of the agreements in question which, in turn, have to comply, in the overwhelming majority of cases, with technical and economic tasks, on the other. Hungary's participation in assuming planning tasks and execution related to hydrological works and structures as well as the exchange of information, has already been mentioned in this respect. Furthermore, inspection and checking, including field examination, have to be linked to this group as well.⁹⁰

The extent to which the committees in question are authorized to deal with *problems of international law* is the consequence of the scope of their tasks. Although the instructions given for the compilation of distinct statutes⁹¹ are more concerned with the formulation of technical norms, the right to submit proposals⁹² aimed at the modification and modernization of the agreements is placed unequivocally within this field. One must not disregard the fact that the committees are concerned with the application of international agreements and, as a result of this, laying down the rights and obligations of the contracting parties, i.e., the interpretation of the agreements in question arises while accomplishing all technical and economic tasks.

Some problems, however, continue to exist, such as the extent to which the committee in question is bound by the provisions of the respective agreement, or, in other words, whether or not it is authorized to disregard it, or whether or not international responsibility can be applied to these committees. These problems will be analyzed more thoroughly in the final chapter; accordingly, the following remarks are limited to the relationship between responsibility under international law and the agreements in force.

The possibility of raising the problem of international responsibility is not *explicitly* laid down anywhere in connection with the formulation of the scope of the committees' tasks; the only point to which it can be related concerns general checking rights.⁹³ Nevertheless, one may only imagine whether or not there is a controversy between the purpose of cooperation to be realized in the agreement in question, raising the problem of the responsibility of any of the parties.

Contrary to the solutions given in the agreements on frontier watercourses, the obligation to *compensate for actual damage* is laid down in *treaties or conventions on the order of state frontiers*; the relevant provisions, however, are ambiguous in several respects. In terms of the 1978 Hungarian-Yugoslav convention, the violation of the order of the frontier is established, e.g., as follows: "...any act or event having its origin on the territory of one of the Contracting Parties which violates, damages, or endangers the other Contracting Party, its territory or persons inhabiting the area" (Article 2, para. 1).⁹⁴ "Causing pollution on the territory of the other State by means of biological, chemical or other harmful matter" also establishes a violation (*ibid.*, para. 2/i). Taking into account the provisions of the convention charging the Principal Mixed Commission or one of the local mixed commissions with bringing about general agreement in all cases of violation of the order of the frontier, determining the occurrence of a violation and the amount of actual damage,⁹⁵ and to submit a proposal to the competent organs for compensation for the respective damage and costs, other problems became irrelevant. These include the qualification of the legal nature of the measures to be taken in order to prevent violation of the order of the frontier, the extent to which damage caused by physical and legal

persons are accountable to the state, and the settlement of responsibility, if any, according to international law or the municipal law of any of the parties. The enforcement of the latter arrangement seems, however, to be stronger, in view of a provision in the 1983 Hungarian–Romanian Convention which states that the determination of damage and compensation are to be made, by common consent, according to the municipal law of the state on the territory of which the respective damage occurred (Article 19, para. 1). The 1977 treaty of the Bős/Gabčíkovo–Nagymaros hydraulic system (Articles 25–36) has detailed provisions on the responsibility and obligation for compensation of the contracting parties; as compensation for damage is incorporated into the accounting system of the operating costs (Article 12), it seems, however, that the solution has evaded the application of the rules of international law.

The *authority of the committees* means, principally, the taking of decisions and, as a consequence of the parity character of the committee, these have to be accepted unanimously. In terms of the provisions of some agreements, the entry into force of the decisions or resolutions requires the explicit consent of the governments concerned;⁹⁶ evidently, this means an international treaty in a simplified form.⁹⁷ Other treaties stipulate, however, that their entry into force is accomplished with a mere absence of objection by any of the governments concerned within a specified time; in this case the approval has to be presumed.⁹⁸

The authority of governments in the field of water economy are not limited to the explicit or tacit approval of the resolutions of the respective commissions. In the absence of consent, the issue has to be submitted to the competent governments in order that they should decide on the matter.⁹⁹

The treaties or conventions concluded by Hungary do not contain the so-called jurisdiction clause; other agreements provide, however, for the submission of legal disputes to a board of arbitration.¹⁰⁰

Returning to the problem of international responsibility, the extent to which this institution of international law is applicable has to be taken into consideration. The absence of positive provisions in the relevant treaties or conventions seems to be irrelevant in this context. On the other hand, one may raise the question whether the fundamental principle of socialist internationalism, as enforced in the relations among socialist countries, would not imply the development of their all-round relations in this sense, i.e., the fundamental principle in question ought to be taken into consideration in the application of the agreements concerned.¹⁰¹ Nevertheless, the monolithic concept of unity has become outdated in several aspects; accordingly, specific national interests will appear or, more so, will be confronted, within the cooperation between the socialist countries, including in everyday matters.¹⁰² Thus, the possibility of raising the problem of international responsibility is no longer excluded, at least on account of the changed conditions.

c) *The role of the CMEA in the water utilization regime of the Danube Basin*

According to general opinion, the agreements on frontier watercourses and the other relevant treaties and conventions have been functioning satisfactorily. When expressing this assessment, their limits as they exist in several aspects, cannot be left out of consideration. In other words, the regulation of international relations resulting from water uses has only been, from the point of view of international law, partial.

The point now is to what extent the existing gap in the law can be filled by the CMEA, i.e., the integrating organization of the socialist countries, at least for the downstream water system of the Danube, i.e., below Pozsony/Bratislava.

The CMEA, concerned with economic and scientific-technical cooperation, has not been directly taking part in international law-making aimed at the establishment of a utilization regime for the Danube and in the application of *de iure condito* norms; nevertheless, its role has not been at all marginal.

As early as 1962, a Conference of Leaders in the field of Water Use and Management was set up within the framework of the CMEA; for the time being, it functions as one of the commissions of the Council. The leaders of the central organs of water economy of the individual countries form the members of the conference, and they participate in its work as heads of delegations. The Statutes of the Conference were approved in 1975. The Conference convenes once a year, alternating between the capitals of the member states, and the head of the water system administration of the host country chairs the session. The work of the Conference is supported by auxiliary organs¹⁰³ and the Water Economy Group of the CMEA Secretariat. Observers of other international organizations¹⁰⁴ are admitted as participants to the sessions. The Conference is authorized to make proposals and take decisions within its authority. The recommendations accepted with the consent of the interested states become obligatory after notification of their acceptance.¹⁰⁵

The tasks of the conference concern, first and foremost, economic and scientific-technical cooperation to be realized in the field of water use and management. Accordingly, the conference may submit proposals in respect of various problems concerning water use and management; furthermore, it organizes the exchange of experience and information, and is concerned with the coordination of scientific-technical research. The implementation of Chapter 14 of the Complex Programme of the CMEA, aimed at the development of socio-economic integration of the member states, and entitled "Principal trends and tasks of the development of cooperation in the field of water use and management" constitutes a fundamental part of the conference's work.

The problems relating to the utilization of international watercourses will certainly become more and more integrated in the *international cooperation* of

the CMEA member countries in the field of *environmental protection*. The respective organ is, for the time being, the Council of Environmental Protection of the Commission for Scientific-Technical Cooperation, set up in 1974. On the basis of this Council, a *Standing Committee of Cooperation in the field of Environmental Protection* was established at the 43rd extraordinary session of the CMEA.

The cooperation programme between the CMEA member states and Yugoslavia on environmental protection and development and the reasonable utilization of natural resources in this context was accepted at the 69th session of the CMEA Executive Committee. The project entitled "economic and legal aspects of environmental protection" was also incorporated into the programme.

As has been mentioned, the CMEA organs take decisions with binding force; nevertheless, their legal nature has been much disputed¹⁰⁶ and, anyway, they are not considered as international treaties. Instead of going into a thorough analysis of this complex problem, it is sufficient to refer to some elements of their content, i.e., the contents of the binding recommendations used to, essentially, clarify actual purposes, to determine the means of their realization, and possibly the unification of municipal law. The resolutions "Uniform criteria and norms of the quality of waters and principles of classification" and "Uniform methods of examining the quality of waters"¹⁰⁷ taken in this respect, belong to this group.

The research of converging the economic and legal aspects of environmental protection¹⁰⁸ has been directed by the Council of Representatives, by means of sessions of experts and a central body for coordination. The relevant institutions of the member states participating in the programme are charged with its implementation;¹⁰⁹ accordingly, these institutions perform the research, but so far the respective legal frameworks have not been clarified. This situation would become complicated if one of the institutions concerned failed to comply with the obligations laid down and accepted in the session, thereby retarding the realization of the common programme.¹¹⁰ The elimination of difficulties of this kind would probably necessitate a more solid internal organization and the acknowledgement of the subject capacity in civil law so that contracts would be concluded concerning the relations between the programme and the research bodies.

The research programme of the CMEA relating to the subject-matter of this work has comprised the problems of transfrontier pollution and environmental damage involving international responsibility.¹¹¹ Within this context, first of all the compilation of studies on a national level and summaries was envisaged, and the formulation of a declaration expressing a *communis opinio doctorum* has been on the agenda only in respect of transfrontier pollution.

When providing a survey of the role of the CMEA, one cannot omit mentioning that, for the time being, the consequences of the restructuring of the CMEA, now on the agenda, cannot yet be assessed.

Due to the completely reorganized international landscape in three short years, the preceding analysis on CMEA is a part of legal history. Nevertheless, the attitude of old member States towards the rights and duties of riparian countries are relatively unchanged.

d) The current situation of Bős/Gabčíkovo–Nagymaros system

Over the course of the year 1989 a serious change relating to the fate of the 1977 treaty concerning the Bős/Gabčíkovo–Nagymaros system of locks was brought about.

After the temporary suspension of the building operations and other works, the Hungarian Government, with parliamentary approval, decided to cease building the Nagymaros dam and hydroelectric power plant and to change some other units of the system. According to the new official position, it would be better to conclude a new treaty in order to arrange the consequences resulting from the termination of the 1977 treaty, instead of amending it.

This decision—above all but not exclusively—was determined by due consideration of environmental factors, such as: the risk of irreversible serious pollution of the surface—and groundwater aquifers, the probability of the serious pollution of drinking water, the destruction of other environmental values, in one word: the possibility of ecological disaster.

The Czechoslovak side considered the Hungarian move a breach of the treaty, and invoked the international responsibility of Hungary. Moreover as a temporary technical solution, it held out the prospect of the diversion of the Danube downstream at Bratislava to the industrial side-channel completely situated in Czechoslovak territory. In connection with the latter, the teleological method of treaty interpretation emerged in an implied way.

In the autumn of 1989, after the political changes in Czechoslovakia, declarations referring to the modification of the 1977 treaty were published in both countries. But the diplomatic talks with this aim were postponed *sine die*, due to the fact that neither of the two governments had *ius actionis* before the parliamentary elections in both countries.

The settlement of the dispute relating to the Bős/Gabčíkovo–Nagymaros system can be realized, according to the nature of the problem, only within the frame of diplomatic compromise where the considerations of international law inevitably take second place. But this hardly disputable fact does not excuse the international lawyer from the task of studying, at least *per tangentem*, the pending or the unsettled questions of international law, which should be considered despite the predominancy of *pacta sunt servanda*. Particularly the following can be emphasized:

— The case of *error* can be invoked as the parties miscalculated the probable

effects of the system on the environment. The effect on the environment was not investigated on a proper scientific basis. This error relating to facts may be invoked as invalidating the consent.¹¹² The reference to the error can be considered so much the more, because the requirement for continuous up-dating which characterize international conventions for the protection of the environment, is totally missing from the 1977 treaty.

— The 1977 treaty's 15th and 19th Articles relating to the protection of water quality or rather the protection of nature are not only out of line with the generally accepted requirements for the prevention of environmental damage but its terms have been implemented only partly, so there can be some talk about the material *breach* of important provisions as a ground for terminating the treaty.

— The reference to the *maxime ad impossibilia nemo tenetur* as one of the general principles of law should be considered. This reference, according to the nature of things, produces more questions: how is this maxim reflected in Article 61 of the 1969 Vienna Convention on the Law of Treaties is to be interpreted? If as in this case the following statement could be applicable: "... if the observance of an international duty would be self-destructive"¹¹³ is given as one reason for terminating the treaty: what relationship would this solution have to international responsibility?

— Raising the fundamental change of circumstances (*clausula rebus sic stantibus*) can have many dimensions. So among others, today the aim of the treaty can hardly be the realization of socialist integration (cp. preambulum), the earlier priority. The huge investment was wasted, the project became a "Duna-sour". The revision of the declared prior right energy generation (Article 4, 5th clause) is induced the need to prevent ecological risks, and generally separate water use from pollution control,¹¹⁴ and even the new demand for environmental security.¹¹⁵ Finally, we cannot disregard the fact that the right to adequate environment as a human right is gradually coming to the fore.¹¹⁶

— If we do not accept the absolute autonomy of the 1977 treaty, but consider that requirement of the law of treaties which is codified in the 3rd paragraph of the Article 31 of the Vienna Convention, and according to which we should take into account that "any relevant rules of international law applicable in the relations between the parties", then we cannot exclude the possibility of collision between the 1977 treaty and other international legal norms, which can be issued by international treaty (such as: multilateral conventions on the protection of the environment)¹¹⁷ or customary international law. This could be so much the more likely as the majority of norms relating to the protection of the environment *per definitionem* were not static, but were by definition evolutionary. Although in international law the problem of incompatible treaties has not been solved satisfactorily¹¹⁸ (and *a fortiori* in the case of the collision between conventional norms and the norms of customary international law), its pro-

cedural consequences are beyond question: We *bona fide* must make an effort to ease the contradictions, which obviously means *pactum de contrahendo*.

Supposing but not admitting the failure of talks aiming at the modification of the 1977 treaty, we can speak about the international liability for injurious consequences arising out of acts not prohibited by international law, because of all kinds of activities which can be placed within an uncertain legal frame according to the above. This regime produces different international legal duties—as the draft of codification in progress shows—in the case of harmful trans-frontier consequences including strict liability.

Notes

¹ For more details see e.g.: AJTAY: op. cit. pp. 135—198; HAJNAL: op. cit. pp. 14 et seq.

² The case of the river Lajta (Leitha) seems to be controversial in this. In their action commenced in the Administrative Court of Austria, Hungarian land-owners claimed the acknowledgement of their utilization rights connected with the waters of the Lajta, in accordance with customary international law. The claim was rejected by the Court, referring to its lack of competence in the case in question, on the one hand, and also to the non-existence of the rule cited by the claimants in international law. Accordingly, the Austrian authorities were allowed to proceed at their discretion when issuing permits for water use. (For the text of the judgement see: Zeitschrift für Völkerrecht, 1913. VII. B. pp. 56—65; commentary by: PÉCSI: op. cit. 1913, II. pp. 166—170; for some aspects of the case see: BOUSEK: op. cit. pp. 39—55). The judgement cannot be regarded as agreeing with the Harmon doctrine (in this sense see: LIPPER: op. cit. p. 21) for it was exclusively concerned with the possibilities of legal remedies as provided by Austrian law (i.e., the absence thereof, in fact), not at all affecting the law of the state whose citizens suffered damage. Actually, it was laid down in the judgement that, in the absence of an international treaty, the persons suffering injury had no possibility of claiming any legal remedy when interference occurred on Austrian territory but caused damage beyond the border (see: HARTIG: op. cit. pp. 11—12). Apart from this, the case could not be abstracted from the specific public law relationship that existed between the two member states of the Austro-Hungarian Monarchy.

³ E.g., the entire Hungarian section of the Danube can be ranked as second category pollution, according to CMEA standards, while some of its tributaries such as a major section of the Tisza, the rivers Körös and the Dráva, belong to the heavily polluted category III; exceptionally, other watercourses such as the frontier sections of the rivers Sajó, Maros, and Mura can even be classified as category IV which is akin to open refuse water channels.

⁴ The average delivery of the Danube, measured on the Romanian section, is 6430 m. s^{-1} minimum rate amounts to 2000 m. s^{-1} .

⁵ SZÉCHENYI, I.: op. cit. p. 137.

⁶ KUN, L.: op. cit. p. 808.

⁷ See the treaties concluded by Austria and Bavaria concerning the rivers Saalach and Salzach in 1820, concerning the order of the frontier in 1851, and concerning the river Inn in 1858, respectively.

⁸ Article 309 of the Saint-Germain treaty, and Article 292 of the Trianon treaty.

⁹ Les négociations de la paix hongroise. Vol. II. Note XXXII.

¹⁰ KUN: op. cit. 1941, p. 809.

¹¹ CHARGUERAUD from 1920 to 1924, ROSETTI from 1924 onwards, and HOUPEURT from 1939 to 1944. Résumé mensuel des travaux de la S. d. N. Vol. IV. No. 3. p. 59; Vol. XIX. No. 5. p. 249.

¹² Cf., BECHER: op. cit. pp. 145—174; KUN: op. cit. 1941, pp. 808—817; TELLYESINSZKY: op. cit. 1928, pp. 3—25.

¹³ The agreements on frontier watercourses concluded by the other member states of the CRED are: Czechoslovak–Austrian treaty of 1928, Czechoslovak–Romanian agreement of 1930, Yugoslav–Romanian agreement of 1931.

¹⁴ KUN: op. cit. 1937, p. 365.

¹⁵ KUN: op. cit. 1941, p. 817. It can be presumed that the failure to conclude a treaty was connected with the change in the trends of Hungarian foreign policy in 1927.

¹⁶ KUN: op. cit. 1937, p. 356.

¹⁷ KUN: op. cit. 1941, p. 817.

¹⁸ See: *La Hongrie devant la conférence de Paris*. Vol. I. pp. 21 et seq.; Peace Conference 1946, p. 1807.

¹⁹ Cf., Article 36 of the Romanian peace treaty, and Article 34 of the Bulgarian peace treaty.

²⁰ Cf., the convention or agreement concluded between Austria and Yugoslavia concerning the frontier rivers of Dráva and Mura in 1954, the agreements between Romania and Bulgaria in 1955, Romania and Yugoslavia in 1955, Bulgaria and Yugoslavia in 1958, Romania and the Soviet Union in 1952, 1957, and 1959, Czechoslovakia and Austria in 1967, Czechoslovakia and the Soviet Union in 1968. No agreement has as yet been concluded between Austria and the Federal Republic of Germany (see: UN Doc. E/CONF.70/4).

²¹ See, e.g., the agreement between Hungary and the Soviet Union in 1950. Article 1.

²² See the Hungarian–Soviet agreement in 1981, Article 2.

²³ The provisions of the most recent agreement between Hungary and Romania include tasks such as the operation of pumping stations and sluices, the exchange of hydrological and meteorological data, the maintenance of altitudinal and horizontal base points required for carrying out hydrological works, and the realization and preservation of hydrological installations (Article 1, para. 2). Similar dispositions are contained in an agreement concluded between Bulgaria and Yugoslavia in 1955 (Article 1, para. 1).

²⁴ See the agreements concluded between Austria and the Federal Republic of Germany in 1950 and 1952.

²⁵ For details see: SAHOVIC: op. cit. pp. 774—783 and 120—135.

²⁶ Modified by the 1983 Prague Protocol.

²⁷ Between Austria and the Federal Republic of Germany concerning the river Saalach, between Romania and Yugoslavia in relation to the Iron Gate Power Plant II in 1977, 1979 and 1987, Bulgaria and Romania on the hydrotechnical plants in Cioara—Belenes and Turnu Magulare—Nikopol in 1974 and 1975, between Romania and the Soviet Union on the hydraulic Stinca—Costesti power plant on the river Prut in 1971.

²⁸ For more details see: BRUHÁCS: op. cit. pp. 18—19.

²⁹ Conference danubienne, pp. 57, 127, 129. For an analysis see: LOGUNOV: op. cit. pp. 70 et seq.

³⁰ CD, Procès-verbaux, T. 20, pp. 366—367.

³¹ Ibid. T. 31, p. 139.

³² Ibid. T. 22, p. 482.

³³ E.g., from the Romanian (ibid. T. 26, p. 233) or Yugoslav part (ibid. T. 33, p. 143).

³⁴ Resolution No. 25/24 (CD, Procès-verbaux, T. 25, p. 241).

³⁵ Resolution No. 25/24 (CD, Procès-verbaux, T. 25, pp. 241 et seq.).

³⁶ Ibid. T. 18, p. 322.

³⁷ Modified by a protocol in 1979.

³⁸ For details see: MILENKOVIC: op. cit. 1982, pp. 510—517 and 564—573.

³⁹ Thus in the 1955 Bulgarian–Romanian agreement, the 1952 Romanian–Soviet convention on the river Prut, and the 1959 Romanian–Soviet agreement on the frontier sector of the river Danube.

This has been the habitual formulation in treaties or conventions on the order of state frontiers. The provision of Article 1, point f) of the Hungarian–Romanian agreement of 1983 forms an exception.

⁴⁰ See the first Articles of the 1955 Hungarian–Yugoslav treaty, the 1956 Hungarian–Austrian treaty, the 1976 Hungarian–Czechoslovak treaty, the 1981 Hungarian–Soviet treaty, and the 1986 Hungarian–Romanian treaty. *Ibid.* the 1984 agreement of Austria and Yugoslavia concerning the river Mura, the 1958 Romanian–Yugoslav agreement, the 1957 Romanian–Soviet agreement, the 1967 Czechoslovak–Austrian treaty, and the 1968 Czechoslovak–Soviet agreement.

⁴¹ According to the 1956 Hungarian–Austrian agreement, this concerns waters within a distance of 6–6 km from the state frontier line (Article 1, point 1). In the Hungarian–Romanian agreement of 1986, the sectors falling under the agreement are laid down in Annex I for each watercourse and channel.

⁴² Article 1, point 1 of the Hungarian–Yugoslav agreement of 1955.

⁴³ See the 1976 Hungarian–Czechoslovak convention, the 1981 Hungarian–Soviet convention, and the 1968 Czechoslovak–Soviet agreement.

⁴⁴ *Ibid.* for the Dráva and Mura, i.e., the two other major rivers.

⁴⁵ *Ibid.* in the Preamble, the importance of the agreements on frontier watercourses is emphasized, on the one hand, and the frontier section is indicated as the area of observation on the other (Article 3, points 1–2, Articles 4–5).

⁴⁶ E.g. a Bulgarian–Romanian agreement in 1955, including decisions and recommendations of the Danube Commission (Article 2), and a Hungarian–Czechoslovak agreement in 1976, Article 13.

⁴⁷ 1955 Hungarian–Yugoslav convention, Article 2, para. 3, 1956 Hungarian–Austrian convention, Article 2, para. 1, 1976 Hungarian–Czechoslovak convention Article 3, para. 1, 1981 Hungarian–Soviet convention, Article 3, 1967 Austrian–Czechoslovak treaty, Article 3, para. 1, 1968 Bulgarian–Yugoslav convention, Article 1, 1955 Bulgarian–Romanian convention, Article 6.

⁴⁸ Contrary to this, a comprehensive enumeration is laid down in the Hungarian–Soviet convention of 1981, Article 2.

⁴⁹ In the same sense, see the provision on the volume of natural waters (Article 5, para. 2).

⁵⁰ Established rights were explicitly recognized in terms of the previous 1954 convention; see Article 23, para. 1. *Ibid.* the 1956 Hungarian–Austrian convention, Article 2, paras. 5–6, the 1967 Austrian–Czechoslovak treaty, Article 3, para. 3.

⁵¹ *Ibid.* Article 8, para. 3.

⁵² E.g., the 1955 Hungarian–Yugoslav convention, Article 2, para. 1, the 1956 Hungarian–Austrian convention, Article 3, the 1976 Hungarian–Czechoslovak convention, Article 6, the 1986 Hungarian–Romanian convention, Article 3, para. 4, Article 4, para. 7, Articles 5–6, the 1967 Czechoslovak–Austrian treaty, Article 4, the 1954 convention concerning the river Mura, Article 2.

⁵³ Cf., the 1956 Hungarian–Czechoslovak treaty, Articles 13–15, the 1961 Hungarian–Soviet treaty, Articles 16–18, the 1964 Hungarian–Austrian treaty, Article 4, para. 2, the 1965 Austrian–Yugoslav treaty, Article 6.

⁵⁴ E.g., the 1956 Hungarian–Czechoslovak treaty, Article 9, para. 2, the 1961 Hungarian–Soviet treaty, Article 13, para. 2. There is no such provision in the 1983 Hungarian–Romanian treaty.

⁵⁵ E.g., the 1986 Hungarian–Romanian convention, Article 9, point 2.

⁵⁶ E.g., the 1976 Hungarian–Czechoslovak convention, Article 3, paras. 1/c and d); the 1981 Hungarian–Soviet convention, Article 3. As to the Hungarian–Romanian convention, it provides for an obligation to inform only if, according to the judgment of the party carrying out the relevant work, substantial harmful effects are likely to occur on the territory of the other party. In this case the mixed commission has to express its opinion (Article 9, para. 4).

⁵⁷ E.g., the 1955 Hungarian–Yugoslav convention, Article 1, para. 3, the 1956 Hungarian–Austrian convention, Article 2, para. 4.

⁵⁸ The term “damage” is explicitly mentioned only in the 1986 Hungarian–Romanian convention, in other cases it is implied.

⁵⁹ In this sense, cf., HERCZEGH: *op. cit.* 1968, p. 23.

⁶⁰ In similar sense, the Preamble of the 1985 Bucharest declaration.

⁶¹ E.g., the 1981 Hungarian-Soviet agreement, Article 9, para. 2, and the 1986 Hungarian-Romanian convention, Article 7, para. 2.

⁶² E.g., the 1956 Hungarian-Austrian convention, Article 5, para. 1, and the 1976 Hungarian-Czechoslovak agreement, Article 7.

⁶³ E.g., the 1956 Hungarian-Austrian convention, Article 6, the 1981 Hungarian-Soviet convention, Article 8, para. 3, and the 1986 Hungarian-Romanian convention, Article 9, para. 3.

⁶⁴ E.g., the 1955 Hungarian-Yugoslav convention, Article 8, the 1956 Hungarian-Austrian convention, Article 7, paras. 1—2, the 1976 Hungarian-Czechoslovak convention, Article 14, the 1981 Hungarian-Soviet convention, Article 9, and the 1986 Hungarian-Romanian convention, Article 12.

⁶⁵ E.g., the 1955 Hungarian-Yugoslav convention, Article 1, para. 2 and Article 6, the 1956 Hungarian-Austrian convention, Article 5, para. 3, the 1976 Hungarian-Czechoslovak convention, Article 7, para. 2, Articles 17 and 18, the 1981 Hungarian-Soviet convention, Article 7, para. 4, and Article 11, and the 1986 Hungarian-Romanian convention, Articles 10—11.

⁶⁶ E.g., the 1981 Hungarian-Soviet convention, Articles 13 and 14.

⁶⁷ Article 3, para. 2. The same provision appears in the 1981 Hungarian-Soviet convention, Article 4, and the 1956 Hungarian-Austrian convention, Article 2, para. 5, which is limited to the watercourses forming the frontier. Similarly, one may look at the 1967 Czechoslovak-Austrian treaty, Article 3, para. 3.

⁶⁸ Cf., Iron Gates Agreement 1963, Article 8.

⁶⁹ Cf., Bős/Gabčíkovo-Nagymaros Treaty 1977, Article 9, para. 1.

⁷⁰ The treaties or conventions dealing with the lower sector of the Danube contain no provisions of this kind.

⁷¹ Cf., the 1956 Hungarian-Austrian convention, Article 2, para. 7, the 1976 Hungarian-Czechoslovak convention, Article 11, para. 1, the 1981 Hungarian-Soviet convention, Article 14, the 1986 Hungarian-Romanian convention, Article 7, paras. 1 and 4. The 1967 Czechoslovak-Austrian treaty only provides for recent pollution (Article 3, para. 3). A distinction between already existing and recent pollution can only be found in the 1955 Hungarian-Yugoslav convention (Article 1, para. 1).

⁷² This is a general provision concerning the obligation to reduce pollution and, in respect of recent pollution, is missing from the Hungarian-Soviet conventions.

⁷³ Cf., the 1986 Hungarian-Romanian convention, Article 7, para. 1, which is completed by an obligation on the Hungarian party concerning bypassing waters resulting from the uses of the Romanian party (Article 8, para. 4).

⁷⁴ E.g., as many as 50 cases of extraordinary pollution originating from outside Hungarian territory were registered on the Hungarian section of the Danube from 1971 to 1980.

⁷⁵ See, explicitly, the 1976 Hungarian-Czechoslovak convention, Article 11, para. 3, the 1981 Hungarian-Soviet convention, Article 5, para. 2, the 1986 Hungarian-Romanian convention, Article 7, para. 3, which included the obligation of notifying impending dangers. Cf., Article 8 of the 1955 Hungarian-Yugoslav convention and Article 11 of the 1956 Hungarian-Austrian convention.

⁷⁶ See the three agreements first mentioned in the preceding note.

⁷⁷ Ibid. the 1985 Bucharest Declaration point 2/b.

⁷⁸ The Vienna Convention on the Law of Treaties, Article 27, Draft Convention on State Responsibility 1980, Article 4.

⁷⁹ Tisza convention, Articles 3—4. In a similar sense formulated in point 2 of the Bucharest Declaration, which also provides for the study of the possibilities of setting up automated systems of observation.

⁸⁰ A pale and ambiguous reference can be found to this point in the 1985 Bucharest Declaration, which reads as follows: "The Governments of the Danubian States will continue to deal, in conformity with their legislation, among other points, with the problem of protection against pollution (point 5)."

⁸¹ Explicitly in the 1985 Bucharest Declaration, points 3 and 7.

⁸² Similarly, in the 1981 Hungarian-Soviet agreement, Article 10, para. 1.

⁸³ Cf., the 1976 Hungarian-Czechoslovak convention, Article 10, para. 1, the 1981 Hungarian-Soviet convention, Article 10, para. 2, and the 1986 Hungarian-Romanian convention, Article 3, para. 6.

⁸⁴ 1986 Hungarian-Romanian convention, Article 3, paras. 1-2 and 4.

⁸⁵ Similarly, in the 1976 Hungarian-Czechoslovak convention, Article 9, paras. 1-2, and the 1981 Hungarian-Soviet convention, Article 10, para. 3.

⁸⁶ Cf., the 1955 Hungarian-Yugoslav convention, Article 8, and the 1956 Hungarian-Austrian convention, Article 11.

⁸⁷ Expressed explicitly in the Tisza Convention, Article 12.

⁸⁸ Tisza Convention, Article 9, and the Bucharest Declaration, point 2/e.

⁸⁹ E.g., two representatives are mentioned in the 1981 Hungarian-Soviet convention, Article 14; the Hungarian-Czechoslovak commission on frontier waters has eight members (Article 1, para. 1), and the Hungarian-Yugoslav commission on water uses and management consists of ten members (Annex, Article 3).

⁹⁰ Cf., the 1955 Hungarian-Yugoslav convention, Annex, Article 1, para. 5, the 1956 Hungarian-Austrian convention, Article 13, para. 1/e, the 1976 Hungarian-Czechoslovak convention, Article 11, para. 2, and Annex, Article 2, para. f, the 1981 Hungarian-Soviet convention, Article 15, para. 3, and the 1986 Hungarian-Romanian convention, Article 15, para. 4/f.

⁹¹ E.g., the 1955 Hungarian-Yugoslav convention, Annex, Article 1, para. 6, and Article 10, the 1986 Hungarian-Romanian convention, Article 4, para. e.

⁹² E.g., the 1956 Hungarian-Austrian convention, Article 13, para. 1/i, the 1976 Hungarian-Czechoslovak convention, Annex, Article 2, para. k, and the 1986 Hungarian-Romanian convention, Article 15, para. 4/h.

⁹³ E.g., the 1955 Bulgarian-Romanian convention, Article 8, and the 1986 Hungarian-Romanian convention, Article 15, para. e/f.

⁹⁴ Cf., the 1986 Hungarian-Romanian convention, Article 1, para. i), essentially in a similar sense.

⁹⁵ Article 5, para. 1/h, and Article 9, para. 1/e, respectively

⁹⁶ Cf., the 1976 Hungarian-Czechoslovak convention, Article 5, para. 2, the 1981 Hungarian-Soviet convention, Article 14, para. 7, and the 1986 Hungarian-Romanian convention, Article 15, para. 3.

⁹⁷ Les accords en forme simplifiée, see: BASTID: op. cit. pp. 46-50.

⁹⁸ Cf., the 1955 Hungarian-Yugoslav convention, Annex, Article 8, and the 1956 Hungarian-Austrian convention, Article 16, para. 1.

⁹⁹ Cf., the 1955 Hungarian-Yugoslav convention, Article 9 and Annex, Article 7, the 1956 Hungarian-Austrian convention, Article 16, para. 2, the 1976 Hungarian-Czechoslovak convention, Article 22, the 1981 Hungarian-Soviet convention, Article 16, and the 1986 Hungarian-Romanian convention, Article 15, para. 3.

¹⁰⁰ Cf., the 1967 Czechoslovak-Austrian treaty, Article 19, the 1963 Iron Gates agreement, Article 21, the 1954 Drava convention, Article 22, the 1954 Mura agreement, Article 10. A similar stipulation may be found in the 1948 Belgrade convention, Article 45. For the problems resulting from its application see: BRUHACS: op. cit. pp. 19-20. The disposition of the 1955 Hungarian-Yugoslav agreement on a coordinating commission (Article 10) may be regarded as a transitional rule.

¹⁰¹ In this sense see: USENKO-USAKOV: op. cit. p. 11.

- ¹⁰² KÓTAI: op. cit. p. 20.
- ¹⁰³ E.g., the conference of the secretaries of the delegations.
- ¹⁰⁴ E.g., the Danube Commission, on the basis of the 1975 agreement concluded between the CMEA and the Commission.
- ¹⁰⁵ HARASZTI—HERCZEGH—NAGY: op. cit. p. 331.
- ¹⁰⁶ For details see: FICZERE: op. cit. pp. 153—179.
- ¹⁰⁷ The texts of these technical norms were published in Hungarian in 1964.
- ¹⁰⁸ Similarly, also in the other eleven principal directions.
- ¹⁰⁹ The distinction between an interested and a dis-interested state also exists in this respect.
- ¹¹⁰ An international organization is out of the question in this respect, the applicability of the 1978 convention on responsibility cannot even be taken into consideration.
- ¹¹¹ Cf., the unpublished protocol of the 1985 session of the Council of Representatives.
- ¹¹² See *per analogiam* the example given by US delegation (KEARNEY) in Vienna Conference on the Law of Treaties. Official Records, First Session, 45th meeting.
- ¹¹³ Russian Indemnity case (1912) RIAA Vol. XI. p. 443.
- ¹¹⁴ See World Charter for Nature (UNSA/RES/37/7 1982). From a theoretical viewpoint see Kiss 1989, pp. 14—15.
- ¹¹⁵ TIMOSHENKO: op. cit. pp. 82—92.
- ¹¹⁶ KISS: op. cit. pp. 20—26; RIEDEL: op. cit. p. 239 et seq.
- ¹¹⁷ ZEHETNER: op. cit. pp. 237—256.
- ¹¹⁸ See ROUSSEAU: op. cit. Tome I, pp. 152, 162—163, SINCLAIR: op. cit. pp. 93 et seq.

The prohibition of interference with the regime of international watercourses

1. The existence of this prohibition in general international law

In Principle 21 of the Declaration of the United Nations Conference on the Human Environment, there appears the following: "States have, in accordance with the Charter of the United Nations and principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or areas beyond the limits of national jurisdiction."

Although the principle in question has been declared in a formally non-binding international document, it can be qualified, however, as the identification of a rule of general international law having a decisive relevance to various transfrontier effects. In fact, the formula has a double character. First, it incorporates the legal principle formulated in the Trail Smelter case and the Corfu Channel case,¹ respectively, and, secondly, by replacing the term "territory" with the "environment", thereby giving it a broader meaning, it contributed to the development of the law. This element seems to have obtained general recognition as it was repeated not only in resolutions taken by international organizations² but it was also incorporated into the text of several multilateral international treaties of a general nature.³ Taking the aforementioned into consideration, the correctness of the preceding statement that the prohibition on causing damage is one of the rules of customary international law cannot be doubted.⁴

The recognition of the obligatory nature of the Stockholm formula does not mean, in fact, the precise delimitation of its content; on the contrary, it clears the way for *various interpretations*, principally because there is an unstable balance resulting from a relationship established between two components, i.e., the recognition of the sovereign law and the obligation related to transfrontier damage.

a) According to one view, this concerns nothing more than the mere juxtaposition of two old principles, i.e., the principle of absolute territorial sovereignty and absolute territorial integrity. Nevertheless, the realization of resolving the relevant problems can hardly be attained in this case, as was dealt with in Chapter III.

b) Giving priority to the sovereign right of exploiting natural resources, the obligations concerning transfrontier damage will be reduced not only to a secondary, but also to a limited significance. Identifying this obligation with the maxim *sic utere tuo ut alienum non laedas*,⁵ it fits the said formula resulting, however, in certain problems.

This legal principle (*adage*) is an Anglo-American legal maxim *par excellence*⁷ based upon some sources of Roman law⁶ and meaning the prohibition of abusing the law.⁸ Apart from the recognition of the theory of abusing the law in international law,⁹ another meaning has also been attributed to the maxim *sic utere tuo*, first and foremost by representatives of international neighbourhood law,¹⁰ i.e., qualifying it as a principle limiting the use of sovereignty. Nevertheless, if causing damage to another country by water uses were prohibited or in another way, on the basis of customary international law, then an adverse activity of this prohibition would not be admitted by the law, and consequently, abusing this law would not be possible either. Even in this case, the prohibition on abusing the law does not disappear completely, for otherwise lawful behaviour may become unlawful as a result of various causes, such as the means of using the law as a quasi-abusing enforcement of the law, e.g., the intention of causing damage.

c) According to another interpretation which one may also encounter, principle 21 of the Stockholm declaration reflects the recognition of so-called objective responsibility.¹¹ This matter will be dealt with later, in this context, reference should only be made to the point that the theory of objective responsibility, as a modern variant of the theory of absolute territorial integrity, has not so far been adopted in general international law.¹²

d) Although it has been hardly possible to delimit the exact meaning of the Stockholm formula unequivocally on account of the text proper or the relevant preparatory works, respectively, one can most probably conclude taking into consideration the recent development of international law,¹³ that the treaties or conventions bearing upon the regimes of the uses of international watercourses in particular, along with others, contribute to the *formation of a separate principle of general international law*, restricting territorial sovereignty.

With this opinion in mind, it is also acceptable that international responsibility may arise as a consequence of non-prohibited, i.e., lawful, behaviour as well.

It is already clear from the foregoing that, although the objective effect (*ratione materiae*) of the legal principle in question is broader than that covering the regime of the uses of international watercourses, one must not disregard the

fact that it came into existence, essentially, in this very context,¹⁴ i.e., it has not only concerned the application of the logic of a *maiores ad minus*.

Let us now have a look at the appearance of *the prohibition of interference with the regime of international watercourses in various international treaties or conventions*.

a) One can habitually, see the general declaration of the prohibition, first and foremost in agreements concerning frontier waters. Thus, it was already stipulated in the Boundary Waters Treaty concluded by the USA and Canada in 1909¹⁵ that "any interference with, or diversion of, waters on either side of the boundary, resulting in any injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs" (Article II).

Just as the term "regime" is identified more with the natural state of watercourses in the preceding examples,¹⁶ in other agreements it means the ways and means of water uses and management. Thus, according to the Lake Inari agreement, concluded by the Soviet Union and Finland in 1959, "the latter undertakes not to carry out any measures likely to affect the regime of Lake Inari or of the River Paatsjoki" (Article 4).¹⁷

As is quite natural, the most general formulation of the prohibition of interference with the regime of watercourses may be found in multilateral agreements likely to have a broad group of participants. The prohibition in question is thus covered in a clause on the reservation of rights in the 1923 Geneva Convention on hydraulic power which reads as follows: "the provision of the Convention did not in any way modify the responsibility or obligations imposed on States, as regards injury done by the construction of works for the development of hydraulic power, by rules of international law" (annexed Protocol).

In terms of the 1965 inter-American draft convention, "the utilization of the waters of an international river or lake for industrial or agricultural purposes must not . . . cause substantial injury, according to international law, to the riparian States . . ." (Article 5).¹⁸

The draft proposal, elaborated by the Asian-African Legal Consultative Committee in 1973, is, essentially, identical with the foregoing, reading as follows: "A basin State may not therefore undertake works or utilization of the waters of an international drainage basin which would cause substantial damage to another basin State unless . . ." One of the considerations of the draft European convention of 1969 reads: "it is a general principle of international law that no country is entitled to exploit its natural resources in a way that may cause substantial damage in a neighbouring country (Preamble)."

b) In other treaties or conventions the cases of prohibited interference with the regime of international watercourses are laid down more precisely. Accordingly, prohibitions or restrictions affecting water drainage,¹⁹ the withdrawal of

water²⁰ or the changing of the water level²¹ occur frequently. In other cases specified forms of water drainage or withdrawing water are regulated by treaties or conventions²² making possible the consent of the injured party, possibly connected with compensation.²³

Equally, the prohibited uses of water and the relevant works are laid down in treaties. They may contain simple²⁴ or very detailed lists of prohibitions, e.g., the incomplete list in the 1964 Soviet-Finnish agreement of frontier waters covered 14 prohibitions (Article 2). Of course, the contrary may also be found.²⁵ If the utilization order of international watercourses governed by a treaty or convention is laid down in its text, this means that the utilizations in question are recognized as lawful from their very outset, on the one hand, and anti-conventional uses are prohibited explicitly or tacitly, on the other.²⁶ The complicated systems of rules contained in the 1960 Indus Treaty constitutes one of the most characteristic examples. The establishment and functioning of the utilization order based on the treaty itself, in some cases is not linked to an obligation to compensate. Nevertheless, it is prescribed in other cases, casually completed by exemption clauses, although provisions concerning unforeseen damage do occur as well. This problem will be dealt with in the final chapter.

Contrary to the treaties or conventions referred to, only the obligation to cooperate is established, e.g., in the 1963 Niger Basin Act.²⁷ Nevertheless, this regulation can be interpreted as the first step towards the setting up of an utilization regime, on the one hand,²⁸ and it only seems controversial as regards the recognition of the prohibition on causing damage, on the other, as, in terms of the complementary agreement of 1964, there is an obligation on the part of the riparian States to inform and to previously consult the Commission in connection with the planned water uses (Article 12); furthermore, the settlement of disputes by an arbitrator or the ICJ is stipulated in Article 16 of the Act.²⁹

The existence of a prohibition relating to interferences with the regime of international watercourses seemed to be already justified by the settlement of the complete series of treaties already referred to. The correctness of this conclusion is also supported by *international judicial practice*.

The judgements of the PCIJ in the Diversion of Water from the Meuse case or the arbitral tribunal in the Lake Lanoux case, respectively, are worthy of particular attention as, not having stated the occurrence of an internationally wrongful act as claimed by any of the parties, they found it necessary to emphasize, with general validity, that "... il existe un principe interdisant à l'Etat d'amont d'altérer les eaux d'un fleuve dans des conditions de nature à nuire gravement à l'Etat d'aval. . ."³⁰

The principle that each State is bound to ensure that activities do not damage another State's territory has been expressed even more unequivocally in *various resolutions of international organizations*, and it is evident that the regime of water utilization is included in this obligation.³¹

With the uniformity evidenced by international practice, both scientific associations and the overwhelming majority of the relevant authors almost exclusively supported this principle and it led to the formulation of a *communis opinio doctorum*, at least in respect of the recognition of the existence of the prohibition of interference with the regime of international watercourses.³² It is sufficient to recall in this context a stipulation of the Salzburg resolution of the IDI of 1961, which reads: "... that the obligation not to cause unlawful harm to others is one of the basic general principles governing neighbourly relations, and this principle is also applicable to relations arising from different utilizations of water..." (Preamble),³³ and the opinions of most qualified authors concur.³⁴ An exception can only be found in the Helsinki Rules of 1966. Qualifying the equitable utilization of the waters as a key principle,³⁵ the theory stating that "international law imposes general limitations upon action that a State may take which would cause injury in the territory of another State"³⁶ is mentioned only within the context of pollution, *connecting* it to the principle of equitable utilization. Nevertheless, a return to the concept that can be regarded as more traditional was already expressed in the resolution of the 1980 Regulation of the Flow of Water of International Watercourses,³⁷ soon to be realized to its full extent in the Seoul Resolution of 1986,³⁸ reading as follows: "A basin State shall refrain from and prevent acts or omissions within its territory that would cause substantial injury to any co-basin State, provided that application of the principle of equitable utilization as set forth in Article IV of the Helsinki Rules does not justify an exception in a particular case. Such an exception shall be determined in accordance with Article V of the Helsinki Rules." (Article I).

On the basis of conforming evidence in international practice and the views of jurisprudence *it cannot be doubted* that Article 9 of the draft, proposed by EVENSEN, the special rapporteur, contains a *de iure condito* rule of international customary law, reading as follows:

"A watercourse State shall refrain from and prevent (within its jurisdiction) uses or activities with regard to an *international watercourse* that may cause appreciable harm to the rights or interests of other *watercourse* states unless otherwise provided for in a *watercourse* agreement or other agreement or arrangement."³⁹

2. Interpretation of this prohibition

The actual agreement concerning the existence of the prohibition cannot be extrapolated to the elements of its content. Not insignificant differences were already revealed by the quotations cited in the foregoing and, with further presentation of the views of a large number of authors who took a stand in this matter, they would be extended *a fortiori*. The substantial differences may be reduced to a) the place of the prohibition within the system, b) the determination

of the behaviour that caused the damage, c) the determination of the parameters of the relevant damage, and finally d) the consideration of possible exceptions.

a) In the formulation of the draft submitted to the ILC, the prohibition on activities regarding international watercourses which cause appreciable harm to other watercourse States (Article 9) is preceded by provisions on equitable sharing in the uses of waters of an international watercourse (Article 7). This order of succession and the concept suggested by it does, however, raise some doubts. Although they imply the recognition of the sovereignty of the riparian states over international watercourses to the extent that these lie on their territory, permitting interpretation as a logical continuation of the provisions of Article 6, the following ought to be taken into consideration:

— The prohibition against activities causing appreciable harm took shape before the formation of the principle of reasonable and equitable partition in the ILA's restatement; besides, it has a more general character and its subject-matter (*ratione materiae*) has a broader effect.⁴⁰ Thus, activities that cannot be qualified as water utilization may also cause harm to the utilization regime of the international watercourse concerned, on the one hand, such as deforestation or erosion brought about in a water system by changing the methods of land cultivation; nevertheless, this statement can, on the other hand, also be reversed, i.e., water utilization may harm interests beyond this domain as well. Thus, pollution may endanger human health,⁴¹ the large water storage basins and artificial lakes are sources of epidemics, influencing the weather and increasing the danger of earthquakes;⁴² water utilization may destroy or damage the habitat or final sanctuary of wild animals and feral plants.⁴³ In addition, one must also consider that the violation of territorial sovereignty by means of transfrontier effects always lurks in the background.⁴⁴ The preceding points imply, moreover, that the inherent logics of the main rule and its exception ought also to be followed by the order of succession, in conformity, for example, with Article 3 of the Montreal Rules.⁴⁵

b) The *behaviour that is relevant from the point of view of the prohibition on interference causing transfrontier effects*⁴⁶ may take various forms. Apart from water uses in a broad sense, the building and operation of engineering structures such as dams for water regulation, barrages, on-shore installations, hydraulic power plants, sluices, etc., are also to be included in this group.

In spite of the evident differences between the relevant forms of behaviour, some *common elements* may be seen, however, and these are as follows:

i) Water uses and other activities have to have an organic connection with the relevant international watercourse, i.e., its water volume is in permanent motion. This means, in other words, that a transfrontier effect is brought about by natural laws.⁴⁷ Hence, in a constellation in which one riparian state, when improving the navigation conditions of an international watercourse, draws international trade to its own ports, thus causing losses to another riparian state,

this is not relevant in this respect and ANDRASSY puts it as follows: "On ne pourrait pas prétendre que le premier Etat soit internationalement responsable de ce préjudice qui, pourtant, est directement causé par les ouvrages exécutés sur son propre territoire."⁴⁸

ii) As already mentioned, there has been a prohibition under general international law in respect of behaviour susceptible to causing transfrontier damage of a material nature.⁴⁹ The point here is whether or not it is the consequence of the nature of this prohibition that it can be transgressed only by means of definite and positive action.

A positive reply⁵⁰ results from the character of the system of prohibitions in international law, on the one hand,⁵¹ and the nature of water utilization and the related activities being manifested in positive steps, on the other. Taking all these into consideration, the judgement pronounced by the German Supreme Court (*Staatsgerichtshof*) in the *Donauversinkung* case in 1927, reading as follows, seems to be justified: "Unless there is an opposite consequence on account of specific titles, no state is obliged to change watercourses, resulting from natural causes, to the advantage of another state. In particular, no measures should be taken which are directed at preventing natural changes related to watercourses in favour of another state."⁵²

The other aspect of the problem is whether or not a state that took measures which have resulted in certain advantages for another state is entitled to claim any reimbursement of the costs incurred. Reference can be made in this respect to the rule which stipulates compensation for unlawful enrichment, stating that anyone attaining material advantage without legal grounds to the prejudice of another person or body is obliged to reimburse that other person or body for the advantage obtained. Although the formulation of unlawful enrichment is still frequently not sufficiently clear, the refunding obligation has been established in international practice.⁵³ Nevertheless, it can only be applied with reservation in the case of interference with the utilization regime of international watercourses which results in a favourable effect.⁵⁴ Let us take as an example the construction of a dam to feed a hydraulic power plant or the retention of high water level by means of storage, resulting in a more balanced flow of water. The engineering or measurement levels just mentioned would be carried out, however, in the constructing state's own interests which cannot then be entitled to ask another state to contribute to the incurred costs. On the other hand, if the first state undertakes to cover the additional costs of the other state, e.g., setting up installations capable of being utilized by the latter as well, then it will be entitled to claim reimbursement or a contribution, with reference to the prohibition of unlawful enrichment. Accordingly, the treaties regulating compensation for unlawful enrichment are so formulated.⁵⁵

iii) Contrary to the preceding point, the ILA's Seoul Resolution also incorporated *neglect* into the kinds of behaviour causing damage, omitting, however,

any particular motivation for such neglect.⁵⁶ With respect to the considerations set forth in the foregoing, this cannot be accepted with general validity for the omission of an activity in the field of water utilization, such as not establishing storage basins in order to ensure a balanced level of water delivery, cannot be qualified as unlawful by itself, even if thereby causing material damage to another state in the form of *lucrum cessans*. Hence, the assumptions of obligations concerning the preservation of the watercourse bed, the protection of river banks, the improvement of waterflow, etc., that are provided in numerous treaties or other agreements relating to the regime of water utilization should be regarded as contractual stipulations.

iv) That the said principle is well-founded cannot be doubted, however, in other contexts. Thus, the state cannot be released from its obligation to prevent private activities capable of resulting in harmful transfrontier effects.⁵⁷ Apart from this, there is a general obligation of prevention taking shape in the field of procedural rules.⁵⁸ Taking into consideration that these will be dealt with separately later, it should here only be noted that negligence in this connection is not excluded, on the one hand, and, on the other, certain circumstances are to be considered from the very outset when a decision concerning water utilization or an activity related to it is taken. It was for this reason that reference was made to "reasonable diligence" in the Dubrovnik resolution of the ILA.⁵⁹ It is questionable, however, whether or not the concept of diligence as formulated in other contexts⁶⁰ is applicable to international relations resulting from the uses of international watercourses; furthermore, it is also contestable whether this by itself can be a point of assessment, i.e., it ought to be connected to the damage incurred (*iunctim*). DUPUY argued, in fact, for proportion between due diligence and possible danger⁶¹ but, as a consequence of this view, there should be no protection in the case of unavoidable damage while maintaining due diligence, even if such damage amounted to a catastrophe.⁶² This statement leads, indeed, to the problem of determining relevant damage.

c) Transfrontier effects originating from the water uses of a riparian state are capable of causing *various types of damage*. Accordingly, the possibilities for water utilization may come to an end, or may be reduced or changed in the state affected by the said effects; the bank proper, the riparian sites, structures and installations connected to water use and management may suffer damage, and the scenic attractions of a watercourse may change, while flora and fauna may be destroyed, etc. According to another, equally possible classification, a distinction may be made between unique, casual or continuous, regular, foreseeable or extraordinary, latent, cumulative, particularly dangerous or irreversible damage. As a matter of fact, a high variety of coupled systems and, as a result, a great deal of variants of damage of a different nature may arise.

The qualification of possible forms of damage by international legislation and legal application has no significance *prima facie*, in general international law in

particular, taking into consideration the mainly concrete nature of international law already mentioned. Also, this statement has no absolute relevance as it is transgressed by some exceptions.

i) Where the codification or identification of general international law is concerned, the prohibition of causing damage used to be limited to cases of "appreciable harm", "serious affect" or "substantial injury".⁶³ While admitting the actual differences among the said qualifications,⁶⁴ an examination should nevertheless concentrate on the point whether or not this quasi-quantification of transfrontier effects can be regarded as relevant and, if so, to what extent. This concerns the methods of assessing damage which is not qualified as indicated above, i.e., non-appreciable, important, serious, considerable, substantial, etc., on the one hand, and the criteria according to which the demarcation line between the two categories in question can be drawn, on the other.

The varying possible damage was already perceived in the *theory of international law of neighbourhood*. Thus, according to FAUCHILLE, "Le riverain d'un cours d'eau aura le droit de faire tous les actes qui ne présentent pour ses coriverains que les inconvénients ou les incommodités *inséparables du voisinage*, mais il devra s'abstenir de tous ceux qui excéderont ces inconvénients ou ces incommodités".⁶⁵ This slight injury or minor inconvenience compatible with good neighbourly relations is presumably adequate for *de minimis* damage, and it seems to be unnecessary to accentuate its irrelevant nature, i.e., it has to be tacitly interpreted, being included in the prohibition on causing damage. Besides, the kinds of damage qualified as appreciable, etc., appear as the counterpart of the *de minimis* type.

While admitting the foregoing, an accentuation of the appreciable, etc., nature of the damage results in damage which exceeds the *de minimis* rate having at least two stages, i.e., one being unlawful and the other not.

The relationship between unlawfulness and damage will be dealt with later; here it need only be emphasized that transfrontier effects within the *de minimis* range and appreciable or serious damages presumably conform with the injurious consequences arising out of acts not prohibited by international law. The introduction of this latter concept implied, however, the appearance of additional problems, particularly if it did not influence the obligation to compensate for caused damage.⁶⁶

Also, the degree of actual damage, i.e., being appreciable, serious, etc., has been stressed only in some treaties or conventions dealing with the regime of utilizing international watercourses, while this categorization does not appear in other agreements. Thus, it is not contained either in the resolution of the Inter-American Bar Association adopted at Buenos Aires in 1957, nor in the Athen's resolution of the IDI of 1979.

Taking the preceding into consideration, the establishment of a relationship between qualifying damage as relevant and assessing it as important, appre-

ciable, considerable, etc., accentuated *expressis verbis*, a source of *a priori* disputes has been introduced into the interpretation of the prohibition of interference with the regime of international watercourses.

ii) Making a *distinction between relevant and non-relevant damage* has been a difficult problem. Hence, EVENSEN was right in his statement that: "The criterion, to an appreciable extent, may perhaps be lacking in scientific, technical, and mathematical stringency . . . it is hardly possible to devise scientific, technical, or mathematical formulae that could be more or less automatically applied to the great variety of elements that may be relevant, and to the concrete problems which necessarily will arise from time to time in regard to the relative use and enjoyment by the various system States of the waters of an international watercourse system; as a result of this, legal standards, with the necessary flexibility and faculty of forming and amending themselves with the endless variety of cases and developments, are preferable to hard and fast formulae."⁶⁷ This statement involves a double consequence. From a general international law level, *de minimis* delimitation and other damages exceeding the former, will depend on all the circumstances of a given case, on the one hand, and consequently, realizing it in terms of an international treaty or convention will not be excluded;⁶⁸ on the other hand, setting up some form of general thesis will necessarily be misleading. Thus, SMITH compared economic gains that may be attained by one state to losses suffered by the other state. Where the losses are unimportant, the state concerned will not be allowed to object to an initiative of the other states aimed at water utilization, but it will be entitled to ask for compensation and the preservation of its future interests. Nevertheless, if legitimate and vital interests of the state in question are threatened by an utilization project, it will be entitled to an absolute objection.⁶⁹ Several objections may be raised, however, against the above statement. First of all, reference may be made to the fact that the actual size of the damage in question may be smaller when compared to the value of the development work that caused it. With this in mind, it may be small in this sense but, in practice, it will be considerable.⁷⁰ Furthermore, SMITH and SEVETTE were of the opinion that, irrespective of the magnitude of the damage, an obligation for compensation was established under customary international law. It is then, however, that one is justified in raising the question that if the state were obliged to provide compensation for all damage, what would be the purpose of making a distinction between serious and minimum damage. As BOURNE noted, the rule formulated by the precited authors would be acceptable with the starting point being that, in the case of having caused insignificant damage, the state would be entitled to a unilateral procedure with the simultaneous obligation of providing compensation. In the case of serious damage, however, the state would not be allowed to do so, but "the validity of such a rule was doubtful".⁷¹

iii) The question may also be raised whether or not only *actual damage* may be regarded as relevant or may a *danger of damage* also be regarded as relevant. This is all the more important as "damage" as a constituent element has been omitted from the conditions for the existence of an internationally wrongful act in the formulation of the ILC.⁷² Contrary to the Spanish view, the award in the Lake Lanoux case excluded the consideration of potential *technical and political dangers* resulting from water drainage: "il n'a jamais été allégué que les ouvrages envisagés présentent d'autres caractères ou entraînent d'autres risques que les ouvrages du même genre qui sont aujourd'hui répandus dans le monde entier. Il n'a par été affirmé clairement que les ouvrages prévus entraînaient un risque anormal dans les relations de voisinage ou dans l'utilisation des eaux".⁷³ Furthermore, "... le risque politique ... ne présenterait pas un caractère plus anormal que les risque technique ... on ne trouve ... ni dans le droit international commun une règle qui interdise à un Etat, agissant pour la sauvegarde de ses intérêts légitimes, de se mettre dans une situation qui lui permette, en fait, en violation des ses engagements internationaux, de préjudicier, même gravement, à un Etat voisin".⁷⁴

With the above statement, the disregarding of a potential danger of damage has been unequivocally bound to conditions, coupling it, in fact, only with the habitual risks resulting from a similar activity, but having failed to solve the assessment of the reaction of technical development to previous utilizations. Besides, it was also not required to give a reply when damage actually occurred, taking into consideration that absolute technological safety can never be attained.

Although the problem of the danger of damage was mentioned by international lawyers only *per tangenter*,⁷⁵ its complete preclusion cannot be regarded as justifiable. In fact, the point is that it is not only *potential damage* that is also taken into consideration in terms of international treaties or conventions, mainly in respect of the definition of pollution. The danger of damage has an impact upon the assessment of the action provoking a transfrontier effect, with particular attention on the fact that the effects in question do not always instantly arise, i.e., they may be latent or cumulative, and be susceptible of producing unintended or unforeseen results. As the coming into existence of transfrontier effects is ensured by the causality following from natural laws, by itself involving danger in several cases, e.g., of highly dangerous substances, any restrictions on the possibility of the potential injured party submitting a claim at the international level for the occurrence of actual damage would, on the one hand, be insufficient, and, on the other, it could not be supported by the rules of general international law *de iure condito* beyond the requirement of cooperation. In fact, the scope of application of the said rules has also been extended to cases of potential damage.⁷⁶

d) Now the question should be raised whether or not the occurrence or the presumed danger of material damage within the parameters outlined above is

contrary, by itself, to the prohibition of interference with the regime of international watercourses, or is an additional condition also required. In another formulation, if *material damage is caused* to a country, is this *identical to injuring its lawful interests*? It is easy to understand why the two cases cannot be equated. In fact, reference is made in the Introduction of the ILA Committee's Seoul Report on International Water Resources Law that, among other points, the problem of the diversion of water out of, and into, the international basin has still to be studied.⁷⁷ This seemed to be a tacit admission that the principles so far restated were not concerned, in fact, with the state of affairs in question or that the reply was unsatisfactory.

The *coordination of the said prohibition with the principle of equitable and reasonable partition* raises a still more serious problem. With the realization of this in mind, a survey of the status of existing and future water utilization becomes necessary. Nevertheless, it has to be mentioned in advance that the relationship between the main rule and the exceptions is here concerned, on the one hand, with the general nature of the prohibition, and, on the other, the reply has only a provisional character. As the content of the principle of equitable and reasonable partition has not so far been clarified.

3. Protection of existing water uses

Several solutions and theories are possible in principle, such as causing damage to actual water uses is not permissible; these uses enjoy only limited protection; or they should not be taken into consideration at all. As the latter variant is hardly compatible with the prohibition on causing damage, only the two first cases should be examined.

a) Prohibition on causing damage to actual water uses

Essentially, this view means the preservation of the established *status quo* of water uses, referred to by the relevant authors either as the principle of the protection of first expropriation⁷⁸ or the obligation of respecting acquired rights.⁷⁹

Those authors who argue for the inviolability of water regimes⁸⁰ also acknowledge the prohibition on causing damage to existing water uses. Contrary to this view, BASTID would limit the protection of existing water uses to cases stipulated in an international treaty or convention or a concession, allowing the termination of the simple priority of utilization with simultaneous compensation.⁸¹ This view is shared by ANDRASSY who, although qualifying previous utilization as an acquired right, refused to accept its absolute character.⁸²

The rule of the protection of actual water utilization is laid down in Article 4 of a resolution by the IDI, adopted at Salzburg in 1961, which reads as follows: "No State can undertake works or utilizations of the waters of a watercourse or hydrographic basin which seriously affect the possibility of utilization of the same waters by other States except on condition of assuring them the enjoyment of the advantages to which they are entitled under Article 3, as well as adequate compensation for any loss or damages."⁸³ In terms of this text, the protection of actual utilization, on the one hand, is ensured, which conforms with the reasonable and equitable share mentioned in Article 3, and, on the other, it is established that actual water utilization in excess of the degree laid down can be terminated only by providing compensation or an indemnity. The substance of the Salzburg Resolution can be formulated so that established rights have no absolute value, i.e., they can be cancelled under given circumstances, but compensation for serious damage caused to the actual use has to be paid in any case. This principle is based upon three concepts: the right of water utilization is guaranteed for the state in terms of Article 2 of the Resolution, qualifying it as an established right under international law; according to Article 3, the other state is also entitled to water utilization, even if the water had already been used elsewhere; and finally, as the first right was established, compensation is payable for its termination. As BOURNE stated, this arrangement "makes the right of the subsequent user very different from that of the first user; it is a 'right' that must be bought by payment of compensation to the first user. This interpretation rather dilutes the meaning of 'right' in the second paragraph of Article 2, and it is difficult to reconcile with the concept of equitable apportionment of the beneficial uses of an international river . . ."⁸⁴ In spite of the correctness of the above statement, another of BOURNE's views is unacceptable, claiming that "... the Institute has in effect declared every serious injury to existing beneficial uses to be unlawful, for the injury gave rise to an obligation to pay damage".⁸⁵ The kind of water utilization by a riparian state which affects the water utilization of another state, exceeding its equitable share, may be considered according to modern terminology more as a harmful consequence of lawful behaviour, while an utilization causing injury to an equitable share will be an internationally wrongful act.

There is an internal contradiction, in fact, in the Salzburg resolution, as it recognizes the right to water utilization for all states, corresponding to a reasonable and equitable share, and actually allows the causing of damage to existing water uses, e.g., their termination, restriction, etc., at the same time prescribing an obligation to pay compensation for damage caused to actual water utilizations in excess of the degree of the reasonable and equitable share. There is an inherent practical threat in the said logical contradiction, i.e., it makes it impossible for a state to proceed to water utilization on the principle of reasonable and equitable share, for the amount of the compensation to be

paid together with the expenses of the relevant works would exceed its financial resources, thus depriving the state that commenced water utilization at a later time of the advantages to which it would be otherwise entitled on the basis of the rule formulated in Articles 2 and 3.

The rule of actual water utilization protection has only to some extent been incorporated into treaties and conventions concerning water regimes, and the same is true for the practice of the states concerned.

— A treaty or convention may guarantee the respect of precisely determined water uses.⁸⁶

— The obligation prescribing respect for water regimes is a frequent provision in treaties or conventions. In spite of its vague formulation, it can essentially be related to the maintenance of the *status quo* of water utilization. According to Article 14 of the 1949 Norwegian–Soviet agreement, problems concerning the setting up or utilization of installations that are susceptible to influencing water regimes, should be settled by special agreements between the contracting parties.⁸⁷ There are, however, other treaties or agreements with more precise delimited obligations. Thus, Article 2 of the 1927 Soviet–Turkish agreement ruled that both contracting parties were entitled to safeguard all installations and equipment destined for water utilization that existed at the time of the agreement’s conclusion. Article 4 of the 1957 Bolivian–Peruvian agreement, concerning Lake Titicaca, provided that the pertaining situation be respected.⁸⁸

Provisions emphasizing respect for “acquired or established rights” can be found in numerous treaties or conventions. Thus, the obligation of maintaining established rights was acknowledged in the Paris peace treaties following World War I,⁸⁹ nevertheless, it is worth mentioning that in respect of the Rhine, rights of this kind were at the same time modified in favour of France under the terms of the Versailles Treaty. Provisions aimed at the protection of established rights have been stipulated in many treaties or conventions relating to frontier waters.⁹⁰ On the other hand, such stipulations occur less frequently in treaties or conventions regulating the utilization of rivers and lakes not considered as frontier waters.⁹¹ Furthermore, the obligation to respect established rights may be found explicitly in some other treaties or conventions on water regimes, e.g., it is stipulated as a general obligation in Article 3 of the 1967 Czechoslovak–Austrian treaty that “... not affecting established rights, both parties have the right of disposing of 50% of the natural delivery of the frontier waters, not increased by technical means”.⁹²

— At the same time, the provisions of several treaties or conventions do not prescribe any respect for established rights;⁹³ in other treaties, only a limited significance has been attributed to the protection of established rights or actual water utilization, respectively.⁹⁴ Thus, Italy’s rights to water utilization were recognized only for a limited period in terms of Annex III of the Italian peace

treaty of 1947. In other cases the respect for established rights was regulated so as to have a relative character, i.e., consultation was necessary prior to proceeding to actual water utilization, according to the provisions of the 1966 agreement concerning Lake Constance, the 1955 Bulgarian–Romanian agreement, the 1963 Niger Act and the 1964 agreement, the 1964 Tchad convention, and the 1973 Argentinian–Uruguayan treaty.

— Provisions relating to the unchangeability of water regime conditions and respect for established rights may almost exclusively be found in treaties or conventions relating to frontier waters, but exceptions have also existed in this field.⁹⁵ Furthermore, a parallel may be drawn between prohibitions of this kind and other provisions of treaties or conventions concerning frontier waters, frequently provided for and requiring the preliminary approval of the other interested party. As evidence is given in the following chapter that there is no rule in international law which would always call for the preliminary approval of the other party to water uses or works which may potentially cause damage, then one may doubt whether it is justified to pay compensation for all damage caused to existing water uses.⁹⁶

— The prohibition on causing damage to actual water uses became a part of several treaties or conventions on account of the fact that there was no important utilization in the international watercourse forming the subject-matter of the respective treaty or convention.⁹⁷ In such cases the purpose of the regulation was more concerned with the sharing of surplus water and the assurance of the extension of water utilization. Accordingly, they have only doubtful significance in cases where there is no surplus water available for maintaining existing uses and covering, at the same time, the needs of the other party.⁹⁸

Taking the aforementioned into consideration, the conclusion may be drawn that existing water utilizations were duly taken into account in terms of the relevant treaties or conventions without establishing, however, a general prohibition on causing damage, and this meant that actual water utilizations could be cancelled or restricted in specified cases. This view is also supported by the 1959 agreement on the Nile and the 1960 Indus treaty, to which most references were made when the rule of respecting actual water uses or established rights respectively, was set up.

Egypt's established rights were absolutely acknowledged by an exchange of notes between Great Britain and Egypt in 1929. The established rights of Egypt and Sudan for a specified volume of water are stipulated in Article I of a 1959 agreement, but this provision can also be interpreted so as to be included in the proportion determined by the principle of reasonable and equitable share. This interpretation was then confirmed by item 2), Article V of the said agreement, establishing the right of some upstream states such as Ethiopia, Tanzania, Kenya, Uganda, and Zaire to part of the waters of the Nile, thus reducing the share of the United Arab Republic and the Sudan. This provision of the

agreement was commented on by BOURNE as follows: "... while these provisions are not admission of the validity of these claims, they suggest a lack of assurance that the claims of upstream states for some fair share of the Nile waters can be successfully devised".⁹⁹

The 1960 Indus treaty is worth noting from two points of view. Article II provided for the setting up of a transitory period of ten years, during which India would limit water delivery from the eastern rivers in the manner specified in an Annex to the treaty, and Pakistan would then be entitled to dispose of this volume of water at its discretion. The transitory period could be prolonged but upon its expiration Pakistan would not be allowed to demand from India the continued delivery of the volume of water in question. Nevertheless, if India continued to deliver the said volume of water, Pakistan would again have the right of free disposition thereof but, if it made use of it, this would not entitle it to demand the continued realization of this concession for its own water uses, neither by means of prescription nor in any other way. Accordingly, this provision of the Indus treaty acknowledges the significance of actual use, on the one hand, but is aimed, at the same time, at its gradual termination, on the other.

At the same time as the conclusion of the Indus treaty, an agreement was reached for the establishment of the Indus Basin Development Fund, amounting to US \$ 900 million in total. Part of it, i.e., \$ 62 060 000 was payable by India and the rest by the World Bank, with the contributions of six states. The purpose of the fund was to give assistance to Pakistan for the building of structures and installations required for the utilization of the waters received within the terms of the Indus treaty. Nevertheless, the treaty in question cannot be interpreted as if the respective amount was to serve as compensation for the damage caused to the previous uses of waters by Pakistan by the new utilization rules, taking into consideration the fact that, as BOURNE was right to note, the underlying purposes of the fund were of a political nature.¹⁰⁰

The view which adheres to the prohibition of serious violation of actual uses and the payment of compensation for damage has not been unequivocally proved, even by judgements made by international courts. Thus, the award rendered by an arbitral tribunal in the Lake Lanoux case stated that, as the French project for the utilization of hydraulic power did not cause Spain any harm whatsoever, there was no need to consider possible compensation. Even if some *obiter dicta* could be found in the award on the principle of the prohibition on causing damage, GERVAIS noted in his comment on the award that water diversions without restitution ought to be condemned, except with the consent of the downstream state (which meant it gave up its rights), provided that, as a result of this, existing uses, i.e., the actual situation, suffered damage as a consequence of the termination or decrease of the natural flow of the waters concerned.¹⁰¹ Nevertheless, the said comment was formulated conditionally,

thus not excluding an interpretation which claimed the respect of the rights guaranteed in terms of Articles 9 and 11 of the Pyrenees Treaty. Furthermore, the tribunal "... gave no hint of what respect would have been required by general principles of international law..." Besides, "... it made it quite clear that the duty to take account of interests related only to the procedural matters of prior notice and consultation, and that a state which follows this procedure in good faith is not under any further obligation if it affects the interests of the other state".¹⁰²

Taking the treaties and conventions on water regimes and international practice into account, it can be stated that there is, for the time being, no rule which would prohibit causing serious damage to the water uses of another state in *all cases* or to make the termination or limitation of water utilization by the other state conditional upon compensation. It is evident, however, that, at the same time, actual water uses have a high significance in procedures taking the relevant interests into consideration.

b) Relative protection of actual water uses

As early as during the height of the theory concerning respect for established rights, some authors were of the view that water usage could not enjoy absolute protection. As a result, there was no ban on terminating or limiting it, in some cases without compensation. STRISOWER, at the Madrid session of the IDI in 1911, raised the question of what was to be understood as damage caused by an exploitation practised by another state, and qualified all exploitations as harmful, irrespective of their nature. From a legal approach, it is beyond doubt that damage means an injury to the rights of the other state concerned.¹⁰³ According to the views of several authors,¹⁰⁴ the prohibition on causing damage was applicable only to cases in which water uses as practised by a state caused injury to the lawful rights of another state. Consequently, water usage could in this sense also comprise activities or measures that might involve harmful results of an important magnitude for other riparian states. This rule essentially means that a distinction has to be made between actual methods of water usage. Thus, some correspond to the right of a reasonable and equitable share, on the one hand, and they therefore enjoy protection, with it not being permissible to cause damage to them; some others, however, exceed these bounds so that their termination, limitation or other damage caused to them are not considered as unlawful.

This opinion can also be unfolded from statements made by some authors. Thus, KLIMENKO refused to consider the inviolability of established rights,¹⁰⁵ and claimed that the principle of a prohibition on causing damage was applicable only to specified rights and interests.¹⁰⁶ CUTH qualified it as unlawful if the

sovereign rights of the other state were violated.¹⁰⁷ Although the author avoided any explicit formulation, it was a logical consequence of the said opinion that any riparian state was entitled to water utilization only to the extent determined by the similar rights of other riparian states. Hence, any water utilization beyond that limit could be terminated without any consequence.

The Helsinki Rules ensure an important place for actual water uses but their protection is limited. Thus, substantial injury caused to another state is mentioned as one of the factors determining the concept of reasonable and equitable share in Article V, point 2/k. The said provision made sure that actual uses would be persuasive in determining the reasonable and equitable share, but only as *one* of the relevant factors. This is clearly expressed in the following: "... despite the usual desirability of protecting existing reasonable uses, the competing factors indicate that some modification of the existing use is called for..." and "... If no other solution can be found, however, one of the uses may necessarily have to prevail to the impairment of the other uses; the amount and kind of compensation, if any, to the State deprived of its uses would then be determined".¹⁰⁸

Accordingly, the protection of actual uses is limited by the Helsinki Rules. This limitation appears, first of all, in the rule that it is enforced until the realization of the right of future utilization, and the *status quo* of the utilization is to be supervised when this occurs. Subsequently, actual uses will represent nothing more than one of the factors to be taken into consideration. Nevertheless, water utilization corresponding to the reasonable and equitable share enjoys full protection. The Helsinki Rules contain no explicit provision on this point, but it is what may be concluded from point 1) of Article VIII, which reads as follows: "An existing reasonable use may continue in operation unless...", and also from point 3), reading: "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". According to an example from the comment referred to above, "... a diversion of water that denies a co-basin State of an equitable share is in violation of international law".¹⁰⁹

Thus, the Helsinki Rules imply a prohibition on causing damage.¹¹⁰ Nevertheless, the explicit formulation was left to Article 1 of the Seoul Resolution.

In determining the relevant damage, the wording of the Helsinki Rules drew a logical conclusion on the principle of reasonable and equitable share, i.e., damage caused to water uses corresponding to a reasonable and equitable share was deemed to be non-permissible, and water uses in excess of this degree were denied protection.¹¹¹ Accordingly, the practical value of the prohibition on causing damage depends on the determination of the degree of the reasonable and equitable share. In addition, it should also be noted that an injury to the reasonable and equitable share has to be accepted if the damage is of a *de minimis* character, on the one hand, and, on the other, if an abuse of the law is

susceptible to being itself prohibited. Furthermore, it has to be also noted that the termination of water use in excess of a reasonable and equitable share is more a matter of theory as, in the absence of a relevant treaty or convention, its practical enforcement would constitute the source of a serious conflict. This is clear from the dispute on the river Euphrates. As a result of water usage by Syria, the volume of water capable of being utilized by Iraq suffered a substantial decrease which in turn led to a serious conflict between the two states. A provisional solution was found so that Syria undertook the obligation to secure the water supply to Iraq "according to its needs".¹¹²

Finally, the question should be raised whether or not a special situation has to be created for specific water uses.

According to BOURNE's starting point, the practice was almost always concerned with the protection of actual downstream uses. In view of this, there is a question whether or not the rules relating to the previous water uses of downstream states may be applicable to the water uses of upstream states. In the view of the author, damage is irrelevant in this case, and the issue here is that "... a downstream state has a right to demand modification of prior utilizations upstream so that it may increase utilization of the river in its own territory...".¹¹³ According to BOURNE, various arguments were practicable; on the basis of the practice of the American Supreme Court, he would favour an upstream state in respect of water utilization¹¹⁴ being aware, at the same time, of the extreme scarcity of relevant examples.¹¹⁵ This exception which could also be used in the author's view, but only *de lege ferenda*, is, however, unacceptable for it is contrary to the equality of the rights of states, on the one hand, and, on the other, a rule of customary international law cannot be based upon the awards of the American Supreme Court; an argument claiming that (taking into consideration *lucrum cessans*) a downstream state would not suffer injury also seems to be beyond reality.

Another variant has to be taken into account as well. Actual water utilization may be based upon an international treaty or convention in which the degree of reasonable and equitable share between the contracting parties has already been laid down. Then, bearing in mind the treaty or convention, the parties proceed to make substantial investment. Nevertheless, the treaty or convention may cease to operate as a result of causes that could not be foreseen. In the absence of a treaty or convention, the states concerned may exceed the reasonable and equitable share due to them at their own risk. Now, however, some questions may be raised. Would or would not the situation be different if the parties acted according to the continued existence of the conventional provisions, and would the termination of the treaty or convention affect the stipulated degree of the reasonable and equitable share? Can the parties be deprived of the utilizations in effect under the terms of the treaty or convention without any compensation? There are views¹¹⁶ acknowledging the significance

of water uses based upon terminated treaties or conventions, but there are no precedents in this respect. A hint may be found in Article 70, item 1/b of the 1969 Vienna Convention on the law of international treaties, which reads as follows: the termination of a treaty "does not affect the rights, obligations or legal situations of the parties that came to existence in the course of the implementation of the treaty prior to its termination". As is expressed in the relevant comment to the draft, only rights, obligations or the legal situations of states are concerned here, without any reference to the established rights of private persons.¹¹⁷

The question concerning the case where the actual water utilization of a state is inferior to what it is entitled to has to be also raised in connection with the solutions given by the Helsinki Rules. This is transitory to the problem of assessing future utilization.

4. Acknowledgement of a right to future utilization

As there have been temporary differences in the development of water uses and management in various countries, problems have also arisen concerning the rights of the state which, as a result of various causes, wished to utilize international watercourses only at a later date. Is the other country concerned obliged to leave this possibility of water utilization unaffected or must it refrain from utilizing a proportional part of international waters? How can opposing interests be measured in such cases, and how can these interests be coordinated?

As for future utilization, Article VII of the Helsinki Rules reads as follows: "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." Furthermore, the following is laid down in item 1) of Article VIII. "An existing reasonable use may continue in operation unless the factors justifying its continuance are outweighed by other factors leading to the conclusion that it be modified or terminated so as to accommodate a competing incompatible use." As for the ILA, the complexity of problems affecting future uses should, in its view, be settled by means of two rules: the right of utilization of one state is recognized, on the one hand, unless another state raises a claim to water exploitation; this rule should not mean, on the other hand, the refusal of a claim for future utilization; on the contrary, when a claim is raised, the previous user will be obliged to limit or terminate utilization. In this respect, the comment refers to two solutions; preference had to be given to one of them in the course of formulating Article VII. According to the first variant, the share ought to be assured even if the waters concerned were not capable of being utilized at a given time. This would be a just measure but no guarantee could be given for the commencing of future utilization. Since this could not be

foreseen, the storage of water would, in fact, be a waste of supplies. In view of this, the solution favoured the second approach, not prescribing water storage and not impeding actual utilization. Nevertheless, if the state which did not make use of water resources or used them only to a small extent "... is ready to use the waters or 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".¹¹⁸ This rule is formulated in point 1) of Article VIII, mentioned in the foregoing.

The double-edged concept of the ILA can also be found in the works of other authors. Thus, BOURNE remarked that "... a state can lawfully utilize the water of its rivers if it is not being used or is not about to be used, to satisfy the needs of co-riparians. To say this, of course, is not to deny that those co-riparians who do not now need the water may in the future have valid claims to some of it when they do in fact need it".¹¹⁹ It seems that the author supports the rule based on reasonableness which governed the attitude of US courts "for it encourages the utilization of water that otherwise would be wasted".¹²⁰ LIPPER argued for the concept with the following points: the realization of the relevant plans was not guaranteed; modifications thereof could not be excluded, and it would be unjustified and incompatible with equitable utilization to store water reserves even if the demands of actual users could not be satisfied; finally, prior to the realization of future utilization, changes in the volume of utilizable water, the needs of the riparian states, the nature of the utilizations, and technology are at hand.¹²¹ Also, he mentioned that damage to interests connected with future utilization cannot be measured and, accordingly, a judicial decision could be based upon nothing more than mere presumptions. However, he added, the following to the aforementioned remarks: "Development aspirations of the co-riparian states, irrelevant in the courthouse, may achieve status and recognition at the bargaining table",¹²² and this was understood to mean the urging of the conclusion of a conventional settlement. Even when agreeing with the reasonableness of conventional settlement, a contradiction is revealed between two elements of the said statement: how could the negotiating parties be in a position to take conflicts of interests resulting from future utilization into consideration, and why would this be impossible for a court, faced with the fact that the basis would be a presumption in both cases.

In other views the recognition of the right of future utilization is connected with safeguarding the possibilities of utilization securing the said right, i.e., the relevant volume of water. Thus, VON BAR who submitted the report that served as the basis of the 1911 Madrid resolution of the IDI, denied the possibility of completely ignoring future utilization, with reference to the requirement of preserving "the utilizable and substantial characteristics of the river".¹²³ In this respect, the Salzburg resolution of 1961 is rather obscure. Reference is made in Article III to the consideration of needs without mentioning, however, needs for

which there exists no satisfactory utilization. Furthermore, "possibilities of use" are mentioned in Article IV. Contrary to this, the necessity of assuring maximum utilization is laid down in the Preamble, so the said resolution could be also interpreted as if there were no intention of preserving a surplus volume of water for possible future utilization.¹²⁴

KLIMENKO took the stand, very positively, that full protection of future utilization is granted under international law. Under his argument, it was hardly possible to speak of a distant future in the given case; furthermore, maintaining the right of sovereign control over the respective river had an increasing significance and, if a state had a right to a reasonable and equitable share, the relevant section had to remain under its control, irrespective of technical circumstances and the claims of other states.¹²⁵

When looking to the correctness of one of the views which ought to be confirmed by practice, one will find that provisions settling the problem of future utilization have been rather rare in relevant international treaties and conventions; nevertheless, the existing scarce rules are in fact rather uniform. Thus, one of the purposes of integrated development was to comply with the existing and future needs of one party (Yugoslavia), in terms of Article 7 of the 1970 Greek-Yugoslav agreement. Other treaties provide, however, for a temporary cession, of the share due to one of the contracting parties, such as Article 9 of the 1944 treaty concluded by the USA, and Mexico, in respect of the Rio Grande, or Article VIII of the 1950 American-Canadian treaty, in connection with Niagara Falls. As these treaties contain explicit provisions concerning the temporary cession of the share of one party in favour of the other party, this is equivalent to the tacit recognition of future utilization.

Regional agreements with a codification character render no assistance to the formulation of a rule respecting future utilization either. Thus, the draft proposal by the Asian-African Legal Consultative Commission follows the text of the Helsinki Rules. The problem of future utilization is of no relevance in the Inter-American draft agreement of 1965 to an agreement between the interested state, directly or indirectly. This is based upon an arbitral award, provided for each project, and consequently it is not of interest whether an existing or a future utilization is threatened.

In the arbitral award given in the Lake Lanoux case, the problem concerning water drainage projects which would compromise the possibility of future water utilization was left open.¹²⁶

As is clear from the aforementioned, international practice has so far been quite poor in allowing the development of a rule of a general nature. Nevertheless, the problem of future utilization can be settled on the basis of the fundamental principles of international law, and the conclusion that may be drawn from these principles is supported by the respective international treaties and conventions. Thus recourse has to be made to the principle of respecting ter-

territorial sovereignty, and the rule has to be acknowledged in this respect that its restriction cannot be presumed, i.e., it can be based only upon clear evidence; nevertheless, this cannot be found in actual state practice. While continuing the analysis of future utilization, some other conclusions may also be drawn. In particular, the existing absence of equality among states in the field of water utilization has to be taken into consideration. As a consequence of this, an existing utilization of waters by a downstream state does not restrict the utilization possibilities of an upstream state nor can it be deprived of this, respectively, as the former will always be in a position to make actual use of its right to a reasonable and equitable share, unless political considerations are against such enforcement. Contrary to this, a downstream state is, practically speaking, not in a position to enforce its claim against the upstream state if the latter were unwilling to accept it. As a result of this, an effort by the downstream state aimed at "regaining its sovereign rights"¹²⁷ may provoke a serious international conflict.

The fundamental considerations dealt with above explain the protests by states in cases in which, in their view, their rights would suffer on account of planned water utilization by another state. Great Britain proceeded in this way, e.g., at the conclusion of the 1959 agreement on the Nile, acting on behalf of her colonies in Africa,¹²⁸ and this approach was expressed when Switzerland used to be mentioned as "a colony of water regimes".¹²⁹

The right to future utilization is not only recognized under international law but protection is also provided for the possibilities of its realization. Accordingly, Article VII of the Helsinki Rules cannot be regarded as an adequate formulation of customary international law, only as a *de lege ferenda* proposal, not being in conformity with the fundamental principles of international law. In fact, the application of the criterion of reasonable and equitable share here led to an erroneous result, thus reducing the value of the principle of reasonable and equitable share as formulated in the Helsinki Rules.

With respect to the possibilities of interpretation, it is only regrettable that the drafts submitted to the ILC¹³⁰ fail to mention the problem of the protection of future utilization, although it may be included *in nuce* by the declaration of the right to a reasonable and equitable share or the statement of the prohibition on causing damage.¹³¹

5. Flood protection

Catastrophes brought about by floods resulting in human and material losses have occurred throughout the history of mankind. Problems of this kind have also presented themselves, of course, in respect of international watercourses, and so it is right to raise the question of whether or not the scope of relevant damage resulting in responsibility under international law includes damage

caused by floods. As a matter of fact the regulation of flood protection in international law covers a much broader field. It is worth mentioning this point briefly in this connection.

According to a UN document, flood protection forms the subject-matter of 22 international treaties or conventions.¹³² Provisions from this field are found, first and foremost, in treaties concerning frontier waters, and they are aimed at the simple maintenance of the existing conditions of water drainage.¹³³ In addition, rules in connection with flood protection are also provided, e.g., in the treaties or conventions concerning the utilization of hydraulic power¹³⁴ or the division of volumes of water, respectively.¹³⁵ The problem of flood protection, however, has been subjected to rules regulating other issues of water utilization, both in frontier water treaties or conventions and in the other agreements referred to above. As for international situations, the ECAFE dealt with problems affecting flood protection in particular, mainly from the point of view of technical aspects,¹³⁶ but the matter was also on the agenda of a UN conference on water regimes¹³⁷ and a seminar held in Dakar;¹³⁸ the latter meeting was principally concerned with international cooperation.

The legal regulation of flood protection was less interesting for relevant authors but, taking the preceding remarks into consideration, this is easily understood. With this in mind, the New York resolution of the ILA on flood protection, adopted in 1972,¹³⁹ has particular significance. In the provisions contained in eight articles, the resolution appears as an effort to formulate customary international law as accepted in this field; additionally, it contains some *de lege ferenda* suggestions as well. The resolution is based on the Helsinki Rules;¹⁴⁰ thus, an explicit reference is found in Article 8 to Articles XXX—XXXVII of the 1966 resolution concerning the settlement of disputes. At the same time, there is no mention in the resolution on flood protection of the fundamental principle of reasonable and equitable share, and the comments to it contain no explanations either.

Point 1) of Article 5 of the resolution reads as follows: "The use of the channel of rivers and lakes for the discharge of excess waters shall be free and not subject to any limitation provided this is not incompatible with the object of flood control." The following is added to the text in point 3): "No basin State shall be prevented from undertaking schemes of drainage, river draining, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of its portions of watercourses provided that, in executing any of these schemes, it avoids any unreasonable interference with the object of flood control, and provided that such schemes are not contrary to any legal restrictions which may exist otherwise."

It is emphasized in the provisions of this resolution mentioned above that the state is free to take various measures aimed at flood control, such as the building of dams, water drainage, bed regulation, prevention of erosion, bed dredging

and ensuring the discharge of water by other means; nevertheless, to some extent limitations exist in this respect under international law.

The rules of the ILA resolution referred to above have been confirmed by a series of provisions from treaties or conventions concerning water regimes. Thus, the freedom to take measures aimed at flood control has been laid down in several treaties or conventions.¹⁴¹ This is frequently formulated so that the other party is not allowed to prevent the downflow of floods.¹⁴² This intention is also contained in the prohibition on modifying the water level, mainly laid down in respect of international lakes.¹⁴³ The limits on the state's freedom of action are set forth in the precited provisions of the ILA resolution, and it is stated that "it must not be incompatible with the purpose of flood control" or "it must not prevent the purpose of flood control in an unreasonable way". The essential point in this context is that the state is not allowed to proceed in the area of flood control without limit; a more precise formulation can hardly be imagined as a general rule, even if it had a very soft character.

The formulation of Article 7, dealing with the responsibility of states under international law, is connected with the provisions of the resolution commented on above. It reads as follows: "A basin State is not liable to pay compensation for damage caused to another basin State by floods originating in that basin State unless it has acted contrary to what could be reasonable expected under the circumstances, and unless the damage caused is substantial."

The exceptional character of responsibility for damage originating from floods is correctly reflected in the rule referred to above, as it has to be taken into consideration that floods are caused by natural phenomena. Accordingly, responsibility under international law is only relevant if the behaviour of the respective state contributed to the appearance or growth of floods and, in accordance with international practice, even in these cases only if the actual damage was of a substantial nature.

Nevertheless, the rule as worded in Article 7 cannot be considered as satisfactory in all aspects. Apart from what was said above in connection with "substantial damage", it is apparent from the text that the state is only responsible in the case of fault. This interpretation is unequivocally supported with the reference to OPPENHEIM in the comment.¹⁴⁴ Besides, the starting point is that, essentially, in this case it may concern the responsibility of the state for an individual under international law. Thus, the state grants a concession to a private corporation that is building a structure which is not in line with the purpose of flood control or, when the concession was granted, the possible harmful effects of the structure in question were not taken into due consideration or, following the completion of the construction work, the respective structure was not inspected with the required care. The fundamental case, however, is, the activity of state organs in respect of flood control, i.e., behaviour resulting in, or increasing, damage from a flood, which is imputable to state organs.

The rule formulated in Article 7 unequivocally covers damages affecting investment stocks in inundated territories, objects registered in land inventories, and agricultural products. Nevertheless, the damage resulting from floods cannot be limited to particular types of destruction by water, as river regulation, dam building for flood control, terrain arrangement, the building of retention dams and barrages, deforestation, etc., influence the so-called standard water level in the case of a flood which is decisive for the degree of prevention. Flood levels have been continuously increasing since the mid-19th century;¹⁴⁵ as a result of this, downstream states are constantly faced with growing prevention costs. Although differing views on this subject are not known, one may conclude, however, bearing in mind the rules of international law, that the relevant states may only be obliged to tolerate the additional costs mentioned above to a given limit.

The bursting of a dam forms another problem, but the ILA resolution in question contains no rules for such a case. First of all, here we are concerned with the collapse of a barrage, as was the case in France (Frejus) and Italy (Vailont), but there has been no example of fluvial inundations or intrusions on the territory of another state. According to some views, this would necessarily involve the responsibility of the state concerned under international law.¹⁴⁶ The bursting of a dam serving flood control purposes constitutes a more complicated case. This may occur from natural causes and, additionally, if a dam is breached by state authority in order to save its territory from the danger of a flood. Nevertheless, the correctness of such action may be questioned as the recognition of an emergency from the international law aspect is disputed, on the one hand, and furthermore, the state can be suspected of having defaulted in having failed to take reasonable flood protection measures in due time.

The ILA resolution, mentioned above, also contains recommendations in Article 5, stipulating that the relevant states should maintain their sections of watercourses, including flood control constructions in good order, and should ensure the prompt execution of repairs or other emergency measures (items 2 and 4) of the said Article. Problems of this kind used to be regulated by international treaties or conventions dealing with flood control¹⁴⁷ and, as a matter of fact, the non-observance of conventional obligations involves responsibility under international law, as laid down in the 1961 USA-Canadian treaty on the river Columbia (Article XVIII, item 1). The starting point for the ILA was that the conventional obligations in question could not be generalized as an obligation aimed at an action could only be formulated in the form of a recommendation.¹⁴⁸

The obligation of states to cooperate in measures of flood control is in the forefront in the ILA resolution (Article 2), and the fields of cooperation are also enumerated in Articles 3 and 4, although not in full. Nevertheless, measures to be taken within the framework of this cooperation should only be effected on

the basis of inter-governmental agreements, i.e., it was left to the basin states to determine the ways and means of cooperation.¹⁴⁹

It remains questionable, however, whether or not the obligation of cooperation includes only the exchange of information joint research projects, the establishment of common works or structures, and the duty of notification, and whether the obligation of negotiation ought not to be mentioned as well. Additionally, it can be disputed whether all obligations as stipulated have only a *de iure condendo* character. The doubts raised by the resolution on flood control resulted, in fact, from the ILA's failure to integrate the principle of reasonable and equitable share into the text. Apart from other points, this omission is unacceptable as flood control is connected to other aspects of water utilization.

The 1972 resolution contains no provisions concerning some problems closely related to flood control, e.g., the provisional or final fluvial inundation or intrusion of part of the territory of another state as a result of the building of water regime installations or equipment. Situations of this kind used to be regulated by the interested states by means of an international treaty or agreement which, usually, also contained provisions on compensation for damage.¹⁵⁰ In view of actual international practice, it can be stated that a fluvial inundation without the consent of the affected state is to be regarded as a breach of international law.

In spite of the *iunctim* between floods and damage which cannot be doubted, cooperation has always been placed in the foreground in the development of international law. This was already reflected in principle No. 9 of the document elaborated within the framework of UNEP¹⁵¹ and the work of the ILC was also guided by it, within the context of water damage cases. Thus, EVENSEN's second draft reads as follows:

"1) States of the watercourse shall cooperate in accordance with the provisions of this Convention with a view to prevention and mitigation of water-related hazardous conditions and occurrences as the special circumstances warrant. Such cooperation should, *inter alia*, entail the establishment of joint measures and regimes, including structural or non-structural measures, and the effective monitoring in the international watercourse concerned, of conditions susceptible to bringing about hazardous conditions and occurrences such as floods, ice accumulation and other obstructions, sedimentation, avulsion, erosion, deficient drainage, drought, and salt water intrusion.

2) States of the watercourse shall establish an effective and timely exchange of information and data and early warning systems that would contribute to the prevention or mitigation of emergencies with respect to water-related hazardous conditions and occurrences relating to an international watercourse." (Article 26).¹⁵²

Taking into consideration that it would be premature to analyze the text cited above, we will limit our opinions to some remarks:

— Useful and desirable as it is to draw attention to the aspect of cooperation, the problems related to damage resulting from floods and other sorts of water-related damage must not be neglected either;

— Taking into consideration the development of international law, would it not be useful to broaden the scope of cooperation, and to formulate an obligation to provide assistance?

— Is it compatible that the elements of cooperation are formulated in a conditional sense, on the one hand, and the stipulations concerned at the same time, form part of an international treaty or convention, on the other?

Notes

¹ RIAA, Vol. III, p. 1965, ICJ, Report 1949, p. 22 in which a direct territorial connection was no longer required by the International Court of Justice, although it applied only to relations of neighbouring states in the Award of the Tribunal.

² Cf. GA/RES/2996/XXVII, the Charter of Economic Rights and Duties of States, Articles 3 and 30, GA/RES/328/XXIX, GA/RES/34/186 (Article 3, para. 1). See also the UN Water Conference, Action Plan, para. 90 (UN Doc. E/CONF.70/29).

³ Cf. World Heritage Convention of 1972, Article 6, para. 3; Dumping Convention of 1972, Preamble; Long-range Transboundary Air Pollution Convention of 1979, Preamble; Convention of the Law of the Sea of 1982, Articles 193 and 194, para. 2.

⁴ UN Doc. A/CN.4/1 Rev. 1, p. 34.

⁵ E.g. BEDARD: *op. cit.* p. 130; BOURNE: *op. cit.* 1965, p. 254; CUTH: *op. cit.* p. 117; HERCZEGH: *op. cit.* 1968, p. 14; WINIARSKI: *op. cit.* p. 81; *ibid.* ILC special rapporteurs: SCHWEBEL (UN Doc. A/CN.4/348, para. 113), McCaffrey (UN Doc. A/CN.4/399, para. 42).

⁶ For details see: SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 116, footnote No. 229).

⁷ Cf. BLACKSTONE's Commentaries, Vol. I, p. 306; BROM's Legal Maxims, pp. 206, 246, 327, 332, 336, 340, 348, 353.

⁸ OPPENHEIM-LAUTERPACHT: *op. cit.* Vol. I, p. 346; SCHWARZENBERGER: *op. cit.* 1971, p. 87; implicitly: AMADOR's Fifth Report, p. 53; for details see: SCHWEBEL's Third Report (UN Doc. A/CN.4/348, paras. 117—118).

⁹ For its acceptance see: SCHWEBEL's Third Report (*ibid.* para. 117), with reference mainly to Article 300 of the Convention on the Law of the Sea from 1982.

¹⁰ ANDRASSY: *op. cit.* 1961, pp. 110—111; ARECHAGA: *op. cit.* 1968, pp. 540, 77 et seq.; BYSTRICKY: *op. cit.* p. 76; DICKSTEIN: *op. cit.* p. 492; LAMMERS: *op. cit.* pp. 570—572; UTTON: *op. cit.* 1973, p. 57; VON DER HEYDTE: *op. cit.* 1960, pp. 135—136.

¹¹ E.g. in the environment commission of the OECD (see: DUPUY: *op. cit.* 1976, pp. 172—176), and one of the working team of UNEP (see: WILLHEIM: *op. cit.* pp. 109—112).

¹² QUENTIN-BAXTER's Fourth Report (UN Doc. A/CN.4/373, paras. 3—6). The changes in the views expounded in the 3rd UN Conference on the Law of the Sea may be considered as characteristic. For more details see: DUPUY: *op. cit.* 1985, pp. 1938—1043.

¹³ Cf. Helsinki Final Act, second basket, Part 5 (environment), point 2.

¹⁴ BILDER: *op. cit.* pp. 166—167; FLORIO: *op. cit.* pp. 159—160.

¹⁵ The stipulation that none of the parties will be authorized to take a measure affecting an international watercourse, which could bring about a substantial harmful effect in the territory of

the other party, was laid down in all treaties or conventions concluded by Germany prior to 1945. Cf. UN Doc. WATER/POLL/CONF/L Vol. II, p. 401, the 1964 Bulgarian–Greek agreement, Article 2, the 1964 Polish–Soviet agreement, Article 9, the 1971 Finnish–Swedish agreement, Chapter I, Article 4.

¹⁶ Unequivocally e.g. the 1929 Norwegian–Swedish agreement, Article 12, para. 1, the 1915 French–Dutch treaty on the border between Guayana and Surinam, Article 3.

¹⁷ Cf. the 1956 Convention concerning the canalization of the Moselle from 1954, Article 54, the 1958 Ouz River Treaty, Article 4, the 1963 Upper Garonne Convention, Article 1, the 1958 Polish–Soviet frontier regime treaty, Article 12, para. 2.

¹⁸ The recognition of this principle has been realized e.g. by the 1971 Act of Asunción, Resolution No. 25, point 2), and the 1971 Act of Santiago, point 4).

¹⁹ Cf. the treaties and/or agreements concluded by Britain in respect of the course of the Nile at the turn of the century, such as Article 3 of the 1891 British–Italian protocol, Article 3 of the 1902 British–Ethiopian treaty, Article III of the agreement concluded by Britain and the Congo in 1906, and the exchange of notes on the Nile in 1929 (Note No. 1, para. 3), the effect of which was doubtful on account of the succession of states and the 1959 Nile Agreement, respectively. See, furthermore, the 1944 Rio Grande–Colorado–Tijuana Treaty, Article 9, the 1950 Niagara Treaty, Articles III and VIII, the 1961 Columbia Treaty, Article XIII, the 1956 Convention concerning the canalization of the Moselle, Article 54, and Article 7 of the Meuse Treaty, concluded by Belgium and the Netherlands in 1863.

²⁰ E.g. Article 2, para. 3) of the 1927 Douro convention, the 1966 Lake Constance agreement, Article 1, para. 2, and Article 3, paras. 1–2, with a conditional character.

²¹ E.g. the Lake Woods agreement (Article 4), concluded by the USA and Canada in 1925, the Lake Dojran minutes, signed by Greece and Yugoslavia in 1956, Section III, paras. 2–3 and 5–6, and the connexion treaty on the Scheldt and the Rhine, concluded by the Netherlands and the Federal Republic of Germany in 1963 (Article 15).

²² E.g. the concession for the building of the Grand Canal d’Alsace, granted by Germany in terms of the Versailles Peace Treaty (Articles 358–359), Article 1 of the Spöl convention, concluded by Italy and Switzerland in 1957, the Näättämö–Gandvik River agreement, concluded by Finland and Sweden in 1951 (Article 1), and Article 9 of the Rio Grande–Colorado–Tijuana Treaty, signed by the USA and Mexico in 1944.

²³ Cf. Article 2 of the 1951 Näättämö–Gandvik River agreement, and Article 1 of the Lake Inari additional protocol, signed by Finland and the Soviet Union in 1959.

²⁴ E.g. the 1863 Meuse Treaty.

²⁵ E.g. the Sure Treaty (Article 1), concluded by the Federal Republic of Germany and Luxembourg in 1950, with provisions for compensation for damage (Articles 10 and 19), and the 1934 Maritza–Ebro Agreement, concluded by Greece and Turkey, Part III, clauses 1–4.

²⁶ Article 63 of the treaty between the Federal Republic of Germany and the Netherlands in 1960, concerning *inter alia* the boundary waters.

²⁷ Article 4, which reads as follows: “The riparian States undertake to establish close co-operation with regard to the study and the execution of any project likely to have an appreciable effect on certain features of the regime of the River. . .”

²⁸ The development of the law led to the conclusion of the Niger Basin Authority convention in 1980, superseding previous agreements.

²⁹ The foregoing are applicable, *mutatis mutandis*, to the solution provided by the 1966 Lake Constance agreement.

³⁰ RGDIP, 1958, p. 107, para. 13, for pollution *mutatis mutandis* (p. 102, para. 6). This seems to be expressed by a covert reference of the PCIJ Judgement on the limited character of territorial sovereignty, reading as follows: “It is subject to these conditions, and not at their arbitrary discretion that the Netherlands is entitled. . .” (Series A/B, No. 70, p. 29).

³¹ See the 1977 Mar del Plata Action plan, para. 90, with reference to the No. 21 Stockholm principle, the ECE Declaration of Policy on Prevention and Control of Water Pollution, including Transboundary Pollution, approved in 1980, item 13, the 1982 World Charter for Nature, item 21/d, and the resolutions enumerated in Note No. 2.

³² As SCHWEBEL wrote: "It is difficult to find now opponents of the general view according to which a State ought not to be allowed to use its territory or authorize persons subject to its jurisdiction or under its control to utilize it in a way that could cause damage to the territory or the interests of another State." (UN Doc. A/CN.4/348, p. 79, para. 111).

³³ Similarly, in the 1979 Athens resolution of the IDI in respect of pollution (Article II), and the 1957 resolution of the Inter-American Bar Association, which reads as follows: "States . . . are under a duty to refrain from making changes in the existing regime that might affect adversely the advantageous use . . ." (Article I/3).

³⁴ E.g. ANDRASSY: op. cit. 1951, pp. 169—176; COLLIARD: op. cit. p. 378; DECLEVA: op. cit. pp. 85 et seq.; DUPUY: op. cit. 1977, p. 30; GOLDIE: op. cit. 1973, pp. 66—69; KIRGIS: op. cit. pp. 291—294; KLEIN: op. cit. p. 124; KISS: op. cit. 1978, p. 22; LAMMERS: op. cit. pp. 342, 360, 372, 381, 580; WOLFROM: op. cit. p. 143, unanimously accepted by socialist scholars of international law also; cf. CUTH: op. cit. p. 96; HERCZEGH: op. cit. 1968, pp. 14 and 19; KLIMENKO: op. cit. pp. 132—134; KOUTIKOV: op. cit. p. 30; TIMOSHENKO: op. cit. pp. 169 et seq.

³⁵ Contrary to this, one of the fundamental principles of future studies considered, as formulated in the Dubrovnik resolution, that "a state is responsible, under international law, for public and private acts producing change in existing regime of a river to the injury of another State . . ." (ILA, 47th Report, 1956, point IV, p. 242; *ibid.* New York Resolution. Agreed recommendations, ILA, 48th Report, 1958, point 1, p. 99).

³⁶ ILA, 52nd Report, 1966, p. 497.

³⁷ ILA, 59th Report, 1980, pp. 362 et seq.

³⁸ ILA, 62nd Report, 1982, p. 278.

³⁹ UN Doc. A/CN.4/381, para 57. The text was submitted to the editors' commission. It was only commented on by McCaffrey's Second Report (UN Doc. A/CN.4/339, paras. 180—187). The formulation of SCHWEBEL's Third Report (Article 8, paras. 1 and 2) may be regarded as an antecedent, albeit with a substantial difference (UN Doc. A/CN.4/348, para. 156).

⁴⁰ ILA, 62nd Report, 1982, p. 276.

⁴¹ The strict system of the Helsinki Rules is not adhered to at this point. Cf. with the stipulation "danger to human life". ILA, 52nd Report, 1966, p. 501.

⁴² Cf. UN Doc. UNEP/GC/61 and Add. 1—3, paras. 143—157; UN Water Conference, Action Plan, para. 34.

⁴³ Cf. the dispute connected with the Ichkeul National Park in Tunisia, CE, *Faits nouveaux* —Nature, No. 82—11.

⁴⁴ See in this sense: GRAEFRATH: op. cit. p. 460.

⁴⁵ ILA, 62nd Report, 1982, p. 160. *Ibid.* Seoul Resolution, Article 1 (62nd Report, 1982, p. 278).

⁴⁶ Behaviour not implicating a transfrontier effect is *ipso facto* irrelevant. Cf. the statements of facts as formulated by BOURNE: op. cit. 1965, p. 188, and VAN ALSTYNE: op. cit. pp. 312 et seq. Only latent, indirect, etc., transfrontier effects can constitute a source of problems in this context.

⁴⁷ This is considered in QUENTIN—BAXTER's Fourth Report (UN Doc. A/CN.4/373, paras 10 and 17) as the domain of physical utilization of the territory, causing material damage.

⁴⁸ ANDRASSY: op. cit. 1959, p. 184. This is the reason why the field of international economic law is excluded in QUENTIN—BAXTER's Fourth Report (*ibid.* paras 12 et seq.).

⁴⁹ According to the commentary to Article 2 of the draft text on the responsibility of states, "State conduct can be either active (action) or passive (omission)". Cf. Yearbook ILC, 1973, Vol. II, p. 180.

⁵⁰ See in this sense: EVENSEN's Second Draft, Article 9, IDI Salzburg Resolution from 1961, Article 4; Inter-American Bar Association, Buenos Aires Resolution from 1957, point 3; *ibid.* KLIMENKO: *op. cit.* p. 144; not unequivocally ANDRASSY: *op. cit.* 1959, p. 185.

⁵¹ Case of the SS. "Lotus" (PCIJ, Series A, No. 10, p. 19).

⁵² Quoted by SAUSER-HALL: *op. cit.* p. 500.

⁵³ For general aspects see: REUTER: *op. cit.* 1968, p. 1145; in connection with the succession of states: O'CONNELL: *op. cit.* p. 104; with respect to nationalization: ARECHAGA in: UN Doc. A/CN.4/152, Annex p. 20; regarding the fees payable for the use of the navigation sluices of the Iron Gate system: STOJKOVIĆ: *op. cit.* p. 134. For the regulation of the said fees: BRUHÁCS: *op. cit.* p. 19 and Note 78.

⁵⁴ For this reason, ANDRASSY's formulation (*op. cit.* 1959, pp. 83, 209) was excessively general in stating that a state was only bound to share advantages resulting from water utilization with another state if this latter contributed to the respective costs. The same concerns his comment at the Salzburg conference (IDI 1961, Vol. II, p. 337). GROS said the same (*ibid.* p. 351).

⁵⁵ Cf. the 1959 Nile Agreement, Article III, the 1961 Columbia Treaty, Article VI, the 1927 Araxe River protocol drawn up by Turkey and the USSR, Article 3, the 1960 boundary treaty concluded by the Federal Republic of Germany and the Netherlands, Article 58, para. 3, the Exchange of Notes concerning the loan of waters of the Colorado River, between Mexico and the USA in 1966; protocol drawn up by Greece and Turkey in 1966, concerning the river Meritiz—Evros, Article 20.

⁵⁶ ILA, 62nd Report, 1982, p. 280. Similarly QUENTIN—BAXTER's draft, Article 1, with reference to actual situations (UN Doc. A/CN.4/383, para. 1).

⁵⁷ In conformity with Article 11 of the 1980 draft on the responsibility of states. There is a substantial difference in this respect between water utilization in a narrower sense and water pollution. As the former is bound to a so-called water regime licence in the majority of states, the latter may also take place contrary to municipal law, i.e. administrative measures.

⁵⁸ Thus it is explained that procedural obligations are coupled with the prohibition in SCHWELB'S Third Report (UN Doc. A/CN.4/348, paras. 158 et seq.); *ibid.* ILA, Seoul Resolution, Article III.

⁵⁹ ILA, 47th Report, 1956, p. 242; *ibid.* DUPUY: *op. cit.* 1976, pp. 33 and 174—175; 181; also DUPUY: *op. cit.* 1977, pp. 396 et seq.

⁶⁰ Responsibility for damage or injuries caused to foreigners.

⁶¹ DUPUY: *op. cit.* 1976, pp. 225—226.

⁶² See QUENTIN—BAXTER's Second Report (UN Doc. A/CN.4/346, para. 45), and analyses in paras. 46—49.

⁶³ Cf. SCHWELB'S Third Report, Additional Project, Article 8 (UN Doc. A/CN.4/348, para. 156), EVENSEN's Second Draft Convention, Article 9 (UN Doc. A/CN.4/381, para. 57); IDI, Salzburg Resolution, Article 4 (Annuaire . . . 1961, Vol. II, p. 382); ILA, Montreal Rules, Article 3, para. 1, and Seoul Complementary Rules, Article 1 (ILA, 62nd Report, 1982, p. 279).

⁶⁴ Cf. SCHWELB'S Third Report (UN Doc. A/CN.4/348, paras. 137—139), the ILA, 62nd Report, 1982, pp. 281—283; ANDRASSY: *op. cit.* 1959, pp. 184—187 and 253; in the opposite sense: BARBERIS: *op. cit.* p. 29.

⁶⁵ FAUCHILLE: *op. cit.* Vol. I/2, p. 449; ANDRASSY: *op. cit.* 1951, pp. 77 and 111; BÉDARD: *op. cit.* pp. 132—133; SEVETTE: *op. cit.* p. 211; WOLFROM: *op. cit.* p. 195.

⁶⁶ BROWNLIE: *op. cit.* 1983, p. 50; BOURNE: *op. cit.* 1965, p. 214, raising problems by making a distinction between serious and minimum damage.

⁶⁷ EVENSEN's First Report (UN Doc. A/CN.4/367, paras. 31); similarly ANDRASSY: *op. cit.* 1951, p. 112; HANDL: *op. cit.* 1975, p. 60; LIPPER: *op. cit.* p. 45.

⁶⁸ See the so-called black and grey lists, e.g. in the Rhine Chemical Pollution Convention, signed in 1977.

⁶⁹ SMITH: *op. cit.* p. 151; *ibid.* SEVETTE: *op. cit.* pp. 221—222.

⁷⁰ BOURNE: *op. cit.* 1965, p. 213.

⁷¹ *Ibid.* p. 214.

⁷² Yearbook ILC, 1971, Vol. II, Part 1, p. 223.

⁷³ RGDIP, 1958, p. 102.

⁷⁴ Ibid. pp. 104–105.

⁷⁵ E.g. SMITH: op. cit. p. 151; CUTH: op. cit. pp. 26 and 106; MORELLI (Annuaire IDI, 1961, Vol. II, p. 106), and LOUIS: op. cit. pp. 839 and 863, in connection with the Jordan dispute.

⁷⁶ Cf. EVENSEN's Second Draft, Article 9; QUENTIN—BAXTER's Draft, Article 1. In a restrictive sense: ILA Montreal Rules, Article 2 (for a commentary, see the 62nd Report, p. 159) and the 62nd Report, 1982, p. 278. Refused *prima facie* by the IDI, Salzburg Resolution, Article 4, and the Inter-American Bar Association, Buenos Aires, p. 4.

⁷⁷ ILA, 62nd Report, 1982, p. 236.

⁷⁸ The rule termed "prior appropriation", "priority rule" or "*Erstnutzung*" corresponds to the principle *prior in tempore, potius in iure*. See: LOUIS: op. cit. p. 857.

⁷⁹ Acquired rights are mentioned by ANDRASSY: op. cit. 1951, p. 193; BATSTONE: op. cit. pp. 523, 529; DUCULESCU: op. cit. p. 176. The term acquired rights appears in the commentary to the Helsinki Rules (ILA Report, 1966, p. 493), while the correctness of the application of this concept was questioned by other authors, e.g. SMITH: op. cit. p. 40, and BOURNE: op. cit. 1965, p. 257. This view seems to be justified as there are two principal fields in which references are made to acquired rights: first, the transfer of territorial sovereignty when one legal system is replaced by another and, second, a legislative change within the same legal system. Cf. VISSCHER: op. cit. 1955, p. 240, favouring the respect of acquired rights. See also G. AMADOR's 4th report (A/CN.4/119, p. 7) and M. BEDJAOU's 2nd report (ACDI 1969, II, p. 74), the latter pointing to the inexactness or, more so, the liquidity of the idea and the controversies within the evidence of acquired rights (ibid. pp. 72–73).

⁸⁰ E.g. DECLEVA: op. cit. p. 85; JAWAD (quoted by KLIMENKO: op. cit. p. 331); WOLFROM: op. cit. p. 143.

⁸¹ Annuaire 1959, Vol. I, p. 275.

⁸² Ibid., p. 159; ibid. SMITH: op. cit. p. 146; SEVETTE: op. cit. p. 36; LIPPER: op. cit. p. 52.

⁸³ Ibid. Inter-American Bar Association, Buenos Aires Resolution, point 2.

⁸⁴ BOURNE: op. cit. 1965, p. 233.

⁸⁵ Ibid. p. 230.

⁸⁶ E.g. Article 12/1 of the 1929 Norwegian–Swedish agreement, Article 5/1 of the 1879 agreement concluded by Baden and Switzerland, Article 4 of the 1952 agreement between the Federal Republic of Germany and Austria.

⁸⁷ Ibid. Article 13 of the 1925 French–German treaty.

⁸⁸ Ibid. Articles 55–64 of the 1929 Belgian–German agreement, Article 17/2 of the 1961 Polish–Soviet treaty, Article 4 of the 1963 Niger Act, Article 1 of the 1964 Tchad agreement, and Article 17 of the 1973 Argentinian–Uruguayan treaty.

⁸⁹ For the enumeration see: DRÄGER: op. cit. p. 39.

⁹⁰ For Africa see: Article 9 of the 1934 British–Belgian agreement and the exchange of notes between Britain and France in 1924; in North America, Article III of the 1909 American–Canadian treaty; in South America, Article 10 of the 1946 Argentinian–Uruguayan agreement; in Asia, Article 109 of the 1923 Lausanne Peace Treaty, Articles 4–6 of the Soviet–Turkish Protocol from 1927; in Europe: Article 58/1 of the 1862 Bavarian–Austrian treaty, Article 30 of the agreement concluded by Belgium and Luxemburg in 1843, Article 34 of the 1960 Belgian–Dutch treaty, and Article XV/2 of the 1923 Italian–Austrian agreement.

⁹¹ E.g. the Preamble of the 1926 South African–Portuguese agreement, the exchange of notes between Britain and Egypt in 1929, Article I of the 1959 agreement between Egypt and the Sudan. For more examples see: LIPPER: op. cit. note 162.

⁹² Ibid. Article 20 of the Polish–Soviet treaty from 1961.

⁹³ E.g. Article 9/f of the USA–Mexican treaty from 1944, and paras. B/1–3 of Annex III of the 1947 Paris Peace Treaty.

⁹⁴ E.g. Articles 11—12 of the 1950 agreement between the Federal Republic of Germany and Austria, Articles 1 and 3 of the Costance agreement from 1966.

⁹⁵ E.g. the complementary Act drawn up between France and Spain in 1866, the treaty concluded by the Netherlands and the Federal Republic of Germany in 1960.

⁹⁶ BOURNE: op. cit. 1965, p. 244.

⁹⁷ E.g. the treaties concerning Africa, with the exception of the treaties relating to the Nile.

⁹⁸ BOURNE: op. cit. 1965, p. 244.

⁹⁹ Ibid. pp. 241—242.

¹⁰⁰ Ibid. p. 231.

¹⁰¹ GERVAIS: op. cit. p. 398.

¹⁰² BOURNE: op. cit. 1965, pp. 244—245.

¹⁰³ AIDI 1911, p. 354.

¹⁰⁴ BOURNE: op. cit. 1965, p. 257; DRÄGER: op. cit. p. 125; LIPPER: op. cit. p. 45 with a contradiction when claiming an obligation to compensate. Cf. Note 97.

¹⁰⁵ KLIMENKO: op. cit. p. 33.

¹⁰⁶ Ibid. p. 133.

¹⁰⁷ CUTH: op. cit. pp. 78, 87, 88, 104, 105, 111, 173, 186 and 204.

¹⁰⁸ ILA, 52nd Report, 1966, p. 490.

¹⁰⁹ Ibid. p. 499.

¹¹⁰ For this reason, the Pakistani delegation was incorrect in stating that the prohibition on causing damage was completely missing from the Helsinki Rules. AALCC Report of the 11th session. 1970, p. 230.

¹¹¹ Ibid. McCaffrey's Second Report (UN Doc. A/CN.4/399, paras. 181—186).

¹¹² For more details see: ROUSSEAU: Chronique, 1976, pp. 295—297.

¹¹³ BOURNE: op. cit. 1965, p. 261.

¹¹⁴ BOURNE: op. cit. 1965, p. 262; *ibid.* BERBER: op. cit. p. 249.

¹¹⁵ Ibid. p. 264.

¹¹⁶ See the Dubrovnik Resolution of the ILA from 1956, Article V, point d), and: LIPPER: op. cit. p. 44.

¹¹⁷ *Annuaire CDI* 1966, Vol. II, p. 289.

¹¹⁸ ILA, 52nd Report, 1966, p. 493.

¹¹⁹ BOURNE: op. cit. 1965, p. 195; *ibid.* SMITH: op. cit. p. 96.

¹²⁰ Ibid. p. 192. In HANDL's view, the volume of water reserved for future utilization is not compatible, however, with the concept of reasonable and equitable share. HANDL: op. cit. 1978—1979, p. 51.

¹²¹ LIPPER: op. cit. pp. 59 et seq.

¹²² Ibid. p. 60.

¹²³ *Annuaire IDI* 1911, p. 164.

¹²⁴ BOURNE: op. cit. 1965, p. 193.

¹²⁵ KLIMENKO: op. cit. pp. 59—61.

¹²⁶ GERVAIS: op. cit. p. 398.

¹²⁷ KLIMENKO: op. cit. p. 58.

¹²⁸ BATSTONE: op. cit. pp. 543—544. According to BOURNE, the English view has not, however, been equivocal. See: BOURNE: op. cit. 1965, p. 241.

¹²⁹ TECLAFF: op. cit. p. 190.

¹³⁰ SCHWEBEL's Third Report (UN Doc. A/CN.4/348), and EVENSEN's Second Draft (UN Doc. A/CN.4/381).

¹³¹ EVENSEN's Second Draft, Articles 6 and 9.

¹³² UN Doc. E/C.7/46, para. 6, and SCHWEBEL's Third Report, containing 16 treaties (UN Doc. A/CN.4/348, paras. 340—347). More than 50 treaties are enumerated, in turn, in the commentary to the New York Resolution of the ILA. (55th Report, 1972, pp. 40—106.)

- ¹³³ ILA, 55th Report, 1972, p. 45.
- ¹³⁴ E.g. the 1961 Columbia treaty.
- ¹³⁵ E.g. the 1960 Indus treaty and the 1977 Ganges agreement.
- ¹³⁶ See the ECAFE Flood Control series.
- ¹³⁷ UN Doc. E/CONF.70/29, paras. 100—102.
- ¹³⁸ UN Doc. ST/ESA/120, Part 1, para. 49.
- ¹³⁹ The Madrid Resolution of the IDI (Article II/5, in: *Annuaire IDI*, 1911, p. 365) can be regarded, to some extent, as an antecedent.
- ¹⁴⁰ ILA, 55th Report, 1972, p. 42.
- ¹⁴¹ E.g. the 1944 Treaty on the Rio Grande, Colorado, and Tijuana.
- ¹⁴² E.g. Articles 7 and 12 of the 1863 Belgian–Dutch treaty, Article IV of Part VI of the 1868 French–Spanish Act, Article 15 of the 1958 Czechoslovakian–Soviet agreement, and Article 9 of the 1944 Treaty on the Rio Grande, Colorado, and Tijuana.
- ¹⁴³ E.g. Article I of the 1955 Italian–Swiss Convention, points 5) and 6) of the 1956 Protocol drawn up between Greece and Yugoslavia, and Article 33 of the 1960 German–Dutch Treaty.
- ¹⁴⁴ ILA, 55th Report, 1972, p. 88.
- ¹⁴⁵ NAGY: *op. cit.* (ed.), p. 172.
- ¹⁴⁶ UN Doc. A/CN.4/152, Annex I, p. 30.
- ¹⁴⁷ For examples see: ILA, 55th Report, 1972, pp. 77 et seq.
- ¹⁴⁸ *Ibid.* p. 79.
- ¹⁴⁹ See the remarks of the Indian lawyer SIKRI. *Ibid.* p. 26.
- ¹⁵⁰ Article 11 of the 1957 Norwegian–Soviet agreement, point 6), Article II of the 1959 agreement on the Nile, point 4), Article III of the 1960 Indus Treaty, and Article XII of the 1961 Columbia Treaty.
- ¹⁵¹ The obligation of co-operation is declared, in a general sense, in para. 9 of the 9th Principle, and the service of prompt information is laid down in para. 1 (cf. GA/RES/34/167).
- ¹⁵² UN Doc. A/CN.4/367, para. 90, was closely related to SCHWEBEL's formula (UN Doc. A/CN.4/348, para. 377); nevertheless, the factors causing damage are extended to the desiccation in this latter. *Ibid.* paras. 370—376.

The principle of reasonable and equitable share

1. The formation of this concept

The principle of sharing water deliveries or utilizations appeared in some treaties as early as the last century,¹ dealing with the utilization regime of international watercourses. The practice of the supreme courts of various federations, however, went beyond this. In a lawsuit between the cantons of Argovie and Zürich, in 1878, the Swiss Federal Court declared only that the canton of Argovie had no property right over the waters concerned as this right contained only a reasonable share of its driving power, and this was not limited by Zürich's cantonal law; on the contrary, the latter had equitable provisions for riparian proprietors.²

In the *Kansas v. Colorado* case, concerning the River Arkansas, the Supreme Court of the United States also made, beyond declaring the existence of the principle of reasonable and equitable share, substantial statements in 1907. In the Court's view, the rights of the two States in question had to be taken into consideration "on the basis of the equality of rights so as to assure, as far as possible, the advantages of irrigation for Colorado, without depriving, at the same time, Kansas of the similar advantages of a waterway".³ Applying this concept in subsequent cases,⁴ the Court also proved the elasticity thereof.

Starting from the principle of the prohibition on causing damage, the German Supreme Court pronounced the following statement of principle in the *Donausinkung* case (1927) in which Württemberg and Baden, two member states of the Weimar Republic, appeared against each other: "The application of this principle is governed by the circumstances of each particular case. Accordingly, the interests of the States concerned are to be pondered equally, i.e., it is not only the absolute prejudice caused to a neighbouring State that has to be considered but the relations of importance between the advantage obtained by one of the States and the prejudice from which the other suffered as well."⁵

The explicit declaration of the principle of reasonable and equitable share has been, in fact, a rather rare occurrence in *international treaties* constituting the great majority of international law-making effecting the utilization regime of international watercourses. Nevertheless, there are treaties in which the parties have made reference to some guiding principles and purposes, such as determining the rights to utilize on the basis of equitable apportionment,⁶ the reasonableness,⁷ efficiency,⁸ or optimum nature⁹ of utilization, or the mutual consideration of interests.¹⁰

Although the relationship between the said ideas has had an ambiguous character, they offer sound evidence, however, of general considerations that used to govern the formulation of the provisions of the treaties concerned.

Nevertheless, a disinclination to declare general principles can be observed in the majority of international treaties or conventions concerning the utilization regimes of international watercourses which could be considered prejudicial, supposedly in conformity with the subject-matter of the treaties or conventions in question, i.e., the settlement of an actual water regime problem in particular. In spite of this, it can be presumed that the various treaties or conventions concerned succeeded in delimitating *de facto* the rights of water utilization, taking into consideration the actual circumstances and interests, enforcing the requirements of technical and economic reasonableness and shaping appropriate compromises; to sum up, all this meant the recognition of the *equitable share of the parties*, as has been duly documented by the thorough scholarly analysis of some treaties or conventions on water regimes of major importance.¹¹

Several substantial elements of the concept of a reasonable and equitable share have been applied by *international courts*, such as the community of interests of riparian States,¹² equity as a general principle of law,¹³ and the coordination of interests.¹⁴ Nevertheless, on the other hand, they failed to declare that it was pronounced *obiter dicta* in respect of the prohibition on causing damage. As will be demonstrated below, this legal vacuum has been filled by the recent practice of the International Court of Justice which followed the emergence of the concept of a reasonable and equitable share.

The importance of the concept of a reasonable and equitable share increased and, more so, became decisive, as a result of two interdependent elements; first, international organizations became anxious to cooperate in connection with international watercourses; and, second, the most important conceptual elements were unfolded through the work of scholarly associations and institutions.

As a consequence of the activity of international organizations it became increasingly evident that specific requirements such as the equitable share of the utilizations or the results thereof¹⁵ or the reasonable nature of utilization,¹⁶ had to be enforced in international cooperation in the field of non-navigational uses of international watercourses.

As for the international scholarly point of view, the ILA's approach from the very beginning¹⁷ was that the right to a reasonable and equitable share, or a reasonable and equitable share proper, constituted a key point¹⁸ in the law of non-navigational uses of international watercourses.

Accordingly, the development of this branch of international law led to the point that the concept of *reasonable and equitable share*, already latent in international practice, was acknowledged explicitly so that it could be considered as generally recognized.¹⁹ In the conforming view of the most reputable international scholarly associations,²⁰ and several individual authors,²¹ international practice has certainly adopted the principle of a reasonable and equitable share. It is questionable, however, whether or not substantial differences in interpretation are concealed underneath this surface of consent in connection with the said concept.

The lack of uniformity in the terminology is already very revealing. So, one is right in supposing that the appearance of adjectives and correlations of words such as equitable utilization or equitable apportionment, equitable participation, *optimum* utilization, beneficial or reasonable use, etc., do not result from fortuitous occurrences and do not represent more examples of *epithetum ornans*. Furthermore, investigating the relationship between the equitability and reasonableness of utilization also seems to be permissible.

The differences in the interpretation of the principle of equitable and reasonable share result, first and foremost, from the very roots of the actual terms, but their necessarily varied meanings in their distinct connections substantially justify these differences.

As was demonstrated above, the first phase of development of the utilization regimes of international watercourses was characterized by limited utilization and a low frequency of transfrontier effects. A negative rule, i.e., the prohibition on transgressing specific limits in the course of utilization, meaning a prohibition on causing damage to another state, was sufficient in situations such as these. With the growing obsolescence of these characteristics, resulting from the dynamic development of water uses and management, the actual adjustment and accommodation of the utilization rights of the individual states between each other became a central problem.²²

The solution was seemingly found in the concept of a reasonable and equitable share which, contrary to the prohibition on causing damage, contained obligations of a positive nature;²³ even more, it was found to be almost identical with general international law limiting territorial sovereignty.²⁴ This line of thought is reflected in McCaffrey's Second Report, juxtaposing equitable utilization and limited sovereignty;²⁵ it even became identified with the maxim *sic utere tuo*.²⁶ It is not only the rapprochement of the conceptual elements of general international law that is demonstrated in KLIMENKO's statements, but also their amalgamation: "the prohibition of the utilization of a watercourse

causing damage in the territory of another state supposes, in fact, that each state would make use of water utilization only to the equitable share due to it. Adversely, the volume of water, representing an equitable share due to one of the states concerned, was understood to mean that utilization of this kind did not cause damage to the equitable share of the other interested state. The relationship of these principles to each other corresponded, to some extent, to the mutual relations of sovereignty and equality, i.e. fundamental principles of international law, serving as starting points for all principles".²⁷

Nevertheless, there are some points contradicting the amalgamation of all principles of general international law into the principle of an equitable and reasonable share. The transfrontier effects brought about by non-navigational uses of international watercourses generate, indeed, problems²⁸ too complicated (even for general international law) to permit a solution by a single rule.²⁹ Besides, it has been evidenced by international practice that the prohibition on causing damage and other principles continue to be incorporated into international treaties and conventions, thus motivating the official statements of governments and making it possible that the respective states also in this respect prefer to maintain the duplicity of the principles of international law,³⁰ with all the resulting consequences.³¹ Finally, the question whether or not the rules of general international law can be applied to the principle of reasonable and equitable share will be decided depending upon whether the actual coordination of the different utilization rights of the riparian states may be carried out on this basis. This is, however, a *conditio sine qua non*, and we must now continue to discuss this problem.

There was of course another starting point which equally led to the concept of reasonable and equitable share. This meant, in particular, emphasis on the hydrological unification of international watercourses and the resulting unification of interests of the riparian states, on the one hand, and the enforcement of the requirement of reasonableness and the optimum degree of utilization, on the other. As these matters have been dealt with in point 4), it need only be emphasized that the joint interests in the utilization of international watercourses, whose existence is beyond doubt, can hardly be separated from the comprehensive system of international relations of the riparian states, which has a decisive influence on the former.

Several references were made in the foregoing to the fact that the term "*reasonable and equitable share*" has at least three meanings:

a) First, in its most generalized form it is understood that the elements of an international watercourse system, having a physical relationship with each other, are under the sovereignty of the various riparian states. The concept should express the controversy existing between "territorial sovereignty" and "international character", resulting from transfrontier effects. This was formulated in EVENSEN's Second Report, reading as follows: "A watercourse State

is, within its territory, entitled to a reasonable and equitable share of the use of the waters of an international watercourse." (Article 6, point 1).³² This wording, which may be regarded as a surrogate of the term "shared natural resources",³³ which provoked a lively dispute, should presumably express the equal sovereignty of the riparian states over an international watercourse. If so, it would be desirable, however, to replace it by a simple declaration instead of the comparatively ambiguous term "reasonable and equitable share".

b) Reasonable and equitable share means a *method* aimed at determining the utilization rights of riparian states, containing in particular the ways and means of settling conflicts of interest according to the pre-requirements of equitability and reasonableness, on the one hand, and the procedure to be applied to achieve this end, on the other.³⁴ Nevertheless, the latter may also be coupled with the principle of cooperation.

c) Finally, the term means the *result* of the coordination of uses, achieved by the application of the reasonable and equitable share method and, in addition, other points such as the means and established forms that lead to an appropriate result, and, finally, the character of the obligations concerning behaviour.

The double meaning of reasonable and equitable share, outlined above, appears explicitly in the award pronounced by the ICJ concerning the continental shelf dividing Tunisia and Libya. In terms of the said award, "the delimitation has to be effected in conformity with the principles of equitableness, taking into consideration all relevant circumstances. . . ." and further: "The application of equitable principles has to lead to an equitable result. . . . It is the result that is important, i.e. the principles are subject to the objective to be attained."³⁵

As for the following, we shall try to present a thorough analysis of the two given aspects of the principle of reasonable and equitable share.

2. Reasonable and equitable share as a method of coordinating utilization rights

a) Efforts to formulate the principle of a reasonable and equitable share

In terms of the Salzburg resolution of the IDI, "If the States are in disagreement over the scope of their rights of utilization, settlement will take place on the basis of equity, taking particular account of their respective needs, as well as of other pertinent circumstances." (Article 3)³⁶ This quoted text is a clear reference to the point that when uses are coordinated, not only is equity decisive, other criteria are as well. Besides, the determination of the nature of equity is left open. Several authors have been of the opinion³⁷ that international prob-

lems raised by the uses of international watercourses are to be settled on the basis of equity instead of considerations under international law.

International law and equity became separated from each other in the traditional concept,³⁸ although *infra legem* equity, i.e., that which is within the application of the law, was inherent in international law, contrary to two other variations of the term: *praeter legem* equity, filling up a legal gap, and *contra legem* equity, i.e., that which is opposite to a legal norm.³⁹ With the recent developments in international law, principally manifested in the awards pronounced by the ICJ over the last twenty years, equity has received a new function, and its principles have become rules of delimitation.⁴⁰ During the first phase of the application of equity, qualified to represent an "actual legal norm", it was decisive, indeed, only in cases of delimitation, which meant applicability in spatial delimitations. Nevertheless, it may be noted that the ICJ gradually distanced itself from this approach, and the term became a more important element of substantial sectors of international law.⁴¹ On the other hand, elements of sovereignty were to be found also in the distribution of resources.

The rules of customary international law prescribing the application of the principles of equity⁴² are to be applied also to the delimitation of rights relating to the utilization of international watercourses, even if they are not free from ambiguity.⁴³ This argument has also been supported by international treaties, which stipulate that disputes connected with interpretation and application should be settled by international judicial decisions. In fact, it is reasonable to suppose that the signatories had in mind disputes which could not be settled through judicial channels, and the ICJ or any arbitral tribunal ought to be entrusted with the rights of decision *ex aequo et bono*.⁴⁴

As mentioned above, the Salzburg formula of coordinating utilization rights has been rather uncertain; nevertheless, the initiation aimed at determining the objective criteria of a reasonable and equitable share as a method has to be to its credit. The Helsinki Rules here played a decisive role. Article V of the Rules reads as follows:

"(1) What is a reasonable and equitable share within the meaning of Article IV is to be determined in the light of all relevant factors in each particular case.

(2) Relevant factors which are to be considered, include, but are not limited to:

a) the geography of the basin, including in particular the extent of the drainage area in the territory of each basin State;

b) the hydrology of the basin, including in particular the contribution of water by each basin State;

c) the climate affecting the basin;

d) the part utilization of the waters of the basin, including in particular existing utilization;

e) the economic and social need 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 need of each basin State;
- h) the availability of other resources;
- i) the avoidance of unnecessary waste in 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."⁴⁵

In comparing the Salzburg Resolution and the Helsinki Rules, a substantial difference, apart from the enumeration of other factors to be taken into consideration, is that equity constitutes the basis for settlement in the former case, while it is one of the attributes of a "share" in the latter,⁴⁶ which is also connected to reasonableness.

As regards the list of factors to be taken into consideration, it seems to be evident that it is difficult to measure some of them. For example, needs are essentially unlimited⁴⁷ and, as a result of varying priorities originating from the political, economic, social, and cultural heritage of the individual countries, an objective assessment of the relevant costs and advantages is not in general practicable.⁴⁸ As was demonstrated in the preceding chapter, international practice concerning water regimes has been reluctant to refer to extreme solutions such as cancelling or restricting existing uses. Besides, political considerations should also be excluded, i.e., only the factors connected with water utilization should be considered as relevant. Accordingly, all matters beyond the interests of water uses and management should not be taken into account. As DRÄGER put it, the starting point should be the dependence of utilization on the respective water basin.⁴⁹

The restriction of relevant factors of this kind may be found in some agreements in which some provisions were, essentially, motivated by the parties. Thus, the distribution of produced hydraulic power was included in the Italian-Swiss agreement of 1949, regulating the utilization of hydraulic power on the Reno di Lei, taking into consideration the waters and usable falls in the relevant areas.⁵⁰ There is some doubt, however, whether political influence could be eliminated if the coordination of important utilization rights was at stake. The criticism affecting the relevant factors mentioned in Article V, seen as favouring more developed countries at the expense of smaller and less wealthy countries, is a characteristic expression of this view.⁵¹ Technical aspects may enforce themselves, presumably, if they are not confronted by the political efforts of the interested states.

In spite of the stated reservations, the effect of the Helsinki Rules as a model element cannot be underestimated. Even EVENSEN in his *Second Report*⁵² deemed it necessary to give a non-comprehensive enumeration of the relevant factors: "In determining whether the use by a watercourse State of the waters of an international watercourse is exercised in a reasonable and equitable manner..." In spite of this relationship, which is beyond doubt, there are also substantial differences between the wording of Article V of the Helsinki Rules and Article 8, point 1) of the Draft. In a way which seems worthy of support, some factors are accentuated in the latter, such as the proportion of the delivery of an international watercourse appearing in the territory of the distinct riparian states (c), or the problem of costs and profits (g). On the other hand, some other criteria relating to the proportion of needs and interests, or a comparison of the importance of various uses seem partly to have a slightly tautological character or they mean more the purpose to be attained than the basis of its solution; besides, cooperation may be considered as a fundamental condition. Beyond these remarks, reference may also be made to the point that the factors in question or the major part thereof have at least been *connected to a so-called material legal source. This means the interests and circumstances to which state volition leading to international law-making is subjected, and the sociological background behind the determination of the given state accepting the international legal norm in question.*

In spite of the reservation mentioned in the foregoing, it seems that a requirement of international law calls for taking individual factors into consideration.

b) Conceptual elements of a reasonable and equitable share

(aa) Consideration of interests

Equity implies, first and foremost, the requirements of mutual consideration and coordination of interests.⁵³ This is one of the most important elements of the award made in the Lake Lanoux case. The starting point for the arbitral board was that the protection of the parties' interests had been prescribed by customary international law.

The respective *interests proper may be of two different kinds*. First, there are interests conforming to the law, and they are therefore enforceable and recognized so that their observance may be demanded.⁵⁴ As to interests without this qualification, the arbitral board decided the following: "Le Tribunal est d'avis que l'Etat d'amont a, d'après les règles de bonne foi, l'obligation de prendre en considération les différents intérêts en présence, de chercher à leur donner toutes les satisfactions compatibles avec la poursuite de ses propres intérêts et monter

qu'il a, à ce sujet, un souci réel de concilier les intérêts de l'autre riverain avec les siens propres."⁵⁵ The difference between interest and law also manifests itself when "l'Etat d'amont a, en vertu de la procédure, un droit d'initiative, il n'est pas obligé d'associer à l'élaboration de ses projet l'Etat d'aval. Si, au cours des entretiens, l'Etat d'aval lui soumet des projets, l'Etat amont doit les examiner, mais il a le droit de préférer la solution retenue par son projet, s'il prend en considération d'une manière raisonnable, les intérêts de l'Etat d'aval . . . De son coté, l'Espagne ne peut invoquer un droit à obtenir un aménagement du lac Lanoux basé sur les besoins de l'agriculture espagnole. En effet, si la France renonçait à tous les travaux envisagés sur son territoire, l'Espagne ne pourrait exiger que d'autres travaux conformes à ses vœux soient réalisés. Elle peut donc simplement faire valoir ses intérêts pour obtenir, dans le cadre, du projet retenu par la France, des modalités permettant raisonnablement de les sauvegarder".⁵⁶

(bb) *Method of approach*

The Helsinki Rules contain hints on the method of considering interests, denominated as a factor analysis approach.⁵⁷ According to the nature of the matter, this "relies on an inductive process of determination".⁵⁸ For the methods of approach, an interesting model is illustrated in the commentary, reading as follows: "... the factor analysis approach seeks primarily to determine whether (i) the various uses are compatible, (ii) the uses are essential to human life, (iii) the uses are socially and economically valuable, (iv) other resources are available, (v) the uses are '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 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".⁵⁹

This method, as seems beyond doubt, is a consequence of the concept of equity, incorporating individualization as one of its major constituent element,⁶⁰ and this latter includes the consideration of all circumstances of a given case.⁶¹ In addition, it is in conformity with the very nature of international law.⁶²

(cc) *Reasonableness of utilization*

According to the Helsinki Rules, a share not only has to be equitable but also reasonable at the same time. The point is now whether or not it is possible or necessary to use the two adjectives parallel to each other; in other words, here we are concerned with the relationship between equity and reasonableness.

In the practice of the ICJ the two adjectives have been used alternatively, but it has been declared that equity means the reasonable application of the law,⁶³ guiding the exploration of the relevant means and guaranteeing the efficiency of the result, equitable being the approach closest to the reasonable result.⁶⁴ The concepts of equity and reasonableness were also identified in the Lake Lanoux case.⁶⁵ Nevertheless, it cannot be stated that the simultaneous use of the two technical terms could be regarded as anything more than usual verbosity. In fact, the terms equity and reasonableness are not completely coherent; their relationship can be visualized by two non-concentric circles intersecting each other, so that their combination may open up new perspectives.

Reasonableness has specific consequences. Thus, it has been generally accepted that the purpose of a reasonable and equitable share is to ensure the highest attainable advantages with the smallest possible harm.⁶⁶ Besides, reasonableness can be regarded as equal to a solution corresponding to common sense, avoiding unnecessary waste. According to LIPPER, "This does not mean that the use must be the most beneficial to which the water could be put, or that the method of utilization is maximally efficient in minimizing waste of the water".⁶⁷ Legal cases arising among member states are used to support the result, which is also attainable by deduction, here expressed as follows:

"1) A right to equitable utilization will be recognized only insofar as it relates to a beneficial use of waters.

2) While the use must bestow a benefit upon the user, the benefit need not be commensurate with the optimum possible utilization of the waters, provided, however, that no user may be wilfully wasteful, or inefficient when it has the means to reduce inefficiency."⁶⁸

In spite of the lawful reservation mentioned in the foregoing, the fact that the requirement of reasonableness is here placed in the foreground presumably means some pressure aimed at the almost permanent change or modernization of the existing utilization system,⁶⁹ with a potential additional burden on the utilization regimes of international watercourses. Besides, it offers a basis for the concept of *integrated utilization*.

c) *Integrated utilization*

LIPPER put this point as follows: "Even as states continue to quarrel over their rights in international rivers on the basis of limited sovereignty, some authorities have already carried their thinking a step further, and are concerning themselves with what has been termed the 'community' approach to international waters."⁷⁰ This is considered as a counterpart of the principle of equitable utilization which "... may not permit the most beneficial development of the basin. Moreover, parallel independent development of a river by each riparian is likely to prove economically wasteful".⁷¹

The principle of a reasonable and equitable share has been interpreted by UTTON so that a hydrographic unit is here divided, resulting in individual uses; accordingly, each state concerned utilizes its waters irrespective of the other states, and these latter are not allowed to interfere with water utilization in an unreasonable way.⁷²

Other authors, however, have been of the view that a reasonable and equitable share means the application of HARTIG's coherence theory,⁷³ comprising the requirement of reasonable water utilization. These viewpoints concluded that the Helsinki Rules recognized so-called integrated utilization.⁷⁴

The concept of integrated utilization showed a gradual development. Previously, the so-called theory of water community was favoured by some authors, claiming the common sovereignty or condominium of the riparian states over a given watercourse.⁷⁵ Thus SAUSER-HALL wrote as follows: "... each riparian state is entitled to a distinct part of hydraulic power ... without taking into consideration whether the border is formed by the downstream watercourse or the centre line of the river actually or preferring the principle of territorial rule, favouring the major volume of water of the highest fall of the bed".⁷⁶ According to the author's conclusion, there is a "common right of exploitation",⁷⁷ i.e., "common sovereignty over rivers constituting a boundary".⁷⁸

The term "common river" may be found in some treaties.⁷⁹ Nevertheless, the use of this expression, according to WINIARSKI, never actually meant a community in a legal sense;⁸⁰ furthermore, as is clear from the papers of the Barcelona conference, joint possession was excluded by states.⁸¹

There is, therefore, no actual evidence for a condominium expressing common sovereignty over waters, and it can, only be regarded as a historical antecedent. In fact, the technical and economic conditions of water uses and management on a water basin level were still non-existent when the said theory was formulated.⁸² Besides, it has to be also kept in mind that, according to the concept of integrated utilization, uniform water uses and management on a water basin level ought to be attained by other means of international law.

When the elaboration of a new solution was intended, it had to be taken into consideration that the sovereignty of the relevant states over the areas securing water supply for their territory could not be disputed. The term "reasonable exploitation" was laid down in Article 2 of the Geneva convention of 1923, and a reply to this was provided by Article 5 of the said convention, stipulating that, when making a choice between the technical solutions of agreements to be concluded on the basis of the convention in question, "political boundaries ought to be discarded". Nevertheless, the Geneva convention was not recognized by the respective states as was pointed out earlier.

Basing his views on the coherence of waters, HARTIG, an Austrian scholar of international law, stated that the basin of a river constituted a specific unit (*res*)

that could not be changed by political boundaries. In view of this, a river basin was considered the common property of the respective riparian states.⁸³ Nevertheless, the author did not reach a conclusion favouring the existence of a uniform water regime; on the contrary, what he said was nothing but a statement that common agreement was necessary. Furthermore, this opinion was limited as he accepted the possibility of unilateral utilization, on the one hand, and he also recognized cases in which the other state was not authorized to refuse consent, on the other.⁸⁴

The concept of integrated utilization appeared in ECOSOC resolutions and the reports of committees set up by it.⁸⁵ Later on it was adopted on a larger scale, presumably as a result of the stimulation of international organizations.

Although not having used the term integrated utilization, this had to be the starting point for WOLFROM, essentially, when he stated that "the coordination of rights and obligations with a maximum profit was only possible by means of a common utilization" and, as he continued, "this postulate was ensured among the interested states by cooperation based upon the actual unity of exploitation".⁸⁶

COLLIARD made explicit reference to the concept by saying that "the concept of an integrated basin was derived from the economic demand of the most intensive exploitation of the resources of the basin concerned". Furthermore, he stated that the concept of an integrated basin gained positive ground in international law, understood "to mean nothing else but the combination of two, already well-known terms, i.e., the river basin and the optimum utilization".⁸⁷ He also made reference to the circumstance that "the concept of an integrated basin appeared first in science and found its development within this context; it was duly taken into consideration in judicial practice, and a favourable adoption in recent contractual practice may be confirmed as well".⁸⁸

The term integrated utilization also appeared in ILA resolutions. Thus, a resolution adopted in Dubrovnik in 1956 read as follows: "So far as possible, riparian States should join with each other to make full utilization of the waters of a river both from the viewpoint of the river basin as an integrated whole, and from the viewpoint of the widest variety of uses of the water, so as to assure the greatest benefit to all." (Article VIII).⁸⁹ The formula reading "the river basin as an integrated whole" was also adopted by the New York resolution⁹⁰ (point 1), and the following point formulated the reasonable and equitable share principle, so that the 1958 resolution could be interpreted as juxtapositioning integrated utilization and reasonable and equitable share with each other. The Salzburg Resolution of the IDI, adopted in 1961, differed from the ILA resolutions as a hint at optimum utilization in the Preamble of the former paper was the only link to integrated utilization contained in it.

As for treaties, conventions or agreements concluded after World War II, they frequently provided for the regulation of integrated utilization. Some

examples should be mentioned here. Thus, as it was only in the Preamble that reference was made to the necessity of integrated utilization in the 1959 agreement on the Nile and the 1960 Indus treaty, the 1961 Columbia agreement contained actual provisions of this sort.⁹¹ Formulations of this kind were found in other documents as well, e.g., the Italian-Swiss agreement from 1949 and the convention from 1957, respectively, the 1963 French-Swiss agreement, the 1970 Greek-Yugoslav agreement, and the exchange of notes between Guatemala and Mexico in 1961. The concept seems to be a clear tendency in international legislation concerning the utilization regime of international watercourses, in Africa in particular. This is evident from the following documents:

- Convention portant la création de l'organisation pour la mise en valeur du fleuve Sénégal (1972),

- Accord portant de l'organisation pour l'aménagement et le développement du bassin de la rivière Kagera (1977),

- Convention relating to the creation of the Gambia River Basin Development Organisation (1978),

- Convention creating the Niger Basin Authority (1980).

While analysing the treaties, conventions, and agreements of this kind, LIPPER made a distinction between documents on a separate development project, allowing the use of territory of another state for purposes ranging from the functioning of missions to collecting information on the water basin area concerned to the building of installations needed for full utilization, on the one hand, and, on the other, documents providing for joint utilization, i.e., projecting, planning, building, management, the division of costs and maintenance obligations, irrespective of state frontiers.⁹² According to WOLFROM, the treaties, conventions, and agreements in question either formulate joint research and projects or provide for the setting up and exploitation of installations relating to water regimes.⁹³

Although integrated utilization is still a rather unclear concept, some elements have already achieved general recognition, such as the following:

- the purpose of integrated utilization is "to ensure the maximum possible benefit from the topography and water resources of a given basin";⁹⁴

- a joint and uniform project on a basin level clearly equals integration, as the point here is to reduce to a common denominator the distinct branches of water utilization and the water uses of individual states;⁹⁵

- integration may mean both uniform and multi-purpose utilization;⁹⁶

- the idea of common administration usually arises. According to the formulation by TECLAFF, a water basin forms an administrative unit; nevertheless, he added, "as regards politically divided basins, these have no organs with authoritative powers".⁹⁷

It is evident from the above that integrated utilization may function in different degrees. Similarly, it is beyond dispute that integration has always been

realized by means of international treaties, conventions or agreements.⁹⁸ In fact, the use of the territory of other states is an inherent element of the term; detailed and complicated rules and institutionalized organizational systems are required to allow the functioning of integrated utilization, and international treaties or other documents are indispensable in this respect as, on account of its nature and formation process, customary international law has been inappropriate to meet the relevant requirements. Accordingly, the report of an experts' committee set up by ECOSOC was right when emphasizing the insufficiency of the rules of international law;⁹⁹ similarly, COLLIARD pointed out that "the international law of rivers failed to adapt itself to the needs of the 20th century".¹⁰⁰

When assessing the concept of integrated utilization, some facts cannot be discarded. Thus, integrated utilization is not applicable if states of different levels of economic development are concerned; also, it is impracticable for huge water basins which cover the territories of several states. Indeed, the primary field of integrated utilization is the exploitation of hydraulic power which, according to the very nature of the term, is of a multi-purpose character.

Hence, the report prepared for the CNR was correct in stating that the integrated concept of administration and exploitation was useful and, consequently, was only relevant, in limited cases, "first of all in relation to the degree and the character of the economic and social development of the region concerned".¹⁰¹

Returning to the relationship between the Helsinki Rules and integrated utilization, it can be stated that, in spite of the requirement of the reasonableness of the utilization, the principle of a reasonable and equitable share as formulated in the Helsinki Rules cannot be considered as the acceptance of integrated utilization. In fact, the Helsinki Rules contain general principles relating to the utilization of international watercourses, and the fact that the provisions of the ILA's Dubrovnik resolutions from 1956 and New York resolutions from 1958, referring to integration, were omitted from the 1966 resolution cannot be considered as an unintentional.

Considering that the existence of an international treaty, convention or agreement has been a *conditio sine qua non* of the realization of the integrated utilization of an international watercourse, and conventional practice has hardly so far permitted the conclusion and the formation of an institution of general international law of this kind, the question is raised whether the relevant result or some kind of joint utilization could be achieved in some other way, i.e., introducing the concept of *shared natural resources* in particular, requiring a community of interests. The concept of shared natural resources came into the foreground in the 1970s, presumably in connection with the new international economic order (NIEO),¹⁰² but it can be traced in documents relating to environment protection¹⁰³ and water management¹⁰⁴ as well. It was first introduced in the codification of non-navigational uses of international water-

courses under international law in SCHWEBEL's Second Report.¹⁰⁵ It was subsequently taken over in EVENSEN's First Draft (Article 6)¹⁰⁶ but deep objections were raised in both the ILC and the 6th (legal) Committee of the UN General Assembly, to the extent that it was left aside in EVENSEN's Second Draft.¹⁰⁷

The category of shared natural resources expressed *prima facie* the reality which beyond doubt confirms the existence of resources on the territories of different states constituting, nevertheless, a coherent natural system.¹⁰⁸ In addition, it not only confirms this fact but it also serves to attribute an international legal content to the concept in question. So, the obligation of cooperation or the purpose of optimum exploitation is derived from it in SCHWEBEL's Second Report.¹⁰⁹ Providing a foundation of this kind to the obligation of cooperation seems, however, to be unnecessary, on the one hand, as it has undoubtedly been a fundamental principle of international law, and, on the other, an obligation under international law only derives from the natural order of things, since relevant international law-making is here an indispensable condition, and the desirable coordination of the laws of nature and legal regulation has so far failed to become enforced in this respect.

Transgressing the declaration of obligation of cooperation postulated by the existence of shared natural resources, RIPHAGEN put forward the "Trail Smelter approach" and the concepts of "common heritage of mankind" and of "shared natural resources". As he put it, "here the *starting* point is *not* the division of the world into national territories of sovereign States but rather the indivisibility of the human environment or at least of that part of it which is considered to be a shared resource of two or more States. In fact, those two concepts suggest a particular *substratum* which escapes the division as mentioned and which, ideally, should be *managed* by a *common authority* rather than be "regulated" *ex post facto* using the rules of State responsibility for damages caused to another State".¹¹⁰ This way of thinking, accentuated by favouring the purpose of maximum exploitation, implicates shared sovereignty¹¹¹ or equitable participation, respectively¹¹² and, for the time being, these seem to be unacceptable on a world-wide scale. Besides, RIPHAGEN himself admitted the remarkable loss in intensity of the difference between the two approaches suggested by him in practice: the responsibility *ex post facto* led to the formation of primary rules, on the one hand, and the concept of unity could not ignore realities,¹¹³ on the other, so a common administration was hardly realized in practice.¹¹⁴

3. Reasonable and equitable share as a result

The comments on the Helsinki Rules had in mind the compatibility of the rights of the state utilization with the help of relevant factors.¹¹⁵ This view was maintained in the ILA report prepared for the Seoul conference.¹¹⁶

Nevertheless, the majority of the respective authors had some doubts. In the view of KLIMENKO, the interested states should decide, on the basis of the reasonable and equitable share principle, what would correspond to this principle in a given case. Subsequently, he wrote the following: "... the proportion between the volumes of water used by the relevant states has to be determined in all cases as related to the river or water basin in question".¹¹⁷ As LIPPER pointed out, "... the area of equitable utilization may not lend itself to the formulation of precise rules..."¹¹⁸ and, consequently it may be nothing more than "... a point of departure for states seeking to resolve water disputes".¹¹⁹ Its practical applicability is connected to discussions between the interested parties, but some positive rules and guides can nevertheless be recognized. As JOHNSON put it, the term reasonable and equitable share means more a method of approach to discussions than a rule on which to decide the said disputes.¹²⁰

The reasonable and equitable share principle has failed to guarantee a result, i.e., the precise and unequivocal determination of utilization rights and volumes of water attributable to individual states.¹²¹ This statement can also be proved with the strength of the Helsinki Rules. Supposing, but not admitting, that the objective criteria of "reasonable and equitable share" had been provided for in full in Article V of the Rules, then the relevant factors enumerated therein allow a great deal of combinations¹²² to the extent that an unequivocal result was excluded from the very outset. In fact, this was confirmed, e.g., in the *Ganges dispute* in which, starting equally from the Helsinki Rules, both India and Bangladesh came to diametrically opposed conclusions.¹²³

It seems as if the ILC's special rapporteurs also shared the view which *argued for the uncertainty of a result* that may be attained by means of the method of reasonable and equitable share. Thus, in EVENSEN's Second Draft, when dealing with the prohibition on activities that may cause appreciable harm, an exception is permitted only if it is provided for by a specific agreement or arrangement,¹²⁴ presumably expressing the principle of equitable utilization.¹²⁵ According to MCCAFFREY, the application of this principle would depend, ultimately, on the benevolence and sense of cooperation of the interested states, taking into consideration "the non-existence of any formulation that would have determined whether the actual utilization of a watercourse by a given state was equitable in relation to another state..."¹²⁶

Accordingly, the actual realization of a reasonable and equitable share has essentially been left to international treaties or conventions. Nevertheless, this arrangement, deemed to be appropriate, has not been free from *serious problems* either.

Thus, flexibility in expressing the essence of a reasonable and equitable share¹²⁷ is susceptible to becoming opposed to the *status quo* as laid down in a relevant treaty or convention. Having this in mind, some authors felt themselves induced to formulate somewhat peculiar statements. So KOUTIKOV held that the

proportion of water utilization as specified by a treaty or convention was an abuse of the law, instead of a breach thereof.¹²⁸ Presumably accepting the teleological interpretation of treaties, DRÄGER stated the following: "... auch ein Überschreiten der vertraglich festgelegten Wassermenge wird nur als Anlass eines Verfahrens verstanden, in dem die Nutzungsrechte bestimmt und abgegrenzt werden und das zu einer anderen, nicht mengenmässig gleichen Verteilung führen kann".¹²⁹

If "reasonable and equitable share" is regulated by a treaty or convention, a posterior coordination of the utilization rights cannot be raised during the validity of the document concerned;¹³⁰ besides, it also seems questionable whether or not the application of the *clausula rebus sic stantibus* could be taken into account in the majority of cases, e.g., referring to the requirement of optimum utilization.

In the case of the existence of a relevant treaty or convention between the interested riparian states, there is valid confirmation whether or not the uses are equitable.¹³¹ Nevertheless, one may raise the question whether the purpose of the document in question is actually realized and, in the adverse case, whether or not the validity or force of the treaty or convention concerned may thereby be affected.

Various solutions have taken shape regarding "reasonable and equitable share" in terms of the treaties or conventions concerning the utilization regime of international watercourses.

As regards water delivery and hydraulic power, a share in equal proportions has very frequently appeared¹³² but, mainly as a corollary of multi-purpose uses, much more complicated formulations have been applied as well.

A classification of this kind was put forward by Colliard who made a distinction between the temporal, territorial, and quantitative share of water uses.¹³³ A hierarchy of uses was also formulated.¹³⁴

Although actual harmonization of the various water uses cannot be brought about by the existence of the reasonable and equitable share principle in itself, and international treaties or conventions serving to realize it may also not be concluded in some cases, it would be a mistake to consider this principle as having no value. The evident deficiencies are counterbalanced by the procedural aspect as the principle *involves important obligations in the field of procedure*.¹³⁵ The outstanding role of the obligations of procedure complies, in fact, with one of the substantial features of international law, namely they serve "... much more as an instrument of diplomacy than of formal forensic confrontation".¹³⁶

Without reducing the importance of procedural rules, the question may also be raised whether or not it is absolutely necessary to ascribe them to the reasonable and equitable share principle since they may be equally *based upon the fundamental principle of international cooperation*. The somewhat artificial

distinction calling for separate rules for uses already in operation and subsequently established could thus be set aside,¹³⁷ and the obligation concerning the exchange of information could be more easily adapted as well.

4. Procedural obligations

The procedural rules relating to the utilization of international watercourses implicate two substantial obligations for the riparian states, i.e., concerning notification and consultation, and these may be sub-divided into further distinct elements. The obligation to provide assistance, unfolding in international law,¹³⁸ seems not to have been established in general principles on the regime of non-navigational uses, although it may have been included *in nuce* in the general obligation of cooperation.

a) The obligation to notify

The obligation to notify, having an *ex ante* character, arises when the trans-frontier effects of a water regime activity are planned by one of the interested states, and it includes, essentially, information on the extent of changes in water regime conditions, e.g., elements of technical projects allowing the assessment of the character and order of the size of interventions, such as the volume and temporal distribution of the planned water delivery, the duration and method of drainage in the storage basin, the parameters of structural works serving water regulation, etc. The content of a preliminary notification cannot be determined *a priori*, i.e., the data to be indicated can only be decided in the actual case concerned. Nevertheless, it goes without saying that all data have to be provided which would permit the reasonable assessment of the transfrontier consequences of planned water uses.

The existence of the notification obligation does not seem to have been disputed, even if its explicit declaration has not so far been very frequent,¹³⁹ and this is attributable, first and foremost, to the fact that the attention of the relevant authorities has been principally directed to the rules of substantive law. Contrary to this, the respective rule of international law has been identified by resolutions of scholarly associations.

The Salzburg resolution of the IDI is absolutely unequivocal in this respect. It reads as follows: "Works or utilization referred to in the preceding article¹⁴⁰ may not be undertaken except after previous notice to interested States" (Article V). As to the ILA, it formulated a recommendation in this respect in the Helsinki rules (Article XXIX, para. 2) which could be considered as a proposal *de lege ferenda*;¹⁴¹ at the same time, a sanction was coupled with the non-fulfil-

ment of a recommendation, hardly justifiable from a legal point of view, but presumably with the intention of facilitating a compromise, depriving a state having committed an omission from a justified favour resulting from a temporal priority, saying that it "... does not deny to the State concerned any other basis it may have for establishing that it is entitled to a 'reasonable and equitable share of the waters'..."¹⁴² As regards subsequent ILA resolutions, the provisions of the said recommendation were first transgressed in some fields¹⁴³ formulating a legal obligation. Later on, the general stipulations of the Seoul resolution declared the following: "When a basin State (hereafter 'proposing State') proposes to undertake, or to permit the undertaking of, a project that may substantially affect the interests of any co-basin State, it shall give such State or States notice of the project. The notice shall include information, data, and specification adequate for assessment of the effects of the project." (Article III, part 1)¹⁴⁴

International practice has been *adequately reflected in the Salzburg and Seoul resolutions*. Admittedly, the obligation of notification was not explicitly prescribed in the Geneva Convention of 1923. Nevertheless, joint study and the obligation of negotiation was laid down in Articles 2, 3 and 4, and these necessarily involve preliminary notification. Furthermore, the Montevideo declaration from 1933 contains a definitely formulated stipulation prescribing that the notifications have to include the required technical information, permitting the other interested States to determine and assess the significance of the respective works (point 7). This rule was also adopted by the 1965 Inter-American Draft Convention (Article 8). Accordingly, the treaties and conventions formulating the general rules of international law relating to water utilization already contain the obligation of preliminary notification, with reference to the subject-matter of the said obligation. This rule, however, may be found less frequently in bilateral treaties.¹⁴⁵ Nevertheless, this should not lead anyone to reject this obligation as it imposes other obligations, i.e., consultation, conclusion of a treaty or convention by contracting parties of a much broader range, and this cannot be imagined, in fact, without some kind of exchange of information. Furthermore, the institutionalization of conventional relations and the setting up of mixed committees also include the obligation of preliminary notification.

The rule of the obligation on preliminary notification as accepted in customary international law was also supported by the arbitral award given in the Lake Lanoux case. Although the award only contained a reference to the Complementary Act signed by France and Spain in 1866, and stated that there was no dispute between the parties in respect of the fulfilment of the obligation concerned, the above pronouncements nevertheless had a general validity, reading as follows: "... l'éventualité d'une atteinte au régime ou au volume des eaux... ne saurait en aucun cas, être laissée à l'appréciation exclusive de l'Etat

qui se propose d'exécuter ces travaux . . . L'Etat exposé à subir les répercussions des travaux entrepris par un Etat limitrophe est seul juge de ses intérêts, et si ce dernier n'en a pris l'initiative, on ne saurait méconnaître à l'autre le droit d'exiger notification des travaux . . . qui sont l'objet d'un projet".¹⁴⁶

The obligation of notification was disputed at a UN Conference on the Human Environment held in Stockholm in 1972. It was laid down in point 20 of a draft declaration of the conference that the respective states were bound to render appropriate data on all activity effected within the territory of their jurisdiction or subject to their control or on new facts, respectively, which was or might be, necessary to prevent harmful consequences to the environment in areas outside their jurisdiction, attributable to the activities or new facts mentioned above. As a result of a dispute which occurred between Argentina and Brazil at the conference, the draft provision was not accepted. However, as regards the matter of providing information, Argentina succeeded in persuading the majority of the UN General Assembly to back its view.¹⁴⁷ Accordingly, the rules on the exchange of information were incorporated into principle 6 of the Declaration on the preservation and utilization of shared natural resources, issued by the UNEP.

In view of the aforesaid, it is beyond doubt that a state planning to interfere with water regime conditions is bound, under an international obligation, to notify the other state of the kind of works or measures that may affect the territory of the latter, irrespective of contractual relations, and the state concerned is entitled to demand notification. This interpretation of actual state practice amounting to preliminary notification is a *conditio sine qua non* of the obligation of negotiation, to be dealt with below, and furthermore, it is in compliance with the reasonable and equitable share concept. Finally, it is absolutely necessary to protect the interests of the other state, and it sets limits on territorial sovereignty to a very small degree which can be accepted without difficulty.¹⁴⁸

Nevertheless, the confirmation of the existence of the rule establishing the obligation of notification under international law failed to set aside all doubts, even with some provisions specifying that the notification had to be made in due time, prior to proceeding to utilization, and to be complete with "... data and technical information sufficient to permit to other States to determine and assess the risks of damage that might result from the new utilization as envisaged".¹⁴⁹ Apart from the possible consequences of the omission of or refusal to provide notification, to be dealt with later, reference should be made to the point that, as only the probability of transfrontier effects was at stake, this permitted discretionary assessment for the would-be acting state. Accordingly, it is thus important to emphasize the requirement of appropriate care to be taken by the respective state in connection with the said probability.

The *regular transfer of information* is closely connected to notification.

In a resolution adopted in New York, the ILA only recommended that riparian states place at the disposal of the competent UN organs, and communicate with each other, hydrological, meteorological, and economic data relating to fluvial delivery, the volume and quality of waters, precipitation, i.e., rain and snow, ground water, and the flow of underground waters.¹⁵⁰ In compliance with this suggestion, the following was laid down in the Helsinki Rules: "With a view to preventing disputes from arising between basin States as to their legal rights or other interests, it is recommended that each basin State furnish relevant and reasonably available information to other basin States concerning the waters of a drainage basin within its territory and its use of, and activities with respect to such waters." (Article XXIX, para. 1).¹⁵¹

Accordingly, the obligation to furnish information has so far been acknowledged only *de lege ferenda* in jurisprudence. Nevertheless, provisions on the mutual communication of hydrological, meteorological, statistical, etc., data are very frequent in water regime treaties, conventions or agreements.¹⁵² In other legal documents, higher levels of information are provided for, such as joint research or studies, the exchange of projects, etc.¹⁵³

In any case, the provisions of these treaties, conventions, or agreements, and without doubt there are many, have been insufficient to conclude the formation of a rule of customary international law prescribing the exchange of information. Apart from actual cases in which the mutual exchange of data has not taken place, in the absence of conventional stipulations, e.g., between India and Pakistan,¹⁵⁴ a theoretical basis has also been missing. In fact, joint research or study implies entry into the territory of the other state concerned, and this would be contrary to the principle of sovereignty in the absence of a relevant conventional provision. Actually, the acquisition and transfer of information have important effects on costs, the exploration of the hydrological conditions of a river requires scientific research, signalling posts are needed for the regular collection of data, the organizational framework of a relationship has to be established, the technical facilities have to be assured, etc. If a state were to receive data of this kind without compensation, this would give rise to an unjustified benefit. Accordingly, a state anxious to receive data in this way has to contribute to the incurred costs; on the other hand, a share of the costs presupposes the conclusion of a treaty or contract. With this in mind, the correct rule of international law was appropriately expressed in an ILA resolution adopted at New York in 1972, which reads as follows: "Expenses for collection and exchange of relevant data, for preparation of surveys, investigations, and studies, for flood forecasting and communication of flood warnings as well as for the setting up of a regular information service shall be borne jointly by the basin States cooperating in such matters." (Article 6, para. 1).

Another application of the notification concept includes *flood-warnings* and other menacing dangers, expressed in several treaties.¹⁵⁵ Nevertheless, only a

recommendation was laid down in Article 4 of an ILA resolution from 1972; according to its formulation, it is not a self-executing rule. This was opposed, however, to the ICJ award pronounced in respect of the Corfu Channel in which the obligation of notification was based upon elementary humanitarian aspects,¹⁵⁶ although only the danger of mines was mentioned therein, general validity could well be attributed to this statement.

b) The obligation to consult or negotiate

The obligation to negotiate and the *pactum de contrahendo* linked with it, has not been alien to international fluvial law, it was mentioned in Article 108 of the Final Act of the Vienna Congress of 1815. This obligation has particular importance in solving problems related to non-navigational uses of international watercourses; indeed, it represents the most significant procedural law reflection of the reasonable and equitable share principle.

The existence of the obligation to negotiate has been accepted by recognized authorities on international law. Accordingly, CUTH considered negotiation as an indispensable preliminary condition;¹⁵⁷ according to DRÄGER, the reasonable and equitable share principle accentuated, first and foremost, the procedure serving the consideration of, and compromises between, interests, and the obligation of the riparian states concerned to cooperate within the context of the said procedure in order to demonstrate and discuss their utilization projects.¹⁵⁸ ANDRASSY, however, limited the scope of the obligation to negotiate to conflicts in water uses threatening international peace and security; under these circumstances, this was dependent not only on the weight of the threatened interests, but also on the highly variable factors determining the relations between the countries concerned.¹⁵⁹ KLIMENKO envisaged limits on the obligation to negotiate in other respects, i.e., an objection that may be regarded as interference with the internal affairs of the state in question must not be negotiated.¹⁶⁰

The obligation to negotiate has also been dealt with in the resolution of international organizations. Thus, a resolution by the IDI adopted at Salzburg in 1961 reads as follows: "In case objection is made, the States will enter into negotiations with a view to reaching an agreement within a reasonable time." (Article 6). Contrary to this, the Helsinki Rules (Article XXX) did not oblige the relevant states to indulge in negotiations, i.e., this approach was regarded only as desirable; nevertheless, this formulation seemed to be in contrast with the wording of Article XXVII, requiring the peaceful settlement of disputes related to water regimes, in compliance with the UN Charter. Although the peaceful settlement of disputes could evidently not be identified with negotiations, it would have been more logical to formulate negotiations as an obligation, and to recommend less frequently used methods of settlement. This approach would

have been all the more practical as it would have induced the ILA to come down on the side of the reasonable and equitable share in the field of procedure.

Consultation, however, is provided for in Article XI, point 2) of the Helsinki Rules with a view to reducing pollution. It is difficult to understand why this single case relating to rights and obligations affecting water regimes was emphasized and the obligation to negotiate was coupled with it, in view of the fact that much more important interests might be at stake in other cases. The Seoul resolution also contained a significant modification in this respect. It reads as follows: "If a basin State objects to the project, the States concerned shall make every effort expeditiously to settle the matter consistent with the procedures set forth in Chapter 6 of the Helsinki Rules..." (Article III, para. 4).¹⁶¹

The vitality of the obligation to negotiate concept is confirmed by the high number of treaties or conventions concluded on water regimes. In addition, it has been explicitly recognized by some treaties or conventions. Thus, in terms of Articles 3 and 4 of the 1923 Geneva convention, negotiations should be carried out, with a view to arriving at an agreement, if works connected with the utilization of hydraulic power have to be carried out partly on the territory of another state, or if works of this kind involve changes in the conditions of the site concerned on the territory of one of the contracting parties in question, or if the realization of such works results in serious harm for other contracting parties. Furthermore, provisions on negotiation may be found in Inter-American codification papers¹⁶² and also in a draft proposal of the AALCC.¹⁶³ The obligation to negotiate or consult has been explicitly imposed on the respective contracting parties in several bilateral treaties.¹⁶⁴ Furthermore, this obligation is laid down, in latent form, in a major proposition of the respective treaties or conventions. Thus, the parties undertook to settle disputed problems by means of an agreement, or not to change the relevant water regime without the consent of the other party, with the necessary consultation resulting from it.¹⁶⁵ Without being mentioned explicitly, the rule in question has actually also been in force in treaties, conventions or agreements in which, with the institutionalization of relations concerned with the water regime, a mixed committee was set up because the discussion of relevant problems was inseparable from its functioning.

In terms of the arbitral award made in the Lake Lanoux case, the states in dispute were charged with the obligation to indulge in good faith negotiations with a view to concluding a treaty.¹⁶⁶ The general validity of the obligation to negotiate was deemed by the ICJ principle of equity.¹⁶⁷ When problems arose, the respective states as a rule carried on negotiations. As to the strength of the evidence of opposite precedents, e.g. the Jordan dispute, this was precluded by the specific circumstances in the relevant cases.

Accordingly, the obligation to negotiate has been clearly acknowledged by international practice. Even if the problems related to indulging in negotiations

have not been regulated in detail under international law, some principles may, however, be laid down. Thus, negotiations have to be carried on in good faith, their object being to arrive at an agreement, and the fundamental principles of international law are to be observed during the course of the negotiations, i.e., the sovereign equality of states, non-intervention in internal affairs, and the prohibition of the threat or use of force in particular.

The obligation to negotiate does not exist, however, as a general requirement in the field dealt with here. It depends, in fact, upon an *objection* by the state exposed to a transfrontier effect resulting from the water utilization project, following notification or being informed of it in any other way. Besides, this is clear from the texts referred to above.¹⁶⁸ Similarly, it is beyond doubt that the objection in question has to be made within a reasonable period of time; nevertheless, the legal consequences of the failure to object are uncertain. Presumably, the notifying state should be authorized to proceed in realizing the water utilization concerned after the lapse of the prescribed time, but this should be done, according to McCaffrey's comment on Article 13, para. 2, within the context of an "obligation of negotiation for the prohibition of violence" ("*obligation de ne pas causer de 'préjudice' juridique*").¹⁶⁹ Furthermore, one can also argue that a non-transmitted reply is equal to consent precluding unlawfulness.¹⁷⁰ Apart from the difficulties connected with the interpretation of a non-transmitted reply, the application of the rule in question can hardly be considered in the given case, taking into account the sovereignty over the relevant section of international watercourses; in fact, the limitation thereof cannot be presumed as this was also pronounced in principle in the award pronounced in the Lake Lanoux case.¹⁷¹

Nevertheless, it remains questionable whether or not the *obligation of agreement* is included in the obligation of negotiation, i.e., the interested states would be bound to arrive at a successful consultation, by means of concluding some sort of agreement.¹⁷²

Several authors have given an affirmative reply to this question. Thus, a complete water drainage system requires the consent of the other interested state, according to DECLEVA's view;¹⁷³ WOLFROM coupled this requirement with the possibility of substantial damage.¹⁷⁴ The principle prohibiting the accomplishment of any work that may have an important influence upon the flow of international waters in a neighbouring state without the consent of that state was considered by BERBER to be a rule of regional European customary law. Anyhow, he supposed that this consent was unequivocally required under the terms of treaties concluded in continental Europe.¹⁷⁵ KLIMENKO saw an obligation to conclude a treaty or convention in connection with boundary waters in view of the fact that the neighbouring state was absolutely affected by water utilization in this context;¹⁷⁶ furthermore, he wrote: "... works capable of causing damage to another country should be carried out in international rivers

only if the other state concerned has been duly notified or negotiations initiated with it promptly or, in several other cases, after having asked for its consent, respectively".¹⁷⁷ GHEMELGEANU limited preliminary consent to cases concerning rivers forming a boundary and the utilization of hydraulic power.¹⁷⁸ It has been a common specific feature of the views mentioned in the foregoing that preliminary consent was coupled with the possibility of the occurrence of substantial damage; even more, additional restrictions beyond the preceding ones have also existed. Accordingly, the thesis referred to above may be interpreted in various ways; apart from this point, it cannot be classified as predominant since the existence of the rule relating to preliminary consent and agreement has been denied by several reputed authors.¹⁷⁹

The rule of preliminary consent was first formulated *de lege ferenda* by a resolution of the IDI adopted at Madrid in 1911. Under its terms, it was explicitly prescribed in two cases, i.e., changing the course of a boundary river and the border-crossing places of transfrontier rivers.¹⁸⁰ Besides, prohibitions were laid down, such as causing pollution, violation of the rights of navigation, bringing about a flood, and substantial interference with water utilization. Anyhow, it remained unclear whether or not preliminary consent was regarded as a condition in view of the said stipulation. In spite of this fact, the said declaration was considered, as was stated by many experts,¹⁸¹ generally and avoiding criticism, as if the preliminary consent of other interested riparian states was required in the case of any substantial damage. The rule of the Madrid resolution was followed by a 1957 resolution of the Inter-American Bar Association (Articles 2 and 3), but its rigidity was modified considerably by calling for an arbitral procedure in disputes not settled by agreement. Thus the enforcement of a veto of a purely obstructive character was prevented.¹⁸² Actually, the rules of preliminary agreement were also not been included in the Salzburg resolution of 1961 nor in the Helsinki Rules; only the recourse to an international court was recommended to the parties,¹⁸³ and this meant, indirectly, agreement.

Conventional practice offers, in fact, a high number of treaties, conventions or agreements calling for the agreement obligation.¹⁸⁴ Thus, agreement is indirectly prescribed in point 10 of the Montevideo Declaration of 1933 and Article 10 of the draft of the Inter-American convention of 1965, providing for recourse to international courts when parties have failed to reach an agreement, i.e., replacing the parties' agreement by a compulsory judicial resolution. Nevertheless, recourse to an arbitration board or the ICJ was merely recommended in a draft of the AALCC (Article X).

A more thorough examination of bilateral treaties containing the preliminary consent rule leads, in fact, to very interesting conclusions. Most stipulations of this kind may be found in treaties concerning boundary waters¹⁸⁵ or those destined to ensure the right of free navigation.¹⁸⁶ In addition, this formulation

can be found in the treaties concluded by the states succeeding the former Austro-Hungarian Empire.¹⁸⁷ In regions outside Europe, it was only applied in treaties relating to the Nile basin and those protecting Egypt's irrigation interests,¹⁸⁸ but the treaties concluded by African states back in the 1960s did not contain this provision. It is worth mentioning, furthermore, that the obligation of agreement has been frequently laid down in various declarations and drafts formulated in Latin America but, as regards actual conventional practice, it can hardly be found even in documents relating to boundary rivers.¹⁸⁹

An analysis of the contents of treaties providing for the agreement obligation may lead to interesting conclusions. Evidently, this stipulation has to be interpreted within the context of other conventional provisions.¹⁹⁰ In fact, the prescription of agreement used to be very frequently coupled with the prohibition of activities, the outcome of which resulted in causing substantial and continuous damage to neighbouring states; more so, some treaties contain explicit mention of water drainage.¹⁹¹ In this context the requirement of agreement is nothing more than a procedural rule destined to prevent possible damage or transfrontier effects with the consent of the injured State, or to preclude wrongfulness, respectively.¹⁹²

With the thorough analysis of treaties containing the requirement of agreement, their significance within the development process of a rule of customary international law will diminish. Nevertheless, one may put the question whether the high number of these treaties, a series in fact, resulted in the birth of a customary law rule. The arbitral award in the Lake Lanoux case gave a precise reply to this question. In the face of extremely strong evidence in the form of eighty treaties and conventions pronouncing the requirement of preliminary consent, to which Spain made a reference, the arbitration board was convinced of the following: "Admettre qu'en une matière déterminée il ne peut plus être exercé de compétence qu'à la condition ou par la voie d'un accord entre deux Etats, c'est apporter une restriction essentielle à la souveraineté d'un Etat, et elle ne saurait être admise qu'en présence d'une démonstration certaine . . . En effet, pour apprécier, dans son essence, la nécessité d'un accord préalable, il faut se placer dans l'hypothèse dans laquelle les Etats intéressés ne peuvent arriver à un accord. Dans ce cas, il faut admettre que l'Etat normalement compétent a perdu le droit d'agir seul, par suite de l'opposition inconditionnée et discrétionnaire d'un autre Etat. C'est admettre un 'droit d'assentiment', un 'droit de veto', qui paralyse, à la discrétion d'un Etat, l'exercice de la compétence territoriale d'un autre Etat."¹⁹³ This dogmatic argumentation was supported by the court of arbitration when noting the difference between the draft and the final text of the Geneva convention of 1923. In fact, the draft was based upon preliminary and compulsory agreements serving the utilization of hydraulic power from international watercourses, but it was rejected by the conference.¹⁹⁴

Accordingly, the treaties containing the requirement of preliminary consent have to be regarded as exceptions to the fundamental principle of international law confirming the free exercise of territorial sovereignty and, in compliance with the principle of the interpretation of treaties, they have to be interpreted in a restrictive way.¹⁹⁵ This conclusion is supported by treaties¹⁹⁶ that explicitly reject the preliminary consent condition. This is clear from other treaties as well. Admittedly, it used to be held by committees set up for the institutionalization of relations concerning water regimes that decisions should be taken with the consent of the respective parties, but a diplomatic settlement of the dispute was provided for cases in which the parties failed to come to an agreement, and only few treaties prescribed a settlement by means of arbitration or the ICJ.

Accordingly, a state planning an enterprise in the field of water utilization and management is not bound to ensure the consent of other interested states for the realization of the project concerned; nevertheless, it has to comply with some obligations of a procedural character, referred to above. As was stated in the arbitral award pronounced in the Lake Lanoux case, "il appartient à chaque Etat d'apprécier, raisonnablement et de bonne foi, les situations et les règles qui le mettent en cause . . . elle prend le risque de voir sa responsabilité internationale mise en cause, s'il est établi qu'elle n'a pas agi dans la limite de ses droits".¹⁹⁷ Hence, the matter of preliminary consent has to be reconsidered, depending on the exercise of territorial authority contrary to international law. In fact, two types of preliminary consent or agreement may be distinguished, i.e., those aimed at prevention or remedy.¹⁹⁸ As to the first kind, it means the right of veto preventing further action, and its use is only allowed on the basis of an explicit conventional provision. On the other hand, a remedy-concentrated consent expresses the resignation of the state in claiming that an internationally wrongful act was committed in a given case. Having in mind the said statements, one may raise the question whether the said remedy-concentrated contribution was necessary as this approach had wide support¹⁹⁹, if the realization of a planned water utilization was contrary to the principles of international law, i.e., that of a reasonable and equitable share in particular, and another prohibiting the causing of damage so that it constituted an internationally wrongful act. It has been beyond doubt that committing an internationally wrongful act was prohibited under its proper rules, and it implicated the international responsibility of the state concerned. In spite of this, the possibility of an internationally wrongful act could not be excluded, so that the condition of preliminary consent could not be considered. As a matter of fact, a state observing the rules and principles of international law was disinclined to commit an internationally wrongful act, and consequently, it would prefer to enter into an agreement in case its water regime resulted in substantial and harmful effects on the territory of another state. The obligation of preliminary consent or agreement as a cause excluding wrongfulness has indeed been functioning in this context.²⁰⁰ Several

treaties of this kind exist with provisions on compensation agreements connected with the filling of storage basins. In the absence of an agreement, the relevant state is allowed to act, but it is then subject to international responsibility for the internationally wrongful act it thereby committed. Nevertheless, a preliminary agreement is unavoidable if the realization of an installation connected to water use and management affects the territory of the other state, in view of the fact that the territory of this state can be entered only with its agreement.

The problems associated with a preliminary agreement also occur in a latent form. Starting from the correct concept that a state is not allowed to utilize waters in a way which violates the reasonable and equitable share of the other state, ANDRASSY saw two possibilities when there was an objection to this latter, i.e., the former stops water utilization or the dispute has to be settled. In plain words, to seek a peaceful settlement is insufficient, it has to be actually attained.²⁰¹ Ultimately, this led to a judicial settlement of a compulsory nature, and the author based his argument upon Article 33 of the UN Charter. It goes without saying that the peaceful settlement of international disputes was declared obligatory by the said provision but, contrary to ANDRASSY's view, this was not limited to disputes endangering international peace and security.²⁰² Furthermore, the author failed to take into consideration the possibility that some international legal disputes could not be settled, and this concept led him towards compulsory jurisdiction, in spite of the explicit conclusion he correctly made, stating that compulsory jurisdiction has not been acknowledged by international law.²⁰³

Finally, the problem of the *obligation of suspension* has to be examined in connection with the obligation to negotiate. Let us now consider the situation when a state has the intention to substantially interfere with water regime relations, and the interested states have been duly notified thereof. If these states have not officially opposed the works or measures in question, the initiating state may proceed to the implementation of the respective plans as no legal dispute has arisen. Nevertheless, if the interested states protest against the disputed water utilization plans which make them susceptible to a violation of their rights or endangering their interests, the problem arises whether or not the initiating state is obliged to refrain from the implementation of the disputed plans for the duration of the disputed settlement process; thus the point here is, with another formulation, whether or not the state concerned is bound, under an international legal obligation, to suspend the disputed works or measures. In fact, two interests have to be coordinated here: that of the initiating state, coupled with the realization of the plans in question, on the one hand, and the protection of the rights and interests of the other states, on the other. The importance of suspension is actually increased by the fact that *in integrum* restitution is excluded or hardly practicable in some cases of internationally wrongful act related to water uses and management.

Views differ from each other in respect of the obligation to suspend. Thus, GRIFFIN recognizes the existence of this rule.²⁰⁴ ANDRASSY accepts it only in a limited sense, i.e., in serious cases implying the application of Article 33 of the UN Charter;²⁰⁵ contrary to these views, DRÄGER argued that the obligation calling for the suspension of the implementation of projected uses where there was an objection by other riparian states until an agreement was reached has not been confirmed by practice, as this would mean the unequivocal rejection of the requirement of preliminary consent or agreement. Nevertheless, he restricted the weight of the former argument to the following, while also making a reservation. Thus, a riparian state was allowed to proceed unilaterally if it complied with the procedure required by the fundamental principle of equitable utilization, and did not exceed the share due to it in the course of water utilization and, taking into consideration the prospect of agreement, had primary interests.²⁰⁶ Anyhow, his final conclusion was positively worded: in the absence of an explicit contractual provision, the initiating state is not obliged to halt the implementation of the disputed plan until the existence of a consensus-based settlement if the execution of the plan is required by its own substantial interests and the equitable measure of water utilization is not thus exceeded.²⁰⁷

Suspension is only recommended in terms of Article 7 of the Salzburg resolution of the IDI, adopted in 1961 and reading as follows: "During the negotiations, every State must, in conformity with the principle of good faith, refrain from undertaking the works or utilizations which are the object of the dispute or from taking any other measures which might aggravate the dispute or render agreement more difficult".

When limiting it to the duration of the examination of the relevant notification, suspension is recommended by the Helsinki Rules in the following terms: "A State providing the notice . . . 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." (Article XXIX, para. 3). As a judicial settlement, i.e., a solution by a compulsory resolution of disputes, was ultimately recommended in Article XXXIV, it was no longer required to take a stand in respect of suspension as it was already regulated by the Rules on Arbitral Procedure and the statutes and rules of procedure of the ICJ, respectively. Thus, the suspension recommendation was transformed to a compulsory rule by the Seoul Resolution, and its duration was also fixed. The relevant text reads as follows: "The proposing State shall not proceed with the project while these efforts²⁰⁸ are continuing provided that they are not unduly protracted. If these efforts become unduly protracted or an objecting party has refused to have resort to third party procedures for the settlement of the remaining differences, the proposing State may, on its own responsibility, proceed with the project, in accordance with the notice." (Article III, para. 4).

The rule of the obligation to suspend may be found in concluded or draft treaties aimed at the formulation or codification of general obligations. Taking into account the wording of the obligation of negotiation as laid down in Articles 3 and 4 of the 1923 Geneva convention, providing for the conclusion of agreements ensuring the implementation of the relevant construction or works, one may conclude the existence of an obligation to suspend, scheduled for the duration of the negotiations concerned. The obligation to suspend was acknowledged more clearly in point 8 of the 1933 Montevideo declaration; it was confirmed in Article 9 of the 1965 Inter-American Draft Convention, setting a delay of six months for a reply to a preliminary notification. With the lapse of the said delay and in the absence of an objection, the state which sent the notification "will be allowed to execute the works, in accordance with the respective plant"; in case of an objection, the competent mixed committee will have to reach a settlement, within a period of six months calculated from the date of reply, respectively.

As to bilateral treaties, the stipulation of the obligation to suspend used to be provided for, however, only exceptionally,²⁰⁹ and there are differences in the actual practice of the relevant states as well. In some cases, e.g., the Chicaco Channel,²¹⁰ or the disputes concerning the utilization of the waters of the Indus²¹¹ or the Columbia,²¹² the states advocating water regime projects refrained from realizing the same as long as the respective treaties or agreements came into existence; on the other hand, the projects were executed by Chile in the Lauca case²¹³ and Israel in the Jordan case,²¹⁴ respectively, in spite of protests by the affected states.

The arbitral award rendered in the Lake Lanoux case also dealt with the problem of suspension, reading as follows: "... pour qu'une négociation se déroule dans un climat favorable, il faut que les Parties consentent à suspendre, pendant la négociation, le plein exercice de leurs droits. Il est normal qu'elles prennent des engagements à cet effet. Si ces engagements devaient les lier inconditionnellement jusqu'à la conclusion d'un accord, elles perdraient, en les signant, la faculté-même de négocier; cela ne saurait être présumé".²¹⁵ Presumably, this formulation should mean that the entire problem is relevant only within the scope of lawful conduct, on the one hand, and that some kind of agreement is at hand as a legal basis, on the other.²¹⁶ After having surveyed the relevant French-Spanish negotiations, the arbitration board came to the following conclusion: "L'accord de 1949 ne pourrait donc prolonger son effet au delà de l'existence de la Commission mixte d'ingénieurs, à moins d'avoir une durée indéfinie. Mais, dans cette dernière hypothèse, il perdrait son caractère provisionnel; il subordonnerait à la nécessité d'un accord le droit même d'exécuter des travaux alors qu'un tel accord devait simplement marquer le moment où pouvait commencer leur exécution."²¹⁷

Accordingly, a sufficiently solid identity which would permit the formulation of an unequivocal rule cannot be found either in the respective treaties nor in the actual behaviour of the states concerned or the relevant judgements. Thus, the existence or non-existence of the obligation of suspension cannot be decided *a priori*.

The *principle of compulsory good faith* has to be the starting point in all cases. Accordingly, the obligation to suspend exists for the reasonable period within which a reply to the obligatory preliminary notification may be expected; on the other hand, beginning with the suspension of utilization or the implementation of the relevant works if proceeding to negotiation is subject to this measure. Nevertheless, the negotiation tactics of the other party in playing for time must not prevent the realization of the projects in question. Taking into consideration, furthermore, the absence of an obligation to conclude a treaty or agreement, respectively, then delaying the obligation to suspend is very limited. Summing up the foregoing, it can be stated that, theoretically, there exists no solution that would meet all relevant interests; with this in mind, BOURNE's opinion seems to be correct, i.e., he claimed that the absence of provisions concerning suspension in the respective international treaties or agreements also implies the absence of substantial problems on this matter in actual practice.²¹⁸

Taking the aforementioned into account, the codification character of the fundamental solutions of the drafts submitted by the special rapporteurs of the ILC,²¹⁹ reflecting customary international law in particular, seems to be unequivocal.²²⁰

Summing up the rules of procedure governing the utilization regime of international watercourses, reference should be made to the point that, in spite of the fundamental importance of the matter, they failed to offer adequate solutions in all cases of international problems resulting from transfrontier effects. In other words, these rules imply in some cases the possibility of insolubility of international legal disputes in this subject. This does not concern, however, a specific feature of this branch of international law; rather, it affects the general problem of the actual role of international law, as a special system of norms, in the solution of international conflicts.

Notes

¹ Additional Act, concluded between Spain and France in 1866, Article VIII (see: BASDEVANT: op. cit. pp. 12 and 14); Treaty between Belgium and the Netherlands on the diversion of water from the Meuse, 1863, Articles 5 and 11.

² See: SAUSER-HALL: op. cit. p. 514.

³ United States Reports, 1921, Vol. 206, p. 100. See: McCaffrey's Second Report (UN Doc. A/CN.4/399, para. 165). For more details see: SMITH: op. cit. pp. 106—112.

⁴ WITMER (ed.): op. cit. pp. 457—725.

⁵ Annual Digest of PIL Cases, 1927—1928, p. 128 (cited by McCaffrey: *ibid.* para. 166).

⁶ 1957 Paatsojoki River Agreement between Norway and the USSR, Preamble. *Ibid.* 1929 Treaty between Haiti and the Dominican Republic, para. 10 (just and equitable manner); Lake Titicaca Agreement between Bolivia and Peru, concluded in 1957, providing for a study to be prepared for efficiently and equitably meeting power demands (Article 4); 1969 River Plate Basin Treaty, Article I, mentioning multiple and equitable uses; Preamble of the 1971 agreement concluded by Ecuador and Peru, 1978 Amazon Treaty.

⁷ 1953 Yarmuk River Agreement between Jordan and Syria, its Preamble, destined to regulate the efficient use of waters; 1956 Convention between the Federal Republic of Germany and France, on the regulation of the upper course of the Rhine, its Preamble on the establishment of a more equitable regime, and stipulating in Article 2 that works shall be carried out in the most rational manner possible, with a view to securing maximum economic efficiency; 1949 Reno di Lei Agreement between Italy and Switzerland, Preamble.

⁸ 1944 Rio Grande, Colorado, and Tijuana River Treaty, Preamble; 1946 Salto Grande Agreement, Preamble; 1958 Ouz Treaty, Article 1; 1961 Columbia Treaty Preamble; 1964 Chad Basin Convention, Article 9; 1964 River Niger Agreement, Article 2.

⁹ 1923 Geneva Convention, Article 5; 1960 Indus Treaty, Article VII; 1977 Ganges River Agreement, Preamble.

¹⁰ 1946 Protocol between Iraq and Turkey, Preamble; 1966 Lake Constance Agreement, Article 1; 1979 Parana River Agreement.

¹¹ E.g. HACKWORTH: *op. cit.* Vol. I, p. 584 for the 1906 Rio Grande convention; JOHNSON: *op. cit.* pp. 234—240 for the Columbia Basin; BAXTER: *op. cit.* pp. 467—476 for the 1960 Indus Treaty; GODANA: *op. cit.* pp. 237—240 and 335—344 for the African rivers.

¹² PCJI, Series A, No. 23 (Case relating to Territorial Jurisdiction of the River Oder), pp. 28—29.

¹³ Cf. the Meuse case, Judge HUDSON's individual opinion; PCJI, Series A/B, No. 70, p. 73.

¹⁴ Lake Lanoux case; RGDIP 1958, pp. 116—117.

¹⁵ UN Doc. E/3066 (1958), para. 38; 1972 Action Plan for Human Environment, Recommendation 51 (point iii); 1977 Mar del Plata Action Plan, para. 90.

¹⁶ UN Doc. ST/ESA/5, para. 44; Action Plan for Human Environment, Recommendation 51 (point ii).

¹⁷ The idea of a reasonable and equitable share had already been raised by KAUFMANN and STRISOWER at the Madrid session of the IDI in 1911. See: *Annuaire ...* (1911), pp. 187, 358—359.

¹⁸ ILA, 52nd Report, 1966, p. 486.

¹⁹ Cf. SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 42).

²⁰ IDI, 1961 Salzburg Resolution, Article 3; ILA, 1966 Helsinki Rules, Article 5; 1986 Seoul Resolution, Article 1; Inter-American Bar Association, 1957 Buenos Aires Resolution, Article I, para. 2.

²¹ E.g. DRÄGER: *op. cit.* pp. 113—123; GAJA: *op. cit.* pp. 370 et seq.; HANDL: *op. cit.* 1978—79, pp. 40—64; KLIMENKO: *op. cit.* p. 102; KOUTIKOV: *op. cit.* p. 79; SMITH: *op. cit.* p. 150; WOLFROM: *op. cit.* pp. 36 and 144.

²² Cf. ILA, 52nd Report, 1966, p. 499; EVENSEN's First Report (UN Doc. A/CN.4/367), para. 50; SCHWEBEL's Third Report (UN Doc. A/CN.4/348), paras. 41 and 73.

²³ EAGLETON: *op. cit.* p. 1021.

²⁴ LIPPER: *op. cit.* pp. 18 and 23—38.

²⁵ UN Doc. A/CN.4/399, paras. 92 et seq., and the same is suggested by the treaties enumerated in the two Annexes.

²⁶ *Ibid.* para. 171. At the same time, it can be co-ordinated with the *sic utere tuo* principle (para. 173).

²⁷ KLIMENKO: op. cit. p. 102. Essentially, McCaffrey's opinion on lawful damage in his Second Report is identical. Ibid. paras. 181 and 198.

²⁸ OLMSTEAD: op. cit. p. 10.

²⁹ VAN ALSTYNE: op. cit. p. 309.

³⁰ LAMMERS: op. cit. p. 580.

³¹ See: LACHARRIÈRE: op. cit. pp. 96 et seq.

³² UN Doc. A/CN.4/381, para. 49.

³³ EVENSEN's First Report, Article 6, para. 2 (UN Doc. A/CN.4/367, paras 80—86). For the dispute see: *Annuaire CDI*, 1984, Vol. I, p. 104.

³⁴ EVENSEN's Second Draft, Articles 7 and 8.

³⁵ ICJ Report, 1982, p. 92, para. 133, and p. 59, para. 70. Ibid. The Gulf of Maine case, ICJ Report, 1984, p. 246.

³⁶ Only the proportion of needs was laid down in the antecedents of this formulation (see: *Annuaire IDI* 1959, Vol. I, pp. 210 and 336). Similarly: Inter-American Bar Association, Buenos Aires Resolution, Article I, para. 2. The qualification of this formulation as only a criterion was objected to by ROLIN in Salzburg (ibid. 1961, Vol. II, p. 132); it was found to be unclear by other authors (see: OVERBECK, p. 245).

³⁷ ANDRASSY: op. cit. 1951, p. 120; BERBER: op. cit. pp. 176, 255—256; CHEN: op. cit. p. 155; DECLEVA: op. cit. p. 127.

³⁸ See the 1937 resolution of the IDI (*Annuaire*... 1937, p. 271) which was preceded by DE VISSCHER's remarks (ibid. 1937, p. 239; ibid. BUZA, op. cit. pp. 14—15 and 38). This duplicity is expressed in the UN Charter, Article 1, para. 1, and the Statute of the ICJ, Article 38. The division is reflected in the legal practice of the PCIJ (*Répertoire* 1976, Série I, Vol. II, p. 28), and the ICJ judgement in the South-West Africa Case (ICJ Report, 1966, para. 49).

³⁹ BERMEJO: op. cit. pp. 21—22; BILGE: op. cit. pp. 108 et seq.

⁴⁰ See the North Sea Continental Shelf case (ICJ Report, 1969, para. 85), Fisheries Jurisdiction case (ICJ Report 1974, paras. 72—73, 78, 86—87), and the judgements enumerated in Note 35 *supra*. In a similar sense see the arbitral award rendered in the La Manche Continental Shelf case in 1977, paras. 70, 97 and 191.

⁴¹ BERMEJO: op. cit. p. 55.

⁴² BILGE: op. cit. p. 116; JENNINGS: op. cit. 1986, pp. 27—40.

⁴³ In connection with the North Sea Continental Shelf Case cf. FRIEDMANN: op. cit. 1970, p. 234; HARASZTI—HERCZEGH—NAGY: op. cit. p. 396; MAREK: op. cit. 1970, p. 69.

⁴⁴ DRÄGER: op. cit. p. 120.

⁴⁵ ILA, 52nd Report, 1966, p. 488; this was extended to shared resources by the Montreal Rules (Article 6), cf. ILA, 60nd Report, 1982, pp. 170—171.

⁴⁶ The Helsinki Rules do not have a coordinated terminology: Chapter II is entitled "equitable utilization", the term "reasonable and equitable share" is used in Chapters IV and V, and the formulation in point 1 of Chapter XXXI is "fullest and most reasonable utilization"; this is also expressed in the comments as "reasonable utilization".

⁴⁷ SCHWEBEL's First Report (UN Doc. A/CN.4/320, p. 44).

⁴⁸ UN Doc. E/CONF/70. A.3, para. 6.

⁴⁹ DRÄGER: op. cit. pp. 117—118.

⁵⁰ Ibid. the 1957 Italian-Swiss agreement. The factors to be taken into consideration for the distribution of waters were already mentioned in the exchange of Notes between Portugal and Spain in 1912; the sharing of waters was laid down in Annex III of the 1947 Italian Peace Treaty with due consideration to needs, and the same provisions are laid down in Article 1 of the 1966 agreement regulating water drainage from Lake Constance, and the 1971 Finnish-Swedish agreement. It is equally acceptable that the objective factors of water uses and management had a role in the 1944 USA-Mexican treaty which realized an empirical share, with a definitely technical character. This

was also stated by OLMSTEAD (op. cit. p. 3), with reference to the 1959 Nile agreement, the 1960 Indus Treaty and the 1961 Columbia convention, respectively.

⁵¹ UN Doc. AGNU, 25e session, 6^{ème} Commission, p. 327. In this sense see: BOURNE: op. cit. 1965, p. 108; DRÄGER: op. cit. p. 118.

⁵² UN Doc. A/CN.4/381, para. 55. There are differences in the first version (UN Doc. A/CN.4/367, para. 9) in several aspects. Thus ILC failed to arrive at an agreement, not only on the insufficient catalogue of the relevant factors but, even more, on its necessity as well.

⁵³ DRÄGER: op. cit. p. 118; GRIFFIN: op. cit. p. 80; HERCZEGH: op. cit. 1969, p. 101.

⁵⁴ RGDIP, 1958, p. 117. With respect to the text, the connection (*iunctim*) between "right" and "interest" as mentioned in Article 8, para. 1/c of the Draft is hardly acceptable. For a more thorough treatment of the problem see: GERVAIS: op. cit. pp. 408 et seq.

⁵⁵ Ibid. p. 116.

⁵⁶ Ibid. p. 117.

⁵⁷ ILA, 52nd Report, 1966, p. 488.

⁵⁸ Ibid. p. 491.

⁵⁹ Ibid. pp. 488—489.

⁶⁰ DE VISSCHER: op. cit. 1972, pp. IV—V.

⁶¹ Cf. North Sea Continental Shelf case (ICJ Report, 1969, para. 93); in DRÄGER: *Billigkeitserwägungen des Einzelfalles*, op. cit. p. 119.

⁶² BERBER: op. cit. 1975, p. 22; FRIEDMANN: op. cit. 1969, p. 47.

⁶³ ICJ Report 1969 (North Sea Continental Shelf case), paras. 89—93.

⁶⁴ Ibid. para. 98.

⁶⁵ RGDIP, 1958, pp. 117—118.

⁶⁶ ILA, 52nd Report, 1966, p. 487; DRÄGER: op. cit. p. 89; LIPPER: op. cit. p. 63.

⁶⁷ LIPPER: op. cit. p. 46; ILA, 52nd Report, 1966, p. 487.

⁶⁸ Ibid. p. 47.

⁶⁹ E.g. whether or not the so-called operating water channel model as applied to the Grand Canal d'Alsace, adapted to hydraulic power plants, may be relevant, and if so, until when. See L'HUILLER: op. cit. pp. 692—711; MOSLER: op. cit. p. 20.

⁷⁰ LIPPER: op. cit. p. 38, and WOLFROM: op. cit. p. 146 confronting nationally based water uses, supported by the mutual limitations of sovereignty and meaning reasonable and equitable share, with so-called "joint" utilization.

⁷¹ Ibid. p. 38.

⁷² UTTON: op. cit. p. 182.

⁷³ MANNER: op. cit. p. 134.

⁷⁴ COLLIARD: op. cit. p. 407; BOLINTINEAU-STEFANESCU: op. cit. p. 167; GHEMELGEANU: op. cit. p. 146; Chapter 4, point 15 of the report entitled "Integrated river basin development".

⁷⁵ For the enumeration of the supporters of the water community theory and the essence of their views see: BERBER: op. cit. pp. 22 et seq.

⁷⁶ SAUSER-HALL: op. cit. p. 547.

⁷⁷ Ibid. p. 548.

⁷⁸ Ibid. p. 550.

⁷⁹ E.g. Article XXX of the 1826 Dutch-Prussian treaty, Article XXXV of the 1843 Belgian-Dutch treaty, and Article I of the 1905 Norwegian-Swedish treaty. For further examples see: LIPPER: op. cit. p. 104.

⁸⁰ WINIARSKI: op. cit. pp. 97—98.

⁸¹ Conférence de Barcelone (1921), *Comptes-Rendus*, pp. 28—30.

⁸² TECLAFF: op. cit. pp. 119 et seq.

⁸³ HARTIG: op. cit. 1958, p. 8.

⁸⁴ Ibid. p. 10.

⁸⁵ E.g. resolution No. 417 (XIV) from June 2, 1952, No. 533 (XVIII) from August 2, 1954, No. 599 (XXI) from May 3, 1956, No. 675 (XXV) from May 2, 1958, and the report "Integrated...", etc.

⁸⁶ WOLFROM: op. cit. pp. 156, 227.

⁸⁷ COLLIARD: op. cit. p. 398.

⁸⁸ Ibid. p. 405.

⁸⁹ ILA, 47th Report, 1956, p. 243.

⁹⁰ ILA, 48th Report, 1958, p. 99.

⁹¹ For an analysis of the respective treaties from this point of view see: TECLAFF: op. cit. pp. 156 et seq.

⁹² LIPPER: op. cit. pp. 38—39.

⁹³ WOLFROM: op. cit. 1963, p. 158.

⁹⁴ Report on "Integrated river basin development", Chapter 4, para. 21; cf. COLLIARD: op. cit. p. 398.

⁹⁵ TECLAFF: op. cit. p. 119. A working programme on this topic may be found in the report "Integrated river basin development".

⁹⁶ UN Doc. ST/ECAFE/SER.F/19 (1963), p. 61.

⁹⁷ TECLAFF: op. cit. p. 119.

⁹⁸ BOLINTINEANU and STEFANESCU raised the question of whether or not state sovereignty is violated by integrated utilization. See: BOLINTINEANU-STEFANESCU: op. cit. p. 167. This is, however, misleading in this form as the conclusion of a treaty and the enforcement of sovereignty do not exclude each other. Cf. PCIJ, Series A, No. 1 (Case of the SS. Wimbledon), p. 25.

⁹⁹ Chapter 4, para. 13 of the report "Integrated river basin development".

¹⁰⁰ COLLIARD: op. cit. p. 398.

¹⁰¹ UN Doc. E/C.7/46, p. 4.

¹⁰² See the Charter on Economic Rights and Duties of States, Article 3 (GA/RES/3281/XXIX) from December 12, 1974.

¹⁰³ E.g. UN Doc. UNEP/GC/44, Corr. 1—2 and Add. 1; UNEP, Draft of Principles (GA/RES/34/186), December 18, 1979.

¹⁰⁴ E.g. Mar del Plata Action Plan (UN Doc. E/CONF. 70/29), paras. 85—90.

¹⁰⁵ UN Doc. A/CN.4/332, Add. 1, para. 142.

¹⁰⁶ UN Doc. A/CN.4/367, para. 80, Commentary, paras. 81—86.

¹⁰⁷ For the motives, see the submission of the Second Report in particular, Annuaire CDI, 1984, p. 104.

¹⁰⁸ For the non-taxing enumeration of shared natural resources, see: Doc. UNEP/GC/44, para. 88, Montreal Rules, Article 5, and the commentary ILA, 60th Report, 1982, pp. 168—170.

¹⁰⁹ UN Doc. A/CN.4/332/Add. 1, para. 146.

¹¹⁰ RIPHAGEN: op. cit. 1980, p. 344.

¹¹¹ Cf. the statements of the Brazilian and Romanian representative. Doc. UNEP/GC/44, para. 16.

¹¹² LAMMERS: op. cit. p. 548.

¹¹³ RIPHAGEN: op. cit. 1980, p. 345.

¹¹⁴ Ibid. p. 350.

¹¹⁵ ILA, 52nd Report, 1966, p. 487.

¹¹⁶ ILA, 62nd Report, 1982, p. 285.

¹¹⁷ KLIMENKO: op. cit. pp. 57 and 92.

¹¹⁸ LIPPER: op. cit. p. 41.

¹¹⁹ Ibid. p. 66.

¹²⁰ JOHNSON: op. cit. pp. 235 et seq.

¹²¹ Ibid. BILDER: op. cit. p. 168; BOURNE: op. cit. 1965, p. 264; UTTON: op. cit. p. 169; VAN ALSTYNE: op. cit. p. 308.

- ¹²² UN Doc. A/CN.4/320, para. 78.
- ¹²³ *Ibid.* paras. 82–83.
- ¹²⁴ UN Doc. A/CN.4/381, para. 57.
- ¹²⁵ Cf. SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 156); McCaffrey's Second Report (UN Doc. A/CN.4/399 paras. 179 et seq.).
- ¹²⁶ *Ibid.* paras. 177 and 185.
- ¹²⁷ *Ibid.* para. 187.
- ¹²⁸ KOUTIKOV: *op. cit.* p. 79.
- ¹²⁹ DRÄGER: *op. cit.* p. 89.
- ¹³⁰ This may be concluded from EVENSEN's Second Draft, Article 8, para. 2.
- ¹³¹ UN Doc. A/CN.4/348, paras. 99 and 102.
- ¹³² For a far from complete list of these treaties, see: McCaffrey's Second Report (UN Doc. A/CN.4/399), Annexes I and II.
- ¹³³ COLLIARD: *op. cit.* pp. 372–377.
- ¹³⁴ See CUTH: *op. cit.* p. 83; DRÄGER: *op. cit.* p. 95; KOUTIKOV: *op. cit.* p. 15; SAUSER–HALL: *op. cit.* p. 518.
- ¹³⁵ DRÄGER: *op. cit.* p. 98; SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 85); EVENSEN's Second Draft, Article 8, para. 2 (UN Doc. A/CN.4/381, para. 55); McCaffrey's Second Report (UN Doc. A/CN.4/399, paras. 186–188). The actual priority of the procedural aspect also follows from QUENTIN–BAXTER's Schematic Outline (UN Doc. A/CN.4/360, pp. 24–30).
- ¹³⁶ JENNINGS: *op. cit.* p. 328.
- ¹³⁷ Cf. McCaffrey's Second Report (UN Doc. A/CN.4/399), paras 192 et seq.
- ¹³⁸ E.g. the 1968 Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space; 1988 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.
- ¹³⁹ Cf. DRÄGER: *op. cit.* pp. 98 and 118; GERVAIS: *op. cit.* p. 419; HANDL: *op. cit.* 1978–79, p. 57; WOLFROM: *op. cit.* p. 57.
- ¹⁴⁰ Uses or constructions or works which seriously affect the possibility of utilization by other States, Article 4, *Annuaire IDI*, Vol. 49. T. II. (1961), pp. 381–384.
- ¹⁴¹ As it was stated in the commentary, this was the most complicated problem within the scope of the peaceful settlement of disputes (ILA, 52nd Report, 1966, pp. 520–521).
- ¹⁴² *Ibid.* p. 522.
- ¹⁴³ Belgrade Resolution on Regulation, Article 7 (ILA, 59th Report, 1980, pp. 368–369), Montreal Resolution on Water Pollution, Article 5, para. 6 (ILA, 60th Report, 1982, pp. 540–541).
- ¹⁴⁴ ILA, 62nd Report, 1986, p. 286.
- ¹⁴⁵ E.g. Article 6 of the 1934 British–Belgian agreement on Tanganyika–Ruanda–Urundi, Article 7 of the 1960 Indian–Pakistani treaty, point B/IX of the 1957 Greek–Yugoslav Protocol, Article 60 of the 1960 Dutch–West German treaty, Article 10 of the 1955 Bulgarian–Romanian agreement, Articles 3 and 4 of the 1964 Bulgarian–Greek agreement, and Article 12 of the 1964 Niger agreement.
- ¹⁴⁶ RGDIP, 1958, p. 115.
- ¹⁴⁷ See the resolutions of the General Assembly Nos. 2995/XXVII and 3129/XXVIII, and Article 30, point 3 of the Charter on Economic Rights and Duties of States.
- ¹⁴⁸ GERVAIS: *op. cit.* p. 419.
- ¹⁴⁹ McCaffrey's Second Report, Article 10 (A/CN.4/399), para. 198.
- ¹⁵⁰ ILA, 48th Report, 1958, recommendations, point 3, p. 99.
- ¹⁵¹ ILA, 52nd Report, 1966, Article 4 of the 1972 resolution on flood protection. For the interpretation of the rule, see ILA, 55th Report, 1972, pp. 48 et seq.
- ¹⁵² E.g. Articles 9/j and 12/d of the 1944 American–Mexican treaty; Article 5 of the 1956

Chinese-Soviet agreement; Article 3 of the 1946 Iraqi-Turkish protocol; Article 6 of the 1960 Indian-Pakistani treaty; Article 21 of the 1961 Polish-Soviet treaty.

¹⁵³ E.g. Article 3 of the 1956 Chinese-Soviet agreement; Article 7 of the 1964 Bulgarian-Greek agreement; exchange of notes between Guatemala and Mexico in 1961; Article VI of the 1971 agreement between the Argentine and Paraguay; Articles 4 and 5 of the 1958 Czechoslovak-Polish agreement. The obligation concerning the compilation of studies ought to be made a general rule in terms of Article 2 of the 1923 Geneva Convention.

¹⁵⁴ E.g. India was disinclined even to publish a water level report on the Ganges basin. This was all the more remarkable as an Indian-Pakistani treaty from 1960, i.e., at the same time, provided for an obligation of detailed notifications in respect of the Indus basin.

¹⁵⁵ E.g. Article 19 of the 1956 Czechoslovak-Soviet agreement; Article 9 of the 1956 French-West German treaty; Article 15 of the 1949 Norwegian-Soviet agreement; Article 17 of the 1960 Finnish-Soviet treaty; Article 7 of the 1954 Yugoslav-Austrian agreement; Article 8 of the 1956 Albanian-Yugoslav agreement; Article 29 of the 1960 Belgian-Dutch treaty.

¹⁵⁶ ICJ Report 1949, p. 22; *ibid.* MORIN's remarks in the ILA conference of 1972, ILA, 55th Report, 1972, p. 24.

¹⁵⁷ CUTH: *op. cit.* p. 131; *ibid.* KLIMENKO: *op. cit.* p. 54.

¹⁵⁸ DRÄGER: *op. cit.* p. 126; *ibid.* SMITH: *op. cit.* p. 151; BERBER: *op. cit.* p. 270.

¹⁵⁹ ANDRASSY: *op. cit.* 1959, p. 200.

¹⁶⁰ KLIMENKO: *op. cit.* p. 54.

¹⁶¹ ILA, 62nd Report, 1986, p. 286. In Chapter 6 of the Helsinki Rules an explicit reference was made to solution by negotiation (Article XXX).

¹⁶² Montevideo Declaration, points 8—10, 1965 Inter-American Draft Convention, Article 9, para. II. The provisions of the documents referred to suggest some kind of balance between informal negotiation and coordination.

¹⁶³ See: Preliminary draft text of the Asian-African Legal Consultation Committee from 1973, Article X.

¹⁶⁴ E.g. Article 2 of the 1929 Norwegian-Swedish convention; Article 11 of the 1946 agreement between Argentina and Uruguay; Article 7 of the 1960 Indian-Pakistani treaty; Articles 4—6 of the 1963 Niger Act; Articles 6—7 of the 1966 tripartite agreement on the Lake Constance; Article 3 of the 1968 European convention on the limitation of the use of detergents; Article 6 of the 1955 Bulgarian-Romanian agreement.

¹⁶⁵ BILDER: *op. cit.* p. 169.

¹⁶⁶ RGDIP, 1958, pp. 106, 108, 116.

¹⁶⁷ See the judgement pronounced in respect of the North Sea Continental Shelf (ICJ Report, 1969, para. 85) and the Fisheries Jurisdiction case (Merits), (UK v. Iceland), (ICJ Report, 1974, paras. 86—87).

¹⁶⁸ *Ibid.* McCaffrey's Second Report, Article 12 (UN Doc. A/CN.4/399, para. 198).

¹⁶⁹ *Ibid.*

¹⁷⁰ Cf. Draft articles on State responsibility, Article 29 (Yearbook ILC, 1980, Vol. II, Part 2, p. 33).

¹⁷¹ RGDIP, 1958, p. 99.

¹⁷² DRÄGER differentiates between consent (*Zustimmung*) and agreement (*Abkommen*) (*op. cit.* p. 86). This distinction seems, however, to be rather moderate as the force of form is unknown in international law, on the one hand, and the two terms referred to above have been alternately used in treaties on the other.

¹⁷³ DECLEVA: *op. cit.* p. 48.

¹⁷⁴ WOLFROM: *op. cit.* p. 145.

¹⁷⁵ BERBER: *op. cit.* p. 154; CHEN: *op. cit.* pp. 183—211.

¹⁷⁶ KLIMENKO: *op. cit.* p. 66; *ibid.* CUTH: *op. cit.* p. 160.

¹⁷⁷ KLIMENKO: *op. cit.* pp. 135—136.

- ¹⁷⁸ GHEMELGEANU: op. cit. pp. 142—143.
- ¹⁷⁹ E.g. DRÄGER: op. cit. pp. 86 et seq.; GERVAIS: op. cit. pp. 407—408; GRIFFIN: op. cit. p. 79; BOURNE: op. cit. 1965, pp. 244—245; *ibid.* SEVETTE: op. cit. p. 176, with a more distinct formulation.
- ¹⁸⁰ Article I of the 1911 resolution concerns rivers forming a frontier while Article II, para. 1 provides for changing the entry point on rivers crossing a frontier.
- ¹⁸¹ BOURNE: op. cit. 1965, p. 222; SMITH: op. cit. p. 156.
- ¹⁸² BOURNE: op. cit. 1965, p. 223.
- ¹⁸³ Article 8 of the Salzburg resolution, and Article XXXIV of the Helsinki Rules.
- ¹⁸⁴ WOLFROM counts 94 treaties (op. cit. pp. 84—98) stipulating either the maintenance of a strict *status quo*, subjecting a modification to the consent of the other party or prescribing preliminary consent only where water uses involve a sensible and lasting change, are capable of causing serious damage or could result in other kinds of substantial changes. For the enumeration of the former treaties see: DECLEVA: op. cit. Note 95. The treaties in question are also provided by TECLAFF: op. cit. pp. 106 et seq.
- ¹⁸⁵ For the former treaties, see the following: Article XVII, point 1) of the 1816 Dutch-Prussian treaty; Article 7 of the 1820 Bavarian-Austrian agreement; Article 2 of the 1867 convention concluded by Baden and Switzerland; as for treaties affecting frontier rivers, see: Article 13 of the 1925 French-German treaty; Article 14, point 2) of the 1949 Norwegian-Soviet agreement, Article 18 of the 1926 South African-Portuguese agreement; Article XX of the 1933 Brazilian-Uruguayan convention; as regards treaties referring to rivers forming or crossing a frontier, see: Article 12, point 1) of the 1929 Norwegian-Swedish convention; Article 2, point 2) of the 1958 Bulgarian-Yugoslav agreement; for treaties concerning specified rivers, see: Articles XI and XIII of the 1961 Columbia convention; Article 7 of the 1960 Indus treaty. The treaties in terms of which the matter in question has to be submitted to an international court of justice, in the absence of an agreement between the parties, tacitly contain the preliminary consent requirement.
- ¹⁸⁶ E.g. Article 12, point 6) of the 1851 Bavarian-Austrian treaty; Article XIV of the 1921 Paris convention on the Danube.
- ¹⁸⁷ DRÄGER: op. cit. p. 86.
- ¹⁸⁸ TECLAFF: op. cit. pp. 160 et seq.
- ¹⁸⁹ DRÄGER: op. cit. p. 88.
- ¹⁹⁰ Cf. 1969 Vienna Convention on the Law of Treaties, Article 31, para. 1.
- ¹⁹¹ DRÄGER: op. cit. p. 86.
- ¹⁹² Draft articles on State responsibility, Article 29 *supra*, Note 170.
- ¹⁹³ RGDIP, 1958, pp. 105—106.
- ¹⁹⁴ *Ibid.* p. 108.
- ¹⁹⁵ HARASZTI: op. cit. 1965, p. 203; GERVAIS: op. cit. p. 409.
- ¹⁹⁶ E.g. Article 5, point 2) of the 1879 agreement between Baden and Switzerland. Treaties or agreements only providing for an obligation of consultation are also of this kind.
- ¹⁹⁷ RGDIP, 1958, p. 110.
- ¹⁹⁸ GERVAIS: op. cit. p. 383.
- ¹⁹⁹ The link between the prohibition on causing damage and preliminary consent is clearly evident. Thus, KLIMENKO (op. cit. p. 21) argued that the consent of a neighbouring state has to be obtained in all cases when the construction of hydraulic power plant dams over a frontier river is planned: *ibid.* EEC, Recommendation No. 2 of 1951, point 2/d.
- ²⁰⁰ Draft articles on State responsibility, Article 29 (Note *supra* 170).
- ²⁰¹ ANDRASSY: op. cit. 1959, p. 202.
- ²⁰² BOURNE: op. cit. 1971, p. 148.
- ²⁰³ ANDRASSY: op. cit. 1959, pp. 170 and 206—207.
- ²⁰⁴ GRIFFIN: op. cit. pp. 78 et seq.; *ibid.* HANDL: op. cit. 1978—79, p. 62.
- ²⁰⁵ ANDRASSY: op. cit. 1959, p. 205.

- ²⁰⁶ DRÄGER: *op. cit.* p. 92.
²⁰⁷ *Ibid.* pp. 118—119.
²⁰⁸ Actually, this was during the time of efforts aimed at the settlement of the dispute.
²⁰⁹ E.g. 1934 Greek-Turkish agreement, Parts I and II; 1960 Dutch-FRG treaty.
Article 62.
²¹⁰ ANDRASSY: *op. cit.* 1959, p. 141.
²¹¹ For the Indus projects see: BAXTER: *op. cit.* pp. 443—485.
²¹² For details see: ROUSSEAU: *Chronique*, 1961, p. 815.
²¹³ LECAROS: *op. cit.* p. 133.
²¹⁴ See LOUIS: *op. cit.* p. 823.
²¹⁵ RGDIP, 1958, p. 111.
²¹⁶ See unequivocally: *ibid.* p. 110.
²¹⁷ *Ibid.* p. 115.
²¹⁸ BOURNE: *op. cit.* 1972, p. 122.
²¹⁹ EVENSEN's Second Draft, Articles 11—14 (UN Doc. A/CN.4/381, paras. 68—74) and McCaffrey's Second Report, Articles 11—13 (UN Doc. A/CN.4/399, para. 198).
²²⁰ Evidently, this cannot be extended to eventual fixed delays.

The prohibition on pollution

1. The development of this prohibition

While writing on new tendencies in international law concerning rivers at the beginning of the 1930s, QUINT made only a resigned remark on the unavoidability of pollution in connection with international watercourses.¹ Hardly three decades later the regulation of protection against pollution was declared by the ILA to be one of the most important problems in international law.²

As regards the preservation of water quality in international watercourses, a paradox or maybe even a schizophrenic situation developed in international law.

a) The prohibition on pollution in international treaties

The prevention of pollution has been the object of international treaties since 1866;³ nevertheless, as few as 21 treaties dealt with the problem up to 1945,⁴ although they include some important or interesting documents such as the Boundary Waters Treaty, concluded by the USA and Canada in 1909,⁵ and agreements concluded by Germany in 1922 with Denmark⁶ and Belgium.⁷ The number of treaties or agreements containing clauses on protection against pollution or exclusively regulating water quality increased dynamically after 1960.⁸ In this very year two treaties were concluded providing for the protection of water quality,⁹ and two other important treaties¹⁰ dealt with this problem as well. At the present time, as many as 200 treaties or agreements can be counted dealing with this subject-matter,¹¹ including documents of great importance such as the Great Lakes Water Quality Agreement from 1972,¹² and two agreements concerning the Rhine from 1976, i.e., on Protection against Chemical Pollution and Protection against Pollution by Chlorides.¹³

In spite of the wide coverage and substantive nature of the conventional law concerning protection against pollution and irrespective of the fact that the

fulfilment of international obligations can actually be measured in this field through changes in water quality, the deterioration of water quality has not stopped; rather, it has been increasing to an extent which causes grave concern. This fact questions, first of all, the effective power of international legal norms concerning this subject, even if the critical pollution rate was supposed to have occurred not only in an international watercourse for which the provisions of a relevant treaty or agreement were in force. Certain illusions which arose in connection with the efficiency or conventional arrangements may be set aside, in fact, when considering that the disappearance of salmon from the Rhine could not be prevented by the Rhine Fishing Convention in 1887, with its strict prohibition on pollution (Article 10).¹⁴ Similarly, this contradiction has also been reflected in the Preamble of the 1972 Great Lakes Water Quality agreement, stating: "the grave deterioration of water quality—that is causing injury", on the one hand, and referring to the "obligation not to pollute boundary waters" as provided for in the 1909 Boundary Waters Treaty on the other.

The considerable inefficiency of treaties or agreements on the protection of international watercourses against pollution raised some more questions: first, about the factors to which this could be attributed, and second, about the extent with which the ways and means of international law-making and application of the law were influenced by the seemingly inevitable process of water quality deterioration.

A profound analysis of relevant international treaties or agreements would be needed to give a precise reply to the questions mentioned above; nevertheless, several circumstances, such as the extent and the general purpose of the present study, counteract this intention.

The rules relating to protection against pollution may be found, first and foremost, in conventions on boundary waters,¹⁵ agreements on fisheries,¹⁶ conventions on navigation,¹⁷ and comprehensive treaties or agreements on water regimes.¹⁸ On the other hand, provisions of this kind hardly ever appear in treaties or conventions on the utilization of hydraulic power, flood protection, and watercourse regulation.¹⁹

As regards the conceptualization of these documents, a distinction may essentially be made between two groups.²⁰

Protection against pollution has been *declared as a general prohibition*, mainly in treaties or agreements from the more remote past and in conventions or agreements concerning fishing or, to a lesser extent, boundary waters. More recently, solutions of this kind may be found in treaties or conventions on the preservation of the habitat of wild fauna and flora.²¹

There is, however, a more characteristic provision, i.e., the parties are *obliged to take appropriate measures* against pollution, such as preventing the growth of pollution or reducing its extent, respectively. The various kinds of measures to be taken and the methods of realization are not laid down in the majority of

treaties or agreements;²² it may be supposed, however, that, apart from economic provisions, they comprise the enactment of appropriate internal (municipal) statutes, and the prescription of technical norms and requirements. The freedom to choose the actual means may be limited, however, by the demand of due diligence,²³ on the one hand, and the prohibition of discrimination on the other;²⁴ the latter meaning not applying stricter norms to pollution with only domestic effects than to transfrontier pollution.

Equally, it is questionable whether or not there is an absolute *iunctim* between the prohibition on pollution and the obligation to take certain measures, i.e., whether or not the former constitutes a legal basis for making recourse to the latter. Beyond the point that the retrospective force of the relevant treaty or agreement would present itself as a problem in this connection,²⁵ first of all in respect of the restriction on pollution, there seems to be an inconsistency between the strictness of the prohibition and the frequently "soft law" character of the obligation to take measures. In plain words, it occurs that the parties' efforts are limited to preserving water quality, the measure they take depends on their economic and technical possibilities, and their approaches to existing and recent pollution differ from each other, etc. While qualifying the relevant contractual measures on the bases mentioned above it has to be admitted, however, that in the view of LAMMERS, their majority has to be regarded as "stringent", i.e., the proportion of those classified as "non-stringent" or "soft" is far lower.²⁶ A counter-argument to this statement is that treaties or agreements containing strict prohibitions have limited territorial validity, the purpose of the document is determined, and the texts fail to give a precise definition of the concept of pollution and the pollution limit. Furthermore, the time factor cannot be neglected, i.e., recently concluded treaties or agreements seem to be less strict.²⁷

There are, however, treaties or agreements providing for *prima facie* soft obligations,²⁸ but these are compensated to a considerable extent by obligatory consultation or judicial settlement.

The recent development of the law concerning the utilization of international watercourses has, in fact, gone beyond a simplified approach to the complex phenomenon of pollution, i.e., the declaration of prohibitions or provisions too general for the non-precise obligations to take effect. While accepting pollution as a reality in our world, some documents, e.g., the Great Lakes Water Quality Agreement and the two agreements on the Rhine from 1976, in particular, are already aiming to enforce the *principle of gradual regulation* or to find *pragmatic technical solutions*, respectively.

The first step should be the institutionalization of cooperation between the relevant riparian states by *setting up an international commission*,²⁹ funding scientific research into the causes, nature, and gravity of pollution, which in turn leads to proposals on the measures to be taken and the shaping of appropriate regulation.³⁰

Beyond any doubt, the Great Lakes Water Quality Agreement from 1972-78,³¹ the Rhine Chemical Pollution Convention, and the Rhine Chloride Pollution Convention from 1976³² are of the greatest importance. As for the first, its provisions principally concern the elaboration and implementation of protection programmes against pollution; the setting up of the black and grey lists constituted the most characteristic feature of the first Rhine agreement,³³ while the second provided for the technical solution enabling it to achieve its purpose, together with the relevant parameters and financial background.

Even without a detailed analysis of the agreements referred to above one may conclude that, although technical norms prevail, they do allow for the quantification, i.e., *ipso facto* strengthening of an international obligation. Accordingly, the drawback of purely international law problems can only be stated in the conventions and agreements offering pragmatic solutions. Prevention is unequivocally predominant in this latter group, and international law may come to the fore in applying the actual documents.³⁴ Besides, it has to be emphasized that these conventions or agreements reflect the growing independence of the pollution problem. Although with as yet sporadic results, recent contractual practice seems to have discontinued the combination of water utilization and pollution.

*Indeed, pollution has a particular character.*³⁵ Admitting that it is a consequence of water usage, and sewage disposal may also be considered as an utilization method, a technical separation of water utilization and the inflow of sewage water into reservoirs is practicable in the majority of cases.³⁶

Apart from the consideration mentioned above, the individual nature of pollution is also supported by the fact that pollution may be more easily integrated into international environmental law as the pollution of watercourses may also be brought about by external sources,³⁷ and it may affect other elements of the natural environment as well.³⁸ Besides, the international regulation of pollution reaches beyond the inter-state sphere,³⁹ on account of the specific relationship between the official or public activity of the state and pollution (*acta de iure imperii*), on the one hand, and considering the possibilities of recourse to legal remedies by individuals and the international protection of human rights, on the other.

b) The prohibition on pollution in general international law

The protection of international watercourses against pollution was already, *de lege ferenda*, among the 1911 proposals of the IDI, even if contained in only a primitive formulation (II./2/);⁴⁰ anyhow, its transformation into a *de iure condito* rule of general international law was a long process. With a cautious formulation, the 1961 report of the Conference on Water Pollution Problems in

Europe spoke of the content of customary international law as "yet not clearly defined and universally agreed upon, and might vary in time as well as from one group of States to another".⁴¹ *Since then, this statement has become somewhat outdated.*

International treaties and agreements regulating protection against pollution, impressive in number and with a dynamic tendency to increase, were presented and commented upon in the previous point. In FLORIO's view, these "evidence the lack, not the existence, of a corresponding general principle";⁴² nevertheless, the respective conventional clauses contain no references to a presumed freedom of action, i.e., the intention of states claiming the existence of unlimited pollution of international watercourses, in the absence of relevant conventional provisions.⁴³ Besides, there are some other serious counter-arguments to this point.⁴⁴

As for international practice in connection with pollution, the subsequent phases of the process comprise, as characterized by SALMON, first the protest of the affected state, which claims that the actual pollution was not permitted; then the state which caused the pollution preferring not to pay an indemnity but, instead, taking measures to eliminate the pollution.⁴⁵ Furthermore, the implicit recognition of the prohibition of pollution in the arbitral award declared in the Lake Lanoux case may be mentioned,⁴⁶ along with the unequivocal formulations of the recommendations of some international organizations,⁴⁷ even if a considerable number are concerned not only with international watercourses but with environmental protection in general and some tolerance has to be admitted as well.

One may consider the counter-arguments to the evidence mentioned above, i.e., the high degree of tolerance by states in cases of transfrontier pollution. According to SALMON, this attitude comes from the fact that "l'Etat pollué, étant souvent le pollueur d'un autre, éviterait d'affirmer trop nettement l'existence de règles dont l'effet boomerang ne serait que trop plausible".⁴⁸ Even if it would be an exaggeration to presume a consistency in the statements of various states,⁴⁹ *the actual pollution of international watercourses and, even more, its increase, cannot be in doubt.*⁵⁰ When interpreting this situation, one could argue that the usual contrast between a claim and a physical act here presents itself,⁵¹ or reference may be made to the maxim "*ex iniuria ius oritur*" or, by analogy, to the principle of non-intervention when, however, practice would not confirm non-intervention, indeed only the opposite. Nevertheless, it is beyond doubt that a fundamental principle of international law is concerned here, but the reservations in principle may be abrogated as facts are not absolutely incompatible with the relative prohibition on pollution, on the one hand, and, on the other, the repeated confirmation of the prohibition on pollution on the part of the international community can by no means be neglected. It is a strong argument in this context that when the actual codification of the law of non-

navigational uses of international watercourses began, the participating states were not only not opposed to dealing with rules aimed at the supervision of pollution; rather, the importance of this problem was particularly emphasised by them.⁵²

Taking the aforementioned into consideration, it is not by chance that the large majority of acknowledged experts on the problem have accepted the existence of the prohibition on pollution in general international law.⁵³ With EVENSEN's formulation, "the obligation to prevent pollution of an international watercourse is now well-established in international law".⁵⁴ Nevertheless, SALMON was presumably right with his remark that "... l'entente ne règne ni à propos du fondement, ni à propos du contenu de l'obligation de ne pas polluer".⁵⁵ The different views may be attributed, first and foremost, to the preference of some authors to couple the prohibition on pollution with other principles of general international law,⁵⁶ extrapolating the latter to the preservation of water quality in international watercourses.⁵⁷ The obligation to preserve water quality used to be deduced from the prohibition on causing damage, interpreted in various ways,⁵⁸ but it was also habitually coupled with the concept of reasonable and equitable utilization.⁵⁹

Varying approaches with logical conceptual differences are also characteristic of the views of scholarly bodies which attained remarkable achievements in identifying the general obligations resulting from the prohibition on pollution.

2. Formulations of the prohibition on pollution within the context of general international law

A connection between the fact that the pollution of international watercourses became a substantial international problem in the 1960s and the efforts aimed at the identification of general international law with regard to this point can be presumed. In line with this, subsequent resolutions of the ILA and the IDI not only exceeded the recognition of the general prohibition on pollution *in statu nascendi*,⁶⁰ but also implied the intention to unravel the content of this prohibition. Thus, progress was achieved in determining the concept of pollution; besides, the rules as laid down appeared not only in sophisticated language but, *prima facie*, they seemed to be stricter than the clauses of international conventional law.⁶¹

a) *The concept of pollution*

As the definition of pollution is rarely found in international treaties, conventions or agreements,⁶² it has been visibly treated as an important problem in documents on the utilization regime of international watercourses dealing with the problem from the point of view of general international law.

The *Helsinki Rules* contain the following definition: "... the term 'water pollution' refers to any detrimental change resulting from human conduct in the natural composition, content, or quality of the waters of an international drainage basin". (Article IX).⁶³ The Athens Resolution of the IDI conforms, essentially, with the formulation of the *Helsinki Rules* (Article I), apart from one single exception; the difference concerns only the attributes of changes (physical, chemical, or biological) extending it to the indirect effects of human conduct.⁶⁴ In addition, EVENSEN's Second Draft includes a reference to some other instances of human conduct, such as the 'introduction of substances, species, or energy' (Article 22).⁶⁵

This approach seems to conform with the stipulation of the award made in the Lake Lanoux case, respecting the consideration of human realities,⁶⁶ on the other hand, EVENSEN's draft completes the definition with the possible harmful consequences of pollution, without being prejudicial, however, regarding their legal relevance, reading as follows: "... which results in effects detrimental to human health, safety or well-being or detrimental to the use of waters for any beneficial purpose or the conservation and protection of the environment including the safeguarding of the fauna, the flora, and other natural resources of the watercourse and surrounding areas".⁶⁷

The formulation of the *Helsinki Rules* concentrates on the actual description of pollution, and does not use the phrase, "including legal incidents".⁶⁸

Leaving aside an examination of the phenomenon of pollution⁶⁹ and comparing the various definitions,⁷⁰ we shall restrict the following comments to just *three remarks*.

i) The concept of pollution has a *mixed character*, i.e., the various definitions bring about a *unctim* between the facts which cause pollution, the sources and the actual effects of the pollution; in other words, emissive and immissive approaches are applied simultaneously.⁷¹ This duplicity contains some ambiguity as the international law relevance of pollution depends on transfrontier effect, and this is influenced by natural conditions such as water delivery, the speed of flow, etc. At the same time, the efficient prevention of pollution can be perceived more within the context of emission. In view of this, the emergence of the tendency to prefer emission standards and reducing the significance of the *unctim* referred to above cannot be regarded as fortuitous. The so-called black and grey lists,⁷² Annex 2 of the Great Lakes Water Quality Agreement on the parameters of detergents with a phosphorous content,⁷³ and the appearance of the category of highly dangerous substances,⁷⁴ resulting in a presumption in respect of harmful consequences, may be considered as demonstrating the said emission standards. The linking of the definition of pollution with the danger of damage has effect in this direction.⁷⁵

ii) Although the initial words of the documents containing the definition of pollution amount to a reservation such as "for the purposes of this Convention

or of this Resolution", this must not preclude the existence of the *recognition of the concept of pollution by customary international law*. This is partly supported by the frequent definitions of the concept and partly by the similarity of the formulations. Consequently, the term pollution, as used in treaties or agreements on the regime of international watercourses, without a more precise formulation has to be interpreted along with consideration of the customary law concept mentioned above.⁷⁶

iii) The complex phenomenon of pollution can be subdivided into various kinds. Accordingly, a *distinction* may be made between unique and continuous pollution; within the latter, accumulating pollution forms a separate sub-category; as for the effects, particularly dangerous, permanent, irreversible, etc., have all been used. Needless to say, the inspection of the various types of pollution by international law always requires different methods;⁷⁷ it remains questionable, however, by which means efficient inspection may be realized within the context of general international law.

b) Formulations of the prohibition on pollution

Initiation has been due to the ILA and the relevant articles of the Helsinki Rules have brought about favourable responses.⁷⁸

The resolutions taken by international scientific forums start from the point that, concerning international obligations, a *distinction has to be made between new and already existing pollution*.

In terms of the Helsinki Rules, "... a State must prevent any new form of water pollution or any increase in the degree of existing water pollution in an international drainage basin which would cause substantial injury in the territory of a co-basin State..." (Article X, para. 1/a).⁷⁹ This obligation of prevention is, however, *made relative by two conditions*:

i) The formula "consistent with the principle of equitable utilization", regarding pollution as a form of water utilization, permits limited pollution⁸⁰ and, as a consequence of the concept of reasonable and equitable utilization, does not make the demarcation line between prohibited and lawful pollution very distinct. Also, what was not taken into consideration was that "it is conceivable that pollution might do serious environmental damage before resulting in any substantial injury which deprives a state of its equitable share".⁸¹ Besides, there is a certain controversy in the Helsinki formula, i.e., why pollution could not be increased in the case of a hardly polluted international watercourse, in compliance with the principle of reasonable and equitable utilization.

The reference to reasonable and equitable utilization seems to be permissible when thinking of the procedural aspects of the said principle, e.g., information, notification, consultation.⁸² Nevertheless, the obligations in question may also

be coordinated with the fundamental principle of international cooperation,⁸³ reference was made to it in the foregoing.⁸⁴

ii) Laying emphasis on "substantial injury" results in non-substantial injuries not being identical to *de minimis* damage, and the explicit use of the attribute implies that one reaches this conclusion resulting in some kinds of pollution entering what can only be described as a somewhat grey field.⁸⁵

Contrary to the Helsinki Rules, a strict prohibition is declared in the *Athens Resolution* of the IDI, which reads as follows: "... States shall take, and adapt to the circumstances, all measures required to (a) prevent any new form of pollution or any increase in the existing degree of pollution." (Article III). Even if environmental protection aspects⁸⁶ manifested themselves in the said resolution, it is difficult, to come to an unequivocal conclusion when interpreting it. With increasing non-adherence to the original draft text, prohibition became more and more strict, e.g., with the disappearance of the hint of due care⁸⁷ suggesting the acceptance of absolute territorial integrity.⁸⁸ The Institute rejected the approach of starting from the principle of reasonable and equitable utilization,⁸⁹ instead basing its view explicitly upon principle No. 21 of the Stockholm Declaration on Human Environment,⁹⁰ but incorporating, however, all its ambiguities.⁹¹ To its credit, the Athens Resolution on the other hand, did not lay emphasis on substantial or serious pollution; nevertheless, it does evidently imply the tacit supposition of the failing relevance of *de minimis* damage. Anyhow, even the Athens Resolution could not escape an inherent contradiction: as the formulation of Article II, repeating the Stockholm formula, could be considered as a result obligation, the provisions of Articles III and IV representing only obligations of conduct.⁹² The difference between these two kinds of international obligations appears in a particularly striking form in the *rules relating to the reduction of existing pollution*.

The respective stipulations of the *Helsinki Rules* only provide for the following: "Consistent with the principle of equitable utilization, ... a State ... 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" (Article X, para. 1/b).⁹³ Apart from the *unctim* established with the principle of equitable utilization and the emphasis laid on substantial damage, mentioned earlier, the formulation referred to above which, mainly as a result of the declared obligation to negotiate,⁹⁴ can hardly be considered as soft law,⁹⁵ referred largely to fictitious events for an important part of the cases concerned. In fact, there is good reason to suppose that, for numerous international watercourses, their existing pollution was already contrary to the concept of reasonable and equitable share when, according to internal logic, this degree of pollution ought to have been abated.

The deficiencies mentioned above have been partly eliminated by the *Montreal Resolution* which declared that "... States shall (b) take all reasonable

measures to abate existing water pollution to such an extent that no substantial injury is caused in the territory of another State" (Article 1).⁹⁶ The text of the *Athens Resolution* of the IDI is, essentially, identical to the Montreal formulation, with the exception that the concept of gradual pollution is introduced in the latter.⁹⁷

As is clear from the above, the *distinction between existing and new pollution* has been the starting point for resolutions taken by international forums. Nevertheless, the correctness of this approach *may be questioned* from several points of view; so, it has not been resorted to by the majority of treaties or agreements concluded with the aim of checking pollution.⁹⁸ It also involves serious consequences from a practical point of view, i.e., it may appear as an additional means of exemption from the implementation of an international obligation, as it can hardly be stated at any given moment whether the pollution in question constitutes an already existing or a new phenomenon. In this context, reference has to be made, furthermore, to the permanent changes of polluting agents or materials, the influence of natural conditions, and the actual difference between latent and accumulating pollution. With this in mind, the distinction between existing and new pollution has been omitted from the EVENSEN *draft*, and a general obligation of prevention is declared.⁹⁹ Besides, a more general aspects of environmental protection also make their appearance in the text, which reads as follows:

"In cases where pollution emanating in a system State causes harm or inconveniences in other system States of a less serious nature than those dealt with in paragraph 1) of this article, the system State where such pollution originates shall take reasonable measures to abate or minimize the pollution. The system States concerned shall consult with a view to reaching agreement with regard to the necessary steps to be taken and to the defrayment of the reasonable costs for abatement or reduction of such pollution."¹⁰⁰

The international obligation regarding the control and, in particular, the reduction of the pollution of an international watercourse obtains a specific dimension by the fact that a *watercourse* in question *transflows, ipso facto, the territory of two or possibly more riparian states*.

With this in mind, EVENSEN's Second Draft contains the following rule:

"A watercourse State shall be under no obligation to abate pollution emanating from another watercourse State in order to prevent such pollution from causing appreciable harm to other watercourse State or States, unless otherwise agreed in the relevant watercourse agreement or other agreement or arrangement. Watercourse States shall, as far as possible, expeditiously draw the attention of the pollutant State and of the States threatened by such pollution to the situation, its causes and effects." (Article 23, para. 3).¹⁰¹

In providing for the obligation relating to the prevention of new pollution, the draft text of the AALCC from 1973 reads as follows: "... regardless of whether

or not such pollution originates within the territory of the State . . ." (Proposition VIII). The above, rather unclear, formulation ought to lead, in conformity with the wording of Proposition IX, to the universal responsibility of the states causing pollution.

Practical arguments may support this approach, i.e., frequently no distinction can be made between the sources of pollution. Taking, however, the level of the principle in general international law, the omission of the requirement of joint action seems to be acceptable. In also applying the principle of cooperation to this situation, the provisions of the EVENSEN draft quoted above went, in fact, as far as they could go.

Accordingly, aspects of land-based sea pollution could not be incorporated into the draft. This is, in fact, a field which affects coastline states in the international community.

Having provided a survey of international law-making on the protection of international watercourses against pollution, the selection of "Prevention of Pollution of Rivers and other Inland Waters" as one of the subjects of the programme for the development and periodic review of environmental law seems to be a little exaggerated.¹⁰²

Notes

¹ QUINT: *op. cit.* p. 338.

² ILA, 51th Report, 1964, p. 132.

³ Regulations annexed to the 1866 Frontier Treaty between Spain and Portugal, Article II; Additional Act between Spain and France (1866), Article VI.

⁴ KOLB: *op. cit.* p. 401. For a survey see: COLLIARD: *op. cit.* 1977, pp. 387 et seq.

⁵ "Boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other" (Article IV).

⁶ Agreement for the settlement of questions relating to watercourses and dikes on the German-Danish frontier, Articles 45—46.

⁷ Provisions relating to the common frontier, III, Article 2.

⁸ SALMON considered 1960 as an important dividing line. See SALMON: Report, p. 279.

⁹ 1960 Convention on the protection of Lake Constance against pollution; 1960 Treaty between Belgium and the Netherlands concerning the Terneuzen and Gent Canal, containing standards on water quality, on the one hand (Article 27), and prescriptions on the discharge of radioactive waste (Article 29), on the other.

¹⁰ 1960 Indus Treaty, Article 4, para. 10; 1960 Treaty between the Federal Republic of Germany and the Netherlands, Article 58, para. 2.

¹¹ As many as 73 treaties, conventions or agreements were mentioned by the IUCN in 1965 (see: UTTON: *op. cit.* p. 165), while SALMON's Report contains no less than 147 treaties (Annuaire IDI, 1979, Vol. I, Annexe, pp. 317—329); LAMMERS compiled a list containing 89 treaties (*op. cit.* pp. 124—146).

¹² Superseded by the 1978 Agreement.

¹³ Apart from the 1986 Tisza Convention and the 1985 Bucharest Declaration, dealt with in Chapter V, mention may be made of the drafts from 1969 and 1974, which appeared under the

auspices of the Council of Europe, the 1973 Treaty between Argentina and Uruguay on the River Plata, the statute signed by the same parties in 1975 on the committee dealing with the River Uruguay, and the Colorado Salinity Agreement between the USA and Mexico, concluded in 1973.

¹⁴ JESSURUN D'OLIVEIRA: op. cit. p. 81.

¹⁵ E.g. the 1958 Afghan-Soviet treaty, Article 13; 1958 Czechoslovak-Polish agreement, Article 3; para. 4; 1964 Polish-Soviet agreement, Articles 10-11; 1964 Finnish-Soviet agreement, Article 4; 1965 GDR-Polish agreement, Article 8; 1968 Czechoslovak-Soviet agreement, Article 7, para. 1; 1971 Finnish-Swedish agreement, Chapter 1, Article 2, Chapter 3, Article 9; agreement between the two German states, concluded in 1973, Articles 2 (f) and 4; 1974 Czechoslovak-GDR agreement, Article 11.

¹⁶ 1893 Convention on the Lake Constance, Articles 12-13; 1950 French-Spanish convention, Article 20, para. 10; 1960 Finnish-Norwegian agreement, Article 18; 1980 French-Swiss agreement.

¹⁷ Cf. the Mannheim Convention relating to the navigation of the Rhine from 1868/1979 and the statutes of the *Commission Centrale de la Navigation sur le Rhin*, set up by the said convention (statute on the river regime, Article 87, and the statute relating to the transport of dangerous materials); St. Laurence Seaway, Exchange of Notes between Canada and the USA in 1959.

¹⁸ 1944 Rio Grande, Colorado, and Tijuana Treaty, Article 3; 1960 Indus Treaty, Article 4, para. 10; 1964 Niger Agreement, Article 12; 1969 River Plata Basin Treaty with the 1971 Act of Asunción, coupled with it; Resolution No. 23; 1978 Amazon Treaty, Article 4.

¹⁹ The exception was e.g. the 1950 State Treaty on the Sauer (Sure), Article 6, para. 2; 1956 Convention concerning the canalization of the Moselle, Article 55.

²⁰ A similar classification was applied by e.g. COLLIARD: op. cit. 1977, pp. 284 et seq.; DUPUY: op. cit. 1977-I, pp. 371 et seq.

²¹ For more details see: DE KLEMM: op. cit. pp. 85-90; recently e.g. 1985 Asean Agreement, Article 19, para. 2.

²² From this point of view, see in particular e.g. the 1956 Treaty between Belgium and the Federal Republic of Germany on the Weser; 1957 Agreement between Italy and Yugoslavia concerning the supply of water to the commune of Gorizia; 1972 Dutch-FRG agreement on sewage purifiers at the mouths of the rivers Ems and Rhine.

²³ For more details see: DUPUY: op. cit. 1977-II, pp. 396-407.

²⁴ Consent was achieved in this respect at the ECE conference, see: Report of the Conference on Water Pollution Problems in Europe, held in 1961, point 35. Principle 23) of the Stockholm Declaration on Human Environment from 1972, accentuating the differences between the possibilities of the most developed and developing countries seems to be partly in contradiction with the ECE formulation.

²⁵ Excluded by the 1969 Vienna Convention on the Law of Treaties, Article 4.

²⁶ LAMMERS: op. cit. p. 122.

²⁷ SALMON: Report, p. 199.

²⁸ E.g. Indus Treaty, Article 4, para. 10 and Article 9; 1964 Niger Agreement, Article 12; 1966 Lake Constance Agreement, Article 3, para. 3 and Articles 8-11.

²⁹ E.g. the Protocol on the International Commission for the Protection of the Moselle against Pollution, concluded in 1961; 1963 Agreement concerning the International Commission for the Protection of the Rhine against Pollution; French-FRG Protocol concerning the Saar International Commission, signed in 1961; French-Swiss Convention relating to the Lake Geneva International Commission, concluded in 1962; Italian-Swiss Convention on Setting up a Mixed Commission, concluded in 1972.

³⁰ A similar task was conferred on the American-Canadian International Joint Commission (ICJ), set up in 1909, for the elaboration of the Great Lakes Water Quality Agreement; see a reference in the Preamble to the 1970 Report of the IJC; furthermore, it was also charged with carrying out additional investigations (Article VI, para. 1/f). Ibid. for the American-Mexican

International Boundary and Water Commission, for the settlement of the Colorado salinity problem.

³¹ For analyses see: BILDER: op. cit. 1973, pp. 294—380; LAMMERS: op. cit. pp. 101 et seq.; RASMUSSEN: op. cit. pp. 499—520; ROUSSEAU: Chronique 1972, pp. 1129—1130 and 1979, p. 758.

³² For analyses see: KISS: op. cit. 1977, pp. 861—867; KISS: op. cit. 1978, pp. 59—80; KISS—LAMBRECHTS: op. cit. pp. 718—736; LAMMERS: op. cit. pp. 183—191.

³³ This legislative method has been applied, for example, in the draft of the Council of Europe, the 1976 Directive of the European Communities (76/464/CEE), and several conventions on the law of the sea, e.g. the 1972 Durnping Convention, the 1974 Paris Convention and the 1976 Barcelona Convention.

³⁴ See the arbitration clause of the Rhine Chemical Pollution Convention, Article 15; *a fortiori* the Draft European Convention from 1974, Article 22.

³⁵ SALMON: Report, p. 285.

³⁶ According to FLORIO (op. cit. 1979, p. 152), pollution may be a consequence, but e.g. the increase of salinity as a result of irrigation may be a separate phenomenon as well.

³⁷ Cf. acid rains, and the long-range transboundary air pollution convention from 1979 on its reduction.

³⁸ Cf. sea pollution originating from the continent; the relevant rules are laid down in the 1982 UN Convention on the Law of the Sea and other regional conventions on the seas.

³⁹ SALMON: Report, p. 333.

⁴⁰ Annuaire IDI, 1911, p. 366.

⁴¹ UN Doc. E/ECE/WATER Poll./CONF/, para. 55.

⁴² FLORIO: op. cit. 1979, p. 134.

⁴³ SCHWEBEL's Third Report (UN Doc. A/CN.4/348, with reference to the permanence of the pollution clause (para. 258).

⁴⁴ GAJA hinted at the difficulties of knowing diplomatic practice; op. cit. pp. 358—359.

⁴⁵ SALMON: Report, pp. 261—262.

⁴⁶ RGDIP 1958, p. 102.

⁴⁷ Cf. 1972 Action Plan for the Human Environment; Recommendation No. 71; ECE Resolution 10/XXI from 1966; Principles 1 and 9; ECE Declaration from 1980, para. 13; UNEP Guidelines concerning shared natural resources (GA/RES/34/186, Principles 3; OECD Recommendation on the Principles of Transfrontier Pollution (C/74/224), Annex B.

⁴⁸ SALMON: Report, p. 286.

⁴⁹ LACHARRIÈRE: op. cit. pp. 181 et seq.

⁵⁰ E.g. in spite of the 1962 French-Swiss Convention water quality failed to improve in Lake Geneva; rather, it deteriorated, and mercury pollution appeared (ROUSSEAU: Chronique, 1976, p. 606). According to a CIPEL report from 1984, "à plus long terme, pour autant que les thérapies prescrites soient appliquées correctement, il devrait retrouver l'état de santé qui était le sien en 1960!" (ROUSSEAU: Chronique, 1985, p. 444).

⁵¹ D'AMATO: op. cit. pp. 50—51.

⁵² Annuaire CDI, 1976, Vol. II, 1^{ère} partie, pp. 188—191.

⁵³ Cf. SALMON Report, p. 287.

⁵⁴ EVENSEN's First Report (UN Doc. A/CN.4/367), para. 167.

⁵⁵ SALMON: Report, p. 287.

⁵⁶ Contrary to this view, DESPAX referred to the general principles of law (op. cit. p. 143); *ibid.* OPPENHEIM—LAUTERPACHT: op. cit. I, p. 346; partly FLORIO: op. cit. 1979, p. 134.

⁵⁷ DINTELMANN (op. cit. pp. 90—91), MILENKOVIC (op. cit. pp. 65—66), REVILLARD (op. cit. p. 45), and WOLFROM (op. cit. 1964, p. 754) argue for an exception to the said tendency, i.e. the relative independence of the prohibition of pollution.

⁵⁸ E.g. BRAMSEN (op. cit. p. 271), COLLIARD (op. cit. p. 385), CUTH (op. cit. 1975, pp. 67 et seq.), FISCHERHOF (op. cit. p. 88), KLIMENKO (op. cit. pp. 105—106), KURSZ III (p. 146), SALMON: Report (p. 108), SCHWEBEL's Third Report (para. 249), THALMANN (op. cit. p. 159), TIMOSHENKO (op. cit. pp. 51 et seq.), BALLENEGGER (op. cit. pp. 36 and 72—73) and LAMMERS (op. cit. pp. 360—386 and 583) proved the existence of the prohibition on pollution in more or less the same way.

⁵⁹ E.g. GAJA: op. cit. pp. 370 et seq., HANDL: op. cit. 1975, pp. 156—194, UTTON: op. cit. p. 167.

⁶⁰ In this sense see e.g. CUTH: op. cit. p. 107; LESTER: op. cit. 1963, p. 833.

⁶¹ According to SALMON, the provisions of the recently concluded treaties, conventions or agreements concerning pollution seem to be less strict (SALMON: Report, p. 199).

⁶² The 1964 Finnish-Soviet agreement on boundary waters (Article 4) and the 1973 La Plata Treaty (Article 47) for exceptions of this kind. The prohibition of specific sorts of pollution has been more frequent, e.g. in fishery agreements. For more details see: BALLANEGGER: op. cit. pp. 22 et seq.

⁶³ ILA, 52nd Report, 1966, p. 494.

⁶⁴ Annuaire IDI, 1979, Vol. II, p. 197.

⁶⁵ EVENSEN's Second Report, UN Doc. A/CN.4/381, para. 84.

⁶⁶ RGDIP, 1958, p. 103.

⁶⁷ Similarly, in the Athens Resolution of the IDI.

⁶⁸ ILA, 52nd Report, 1966, p. 495. Ibid. ILA, 60th Report, 1982, p. 536. SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 311).

⁶⁹ For more details see: CHAHUAN: op. cit. pp. 240 et seq.

⁷⁰ Cf. LAMMERS: op. cit. pp. 7—17.

⁷¹ For the emission and immission concepts see CHAHUAN: op. cit. pp. 242 et seq.

⁷² 1976 Rhine Chemical Pollution Convention, Annexes; Council of Europe draft from 1969/74.

⁷³ Ibid., European Agreement on the restriction of the use of certain detergents, 1968.

⁷⁴ Rules on Water Pollution in an International Drainage Basin, Article 2 (ILA, 60th Report, 1982, p. 538); ILA, Montreal Rules, Article 4 (ibid. p. 167); Great Lakes Water Quality Agreement, Article III (specific water quality objectives).

⁷⁵ Cf. 1979 Long-range Transboundary Air Pollution Convention, Article 1/a; 1982 UN Convention on the Law of the Sea, Article 1, para. 4; QUENTIN-BAXTER's Draft, Article 1, UN Doc. A/CN.4/373.

⁷⁶ As is declared in the Lake Lanoux case award, the treaties or conventions have to be fitted into the system of international law. RGDIP, 1958, p. 100. (Ibid. ILC comment to the Convention of the Law of Treaties, Article 27; Vienna Convention, Article 31, para. 3/c; Yearbook, 1966, Vol. II, p. 222). The recent development of international law may be enforced (cf. the award concerning peremptory pleas connected to the continental shelf in the Aegean Sea; ICJ Report, 1978, p. 32).

⁷⁷ Cf. CHAHUAN: op. cit. p. 282.

⁷⁸ Cf. e.g. UTTON: op. cit. p. 164; UN Doc. ST/ESA/5, para. 134.

⁷⁹ ILA, 52nd Report, 1966, pp. 496—497; conforming to the formulation of the Montreal Resolution, Article 1, para. a). Accordingly, the controversy between the concept of pollution and the obligation to prevent it persisted together with the presumption that emission did not necessarily imply harmful consequences.

⁸⁰ DICKSTEIN (op. cit. p. 497) is also of the same opinion.

⁸¹ TECLAFF: op. cit. 1973, p. 235; SALMON: Report, p. 207.

⁸² Cf. Montreal Resolution, Articles 5 and 6, together with Article 7, concerning a recommendation on the organization of scientific research, continuous control, and laying down standards on water quality. ILA, 60th Report, 1982, pp. 540—543.

⁸³ See Chapter VIII.

⁸⁴ This is explicitly included in Article 4 of the Montreal Resolution, ILA, 60th Report, 1982, p. 539. Going beyond this, the possible means of cooperation are also enumerated in Article VII of the Athens Resolutions of the IDI (Annuaire IDI, 1979, Vol. II, p. 201).

- ⁸⁵ *Infra* (Chapter VI).
- ⁸⁶ SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 263).
- ⁸⁷ Initially it was included in the proposal. See SALMON: Report, p. 288; *Annuaire IDI*, 1979, Vol. II, p. 108.
- ⁸⁸ Cf. Mme BINDSCHIEDLER's remark. *Ibid.* pp. 116 and 121; *ibid.* LAMMERS: pp. 536—537.
- ⁸⁹ As SALMON stated, the Salzburg Resolution, having also accepted the concept of reasonable and equitable utilization, was not applicable to pollution (SALMON: Report, p. 278).
- ⁹⁰ Cf. the formulation of Article II (see SALMON: Report, p. 209).
- ⁹¹ For the interpretation of the Stockholm formula, see Chapter VI, point 1).
- ⁹² In this sense see AGO's remarks (*Annuaire IDI*, 1979, Vol. II, p. 132).
- ⁹³ *ILA*, 52nd Report, 1966, p. 497.
- ⁹⁴ "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." (Article XI, para. 2). *Ibid.*, p. 501.
- ⁹⁵ For the reasons see SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 264).
- ⁹⁶ *ILA*, 60th Report, 1982, p. 535.
- ⁹⁷ "... abate existing pollution within the best possible time limits". (Article III, para. 1/b). *Annuaire IDI*, 1979, Vol. II, p. 199.
- ⁹⁸ SCHWEBEL's Third Report (UN Doc. A/CN.4/348, para. 267).
- ⁹⁹ Article 23, para. 1 (UN Doc. A/CN.4/381, para. 85).
- ¹⁰⁰ Similarly: Montreal Resolution, Article 1/c. *ILA*, 60th Report, 1982, p. 535.
- ¹⁰¹ EVENSEN's Second Report (UN Doc. A/CN.4/381, para. 85.)
- ¹⁰² *Ad hoc* meeting of Senior Governments Officials Expert in Environmental Law. EPL, 8 (1982), pp. 31—35.

The application of international legal norms relating to non-navigational uses of international watercourses

1. Introduction

As YASSEN states, "L'application est l'opération qui assure le passage de l'abstrait au concret".¹ This concise wording incorporates complicated problems of international law; as one would expect, the analysis of the problems referred to above cannot form the subject-matter of an article dealing with a specific field of international law. Hence, there is no place here for interpretation as a *conditio sine qua non* of the application of the law; and what is more, a preceding phase, i.e., the proving of norms of this nature,² also cannot be discussed in respect of general international law. The same is applicable, furthermore, to the conditions of the *bona fide* fulfilment of international obligations, the possible operations of the application of the law,³ the clash between the norms of international law concerning the same subject-matter,⁴ and the modalities of the settlement of disputes.

As is evident from the preceding comments, universal and non-universal *international organizations* have been playing a major role in international law-making aimed at the establishment of the utilization regime of international watercourses.⁵ In spite of this, they may receive only a very modest share in the application of international legal norms dealing with this subject. As a result of the particular structure of international conventional law, dealing with this very field, i.e., the quasi-hegemony of bilateral and restricted multilateral treaties or conventions, the extension of the range of participants to the said treaties or conventions⁶ could not be considered. In fact, this was not even necessary with regard to general international law. The cases in which international organizations took a stand in actual disputes affecting water utilization may be considered as exceptional.⁷

Even if the codification of general international law relating to non-navigational uses of international watercourses could be accomplished, it seems improbable, indeed, that international organizations could acquire the right of

inspection as has been established, e.g., concerning the international protection of human rights or the use of atomic energy for peaceful purposes.⁸ In fact, this statement is not at all exaggerated even in the face of efforts aimed at the implementation of documents that are not formally binding.⁹

With the above in mind, two problems will be analyzed in the present Chapter: first, institutions ensuring the continuous cooperation of the interested states, called committees in a simpler form, will be considered; second, the possible role of international responsibility as an institution ensuring, in general, the enforcement of international legal norms in this particular field of international law will be raised.¹⁰

2. Committees

The necessity for organized and institutionalized cooperation was long ago recognized by states; as a result, joint organs, in charge of water regime problems were set up, and they were called committees, which were provided with various attributes. Committees of this kind were established as early as the 19th century¹¹ but, essentially, their extensive use was realized in the 20th century. By 1970, their number exceeded one hundred¹² and, as one might expect, several more have subsequently been founded. For the time being, it is almost impossible to imagine a treaty or convention dealing with the water regime without instituting a relevant committee. It was for this reason that the question was raised whether the riparian states were not under an international obligation to institutionalize their respective relations.¹³ A negative answer has to be given to this question as the setting up of committees has been coupled with international treaties or conventions providing for their composition, functions and powers, the methods of taking decisions, etc. On the other hand, if an obligation to conclude a treaty is not to be considered as set out above, an obligation to organize an international administration or regime will not exist either.¹⁴ Nevertheless, the absence of an obligation with such a content must not mean that the institutionalization of relations in the field of water regimes and the setting up of committees have not been desirable. In fact, this was already recommended in Article II, point 7) of the Madrid Resolution of the IDI adopted in 1911. Similarly, starting from the same context, it is declared by the 1961 Salzburg Resolution: "It is recommended that States interested in particular hydrographic basins investigate the desirability of creating common organs for establishing plans of utilization designed to facilitate their economic development as well as to prevent and settle disputes which might arise." (Article 9). The relevant solution as provided in Article XXXI of the Helsinki Rules seems to be contradictory: "joint agency" is mentioned within the context of the methods of dispute settlement, on the one hand, but "the creative function of the joint

technical agency in planning the utilization of the basin" is emphasized on the other.¹⁵ Furthermore, the following is explicitly declared in the 1976 Madrid Resolution: "With a view to implementing the principle of equitable utilization of the waters of an international drainage basin, and consistent with the provisions of Chapter VI of the Helsinki Rules relating to the procedures of the prevention and settlement of disputes, the basin States concerned and interested should negotiate in order to reach agreement on the establishment of an international water resources administration." (Article 2, para. 1).

International lawyers preferred, in fact, to describe the activity of the committees in question;¹⁶ accordingly, hardly any efforts were made aimed at the investigation of international law problems relating to the functioning of the committees in question. This can be explained, first and foremost, by the fact that the international law element was necessarily pushed into the background within the activities of the committees concerned. In addition, actual differences between the committees, making any generalization difficult, have to be taken into consideration as well. These differences between the individual committees regarding their functioning, composition decision-making, territorial authority, the extent of their tasks, and financial problems are clearly illustrated in an Annex attached to the ILA's Madrid Resolution.¹⁷ The possible extent of the tasks of these committees as well as an optimum organizational model, in compliance with these tasks, have formed the subject-matter of recent research.¹⁸ The committees, i.e., the organs allowing for international cooperation in the field of water regimes, are briefly characterized below.

The composition of the committees is coordinated within the international treaties or conventions by which they have been set up. Bilateral treaties provide for the establishment of a committee on a parity basis, i.e., all parties delegate their representatives to the committee in equal number. A committee may be composed of two national sections.¹⁹ Instead of formally setting up a committee, representatives are designated²⁰ by both parties in some cases; this is, however, a solution which does not affect the substance of the matter as, according to the correct assumption by KLIMENKO, "there are several common features in the work of representatives and river regime committees".²¹ The number of committees set up in terms of a multilateral treaty or convention should be the same as the number of contracting parties.²²

The organization of the committees in question is characterized by a high degree of variety. As a rule, they consist of one or more representative(s) of the member states, called delegates, commissaries, proxies, etc. Experts are employed to give assistance. The committees also set up various sub-committees. Thus, as many as twenty international offices function under the auspices of the international joint committee set up under the American-Canadian treaty of 1909;²³ the Council of Water Quality of the Great Lakes and the Consultative Research Council were placed under the guidance of the committee set up by the

agreement on the water quality of the Great Lakes.²⁴ Some committees have at their disposal a permanent office or secretariat.²⁵ The 1969 treaty on the La Plata Basin set up a separate system with the following structure: an annual conference of foreign ministers, an inter-governmental coordinating committee, i.e., a permanent body consisting of the heads of the diplomatic missions of the contracting parties accredited to Argentina and, finally, an administrative staff led by a secretary.

The organization of the committees is related to their international status. The overwhelming majority of the committees are not international organizations as they have no permanent organizational features; accordingly, they may be regarded as joint organs having control of international tasks.²⁶ There are, however, several committees with the legal status of an international organization, as a result of explicit provisions contained in the relevant treaty or convention²⁷ or the structure of the committee proper.²⁸

If an international organization was set up by a respective treaty or convention, the privileges and exemptions of the state representatives participating in the work of the body concerned are specified;²⁹ also, the legal status of committee members was not laid down in detail; instead, some facilities, e.g., simplified border crossing agreements, were established, relating to the carrying out of their habitual work.³⁰

It is a difficult task to characterize the scope and activities of these committees as they depend, essentially, on particular factors, i.e., the specific features of international watercourses within their territorial jurisdiction or authority, the relationships of the participating states with one another, etc. Thus, COLLIARD makes a distinction³¹ between committees with technical, technical-administrative and judicial or normative jurisdiction. As for the first group, they essentially consist of engineers with technical tasks, assuring only a minimum degree of institutionalized cooperation.³² A technical-administrative committee, called a committee charged with water uses and management by the author, has wide authority, including the expression of its view on rivercourse regulation projects, the costs of such works, the maintenance of waterways, plans regarding the comprehensive problems of construction and hydrotechnical works, the submission of proposals concerning the amendment of the respective agreement or replacing it by a new agreement, actual international control of the relevant river, etc. In spite of the predominance of technical problems to be complied with by the committee, its activity is not absolutely restricted to this particular field.³³ As for committees with normative or judicial authority, they are charged with the comprehensive control of the respective river from administrative and judicial points of views.³⁴

The classification as outlined above seems to be simplified and, hence, it can hardly be enforced in practice. Thus, it is easy to demonstrate that committees classified as belonging to the technical field by the author are used to dealing

with problems that are characteristic for those from the second or third category. Thus, the permanent joint technical committee set up under the 1959 Nile agreement has large-scale control functions and is entitled to elaborate draft treaties or agreements; the permanent committee of the Indus has the task of elaborating statutes and is authorized to settle disputes, etc. Essentially, it is unacceptable to see a committee incorporating the best model which has both an administrative and a normative function.³⁵ Furthermore, it is equally unacceptable if various powers exclude each other; thus, the American-Canadian International Joint Committee, regarded as a type of committee with normative and judicial authority, is in charge of large-scale technical and administrative tasks as well.³⁶

It is a fundamental function of the committees to offer an appropriate forum for interstate negotiations and consultations. The committees supervise the problems associated with water uses and management, relating to international watercourses within their authority first and foremost from scientific, technical, and economic aspects; the exchange of information is an obvious element of this activity. Apart from the tasks of a general nature, the committees may be entrusted with other types of task by particular treaties or conventions concerning water uses and management; e.g., they may be entitled to study the hydrological, hydrotechnical and economic characteristics of a given international watercourse, to prepare water regime projects,³⁷ to build and operate construction works,³⁸ to control water utilization.³⁹

When looking at the international legal element of the activities of these committees, the first point that comes to mind is that when performing its functions, a committee has to necessarily interpret and apply an international treaty, convention or agreement as its tasks relate, essentially, to the application of an international document of this kind. From the problems that may arise in this context mention should be made of determining the territorial scope of the relevant water regime treaty, i.e., the authority of the committee concerned, the possibilities of extending the scope of the committee's tasks, etc.⁴⁰ Actual tasks in the field of international law may consist of the following: laying down statutes,⁴¹ submitting proposals aimed at the amendment of a treaty or its replacement by a new one,⁴² carrying out some exceptional functions as an authority,⁴³ and maintaining contact with other committees.⁴⁴

One may raise the question whether or not the activities of these committees relating to international law are limited by their cooperative function, concerning the settlement of international legal disputes in particular. Actually, various legal disputes may arise in the application of a given international convention dealing with water regimes. Thus, i) in view of the fact that the functioning of a committee is bound to a given international treaty or convention, the extent within which the committee in question may act beyond the limits of the treaty or convention concerned has to be determined; similarly, it should be made clear

whether or not the committee may take into consideration other international treaties or conventions than the one to which it is bound, as well as the general rules of international law; in other words, to what extent is the committee entitled to apply the method of systematic or methodological interpretation of the relevant treaties or conventions; ii) the limits within which the transfrontier effects of interference with water regime conditions (being beyond the operation of the explicit provisions of the respective treaty or convention) may be examined within the framework of the committee proper should be laid down; iii) it should be decided whether or not the committee is authorized to consider the problem of responsibility under international law when there is a breach of a treaty, other internationally wrongful acts or the possible harmful consequence of lawful behaviour.

As a result of the complicated nature of the function of these committees and of the international legal disputes concerned, it has been frequently the case with water regime treaties that matters that remained unsettled within the framework of the respective committee or proved to be insoluble were referred to central organs of the contracting parties. This means that, in order to settle these disputes, recourse has to be made to conventional diplomacy, without the possibility of exploiting the advantages of the institutionalization of the relevant relations.

The report of an experts' commission set up by the UN Secretary-General suggested doubling the number of such committees. Thus, a technical committee, composed mainly of professional engineers, would deal with planning cooperation, and the other committee would be charged with the settlement of disputes. Separation would here serve to exclude conflicts, which are disturbing the spirit of cooperation.⁴⁵ It is a further argument for this approach that, with its application, aspects of international law could more efficiently be enforced in the administration of international watercourses. Nevertheless, it has to be stated that international practice has so far failed to develop in this direction; accordingly, the committees with general authority continue to deal with the settlement of disputes.⁴⁶

As for the problems relating to the authority or jurisdiction of these committees, the most important points concern the methods of decision-making and the legal nature of the decisions. The presumed general rule is that decisions have to be taken unanimously; this is quite normal for parity-based committees. Exceptions to this rule are exceptional,⁴⁷ and they principally concern committees on which the delegates of several states are represented.⁴⁸ As a rule, unanimously approved decisions do not come into effect immediately, i.e., their binding force requires the approval of the governments of the member states. Most relevant treaties, conventions or agreements provide for formal approval; nevertheless, it has been habitually the case that the approving declaration of the government concerned has been subject to a delay so that, after the lapse of this

delay, the decision in question comes into force,⁴⁹ i.e., tacit approval is here stipulated.

Essentially, a continuous decision-making process, aimed at the application of the given water regime document, is realized within the framework of the committees here dealt with. The legal nature of these decisions depends on various factors, summarized as follows: i) according to the municipal law of the contracting parties, the central organ approving the committee decision is authorized to conclude an international treaty or convention; ii) the assessment of "tacit approval" has to be clarified; iii) it has to be decided whether the subject-matter of the relevant decision is within the field of international law or falls within the sphere of municipal law, i.e., civil law or administrative law in particular. Taking the aforementioned into consideration, a uniform legal nature for committee decisions is out of the question, and an international treaty, convention or agreement, established in a simplified form, may be acknowledged for only some of the respective cases.

3. The utilization regime of international watercourses and international responsibility

a) Introduction

Transgressing the traditional theory, the ILC acknowledged the general character of international responsibility. Dividing international law into primary and secondary rules has been a logical consequence of the above view.⁵⁰ As for the former, the rules within it establish the international rights and obligations of states in various spheres of international relations, e.g., the interstate relations originating from the uses of international watercourses, while rules of the latter lay down the consequences of the violation of the primary rules under international law. Taking into consideration the general character of the norms of international responsibility, it seems appropriate to state that a reference to the said norms would be sufficient when applying the norms of international law relating to the utilization of international watercourses. Further, one could argue that, *prima facie*, this approach would comply with the ILC concept.

In spite of the said premise, several authors have argued for the completion of the elaboration of the utilization regime of international watercourses by investigating problems of international responsibility.⁵¹ These efforts are not only supported by practical aspects, i.e., claims for international legal responsibility presented in actual disputes,⁵² and some clauses of this kind, contained

in some international treaties or conventions, but there are theoretical arguments as well, along with the nature and content of the so-called primary rules which affect legal relations arising from international responsibility.

It is interesting to note that the problem of international responsibility came to the fore, essentially, within the context of transfrontier pollution, thus resulting in a somewhat paradoxical situation: as was shown above, the extrapolation of the rules of water utilization was needed to provide a foundation for the prohibition of pollution of this kind, while the actual problem referred to showed, rather, the opposite, i.e., reverting the solutions to international responsibility resulting from transfrontier pollution to the cases of violating utilization rules. From the point of view of a possible recourse to international responsibility there is, however, a substantial difference between the two sets of facts, which has to be now analyzed.

Evidently, the system of international responsibility cannot be discussed within the framework of the present work. With this in mind, only two problems need to be mentioned; first, the relationship between the solution of responsibility problems occurring in connection with the utilization of international watercourses and the general rules of international responsibility; second, the rule of international responsibility in the application of international rules concerning the utilization of international watercourses.

*b) Possible special features of international responsibility
in connection with the utilization regimes of international
watercourses*

Although the treaties or conventions relating to the utilization regime of international watercourses contain primary rules, *references* to possible international responsibility may be found, however, in some *treaties*. Secondary rules may appear in clauses on the reservation of rights, of a negative character; we may here cite one case, "the provisions of the convention did not in any way modify the responsibility imposed on States as regards injury by the rules of international law".⁵³ In other treaties, conventions and agreements international responsibility is declared in the case of a breach of treaty, i.e., an internationally wrongful act.⁵⁴ In further conventional documents this responsibility is implied; thus, the parties may be relieved of the fulfilment of their obligations in specified cases, such as an exceptional drought or a serious accident;⁵⁵ they could agree to the fluvial inundation of their territory set against a method of compensation;⁵⁶ furthermore, abandoning an indemnity may be stipulated as well.⁵⁷

Even if the majority of the respective treaties or other relevant documents fail to provide for international responsibility, this fact is not an obstacle to raising

the problem of international responsibility as "... reparation therefore is the indispensable complement of a failure to apply a convention, and there is no necessity for this to be stated in the convention itself."⁵⁸

The approach to an internationally wrongful act has been also applied in documents realizing the identification of general international law.⁵⁹ Nevertheless, a particular problem may be recalled. Limiting responsibility to compensation is applied, principally, in treaties.⁶⁰ Anyhow, conventional clauses with this content should not be assessed as a non-applicability of other legal consequences of responsibility,⁶¹ for this would be contrary to the provision of restrictive interpretation.⁶² Accordingly, international responsibility resulting from the violation of a water utilization regime has no specific feature.

Taking the preceding remarks into consideration, along with the relatively small number of conventional documents with this content, and the provisions of conventional clauses, it is *irrelevant to speak of the establishment of a special system of responsibility*;⁶³ taking into account the particular nature of international watercourses, one can also hardly imagine this in the future. Accordingly, *the general rules of international responsibility are enforced in the field of non-navigational uses of international watercourses*.

Another distinction applied by the ILC, i.e., separating international responsibility for an internationally wrongful act and *international liability for injurious consequences arising out of acts not prohibited by international law*,⁶⁴ is also relevant in the field of the law relating to non-navigational uses of international watercourses. Some treaties provide for compensation for damage resulting from the establishment and functioning of a water utilization regime.⁶⁵ A distinction between unavoidable and unforeseen damage is also worthy of attention.⁶⁶

c) The role of international responsibility in the application of the utilization regime of international watercourses

Conforming to other regulated fields, international responsibility arising out of the violation of obligations is also an inseparable element of the regulation of non-navigational uses of international watercourses under international law. In fact, it has been formulated unequivocally in the draft articles on State Responsibility, accepted by the ILC in 1980, which reads as follows: "Every internationally wrongful act of a State entails the international responsibility of that State." (Article 1).

In spite of this indisputable premise, several authors have come to a different conclusion. It has to be admitted, however, that this has occurred principally from the point of view of pollution or environmental protection. According to REST, there are, e.g., so-called primary rules providing for the prevention or

restriction of injurious consequences to the environment of transfrontier origin, nevertheless they do not involve the actual responsibility of the state concerned for damage of this nature.⁶⁷ In the view of other authors, either the legal institution of international responsibility proper is inadequate in this field,⁶⁸ or the enforcement of international responsibility cannot be validated, when conforming to the nature of both conventional and *a fortiori* customary law obligations related to transfrontier pollution.⁶⁹ Kiss recognized only soft responsibility;⁷⁰ there is also a widely adopted view suggesting the conclusion of conventions or agreements establishing private international law responsibility for the prominent cases of environmental damage.⁷¹

If the arguments against the role of international responsibility are connected in the field of non-navigational uses of international watercourses, being within the scope of the international law of environmental protection, with the absence of sanction mechanisms under international law, even if not complete, or strikingly inefficient at least,⁷² or, finally, they result from practical considerations, then they exceed the declared aims of the present work. Nevertheless, there are *two inherent causes* which have an influence on the possible role of international responsibility that are worth mentioning.

i) As already stated, the state is *obliged to prevent transfrontier effects of water utilization beyond a given limit*. Notwithstanding this, water uses themselves are only exceptionally coupled with the exercise of public power. This manifests itself, furthermore, in that the conduct of persons not acting on behalf of the State is bound in this field to a state licence, concession, etc., and, when issuing it, the respective state has to proceed in accordance with its international obligations. As a matter of fact, the failure of the state to comply with this would establish international responsibility. Nevertheless, another situation has to be taken into consideration which has occurred mainly in the field of pollution, i.e., the unlawful conduct of individuals proceeding contrary to their license or concession or without any such license or concession, respectively. The point here is whether or not the international responsibility of the state from whose territory transfrontier damage of this kind originates is established. It can hardly be disputed that, given this state of facts, not only foreign individuals may suffer damage,⁷³ but also the state exposed to a transfrontier effect. With this in mind, several authors have come to the conclusion that a state has international responsibility for damage in the territory of which the given transfrontier effects arose, for pollution in particular.⁷⁴ This would mean a sort of strict or objective liability,⁷⁵ with the damage as caused being the only relevant point. This is, however, out of the question at the level of general international law. The concept of the objective responsibility of the state was not only rejected by the ICJ in the Corfu Channel case,⁷⁶ but the presumption of responsibility, based on the maxim *res ipsa loquitur* was not accepted either.⁷⁷ QUENTIN—BAXTER excluded the recognition of objective responsibility by the international com-

munity *expressis verbis* (explicitly),⁷⁸ and this is confirmed by the history of the negotiations that led to the formulation of Article 235 of the 1982 UN Convention on the Law of the Sea.⁷⁹

Similarly, liability for possible injurious consequences arising out of an act not prohibited by international law cannot be taken into consideration as the set of facts outlined in the foregoing are *ipso facto* unlawful, not only under international law, but from the point of view of municipal law as well.

Accordingly, the international responsibility of a given state can be raised only on the basis of whether or not the state concerned took due care in the control of water uses involving transfrontier effects,⁸⁰ as required by the primary rules of international law.⁸¹ As a consequence of this, the relevant decision has to be treated as a question of evidence.⁸² Thus, the available means of control, the functioning of the competent state mechanism, and the delay allowed for reaction, all have to be examined. Nevertheless, if a breach of an obligation, imputable to the given state, can be established, there is no more room for deliberating whether or not the state concerned proceeded as it was expected to do, according to the ILC concept at least.⁸³ Notwithstanding this, some reality of an exemption from international responsibility has to be acknowledged in principle as otherwise one would return to the concept of objective responsibility, i.e., the respective state would be liable for any transfrontier damage originating from its territory.⁸⁴

As one would expect, the preceding comments should not preclude objective responsibility in terms of a treaty or convention to be concluded by the interested states;⁸⁵ nevertheless, the obstacles to wide-scale acknowledgement of solutions of this kind are clearly demonstrated by the response to the relevant draft convention, elaborated under the auspices of the Council of Europe in 1969; in fact, the relevant Article 7 of the draft was found to be unacceptable by the Committee of Ministers.⁸⁶

ii) The *norms of international law* relating to the utilization of international watercourses have, in fact, *some inherent peculiarities* which, with some exaggeration, may make the success of raising the problem of international responsibility in practice rather illusory. It is not only that the ambiguous character of international law raises difficulties in general;⁸⁷ in fact, it is rather difficult or, in some cases even impossible, to demonstrate in the field examined here that "an act of State is not in conformity with what is required of it by an obligation".⁸⁸ To sum up the statements of the preceding chapters, the points to be considered in this context comprise the set of principles of general international law, the wide-scale use of discharging clauses, the emphasis laid on the "substantial" character of damage, and the preponderance of procedural rules. Needless to say, *procedural obligations* can also be violated but, to refer to QUENTIN-BAXTER, this is not a basis in itself for submitting a claim;⁸⁹ hence, the said acts will be regarded as non-obligations.⁹⁰ On the other hand, the sanctions in

MCCAFFREY's draft (Article 13 (3)) seem to have excessive provisions,⁹¹ especially when thinking of the non-existence of a direct causal link between the reconsideration of procedural requirement and the actual damage.

As regards the *soft law character* of the principal elements of the international legal regulation relating to the utilization of international watercourses, one can doubtless argue that the binding force of a provision depends not only on its form but its content as well.⁹² This, however, would be a false interpretation of international practice which cannot be considered, in fact, as if the enforcement of international responsibility, forming an important element of the international legislative process, ought to be finally excluded. On the contrary, this should be maintained in principle, and two practical approaches are applied: either having recourse to new international law-making with a view to finding a solution to the respective problem⁹³ or, while making reference to it, relieving the interested parties from the task of complying with their accepted international obligations.

Finally, reference should be made in this context to the dilemma of whether transfrontier damage results from a violation of international law or is a consequence of lawful conduct. For most of transfrontier damage, it is difficult to solve the dilemma.⁹⁴ This would involve, a paradox, i.e., the damage caused ought to be compensated,⁹⁵ and this would mean a return to the concept of objective responsibility already rejected.⁹⁶

Summing up the above, international responsibility has a very limited role in respect of the utilization regime of international watercourses. This necessarily gives rise to the question whether it would be convenient to look for other ways and means to compensate damage, e.g., at the *private international law level*,⁹⁷ while maintaining and, even more, developing international responsibility.⁹⁸ This problem nevertheless reaches beyond the subject-matter of the present work.

Notes

¹ YASSEN: op. cit. p. 10.

² SALMON: op. cit. 1982, p. 307.

³ See LACHARRIÈRE: op. cit. pp. 110 et seq.

⁴ For the conflict between treaties see: ROUSSEAU: op. cit. Vol. I, pp. 151 et seq.

⁵ Apart from the points dealt with, mention may be made of e.g. technical and financial assistance. See UN Doc. ST/ESA/5. Part IV, points C) and D).

⁶ BOKOR-SZEGŐ sees one of the possible roles of international organizations in this field. BOKOR-SZEGŐ: op. cit. 1976, p. 147.

⁷ E.g. Ganges dispute (UN Yearbook, 1976, pp. 208—210); Parana dispute (LAMMERS: op. cit. pp. 293—296).

⁸ For assuring the application of international treaties or conventions regulating technical matters see: LANDY: op. cit. pp. 1—2.

⁹ See the assessment of the implementation of the Mar del Plata Action Plan from 1977 (UN Doc. E/C.7/118 et seq.); 1979 Shared Natural Resources Guide Lines (UNEP/GC/10/8 et seq.); respecting World Charter for Nature (UN Doc. UNEP/GC/12) INF/4, Chapt. III, paras. 14 and 21—22).

¹⁰ ROUSSEAU: *op. cit.* Vol. I, p. 194; this viewpoint was also emphasized by BOKOR-SZEGŐ (see BOKOR-SZEGŐ: *op. cit.* 1976, p. 154).

¹¹ The first committee was set up by the treaty signed by Prussia and the Netherlands in Fontainebleau in 1785 and at Clèves in 1816, respectively.

¹² Doc. AGNU, vingt-cinquième session. 6^{ème} Commission, p. 335.

¹³ ILA, 57th Report, 1976, p. 246.

¹⁴ *Ibid.* Article 2 of the ILA's 1976 Madrid Resolution; BOURNE: *op. cit.* 1972, p. 212; FLORIO: *op. cit.* p. 151.

¹⁵ ILA, 52nd Report, 1966, Commentary, p. 524.

¹⁶ E.g. KLIMENKO: *op. cit.* pp. 151 et seq.; TECLAFF: *op. cit.* pp. 179 et seq.

¹⁷ ILA, 57th Report, 1976, pp. 253—256.

¹⁸ E.g. UN Doc. ST/ESA/5, Parts III and IV.

¹⁹ E.g. the American-Canadian and American-Mexican international joint committees.

²⁰ E.g. in terms of the 1952 Romanian-Soviet convention or the 1964 Polish-Soviet agreement.

²¹ KLIMENKO: *op. cit.* p. 166.

²² E.g. the Niger committee set up by the 1964 agreement, and the La Plata Committee established by the 1969 treaty.

²³ ELY-WOLMAN: *op. cit.* p. 149, Note 14.

²⁴ Article VII of the 1972 agreement.

²⁵ E.g. the Niger committee and the La Plata committee, respectively.

²⁶ CUTH: *op. cit.* p. 170.

²⁷ E.g. the American-Mexican joint committee, and the Niger, Senegal, Tchad, and La Plata committees.

²⁸ E.g. the American-Canadian international joint committee.

²⁹ E.g. Article 17 of the 1964 Tchad convention, Article 11 of the 1964 Niger agreement.

³⁰ E.g. Article 13 of the 1926 South African-Portuguese agreement, Article VIII of the 1956 Brazilian-Paraguayan agreement, Article 8 of the exchange of Notes between Argentina and Uruguay in 1968, Article 11 of the 1958 Czechoslovakian-Polish agreement, Article 14 of the 1964 Polish-Soviet agreement.

³¹ COLLIARD: *op. cit.* pp. 428 et seq.

³² *Ibid.* p. 423.

³³ *Ibid.* p. 426.

³⁴ *Ibid.* p. 428.

³⁵ *Ibid.* p. 426.

³⁶ For the powers of the American-Canadian international joint committee see: MACKAY: *op. cit.* pp. 292—318.

³⁷ E.g. 1956 Chinese-Soviet agreement on scientific research in the Amur basin, 1971 Argentinian-Paraguayan agreement on studying the utilization of the waters of the river Parana, 1971 Bulgarian-Greek agreement.

³⁸ E.g. Articles 5—7 of the 1944 American-Mexican treaty.

³⁹ E.g. Articles 9 and 12 of the 1944 American-Mexican treaty, Article II of the 1905 Dutch-Prussian treaty, Article 3 of the 1930 French-Swiss convention, Article I of the 1931 treaty between Liechtenstein and Austria.

⁴⁰ E.g. the international committee which was set up under the terms of the 1909 American-Canadian treaty was initially concerned with the protection of the water level and navigability; subsequently it was charged with preparing plans for the integrated utilization of the Columbia

basin, the clarification of problems on the protection of water quality of the Great Lakes, and recently it has also been interested in air pollution problems.

⁴¹ E.g. Article 4 of the 1956 Albanian-Yugoslav Agreement, Article 4 of the 1958 Bulgarian-Yugoslav Agreement, Article 30 of the 1952 Polish-East German Agreement, Niger River Commission, by Article 4 of the 1964 Niamey Agreement.

⁴² E.g. 1963 Agreement on setting an international committee for water quality protection of the Rhine; 1969 La Plata treaty.

⁴³ E.g. Article X of the 1909 American-Canadian treaty, Articles 2-3 of the 1922 Danish-German convention.

⁴⁴ E.g. Articles 5 and 6 of the 1963 Niger Act, Article 9 of the 1961 Protocol on protection against pollution of the Mosel, Articles 8 and 10 of the 1963 agreement on protection against pollution of the Rhine, Article 9 of the 1962 French-Swiss convention.

⁴⁵ Report entitled "Integrated...", para. 31.

⁴⁶ E.g. Article VIII of the 1960 Indian-Pakistani treaty, Article 11 of the convention on the Senegal committee.

⁴⁷ E.g. in the case of the American-Canadian international joint committee.

⁴⁸ E.g. decisions are taken in the Niger committee by a 2/3 majority.

⁴⁹ E.g. Article 5 of the 1958 Bulgarian-Yugoslav Agreement.

⁵⁰ Yearbook ILC, 1973, Vol. II, p. 169.

⁵¹ E.g. BALLENEGGER: *op. cit.* pp. 44-46 and 66-73; LAMMERS: *op. cit.* pp. 587-661; concerning problems dealing with the principle of the international law of environmental protection, see: KOLBASOV: *op. cit.* pp. 206 et seq.; TIMOSHENKO: *op. cit.* pp. 165-189. International responsibility for damage to the environment has been one of the subjects of CMEA research in the international law of environmental protection, during the period 1986-1990.

⁵² See the cases mentioned by LAMMERS, e.g. pollution of the Rhone (*op. cit.* p. 591), pollution by potassium chloride in the Alsace (p. 605), the case of the Verbois Dam (the regulation of the river Garonne), the case of the Gut Dam (p. 630), the Odera river pollution, the periodic violations of the operating rules of the Iron Gate power plant.

⁵³ 1923 Geneva Convention on Hydraulic Power, Protocol; for its interpretation see: SAUSER-HALL: *op. cit.* p. 535; *ibid.* 1974 Draft Convention of the Council of Europe, Article 21.

⁵⁴ 1960 German-Dutch boundary waters treaty, Article 63; 1960 Polish-Soviet state frontier Regime treaty, Article 44; Article 16 of the 1960 Finnish-Soviet Agreement, with the same content; 1961 American-Canadian Convention on the river Columbia, Article XVIII; 1964 Finnish-Soviet boundary waters Agreement, Article 5; 1960 Indus Treaty, coupling the obligations of Pakistan and India (Articles 2 and 3) to the jurisdiction of a Court of Arbitration; authorized to settle disputes, including any question concerning the existence of any fact which, if established, might constitute a breach of the Treaty (Article 9).

⁵⁵ 1906 Rio Grande Convention, Article II; Rio Grande, Colorado, and Tijuana Rivers Treaty from 1944, Article 10, and the drainage of floods, Article 17.

⁵⁶ 1959 Nile Agreement, Article II, para. 6; 1959 Finnish-Soviet additional protocol relating to Lake Inari, Article I.

⁵⁷ 1954 Drave River Agreement, Article 3, para. 4.

⁵⁸ PCIJ Series A, No. 9 (Chorzów case (Jurisdiction)), p. 21.

⁵⁹ Cf. AALCC Draft propositions from 1973, IX. Only for transfrontier pollution; Athens resolution of the IDI, Article 5 (Annuaire IDI, 1979, Vol. II, p. 197); ILA, Montreal Resolution, Article 9 (ILA, 60th Report, 1982, p. 545).

⁶⁰ For the case of anti-contractual water utilization the non-acquisition of rights may be declared, e.g. 1960 Indus Treaty, Article 4, para. 14.

⁶¹ In this sense see KEANNEY's remarks (Annuaire IDI, 1976, Vol. I, p. 286). For these legal consequences see RIPHAGEN's draft, Articles 6 and 7 (Annuaire CDI, 1985, Vol. II, 1^{ère} partie,

pp. 9—10). Similarly, it cannot be accepted either if the parties in question renounced their rights as laid down in Article 60 of the 1969 Vienna Convention on the Law of Treaties with this reservation.

⁶² See HARASZTI: *op. cit.* 1965, pp. 203 et seq.

⁶³ This possibility has in principle been acknowledged in Article 2 of the provisional draft of the ILC (Annuaire CDI, 1985, Vol. II, 2^{me} partie, p. 41).

⁶⁴ Yearbook ILC, 1980, Vol. II, part 2, p. 27.

⁶⁵ E.g. 1927 Soviet-Turkish frontier waters convention, Article 5, and 1927 Araxe River Protocol; American-Mexican exchange of notes concerning the loan of waters of the Colorado river in 1966; agreement between Canada and the USA concerning claims relating to the Gut Dam in 1965, Article II, without prejudice to the legal and factual positions maintained by the parties (Yearbook ILC, 1974, Vol. II, Part 2, p. 294); 1950 Sauer hydroelectric power plant treaty, Articles 10 and 19; 1951 Agreement between Finland and Norway on the transfer of water, Article 2; 1958 State Treaty concerning the construction of hydro-electric power installations on the Our, Article 4.

⁶⁶ The 1957 Norwegian-Soviet Paatsojoki River Agreement only provides for compensation for unforeseen damage, Article 11; contrary to this, the said obligation is established for both cases in terms of the 1966 Lake Constance Agreement, Articles 1 and 4—5.

⁶⁷ REST: *op. cit.* 1978, pp. 32 et seq.; 1933, pp. 223 et seq.

⁶⁸ LANG: *op. cit.* p. 517; HANDL: *op. cit.* 1983, p. 85.

⁶⁹ DUPUY: *op. cit.* 1978, pp. 272—273.

⁷⁰ KISS: *op. cit.* 1981, p. 515.

⁷¹ GÜNDLING: *op. cit.* p. 271.

⁷² WEIL: *op. cit.* p. 5.

⁷³ For the doubtfulness of the application of diplomatic protection see Kiss: Rapport, pp. 468—470.

⁷⁴ Cf. KLIMENKO: *op. cit.* p. 140; LESTER: *op. cit.* 1963, p. 849.

⁷⁵ Cf. LAMMERS: *op. cit.* p. 629.

⁷⁶ HARASZTI: *op. cit.* 1958, pp. 35—36.

⁷⁷ DUPUY: *op. cit.* 1977, pp. 187—190.

⁷⁸ QUENTIN-BAXTER's Fourth Report, paras. 4—6.

⁷⁹ DUPUY: *op. cit.* 1986, pp. 1038—1041.

⁸⁰ Ibid. LAMMERS: *op. cit.* p. 597.

⁸¹ See AGO's comments on Article 23 of the Draft articles on State responsibility (Yearbook ILC, 1978, Vol. I, p. 9); *ibid.* GÜNDLING: *op. cit.* p. 279; in the opposite sense: ZEMANEK: *op. cit.* p. 329.

⁸² This was the argument of Judge WINIARSKI in the Corfu Channel case (ICJ Report, p. 54).

⁸³ Cf. the enumeration in Article 3 of the draft on the constituent elements of a violation of international law.

⁸⁴ LAMMERS claims the presumption of responsibility (LAMMERS: *op. cit.* p. 588).

⁸⁵ Cf. the 1973 La Plata Treaty between Argentina and Uruguay, Articles 51—52, and Article 42 of the 1975 Statutes of the River Uruguay Committee.

⁸⁶ See Yearbook ILC, 1974, Vol. II, Part 2, p. 346. It cannot be foreseen whether or not this problem will again be raised in a new initiative aimed at concluding a treaty (see Naturopo, No. 1987/55, pp. 5 and 30).

⁸⁷ CHAUMONT: *op. cit.* pp. 54—64.

⁸⁸ Cf. Draft articles on State responsibility, Article 16 (Yearbook ILC, 1980, Vol. II, Part 2, p. 31).

⁸⁹ QUENTIN-BAXTER's Fourth Report UN Doc. A/CN.4/313 Annex). In respect of evidence, this statement should in Barboza's view be modified (UN Doc. A/CN.4/402, pp. 9, 13).

⁹⁰ RIPHAGEN: *op. cit.* 1983, p. 594.

⁹¹ McCaffrey's Second Report, Article 13, para. 3. (UN Doc. A/CN.4/399), Add. 2, p. 14.

⁹² Kelsen: op. cit. p. 9.

⁹³ Cf. LACHARRIÈRE: op. cit. p. 201.

⁹⁴ It may be of particular importance in this respect that the maxim *sic utere tuo* forms the main support for the codification concept concerning liability for injurious consequences arising out of acts not prohibited by international law (Yearbook ILC, 1980, Vol. II, Part 2, p. 159).

⁹⁵ For the ambiguous formulation of this obligation see: QUENTIN-BAXTER's Third Report, Schematic outline, sec. 4, Articles 1—2.

⁹⁶ For the criticism of this solution see: BROWNLIE: op. cit. 1983, pp. 50 et seq.; according to Margraw, only the actual views came nearer to each other; MARGRAW: op. cit. p. 313.

⁹⁷ In conformity with Principle No. 22 of the Stockholm Declaration. This may be interpreted, however, as if no adequate international regime had existed for compensating transfrontier damage and merely its establishment was set as a purpose (GÜNDLING: op. cit. p. 274).

⁹⁸ E.g. SAND: op. cit. pp. 7—8 (for an abstraction from the state frontier see: SAND: op. cit. 1978, p. 165); FISCHERHOF, op. cit. p. 86 et seq.; OECD Report from 1984, point 3) (EPL, 13/3/1984), p. 123.

Abbreviations

AAA	Annuaire de l'Association des Auditeurs et anciens Auditeurs de l'Académie de droit international de la Haye
AALCC	Asian-African Legal Consultative Committee
AFDI	Annuaire français de droit international
AJ	Állam- és Jogtudomány (Political and Legal Science) — Budapest
AJIL	American Journal of International Law
ASDI	Annuaire suisse de droit international
ASIL	American Society of International Law
AV	Archiv des Völkerrechts
BCICLR	Boston College International and Comparative Law Review
BYBIL	British Yearbook of International Law
CBR	Canadian Bar Review
CD	Commission du Danube
CDI	Commission du droit international
CJTL	Columbia Journal of Transnational Law
CMEA	Council for Mutual and Economic Aid (Comecon)
CYIL/ACDI	Canadian Yearbook of International Law
DIHD	Droit International et Histoire Diplomatique Documents choisis par C.A. Colliard — A. Manin (Paris, 1970)
DLV	Duke Law Review
ECE	Economic Commission for Europe
ECOSOC	United Nations Economic and Social Council
EPL	Environmental Policy and Law
FAO	Food and Agriculture Organization
GAOR	UN General Assembly Official Record
GYIL	German Yearbook of International Law
HUGY	Hatályos jogszabályok gyűjteménye (Corpus of Prevailing Legal Rules) (Budapest 1979)
ICJ	International Court of Justice
ICLQ	International and Comparative Law Quarterly
IDI	Institut de droit international
IJIL	Indian Journal of International Law

ILA	International Law Association
ILC	International Law Commission
ILM	International Legal Materials
IYIL	Italian Yearbook of International Law
JDI	Journal de droit international
JRMP	Jugoslavenska Revija za Medunarodno Pravo
Külpol.	Külpolitika (Foreign Policy) — Budapest
LNTS	League of Nations Treaty Series
Martens, Rec.	De Martens, Recueil des traités
Martens, NRG	De Martens, Nouveau recueil général de traités
MLR	Michigan Law Review
NYIL	Netherlands Yearbook of International Law
OCDE	Organisation de coopération et de développement économique
OECD	Organization for Economic Co-operation and Development
OMS	Organisation mondiale de la santé
ÖZÖR	Österreichische Zeitschrift für Öffentliches Recht und Völkerrecht
PCIJ	Permanent Court of International Justice
PYIL	Polish Yearbook of International Law
Questions	Question of International Law — Budapest
RBDI	Revue belge de droit international
RCADI	Recueil des cours de l'Académie de droit international de la Haye
RDC	Revue de droit contemporain
RDI	Revue de droit international
RDILC	Revue de droit international et de législation comparée
RGDIP	Revue général de droit international public
RHDI	Revue hellénique du droit international
RIAA	United Nations, Report of International Arbitral Awards
RREI	Revue roumain d'études internationales
RSA	Recueil des sentences arbitrales
SEMP	Sovietskiy yezhegodnik mezhdunarodnogo prava (Soviet Yearbook of International Law)
SGP	Sovietskoye gosudarstvo i pravo (Soviet State and Law)
SNRT	Société des Nations, Recueil des traités
TK	Társadalomtudományi Közlemények (Bulletin of Social Sciences) — Budapest
TRHGy	Törvények és rendeletek hivatalos gyűjteménye (Official Corpus of Laws and Decrees) (Budapest)
UN	United Nations
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
UNTS	United Nations Treaty Series
VK	Vízügyi Közlemények (Bulletin of Water Management) — Budapest
WEW	Wasser- und Energiewirtschaft
YUN	Yearbook of United Nations
ZaöRV	Zeitschrift für ausländisches öffentliches Recht und Völkerrecht
ZV	Zeitschrift für Völkerrecht
ZVB	Zeitschrift für Völkerrecht und Bundestaatrecht

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- 7) Treaty of Limits between Prussia and the Netherlands (Clèves, 7 October 1816). UN Doc. ST/LEG/SER. 8. B/12., treaty no. 204.
- 8) Boundary Treaty between France and the Netherlands (Courtrai, 28 March 1820). *Ibid.* treaty no. 182.
- 9) Agreement between Bavaria and Austria concerning the course of the water frontier along the Saale and Salzach Rivers (24 December 1820). *Ibid.* treaty no. 131.
- 10) Convention fixing the frontier between Belgium and the Grand Duchy of Luxembourg (Maastricht, 7 August 1843). *Ibid.* treaty no. 152.
- 11) Navigation Agreement between Austria and Bavaria (2 December 1851). *Ibid.* treaty no. 133.
- 12) Agreement between Austria and Bavaria concerning the regulation of the Inn River. *Ibid.* treaty no. 134.
- 13) Traité de Paris du 30 mars 1856. DIHD Tome II, p. 26.
- 14) Treaty between Austria and Bavaria concerning the regime of the frontier line and other territorial relations (24 June 1862). UN Doc. ST/LEG/SER. B/12., treaty no. 135.
- 15) Treaty between Belgium and the Netherlands to regulate the regime of diversion of water from the Meuse (The Hague, 12 May 1863). *Ibid.* treaty no. 157.
- 16) Traité de délimitation entre la France et l'Espagne fixant d'une manière définitive la frontière commune ainsi que les droits, usages et privilèges appartenant aux populations limitrophes des deux pays (Bayonne, le 26 mai 1866). *Ibid.* treaty no. 184.

- 17) Acte additionnel aux traités de délimitation des 2 décembre 1856, 14 avril 1862 et 26 mai 1866 conclu entre le France et l'Espagne (Bayonne, le 26 mai 1866). *Ibid.* treaty no. 185.
- 18) Acte final de la délimitation de la frontière internationale des Pyrénées entre la France et l'Espagne (Bayonne, le 11 juillet 1868). *Ibid.* treaty no. 186.
- 19) Convention révisée pour la navigation du Rhin entre la France, la Prusse, les Pays-Bas, la Bavière et les Grands-Duchés de Bade et de Hesse (Mannheim, le 17 octobre 1868). DIHD Tome II, p. 29. Protocol additionnel no. 2 à la convention de Mannheim du 17 Octobre 1868 pour la navigation du Rhin (Strasbourg, 17 octobre 1979). RGDIP 1986, p. 306.
- 20) Traité entre l'Autriche-Hongrie, l'Allemagne, la Grande Bretagne, l'Italie, la Russie et la Turquie (Berlin, le 13 juillet 1878). *Neumann op. cit.* Tome X, p. 766.
- 21) Convention between Switzerland and the Grand Duchy of Baden regarding navigation on the Rhine from Neuhausen to below Basle (Basle, 10 March 1879). UN Doc. ST/LEG/SER. B/12., treaty no. 217.
- 22) Convention between Switzerland, Germany and the Netherlands for the regulation of salmon fishing in the Rhine basin, with Protocol (Berlin, 30 June 1885). *Ibid.* treaty no. 112.
- 23) Convention with Protocol between Switzerland, the Grand Duchy of Baden, and Alsace-Lorraine to establish uniform provisions regarding fishing in the Rhine and its tributaries, including Lake Constance (Lucerne, 18 May 1887). *Ibid.* treaty no. 113.
- 24) General Act of the Berlin conference (26 February 1885). *Martens*, NRG 2^e série, Tome X, p. 414. Convention Revising the General Act of Berlin (Saint-Germain-en Laye, 10 September 1919). *Ibid.* 3^e série, Tome XIV, p. 12.
- 25) Protocol between the Governments of Italy and the United Kingdom for the demarcation of their respective spheres of influence in Eastern Africa (Rome, 15 April 1891). UN Doc. ST/LEG/SER. B/12., treaty no. 13.
- 26) Convention between Austria-Hungary, Baden, Bavaria, Lichtenstein, Switzerland and Württemberg concerning fishing in Lake Constance, with Protocol (Bregenz, 5 July 1893). *Ibid.* treaty no. 114.
- 27) Treaty between Ethiopia and the United Kingdom relative to the frontiers between the Anglo-Egyptian Sudan, Ethiopia and Eritrea (Addis Abeba, 15 May 1902). *Ibid.* treaty no. 13.
- 28) The Convention for the Protection of Birds Useful to Agriculture (Paris, 19 March 1902). *102 British and Foreign State Papers*, p. 969.
- 29) Convention between the Netherlands and Prussia concerning the Dinkel and Vechte Rivers (Berlin, 17 October 1905). UN Doc. ST/LEG/SER. B/12., treaty no. 210.
- 30) Convention entre la Suède et la Norvège, annexée au traité de Karlstadt (26 octobre 1905). *Martens*, NRG 2^e série, Vol. 34, p. 710.
- 31) Agreement between Great Britain and the Independent State of Congo, modifying the Agreement signed at Brussels, 12 May 1894, relating to the spheres of Influence of Great Britain and the Independent State of the Congo in East and Central Africa (London, 9 May 1906). UN Doc. ST/LEG/SER. B/12., treaty no. 30.
- 32) Convention between the USA and Mexico concerning the equitable distribution of the waters of the Rio Grande for irrigation purposes (Washington, 21 May 1906). *Ibid.* treaty no. 75.
- 33) Convention between Rumania and Serbia concerning fishing in the frontier section of the Danube (Bucharest, 27 February 1908). *Martens*, NRG 3^e série, Vol. IV, p. 219.
- 34) Treaty between Great Britain and the USA relating to Boundary Waters and Questions arising between the USA and Canada (Washington, 11 January 1909). UN Doc. ST/LEG/SER. B/12., treaty no. 79.
- 35) Exchange of Notes constituting an Agreement between Spain and Portugal on the exploitation of border rivers for industrial purposes (Madrid, 29 August and 2 September 1912). *Ibid.* treaty no. 147.

- 36) Convention between France and the Netherlands to determine the boundary between the colonies of French Guiana and Surinam (Paris, 30 September 1915). *Ibid.* treaty no. 72.
- 37) Traité de paix de Versailles (29 juin 1919). *Strupp, K.*: Documents pour servir à l'histoire du droit des gens. Tome IV (Berlin 1923). 2^e ed., p. 140.
- 38) Traité de paix de St. Germain avec l'Autriche (10 septembre 1919). *Ibid.* p. 1006.
- 39) Traité de paix de Trianon avec la Hongrie (4 juin 1920). Loi no XXXIII de 1921 *Corpus iuris* (Budapest 1921), p. 310.
- 40) Convention and Statute on régime of navigable waterways of international concern (Barcelona, 20 April 1921). LNTS Vol. VII, p. 37.
- 41) Convention établissant le statut définitif du Danube (Paris, 23 juillet 1921). DIHD Vol. II, p. 75.
- 42) Traité de paix de Lausanne avec la Turquie (24 juillet 1923). LNTS Vol. XXVIII, p. 75.
- 43) Convention relating to the development of hydraulic power affecting more than one State and Protocol of Signature (Geneva, 9 December 1923). LNTS Vol. XXXVII, p. 77.
- 44) Provisions relating to the common frontier between Belgium and Germany (Aix-la-Chapelle, 6 November 1922). UN Doc. ST/LEG/SER. B/12., treaty no. 118.
- 45) Agreement for the settlement of questions relating to watercourses and dikes on the German-Danish frontier (Copenhagen, 10 April 1922). *Ibid.* treaty no. 166.
- 46) Convention approving the Regulations of the Permanent Technical Hydraulic System Commission of the Water Regime (Paris, 27 May 1923). Loi no. VII de 1925 *Corpus iuris* (Budapest, 1926), p. 24. See *Hudson, M. D.*: International legislation. A Collection of the Texts of Multipartite International Instruments of General Interest. Vol. II, (Washington 1939), p. 1022.
- 47) Agreement between Italy and Austria concerning economic relations between the frontier zones of the two States (Rome, 28 April 1923). UN Doc. ST/LEG/SER.E/B/12., treaty no. 139.
- 48) Convention entre la Hongrie et la Roumanie concernant le régime des eaux des territoires limitrophes et la liquidation des syndicats de défense contre les inondations coupés par la frontière (Bucharest, 14 avril 1924). LNTS Vol. 46, p. 42.
- 49) Treaty between France and Germany regarding the delimitation of the frontiers (Paris, 14 August 1925). UN Doc. ST/LEG/SER. B/12., treaty no. 178.
- 50) Agreement and Protocol between Canada and the US to regulate the level of Lake of the Woods (Washington, 24 February 1925). *Ibid.* treaty no. 50.
- 51) Agreement between the Union of South Africa and Portugal regulating the use of the waters of the Kunene River for the purposes of generating hydraulic power and of inundation and irrigation in the Mandated Territory of South West Africa (Cape Town, 1 July 1926). *Ibid.* treaty no. 29.
- 52) Convention and Protocol between the USSR and Turkey regarding the use of frontier waters (Kars, 8 January 1927). *Ibid.* treaty no. 106.
- 53) Protocol annexed to the Convention concluded between the USSR and Turkey regarding the use of frontier waters (Kars, 8 January 1927). YILC 1974, Vol. II. Part Two, paras. 321-324, p. 95.
- 54) Convention et protocole final. Protocoles juridiques de frontière, rédigés par la Commission de délimitation austro-hongroise: adoption (11 mars 1927). LNTS Vol. 80, p. 147.
- 55) Convention between Spain and Portugal to regulate the hydroelectric development of international section of the River Douro (Lisbon, 11 August 1927). UN Doc. ST/LEG/SER. B/12. treaty no. 248.
- 56) Convention concernant des questions découlant de la délimitation de la frontière entre la Hongrie et la Tchécoslovaquie (Prague, 24 novembre 1928). LNTS Vol. 110, p. 425.
- 57) Treaty between the Republic of Austria and the Czechoslovak Republic regarding the settlement of legal questions connected with the frontier (Prague, 12 December 1928). UN Doc. ST/LEG/SER. B/12., treaty no. 130.

- 58) Exchange of notes between the United Kingdom and the Egyptian Government in regard to use of the waters of the Nile River for irrigation purposes (Cairo, 7 May 1929). *Ibid.* treaty no. 7.
- 59) Treaty of peace, friendship and arbitration between the Dominican Republic and the Republic of Haiti (San Domingo, 20 February 1929). *Ibid.* treaty no. 68.
- 60) Convention between Norway and Sweden on certain questions relating to the law on water-courses (Stockholm, 11 May 1929). *Ibid.* treaty no. 237.
- 61) Agreement between Germany and Belgium concerning the common frontier (Aix-La-Chapelle, 7 November 1929). *Ibid.* treaty no. 150.
- 62) Convention between France and Switzerland respecting the Chatelot Falls concession on the Doubs (Paris, 19 November 1930). *Ibid.* treaty no. 199.
- 63) Convention entre la Roumanie et la Tchécoslovaquie concernant le règlement des questions découlant de la délimitation de la frontière (statut de frontière) avec annexes (Praha, 15 juillet 1930). LNTS Vol. 154, p. 158.
- 64) Convention générale entre la Roumanie et la Yougoslavie concernant le régime des eaux (Belgrade, 14 décembre 1931). LNTS Vol. 135, p. 32.
- 65) Treaty between Austria and Lichtenstein regarding the regulation of the Rhine and tributary waters (Vaduz, 23 June 1931). UN Doc. ST/LEG/SER. B/12., treaty no. 140.
- 66) Convention relative to the preservation of fauna and flora in their natural state (London, 8 November 1933). LNTS Vol. 172, p. 241.
- 67) Declaration of Montevideo concerning the industrial and agricultural use of international rivers, approved by the Seventh Inter-American Conference at its fifth plenary session, 24 December 1933. YILC 1974, Vol. II, Part Two, p. 212.
- 68) Convention regarding the determination of the legal status of the frontier between Brazil and Uruguay (Montevideo, 20 December 1933). UN Doc. ST/LEG/SER. B/12., treaty no. 49.
- 69) Agreement between the Belgian Government and the Government of the UK of Great Britain and Northern Ireland regarding water rights on the boundary between Tanganyika and Ruanda-Urundi (London, 22 December 1934). *Ibid.* treaty no. 4.
- 70) Agreement between Greece and Turkey concerning the control of hydraulic works on both banks of the River Maritza-Ebros (Ankara, 20 June 1934). *Ibid.* treaty no. 220.
- 71) Convention entre le Royaume de Hongrie et la République Tchécoslovaque concernant le règlement des questions d'ordre technique et économique sur le secteur limitrophe hongaro-tchécoslovaque du Danube ainsi que sur celui de la Tisza en aval du confluent du Szamos (Budapest, 24 avril 1937). LNTS Vol. 189, p. 403.
- 72) Treaty between USA and Mexico relating to the utilization of the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo) from Fort Quitman, Texas, to the Gulf of Mexico (Washington, 3 February 1944). UN Doc. ST/LEG/SER. B/12., treaty no. 77.
- 73) Protocol relative to the regulation of the waters of the Tigris and Euphrates and of their tributaries, annexed to the Treaty of Friendship and Neighbourly Relations between Iraq and Turkey (Ankara, 29 March 1946). *Ibid.* treaty no. 104.
- 74) Agreement between Argentina and Uruguay relating to the utilization of the rapids of the Uruguay River in the area of Salto Grande (Montevideo, 30 December 1946). *Ibid.* treaty no. 40.
- 75) Treaty of Peace between the Allied and Associated Powers and Hungary (Paris, 10 February 1947). Law no. XVIII of 1948 HJGy Vol. 6, p. 16. UNTS Vol. 42, p. 35.
- 76) Treaty of Peace between the Allied and Associated Powers and Italy (Paris, 10 February 1947). UN Doc. ST/LEG/SER. B/12., treaty no. 120.
- 77) Convention regarding the régime of navigation on the Danube (Belgrade, 18 August 1948). UNTS Vol. 33 p. 196.

- 78) Agreement between Italy and Switzerland on the Reno di Lei hydraulic power concession, with Additional Protocol (Rome, 18 June 1949). UN Doc. ST/LEG/SER. B/12., treaty no. 231.
- 79) Agreement between the Royal Norwegian Government and the Government of the USSR concerning the régime of the Norwegian-Soviet frontier and procedure for the settlement of frontier disputes and incidents (Oslo, 29 December 1949). *Ibid.* treaty no. 238.
- 80) Exchange of notes between the Government of the UK of Great Britain and Northern Ireland and the Government of Egypt regarding the construction of the Owen Falls Dam (Cairo, 20 and 21 May 1949). *Ibid.* treaty no. 9.
- 81) Exchange of notes constituting an Agreement between the Government of the UK of Great Britain and Northern Ireland (on behalf of the Government of Uganda) and the Government of Egypt regarding co-operation in meteorological and hydrological surveys in certain areas of the Nile Basin (Cairo, 19 January, 28 February and 20 March 1950). *Ibid.* treaty no. 11.
- 82) Treaty between the USA and Canada relating to the uses of the waters of the Niagara River (Washington, 27 February 1950). *Ibid.* treaty no. 59.
- 83) Agreement between the Austrian Federal Government and the Bavarian State Government concerning the diversion of water in the Rissbach, Dürrach, and Walchen districts (reached on 29 June 1948 and concluded on 16 October 1950). *Ibid.* treaty no. 136.
- 84) State Treaty between the Grand Duchy of Luxemburg and the Land Rhineland Palatine in the FRG concerning the construction of a hydroelectric power plant on the Sauer (Sûre) at Ralingen (Rosport) (Trier, 25 April 1950). *Ibid.* treaty no. 201.
- 85) Agreement between the Governments of Finland and Norway on the transfer from the courses of the Näätämö River to the course of the Gandvik River of water from the Garsjöen, Kjerringvatn and Förstevannene Lakes (Oslo, 25 April 1951). *Ibid.* treaty no. 168.
- 86) Exchange of notes constituting an agreement between USA and Canada relating to the St. Laurence Seaway Project (Washington, 30 June 1952). *Ibid.* treaty no. 60.
- 87) Agreement between the Government of the Republic of Austria and the Government of the Federal Republic of Germany and of the Free State of Bavaria concerning the Donaukraftwerk-Jochenstein-Aktiengesellschaft (13 February 1951). *Ibid.* treaty no. 138.
- 88) Convention between the Government of the USSR and the Government of the Rumanian People's Republic concerning measures to prevent floods and to regulate the water regime of the river Pruth (Kishinev, 25 December 1952). *Ibid.* treaty no. 251.
- 89) Agreement between the Republic of Syria and the Hashemite Kingdom of Jordan concerning the utilization of the Yarmuk waters (Damascus, 4 June 1953). *Ibid.* treaty no. 105.
- 90) Agreement between the Government of India and the Government of Nepal on the Kosi Project (Katmandu, 25 April 1954). *Ibid.* treaty no. 95.
- 91) Convention between the Government of the FPR of Yugoslavia and the Federal Government of the Austrian Republic concerning water economy questions relating to the Drava (Geneva, 25 May 1954). *Ibid.* treaty no. 144.
- 92) Agreement between the FPR of Yugoslavia and the Republic of Austria concerning water economy questions in respect of the frontier sector of the Mura and the frontier waters of Mura, together with the Statute of the Permanent Yugoslav-Austrian Commission for the Mura (Vienna, 16 December 1954). *Ibid.* treaty no. 145.
- 93) Agreement between the FPR of Yugoslavia and the Romanian People's Republic concerning questions of water control on water control systems and watercourses on or intersected by the State frontier, together with the Statute of the Yugoslav-Romanian Water Control Commission (Bucharest, 7 April 1955). *Ibid.* treaty no. 253.
- 94) Agreement between the Government of the FPR of Yugoslavia and the Government of the Hungarian People's Republic concerning water economy questions together with the Statute of the Yugoslav-Hungarian Water Economy Commission (Belgrade, 8 August 1955). *Ibid.* treaty no. 228.

- 95) Agreement concerning the maintenance and improvement of the fairway in the Romanian-Bulgarian sector of the Danube (Sofia, 29 November 1955). YILC 1974, Vol. II, Part Two, p. 302.
- 96) Agreement between the USSR and the PR of China on joint research operations to determine the natural resources of the Amur River basin and the prospect for development of its productive potentialities and on planning and survey operations to prepare a scheme for the multi-purpose exploitation of the Argun River and the Upper Amur River (Peking, 18 August 1956). UN Doc. ST/LEG/SER.B/12., treaty no. 87.
- 97) Minutes of meetings held by delegations of the FPR of Yugoslavia and the Kingdom of Greece from 23 to 30 March 1956 to discuss the water level of Lake Dojran (Salonica, 31 March 1956). *Ibid.* treaty no. 222.
- 98) Treaty between the French Republic and the FR of Germany concerning the settlement of the Saar question (Luxemburg, 27 October 1956). *Ibid.* treaty no. 179.
- 99) Treaty between the Kingdom of Belgium and FR of Germany regarding the rectification of the Belgian-German frontier and the settlement of various problems concerning the two countries (Brussels, 24 September 1956). *Ibid.* treaty no. 151.
- 100) Agreement between the Government of the FPR of Yugoslavia and the Government of the PR of Albania concerning water economy questions, together with the Statute of the Yugoslav-Alban Water Economy Commission and with the Protocol concerning fishing in frontier lakes and rivers (Belgrade, 5 December 1956). YILC 1974, Vol. II, Part Two, p. 120.
- 101) Convention between the FR of Germany and the French Republic on the regulation of upper course of the Rhine between Basle and Strasbourg, and attached Protocol (Luxemburg, 27 October 1956). UN Doc. ST/LEG/SER. B/12., treaty no. 180.
- 102) Treaty between Hungarian People's Republic and the Republic of Austria concerning the regulation of water economy questions in the frontier region (Vienna, 9 April 1956). UNTS Vol. 438, no. 6315; see also Law-decree no. 32 of 1959 HJGy Vol. VI, p. 197.
- 103) Treaty between the Czechoslovak Republic and the Hungarian People's Republic concerning the regime of State frontiers (Prague, 13 October 1956). UN. doc. ST/LEG/SER B/12., treaty no. 164; see also Law-decree no. 15 of 1958. HJGy Vol. VI, p., 126.
- 104) Convention concerning the canalization of the Moselle (Luxembourg, 27 October 1956). *Ibid.* treaty no. 123.
- 105) Agreement concerning co-operation between the US of Brazil and the Republic of Paraguay in a study on the utilization of the water-power of the Acaray and Monday Rivers (Rio de Janeiro, 20 January 1956). *Ibid.* treaty no. 46.
- 106) Agreement between Bolivia and Peru concerning a preliminary economic study of the joint utilization of the waters of Lake Titicaca (La Paz, 19 February 1957). *Ibid.* treaty no. 45.
- 107) Convention between the Swiss Confederation and the Italian Republic concerning the use of the water powers of the Spöl and an additional Protocol (Berne, 27 May 1957). *Ibid.* treaty no. 235.
- 108) Agreement between Norway and the USSR on the utilization of water-power on the Pasvik (Paatso) River (Oslo, 18 December 1957). *Ibid.* treaty no. 239.
- 109) Minutes of meetings held by delegations of the FPR of Yugoslavia and the Kingdom of Greece from 26 August to 1 September 1957 to work out a procedure and plan for co-operation in making hydro-economic studies of the drainage area of Lake Dojran (Stari Dojran, 1 September 1957). *Ibid.* treaty no. 223.
- 110) Agreement between the Government of the Italian Republic and the Government of the FPR of Yugoslavia concerning the supply of water to the commune of Gorizia (Nova Gorizia, 18 July 1957). *Ibid.* treaty no. 236.
- 111) Convention concerning fishing in the waters of the Danube (Bucharest, 29 January 1958). *Ibid.* treaty no. 125.

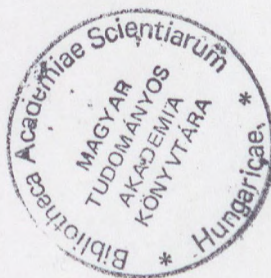
- 112) Treaty between the Government of the USSR and the Royal Government of Afghanistan concerning the régime of the Soviet-Afghan State frontier (Moscow, 18 January 1958). *Ibid.* treaty no. 86.
- 113) Agreement between the Argentine Republic and the Republic of Paraguay concerning a study of the utilization of the water power of the Apipé Falls (Paraná) (Buenos Aires, 23 January 1958). *Ibid.* treaty no. 37.
- 114) State Treaty between the Grand Duchy of Luxembourg and the Land Rhineland Palatine in the FRG concerning the construction of hydro-electric power station on the Ouz, with Annexes (Trier, 10 July 1958). *Ibid.* treaty no. 202.
- 115) Agreement concerning water-economy questions between the Government of the FPR of Yugoslavia and the Government of the People's Republic of Bulgaria (Sofia, 4 April 1958). *Ibid.* treaty no. 161.
- 116) Agreement between Czechoslovakia and Poland concerning the use of water resources in frontier waters (Prague, 21 March 1958). UNTS Vol. 538, p. 89.
- 117) Convention entre la France et l'Espagne relative à la pêche en Bidassoa et baie du Figuier (Madrid, 14 juillet 1959). Journal of RF, 9 mars 1965, p. 1893.
- 118) Agreement between the United Arab Republic and the Republic of Sudan for the full utilization of the Nile waters (Cairo, 8 November 1959). UN Doc. ST/LEG/SER B/12., treaty no. 34.
- 119) Agreement between the Government of Nepal and the Government of India on the Gandak River Irrigation and Power Project (Katmandu, 4 December 1959). *Ibid.* treaty no. 96.
- 120) Agreement between the Government of the USSR, the Government of Norway and the Government of Finland concerning the regulation of Lake Inari by means of the Kaitakoski hydroelectric power station and dams (Moscow, 29 April 1959). *Ibid.* treaty no. 126.
- 121) Additional Protocol between USSR and Finland concerning compensation for loss and damages and for the works to be carried out by Finland in connection with the implementation of the agreement of 29 April 1959 (Moscow). *Ibid.* treaty no. 176.
- 122) Agreement between the FPR of Yugoslavia and the Kingdom of Greece concerning hydro-economic questions and Annex concerning the Regulations of the Yugoslav-Greek Permanent Hydro-economic Commission and Exchange of Letters (Athens, 18 June 1959). *Ibid.* treaty no. 224.
- 123) Treaty between India and Pakistan regarding the use of waters of the Indus (Karachi, 19 September 1960). *Ibid.* treaty no. 98.
- 124) Convention on the protection of Lake Constance against pollution (Steckborn, 27 October 1960). *Ibid.* treaty no. 127.
- 125) Treaty between the Kingdom of the Netherlands and the FR of Germany concerning the course of the common frontier, the boundary waters, real estate property situated near the frontier, traffic crossing the frontier on land and via inland waters, and other frontier questions (The Hague, 8 April 1960). *Ibid.* treaty no. 212.
- 126) Treaty concerning arrangements for co-operation in the Ems Estuary (The Hague, 8 April 1960). UNTS Vol. 509, p. 2.
- 127) Treaty between the Kingdom of Belgium and the Kingdom of the Netherlands concerning the improvement of the Terneuzen and Ghent Canal and the settlement of various related matters (Brussels, 20 June 1960). UN Doc. ST/LEG/SER.B/12., treaty no. 160.
- 128) Agreement between the Government of the Republic of Finland and the Government of the USSR concerning the regime of the Finnish-Soviet State frontier (Helsinki, 23 June 1960). *Ibid.* treaty no. 177.
- 129) Treaty between USA and Canada relating to co-operative development of the water resources of the Columbia River Basin (Washington, 17 January 1961). *Ibid.* treaty no. 65.
- 130) Protocol concerning the establishment of the International Commission for the Protection of the Moselle against Pollution. YILC 1974, Vol. II, Part Two, p. 301.

- 131) Protocol concerning the establishment of an International Commission for the Protection of the Saar against Pollution (Paris, 20 December 1961). JORF 1962, No. 200, p. 8364.
- 132) Treaty concerning the régime of the Soviet-Polish State frontier and co-operation and mutual assistance in frontier matters (Moscow, 15 February 1961). UNTS Vol. 420, p. 161.
- 133) Treaty concerning the régime of the Hungarian-Soviet State frontier and co-operation and mutual assistance in frontier matters (Budapest, 3 October 1961). Law-decree no 16 of 1962, HJGy Vol. VI, p. 306.
- 134) Exchange of notes between Guatemala and Mexico constituting an agreement concerning the establishment of the International Commission on Boundary and Waters (Guatemala City, 9 November and December 1961). YILC 1974, Vol. II, Part Two, p. 292.
- 135) Convention between France and Switzerland concerning the protection of the waters of Lake Geneva against pollution (Paris, 16 November 1962). *Ibid.* p. 308.
- 136) Convention entre la France et la Suisse relative à l'aménagement hydro-électrique d'Emosson (Paris, 23 Août 1963). RGDIP 1965, p. 279.
- 137) Final Act, Agreement and other Acts between Romania and Yugoslavia relating to the establishment and operation of the Iron Gates Water Power and Navigation System on the River Danube (Belgrade, 30 November 1963). UNTS Vols. 512-513.
- 138) Treaty between Belgium and the Netherlands concerning the connexion between the Scheldt and the Rhine (The Hague, 13 May 1963). UNTS Vol. 540, p. 3.
- 139) Protocol between Greece and Turkey concerning the final elimination of differences concerning the executions of hydraulic operations for the improvement of the bed of the River Meriç-Evros carried out on both banks (Ankara, 19 January 1963). YILC 1974, Vol. II, Part Two, p. 308.
- 140) Accord concernant la Commission internationale pour la protection du Rhin contre la pollution (Bonn, 29 avril 1963). *Ibid.* p. 301.
- 141) Convention between USA and Mexico for the solution of the problem of the Chamizal (Mexico, 29 August 1963). UNTS Vol. 505, p. 185.
- 142) Convention entre l'Espagne et la France relative à l'aménagement du cours supérieur de la Garonne (Paris, 29 juillet 1963). RGDIP 1964, p. 1065.
- 143) Convention relating to the general development of the Senegal River basin (Bamako, 26 July 1963). YILC 1974, Vol. II, Part Two, p. 289.
- 144) Act regarding navigation and economic co-operation between the States of the Niger basin (Niamey, 26 October 1963). UNTS Vol. 587 p. 9.
- 145) Convention relating to the status of the Senegal River (Dakar, 7 February 1964). YILC 1974, Vol. II, Part Two, p. 289.
- 146) Convention and Statutes relating to the development of the Chad Basin (Fort-Lamy, 22 May 1964). *Ibid.* p. 290.
- 147) Agreement concerning the Niger River Commission and the navigation and transport on the River Niger (Niamey, 25 November 1964). UNTS Vol. 587, p. 19.
- 148) Agreement between Finland and USSR concerning frontier watercourses (Helsinki, 24 April 1964). UNTS Vol. 537, p. 231.
- 149) Agreement between Bulgaria and Greece on co-operation in the utilization of the waters of the rivers crossing the two countries (Athens, 9 July 1964). YILC 1974, Vol. II, Part Two, p. 315.
- 150) Agreement between Poland and USSR concerning the use of water resources in frontier waters (Warsaw, 17 July 1964). UNTS Vol. 552, p. 175.
- 151) Treaty between Hungary and Austria concerning the safeguarding of common State frontier and the regulation of connected questions (Budapest, 31 October 1964). Law-decree no. 10. of 1965; as well treaty concerning the procedure of inquiry of events to be occur at the common frontier. Law-decree no. 11 of 1965. HJGy Vol. VI, pp. 471 and 478.

- 152) Draft convention on the industrial and agricultural use of international rivers and lakes, prepared by the Inter-American Juridical Committee in 1965. YILC 1974, Vol. II, Part Two, p. 350.
- 153) Agreement between GDR and Poland on co-operation in water economy questions in frontier waters (Berlin, 11 March 1965). DDR Gesetzblatt 1967, Vol. I. p. 94.
- 154) Agreement between USA and Canada concerning the establishment of an international arbitral tribunal to dispose of US claims relating to Gut Dam (Ottawa, 25 March 1965). YILC 1974, Vol. II, Part Two, p. 294).
- 155) Exchange of notes constituting an agreement between Mexico and USA concerning the loan of waters of the Colorado River for irrigation of lands in the Mexicali Valley (Mexico City, 24 August 1966). UNTS Vol. 606, p. 251.
- 156) Agreement between Austria, FRG and Switzerland regulating the withdrawal of water from Lake Constance with final protocol (Berne 30 April 1966). UNTS Vol. 620, p. 191.
- 157) Treaty between Austria and Czechoslovakia concerning the regulation of water management questions relating to frontier waters (Vienna, 7 December 1967). UNTS Vol. 728, p. 313.
- 158) Agreement between Senegal and Gambia on the integrated development of the Gambia River basin (Dakar, 31 July 1968). UNTS Vol. 640, p. 101.
- 159) African Convention on the conservation of nature and natural resources (Algiers, 15 September 1968). UNTS Vol. 1001, p. 3.
- 160) European Agreement on the restriction of the use of certain detergents in washing and cleaning products (Strasbourg, 16 September 1968). YILC 1974, Vol. II, Part Two, p. 302.
- 161) Convention between Czechoslovakia and USSR concerning water economy questions in frontier waters (Bratislava, 26 November 1968). Digest of Acts of CSSR No. 63/1969.
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- 163) Treaty on the River Plata Basin (Brasilia, 23 April 1969). UNTS Vol. 875, no. 12500
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The importance of water as a source of energy used for water supply, power generation, irrigation or in industry has greatly increased in the past decades. At the same time the necessity to solve the problems of pollution and environment protection has also appeared. The international law-making responded to this challenge of facts being law-making forces with an exponential growth, and the confirmation of the observance and implementation of international legal regulations have come into the limelight.

This work surveys and analyses the almost 500 international contracts for non-navigational uses of international watercourses, and it pays special attention to the solutions applied in the Danube Basin (frontier-water conventions, water power generation such as the Bős (Gabčíkovo)-Nagyymaros Hydroelectric Power Plant System, pollution control).

In addition to this, it treats and interprets the pertinent principles of general international law, the codification of customary international law in the UN International Law Commission as well as its identifications in international scientific conferences.

In the heart of the great number of international legal regulations there are basic questions such as the interpretation of territorial sovereignty, the correlation of contracts and customary law, reasonable and equitable utilization, the principle of prevention, procedural obligations concerning transfrontier impacts assessment and the problem of international responsibility and liability.

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OF INTERNATIONAL WATERCOURSES

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