

The draft articles on the law of international watercourses adopted by the International Law Commission: an overview and some remarks on selected issues

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In 1994, after more than twenty years of work, the International Law Commission of the United Nations adopted a set of thirty-three draft articles on the Law of the Non-Navigational Uses of International Watercourses. In the same year, the draft articles were submitted to the General Assembly with a view to the adoption of an international convention. The present paper analyzes and comments upon some of the major issues dealt with in the draft articles, devoting special attention to the substantive legal principles governing the utilization of international rivers and the protection of related ecosystems. Various questions still remain open for consideration by the Working Group convened by the General Assembly in 1996-1997 for the elaboration of a definitive convention. In spite of this, the draft articles adopted by the International Law Commission stand as an important achievement in the effort at codification of the law of international water resources. The present article was written within the framework of the research project "Technical aspects of the international law of the sea" which is being carried out at the Faculty of Law, University of Milan, Italy. © 1997 United Nations. Published by Elsevier Science Ltd

The utilization by States of the waters flowing in rivers which cross or border their respective territories raises complicated legal questions. In the not so distant past, riparian States kept rigid attitudes influenced by their geographical position on a shared watercourse: upstream States claimed absolute freedom to utilize transboundary waters regardless of the needs of downstream countries ("absolute sovereignty" theory) while the latter claimed the right to receive the unaffected natural flow of waters coming from upper countries ("absolute territorial integrity" theory) (Berber, 1959; Cafilisch, 1989; Bruhács, 1993). The first legal question, therefore, is to reconcile such absolute claims while allocating a quantity of water to each riparian State. Secondly, since the pollution of transboundary waters increases at the same rate as their intensive and multi-purpose economic exploitation, there is a problem of preserving the quality of the waters and related ecosystems (Gaja, 1973; Sette-Camara, 1984; Lammers, 1984).

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In the absence of specific agreements among riparian States, general principles and rules of international law are called upon to solve these questions. In order to clarify such rules, the General Assembly, in its resolution 2669(XXV) of 8 December 1970, requested the International Law Commission (hereinafter "ILC" or "the Commission") to "take up the study of the law of the non-navigational uses of international watercourses with a view to its progressive development and codification". In 1994, after more than twenty years of work, the ILC completed its task with the adoption on second reading of a complete set of thirty-three draft articles on the topic (United Nations, 1994c). The Commission submitted the draft to the General Assembly, recommending the elaboration of a convention by the Assembly itself or by an international conference of plenipotentiaries of States.

The purpose of the present article is to analyze and comment on some selected issues in the ILC draft articles. Before engaging in the analysis, a brief consideration of the background of the ILC work on international watercourses and an overview of the draft finally adopted in 1994 is provided.

Background and overview of the ILC draft articles

Background of the work of the ILC on international watercourses

In 1971, following General Assembly Resolution 2996(XXV), the topic of international watercourses was included in the ILC general programme of work. At its 1974 session, the Commission set up a sub-committee to consider the subject. In its report, the sub-committee pointed out a number of preliminary issues—such as the scope and the exact meaning of the term “international watercourse”, the uses of waters to be examined and the opportunity to deal with the problem of pollution of international watercourses—and proposed that a questionnaire on the issues be conveyed to Governments. At its 1976 session, the Commission considered the replies of 21 Governments to the questionnaire, together with the report of the first special rapporteur appointed for the topic, Richard D. Kearney. The general debate at that session led the Commission to draw up the outline of its future study on watercourses. First of all, the Commission decided not to pursue, at the outset of the work, the question of determining the exact scope of the term “international watercourse”. Secondly, the ILC resolved to devote its attention to the formulation of general principles applicable to legal aspects of the uses of watercourses. The Commission pointed out, in this regard, that these principles should be designed to promote the adoption of regimes for individual international rivers and should be of a residual character. Thirdly, the Commission agreed to include problems related to pollution of international watercourses in the study. During the following years, several changes in the special rapporteurship delayed the development of the draft. In 1980, the Commission was able to adopt a first group of six articles, proposed by special rapporteur Stephen M. Schwebel, on a provisional basis. Those articles were then withdrawn by the subsequent special rapporteur, Jens Evensen, and in 1984 a new set of nine articles, dealing with the general principles of the topic, was adopted.

In 1985, the appointment of the new special rapporteur, Stephen C. McCaffrey, opened the way to a period of continuity in the study, a factor which led the Commission, during its session of 1991, to adopt on first reading a set of thirty-two articles (United Nations, 1991b). At the same session, the Commission decided to send the draft articles to Governments, to elicit their comments and observations.

The consideration of the topic was resumed at the 1993 session. In the light of comments received from 21 Governments and under the guidance of the newly appointed special rapporteur, Robert Rosenstock, the Commission made the necessary adjustments to the first reading, and at its 1994 session, adopted the second reading of the draft.

Survey of the draft articles adopted by the ILC in 1994

The draft articles adopted by ILC on second reading are similar in most respects to those approved in 1991. A significant change, apart from the redrafting of some

provisions, is the addition of a new article 33 on settlement of disputes; moreover, a resolution on transboundary confined groundwater is annexed to the draft. On the whole, the draft is conceived as a framework instrument, setting forth general principles and rules that may be applied and adjusted by specific agreements among States sharing individual international watercourses.

In terms of structure, the thirty-three draft articles are organized in six chapters or parts. Part I, the Introduction, contains four articles devoted to the scope of the draft articles (article 1), the use of terms (article 2), the application of the draft articles to individual watercourses through specific watercourse agreements (article 3) and the position of riparian States in respect to watercourse agreements (article 4). Part II of the draft articles includes the general principles of the subject: the rule of equitable and reasonable utilization (article 5), the list of factors relevant to equitable utilization (article 6), the obligation not to cause significant harm to other watercourse States (article 7), the general obligation to cooperate with other watercourse States (article 8), the duty to exchange data and information concerning a shared watercourse on a regular basis (article 9) and the principle that no use enjoys inherent priority over other uses (article 10). Part III, entitled “Planned Measures”, contains articles 11 to 19, which specify the obligations of prior notification and consultation that bind riparian States in case of projected new uses of an international watercourse. Part IV contains seven articles, dealing respectively with the protection and preservation of ecosystems related to international watercourses (article 20), the prevention, reduction and control of pollution (article 21), the introduction of new species in an international watercourse (article 22), the protection and preservation of the marine environment (article 23), the joint management and the regulation of international watercourses (articles 24 and 25) and the maintenance and security of installations related thereto (article 26). Part V contains only two articles, devoted to the prevention and mitigation of harmful conditions resulting from natural causes or human conduct, such as floods, siltation, erosions, etc., and to the obligations of riparian States in emergency situations (articles 27 and 28). Part VI of the draft gathers, under the title of “Miscellaneous Provisions”, a number of unrelated provisions on different subjects: protection of watercourses and related installations in times of armed conflict (article 29), indirect procedures of notification and consultation among watercourse States (article 30), data and information concerning watercourses vital to national security of riparian States (article 31), non-discrimination with regard to access to judicial or administrative procedures (article 32) and settlement of disputes (article 33).

In the following, selected aspects of the draft articles will be discussed: the meaning of the term “international watercourse”; the two general principles of “equitable utilization” and prohibition to cause harm; and the question of the protection of watercourses and related ecosystems against pollution.

The definition of "international watercourse" and the question of transboundary confined groundwaters

The definition of "international watercourse"

The first aspect of the draft articles that deserves attention is the definition of the concept of international watercourse. This is of primary importance, since the scope of the constraints posed on States in the utilization of water resources located in their territories depends on the exact delimitation of the term "watercourse".

The central issue seems to be the determination of the components that form a watercourse and that, consequently, are subject to international regime. Generally speaking, States are not inclined towards broad interpretations of the term watercourse, or one that includes such hydrological components as tributaries, lakes, underground aquifers, glaciers, etc. which, although distinct from the main course of a river, are connected with it (Sette-Camara, 1984).

On the other hand, it must be kept in mind, that, due to the physical nature of water and its constant movement in streams, the different components of a watercourse listed above are integrally connected. As a consequence, the negative impact of human activities in one part of a watercourse located within the territory of a particular State can spread and be perceived at other points of the same watercourse, located in the territories of other riparian States. Therefore, the physical and hydrological unity of a watercourse must be considered by States in order to ensure the optimal management and the adequate protection of the watercourse itself (United Nations, 1979).

These conflicting considerations emerged dramatically in 1974, when the Commission circulated a questionnaire to governments addressing the two questions of the scope of the definition of "international watercourse" and whether this definition should be based on the concept of "drainage basin". The drainage basin concept, elaborated mainly in the Helsinki Rules on the Use of Waters of International Rivers, adopted by the International Law Association in 1966, refers to the entire geographic area, known as "watershed", in which all sources of water are located, both surface and underground, that provide water to the main river (International Law Association, 1966).

The replies of the governments to these two questions revealed a sharp division of opinions. In particular, the use of the term "drainage basin" in the draft articles proved to be highly controversial. Certain countries (generally downstream) pronounced themselves in favour of that notion, arguing that the term "drainage basin" would provide a sound conceptual basis for dealing with the hydrographic coherence of a watercourse, and would reflect the legal relevance of the interdependence among its various components.

On the other hand, some upstream States strongly opposed the inclusion of the term drainage basin in the draft articles, fearing that the geographical implications involved in that concept could open the way to undue restrictions on the sovereignty of States in freely disposing of the land areas through which an international river flows. The same States favoured the

use of a narrower approach based on the "traditional" definition of international watercourse, which appears in some ancient treaties on river navigation. This definition limits the concept of international watercourse to the main surface water channel of a river that crosses or borders the territories of different States, and is intended to exclude not only tributaries, but also other hydrographic components such as groundwater (United Nations, 1976, 1979).

The same differences emerged among the members of the ILC. In the absence of consensus over the definition of the term "international watercourse", and in order not to compromise the advancement of the draft articles, the Commission decided to defer the consideration of the question of the use of terms to a later stage of its work.

The Commission was able to agree on a definition of the term "international watercourse" only at its 1991 session, at the time of the adoption of the entire first reading of the draft articles. The same definition appears, with slight modifications, in the second reading of the draft, adopted in 1994. According to article 2 of this draft, an international watercourse is "a watercourse, parts of which are situated in different States", and a watercourse is further defined as "a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus".

The definition in article 2 is based on the watercourse as a hydrologic system formed by a number of components, both surface and underground, through which water flows. Hence, as long as these elements are physically interrelated, they form part of a watercourse (United Nations, 1991a). Moreover, the system of surface and underground waters must normally flow into a "common terminus". The "common terminus" requirement is intended to prevent that, for example, two different river basins connected by an artificial canal could be considered as a single watercourse for the purposes of the draft articles. This way, a limitation is introduced in the geographic scope of the draft articles (United Nations, 1994c).

The definition included in draft article 2 appears a viable compromise between the two conceptual interpretations of the meaning of international watercourse described above. On the one hand, the concept of a hydrological system helps to overcome the limits of the traditional definition of international watercourse, making it clear that a watercourse is not merely "a pipe carrying water", but a complex hydrological reality, the components of which are relevant for the purposes of international legal regulation. On the other hand, the description of a watercourse as a system of water components helps to avoid the "territorial" implications of the concept of drainage basin, assuming that the draft articles apply only to international water resources of States and not to their land territories.

Although some doubts remain as to the extent to which the activities of States on land could be totally ignored or excluded from the scope of a legal regime governing the utilization of international watercourses (Banks, 1996), the definition finally elaborated by the

ILC probably represents a positive achievement in terms of its being acceptable to States. This conclusion seems corroborated by the support for article 2 of the draft expressed by State delegates during the 1994 session of the Sixth Committee (United Nations, 1995).

The resolution on transboundary confined groundwaters

A more specific problem raised by draft article 2 is whether it covers all transboundary groundwaters. The definition of "international watercourse" as a system of water components constituting a unitary whole by virtue of their physical relationship entails as a consequence that groundwaters are part of the system only to the extent that they interact (are physically linked) with the surface waters forming a watercourse. As a result, the so-called "confined groundwaters", that is underground aquifers with no relationship with surface waters, are excluded from the definition of "international watercourse" embodied in draft article 2.

Despite the ILC's unwillingness to include confined groundwaters in the scope of the draft articles adopted in the first reading in 1991, the special rapporteur Rosenstock suggested that the question be reconsidered during the examination of the second reading of the draft (United Nations, 1994a). Finally, the Commission decided to annex a resolution on transboundary confined groundwaters to the second reading of the draft articles. In this resolution the Commission, recognizing "the need for continuing efforts to elaborate rules pertaining to confined transboundary groundwaters", recommends States "to be guided by the principles contained in the draft articles on the law of the non-navigational uses of international watercourses, where appropriate, in regulating confined transboundary groundwaters" (United Nations, 1994c).

The intermediate course taken by the Commission in 1994 may have resulted partly from the lack of proper understanding of the physical features of confined groundwaters and of their interconnections with surface waters. More realistically, the Commission's choice was also influenced by its wish not to extend excessively the scope of the draft articles (United Nations, 1993c, 1994b). Be that as it may, it seems odd, however, that a draft, of which the main purpose is to establish a comprehensive legal framework for the utilization of international water resources, excludes from its application an important category of underground aquifers. This result is even more unfortunate if one considers the recent trends in the field of water management, as expressed by various international instruments, such as Chap. 18 of Agenda 21 adopted at the 1992 United Nations Conference on Environment and Development. These instruments consider the integrated management and planning of all types of water resources, including groundwaters, as the most adequate way to achieve their proper utilization and protection. From the point of view of progressive development of international water law, a further step by the ILC towards the explicit inclusion of transboundary confined aquifers in the draft articles would have been welcome.

The rule of equitable utilization, the duty not to cause significant harm and their relationship

Part II of the draft articles codifies the basic rules of customary international law governing the utilization of international watercourses: the principle of equitable utilization and the duty not to cause significant harm to other riparian States.

The principle of equitable utilization

The first basic rule of international water law obliges riparian States to utilize an international watercourse in an equitable and reasonable manner. This rule stresses the equal and correlative rights of riparian States with respect to the use of a shared watercourse. In other words, every riparian State is entitled to enjoy, within its territory, a reasonable and equitable share of the uses and benefits of an international watercourse, but this entitlement is limited by the duty not to deprive other riparian States of their right to equitable utilization. In the case of conflicting claims to utilization, the measure of the rights of each State will be determined by taking into account the equity and reasonableness of the respective needs. The latter consideration implies that it is impossible to establish *in abstracto* what is a reasonable and equitable utilization of an international watercourse. The equitable and reasonable utilization of a watercourse will be evaluated case by case, by weighing and balancing all factors relevant to the concrete situation, and without according to any such factors an inherent priority over others (Lipper, 1967; Caflich, 1989; Bruhács, 1993; United Nations, 1982, 1986).

These general features of the rule of equitable utilization are embodied in articles 5, 6 and 10 of the ILC draft. The first of these articles reads as follows:

(1) Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimum utilization thereof and benefits therefrom consistent with adequate protection of the watercourse.

(2) Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and the development thereof, as provided in the present articles.

The two paragraphs of draft article 5 elaborate upon the principle of equitable utilization. Under the first paragraph, optimum utilization is indicated as the goal to be sought by riparian States in terms of their benefiting from an international watercourse; under the second paragraph, riparian States are called upon to cooperate and participate on an equal basis towards reaching that goal.

As a more thorough analysis of the principles of cooperation and equitable participation was already

provided in the article by Dr Attila Tanzi (Tanzi, 1997), only some brief remarks are made here on the concept of optimum utilization.

In its commentary on draft article 5, the Commission explained that the aim of optimum utilization does not mean the achievement of the maximum use of the watercourse or the most economically valuable use: rather, it implies attaining maximum possible benefits for all riparian States while minimizing the detriment to each (United Nations, 1994c). Moreover, paragraph 1 of draft article 5 further qualifies the goal of optimum utilization, pointing out that the economic exploitation of an international watercourse must not be pursued blindly by States, but in a manner "consistent with the adequate protection of the watercourse". This sentence seems to refer to some of the basic requirements which lie at the core of the concept of "sustainable use" of natural and environmental resources, i.e. a use of such resources that avoids their depletion and meets the needs of the present and future generations (Hey, 1995). In fact, although the concept of "sustainability" is not explicitly mentioned in the text of article 5, the records of the 1994 session reveal that some members of the ILC felt that the objective of sustainable use of an international watercourse was adequately covered by the final phrase of paragraph one of the article (United Nations, 1994b).

As noted above, the rule of equitable utilization is a very general and flexible one, and its proper implementation requires taking into account all the circumstances pertaining to each single case. To this end, draft article 6 provides a list of factors that are relevant in determining, in each concrete situation, what an equitable and reasonable utilization of the watercourse is. It is important to stress that the list contained in article 6 (that refers to factors of natural, economic and social character) is merely indicative and not exhaustive (United Nations, 1994c).

Finally, the first paragraph of draft article 10 provides that, in the absence of contrary agreements or customs, no use of an international watercourse enjoys inherent priority over other uses. This important principle is completed by the second paragraph of the article, according to which any conflict concerning the uses of an international watercourse will be settled by the application of draft "articles 5 to 7, with special regard being given to the requirements of vital human needs" (article 10) (United Nations, 1994c). The purpose of the latter sentence does not seem to derogate from the basic criterion of absence of priority among uses; nevertheless it represents a remarkable statement in favour of the special attention that riparian States must pay to providing sufficient water to sustain human life when they utilize an international watercourse (McCaffrey, 1992).

The obligation not to cause significant harm to other watercourse states

The second basic rule of international water law, derived from the ancient Latin dictum *sic utere tuo ut alienum non laedas*, is the obligation of watercourse

States to use an international watercourse in such a way as not to cause harm to other riparian States (Caflisch, 1989; Bruhács, 1993; United Nations, 1982). As a negative provision, the "no harm" rule sets limitations to the sovereign freedom of States to exploit their water resources. But the extent of these limitations on State sovereignty will depend on the way in which the "no harm" rule is framed.

In this connection, a first question is to define the kind of damage forbidden by the duty not to cause harm. Of course, the rule does not cover the *de minimis* or trivial harm, but only harm above a certain threshold of seriousness. The difficulty lies in ascertaining the threshold above which the harmful consequences of the use of an international watercourse become legally relevant to the application of the rule, and are therefore prohibited (Sachariew, 1990).

A second question pertains to the definition of the obligation embodied in the "no harm" rule as one of "conduct" or one of "result", and to the standard of responsibility hereby involved. In other words, the issue at stake is whether a State may avoid responsibility for causing harm to another riparian State by adopting the conduct that could reasonably be expected or required in order to prevent the harm; or whether the responsibility of the State is involved, regardless of the conduct adopted by it, in any case where the prohibited harm has taken place (McCaffrey, 1989).

The ILC's approach to these issues evolved considerably in the interim period between the 1991 and the 1994 final version of the draft articles.

Draft article 7 included in the first reading was very concise, stating that "Watercourse States shall utilize an international watercourse in such a way as not to cause appreciable harm to other watercourse States". Notwithstanding the fact that the commentary to the article seeks to explain that the qualifier "appreciable" embodies a factual as well as an objective standard (United Nations, 1988b), the threshold envisaged by this term remains rather vague. In fact, "appreciable" could indicate any harm that is merely "measurable", with the consequence that the threshold of prohibited harm is a very low one. Moreover, the unconditional wording of the text seems to envisage a cogent interpretation of the duty not to cause harm, conceived in terms of an obligation of result involving the strict responsibility of the State that has caused the damage.

The ambiguities of draft article 7 adopted on first reading were criticized by a number of governments, both during the 1991 session of the Sixth (Legal) Committee of the General Assembly and in their written comments on the first reading of the draft articles (see for example the comments of United States: United Nations, 1993a).

Taking into account the criticisms of the governments, and following the suggestions of special rapporteur Robert Rosenstock, the ILC adopted on second reading at its 1994 session a thoroughly revised version of article 7. The first paragraph of the new text is particularly aimed at solving the above mentioned shortcomings, and reads as follows:

1. Watercourse States shall exercise due diligence to utilize an international watercourse in such a way as not to cause significant harm to other watercourse States.

The first relevant innovation is the replacement of the word "appreciable" with the word "significant" as a qualifier of the prohibited harm. This change is intended to make the threshold of prohibited harm more certain, avoiding the dual meaning of the term "appreciable" as both "measurable" and "significant". At the same time, in its commentary to the draft articles, the Commission has pointed out that "significant" is not intended to raise the applicable standard: in the ILC understanding, "significant" indicates certain harm, more than simply measurable, but not necessarily "substantial" (United Nations, 1994c).

The major innovation contained in the first paragraph of the new article 7 is the reference to the concept of "due diligence" (Pisillo-Mazzeschi, 1992). This mention underlies a radical change of perspective in the scope of the prohibition to cause harm. The "due diligence" obligation contained in the first paragraph of article 7 is not intended to guarantee that in utilizing an international watercourse significant harm would not occur, but that user States perform their best efforts to prevent significant harm to other watercourse States. As the ILC makes clear in its commentary to the article, what is here involved is "an obligation of conduct, not an obligation of result" (United Nations, 1994c). As a consequence, a user State can be deemed to have breached its obligation under draft article 7 only when it has failed to adopt the conduct required, or the measures necessary, to prevent the occurrence of the harmful event. This way, the Commission has definitively clarified the nature of obligation not to cause significant harm and the standard of responsibility required for its breach.

The introduction of the "due diligence" concept in the new text of article 7 deserves attention. From a general point of view, this change has the merit of bringing the ILC draft in line with the trends of State practice in the field of use and protection of natural and environmental resources. Indeed, in many recent multilateral treaties concluded in this field, States have been ready to accept provisions framed in terms of "due diligence", rather than rules imposing absolute or strict obligations; such norms call upon States to adopt "appropriate efforts", "practical steps" or "best practicable means" directed to prevent the harmful effects of their activities on the natural environment (see for example article 2 of the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes).

As far as the utilization of international watercourses is concerned, the introduction of the "due diligence" standard in draft article 7 has the effect to soften the impact of the "no harm" rule, making its application more flexible and more consistent with the requirements of the principle of equitable utilization (McCaffrey, 1994). The latter consideration leads us to deal with the delicate problem of the relationship between the two general principles contained in the

ILC draft articles, as it will be described in more detail in the next sub-section.

The relationship between the equitable utilization and the duty not to cause harm

A very delicate issue related to the two principles of "equitable utilization" and "no harm" is how the principles can be reconciled; or which of the two prevails in case of conflict (Bourne, 1992; Caflich, 1993; McCaffrey, 1994). In fact, the possibility of such a conflict is not remote. Suppose an upstream State X is planning to build a dam on an international watercourse, the effect of which will be to deprive downstream State Y of a share of the waters used by that State for agricultural irrigation. Since the principle of equitable utilization allows riparian States to strike a balance between their respective user benefits and detriments, State X will invoke that principle as the basis for its right to build the dam. State X could claim that the detriment caused to State Y is allowable under an equitable and reasonable utilization of the watercourse. On the other hand, State Y could invoke the strict application of the "no harm" rule, arguing that the building of the dam could cause significant harm to its utilization of the watercourse, and therefore must be prohibited. The outcome will be different depending on whether priority is accorded to one principle or to the other. If the "no harm" principle prevailed, the upstream State X would not be permitted to build a dam that would cause harm to its downstream neighbour. If the equitable utilization principle prevailed, the harm to downstream State Y would be one factor to be weighed in determining whether the dam is permissible (McCaffrey, 1995).

The question is even more complicated when the utilization of an international watercourse causes the pollution of its waters and the deterioration of the environment at large. In such instances, it is difficult to accept the conclusion that the pollution of a watercourse must be tolerated as the result of its equitable utilization. In other words, the application of the "no harm" rule seems better suited in cases involving pollution or other threats to the environment (McCaffrey, 1989).

The ILC, in adopting the first reading of the draft articles, decided to give priority to the prohibition to cause significant harm over the principle of equitable utilization. The Commission's understanding at that time was to consider every utilization of an international watercourse involving appreciable-significant harm to other watercourse States as inherently inequitable and unreasonable and, therefore, prohibited (United Nations, 1988b).

However, a number of States, in their written comments on the draft articles as adopted on first reading, criticized the choice of the Commission as an unbalanced solution, which would have the effect to prevent upstream States from undertaking any new development of an international watercourse that could cause appreciable/significant harm to downstream States (see for example the comments of Canada: United Nations, 1993a).

Following these reactions, the special rapporteur Robert Rosenstock, in his first report of 1993, proposed a new text of the draft article on the duty not to cause harm, in which the order of priority was reversed in favour of the principle of equitable utilization. At the same time, the text proposed by Rosenstock introduced an exception to the supremacy of the equitable utilization rule in cases where the significant harm took the form of pollution; such uses were in fact presumed to be inequitable and unreasonable (United Nations, 1993b).

During the adoption of the second reading of the draft articles at its 1994 session, the Commission added a new paragraph to the text of the article on the duty not to cause harm, with the intention to clarify the relationship between the two general principles. Paragraph 2 of article 7 adopted on second reading goes as follows:

2. Where, despite the exercise of due diligence, significant harm is caused to another watercourse State, the State whose use causes the harm shall, in the absence of agreement to such use, consult with the State suffering such harm over:

(a) the extent to which such use is equitable and reasonable taking into account the factors listed in article 6;

(b) the question of *ad hoc* adjustments to its utilizations, designed to eliminate or mitigate any such harm caused, and, where appropriate, the question of compensation.

This paragraph must be read in the light of the "due diligence" obligation not to cause significant harm to other watercourse States set forth in the first paragraph of article 7. Paragraph 2 comes into effect only when "significant harm" has been caused "despite the exercise of due diligence" by the user State, that is when the user State has not breached the obligation of diligent conduct set forth in the previous paragraph. The kind of situation envisaged should be one in which any question of international responsibility of the user State for wrongful act is excluded. In this case, the specific obligations of consultation spelled out in paragraph 2 of article 7 apply.

In the first case, under letter (a) of the paragraph, the State causing harm must enter into consultation with the victim State regarding the extent to which the harmful use is an equitable and reasonable one. This subparagraph involves the recognition of the possibility that a harmful use of a watercourse may nevertheless be equitable and reasonable. An important limitation to this possibility is spelled out in the relevant part of the commentary, which explains that a use entailing significant harm to human health and safety is understood to be inherently inequitable and reasonable. But, apart from this important specification, the precise effects of subparagraph (a) remain rather obscure.

The commentary points out that the burden of proof in establishing that the harmful use is equitable and reasonable lies on the user State (United Nations, 1994c). But the same commentary does not explain what the consequence of a negative finding would be. One may wonder if the user State could

even be accredited with a diligent conduct in preventing the harmful consequences of its activity when it has failed to adequately weigh and apply all the factors relevant to an equitable and reasonable utilization of the watercourse. In all events, the failure to prove the equitable character of the utilization would amount to a breach by the user State of its international obligations, preventing the application of the special regime provided for in the second paragraph of article 7.

Some difficulties also arise in the opposite hypothetical case: when the user State has been successful in showing proof of equitable utilization. In particular, it is not clear whether this State is then released from any further obligation, or whether the specific provisions of letter (b) of the second paragraph of article 7 apply. The more plausible answer is that subparagraph (b) applies also in the case of a positive finding regarding the equitable character of the utilization (McCaffrey, 1995; Fitzmaurice, 1995). In that case, the user State is obliged to consult with the victim State on the question of *ad hoc* adjustment aimed to eliminate or mitigate the significant harm and on the question of the payment of appropriate compensation. This interpretation admits the conclusion that the significant damage arising out of a diligent use is one of the relevant factors that must be weighed in determining an equitable and reasonable utilization of an international watercourse. In this connection, the commentary of the ILC underlines the important role of the payment of a compensation as "a means of balancing the equities in particular cases" (United Nations, 1994c).

Incidentally, the analogy should be emphasized between the obligations of consultation provided for in subparagraph (b) of article 7 and some of the basic conclusions reached by the ILC in the context of its work on the topic "International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law". This topic is intended to cover, *in abstracto*, situations in which States engage in activities on their territories that are lawful—in the sense that they are not prohibited by international law—but that nevertheless cause significant harm to other States (Barboza, 1994). In such situations, the ILC understanding was that the characterization of the harmful activity as lawful and permissible must not override the principle that the victim of transboundary harm should not be left to bear the entire loss. To guarantee this result, the ILC has singled out the basic obligation of the State causing the harm to negotiate with the victim State in order to provide it with adequate compensation or other relief, for example a modification in the operation of the activity so as to avoid or minimize future damages (United Nations, 1996).

The legal reasoning behind the "State Liability" approach may also explain the conditions under which a diligent and equitable use of an international watercourse remain lawful, in spite of significant harm caused to other riparian States. The introduction of this legal reasoning in the law of the non-navigational uses of international watercourses represents the most

significant innovation realized by paragraph 2 (b) of article 7 (Fitzmaurice, 1995).

As a whole, the second paragraph of article 7 aims to reconcile the "equitable utilization" and "no harm" principles, rather than declaring the supremacy of one over the other. Unfortunately, the wording of the paragraph is not entirely consistent with such intent, and some further clarification is needed concerning the way it operates.

Finally, it may be noted that the second paragraph of article 7 does not address the question of the relationship between the "equitable utilization" and "no harm" principles in cases involving pollution. It remains to be seen whether the answer to this question can be found in Part IV of the draft articles, which is devoted to the protection of international watercourses.

The protection of international watercourses

The obligations of riparian States relating to the protection of international watercourses and their environment are spelled out in four articles contained in Part IV of the draft. As articles 22 and 23 deal specifically with the issues relating to the introduction of new species in the watercourse and of the protection of the marine environment, our attention will focus on the more general provisions contained in articles 20 and 21.

Protection and preservation of ecosystems

Part IV of the draft opens with article 20, which states that "Watercourse States shall, individually or jointly, protect and preserve the ecosystems of international watercourses".

This article is based on the assumption that an international watercourse must be considered not only as an economic resource to be exploited, but also as an ecological unit deserving protection (McCaffrey, 1993). The key concept in this approach is the notion of "ecosystem". The term "ecosystem" is defined in the commentary annexed to article 20 as "an ecological unit consisting of living and non-living components that are interdependent and function as a community". As in the case of the term "international watercourse", the boundaries of the concept of ecosystem are identified by reference to the interrelationship (usually observable) among its various components. In this case also, the Commission has been careful to avoid any possible "geographical" or "territorial" extension of the notion of ecosystem. The term ecosystem was preferred in article 20, being more precise than "environment"; the ILC believed that the latter term could be interpreted too broadly to apply to areas surrounding a watercourse that have minimal bearing on the protection and preservation of the watercourse itself (United Nations, 1994c).

As to the contents of the undertakings imposed on States by article 20, the commentary points out that the obligation to "protect" implies that riparian States shield the ecosystems related to international watercourses both from actual harm and from the threat of future harm. The relevant footnote specifies

that the obligation to protect ecosystems is "a general application of the principle of precautionary action". On the other hand, the obligation to "preserve" covers the ecosystems that are in pristine or unspoiled conditions, and requires riparian States to maintain those ecosystems as much as possible in their natural state (United Nations, 1994c). What the commentary does not entirely clarify is whether the obligation of protection and preservation also involves the duty of States to restore the conditions of ecosystems that are currently degraded (Nanda, 1992).

Be that as it may, the major innovation of article 20 is that the application of the obligations provided is not made dependent on significant harm eventually suffered by riparian States. In fact, the obligation of protection set forth in article 20 goes further than the "no harm" rule codified in article 7 of the draft, since it implies the taking of protective measures that may be necessary even if no pollution harm is caused to other riparian States (McCaffrey, 1989). What article 20 intends to achieve, according to the ILC, is a utilization of international watercourses that may be "ecologically sustainable", so that the ecological balance of watercourses and the possibility of their future use are not compromised. The commentary to article 20 is very clear on this point, stating that "together, protection and preservation of aquatic ecosystems help to ensure their continued viability as life supporting systems, thus providing an essential basis for sustainable development" (United Nations, 1994c).

Finally, it must be noted that the commentary to article 20 points out that the obligation of protection of ecosystems is a specific application of the requirement mentioned in article 5 of the draft, according to which riparian States shall use and develop an international watercourse in a manner consistent with the adequate protection thereof. On the other hand, the text of article 20—in prescribing that States shall "individually or jointly" protect and preserve ecosystems—acknowledges the opportunity for riparian States to cooperate on an equitable basis in the implementation of protective aims. These specifications prove that the ILC has conceived the protection of ecosystems as an essential factor in the realization of the equitable and reasonable utilization of international watercourses (Brunné and Toope, 1994).

Prevention, reduction and control of pollution

Problems relating to pollution of international watercourses are dealt with in article 21 of the draft. The first paragraph of the article contains the definition of pollution: "any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct". This is a neutral and purely factual definition of pollution; it does not mention either any particular kind of pollution or pollutant agents, or the threshold of gravity of the pollution, and not even the specific targets or detrimental effects of the pollution (such as harm to human health, property or living resources) (United Nations, 1994c).

These aspects are defined more precisely in the second paragraph of article 21, which reads as follows:

Watercourse States shall, individually or jointly, prevent, reduce and control pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in this connection.

The obligation set forth in this paragraph applies to polluting activities that cause, or may cause, "significant harm". The commentary explains that pollution falling below that threshold might be covered by the provisions of article 20 of the draft. This apparent limitation is balanced by the second paragraph of article 21, which prohibits pollution that affects, in the form of significant harm, not only the beneficial uses of an international watercourse, but also the "environment" at large of the riparian States. According to the commentary, the term environment is intended to cover matters such as "the living resources of the international watercourse, flora and fauna dependent upon the watercourse, and the amenities connected with it", and thus it encompasses a broader concept than the term "ecosystem" contained in preceding article 20 (United Nations, 1994c).

Turning to the content of the obligation set forth in the second paragraph of article 21, the commentary clarifies that it represents a specific application of the general principles spelled out in articles 5 and 7 of the draft.

In applying the general principle of "no harm" to the case of pollution, the ILC has been inspired by two main considerations. The first observation was that some international watercourses are already polluted to varying degrees, while others are not. The second remark was that State practice shows a general willingness to tolerate even significant pollution harm, provided that the State of origin is making its best efforts to reduce or control the pollution. These arguments convinced the ILC that an absolute requirement to abate the existing pollution causing harm could result in undue hardship for riparian States, "especially where the detriment to the watercourse State of origin was grossly disproportionate to the benefit that would accrue to the watercourse State experiencing the harm" (United Nations, 1994c).

As a result, the second paragraph of article 21 does not express an absolute ban on pollution. Rather, it calls upon riparian States to control or reduce existing forms of pollution and to prevent new ones. In this case also, the obligation involved is one of "due diligence". Thus, only a failure of the polluter State to exercise due diligence in reducing the pollution to an acceptable level would entitle the affected State to claim that the polluter State has breached its obligation under paragraph two of article 21. Moreover, the emphasis on the need to prevent pollution implies that the principle of precautionary action is applicable here,

as it is in article 20. The commentary suggests that the latter principle can provide important guidance in the conduct of States, especially when dangerous—e.g. toxic, persistent and bioaccumulative—substances are involved (United Nations, 1994c).

On the basis of these considerations, it is now possible to examine a problem that had been left unanswered at the end of the preceding section. This concerns the relationship between the "equitable utilization" and "no harm" principles in case of activities involving pollution of international watercourses. The question was considered by the ILC at its 1988 session, when the special rapporteur Stephen C. McCaffrey presented a set of draft articles dealing with the protection of international watercourses. McCaffrey suggested to adopt a "no pollution harm" rule not qualified by exceptions in favour of the principle of equitable utilization, on the understanding that water uses causing pollution must be regarded as being *per se* inequitable and unreasonable. On the other hand, according to the special rapporteur, the possibility of conflict between the two general principles could be minimized by the introduction of the standard of due diligence in the context of the "no pollution harm" rule; McCaffrey noted that the latter concept could introduce certain considerations of equity, that lie behind the principle of equitable utilization, in the application of the "no harm" rule (United Nations, 1988a).

These arguments were substantially accepted by the ILC in 1988, and led to the adoption of the text of article 21 included in the first reading of the draft articles (United Nations, 1988b). In the absence of substantial modifications either to the text or the commentary on article 21 in the second reading of the draft, it is presumed that the same considerations are still valid.

However, it may be asked whether the general emphasis given to the concept of "due diligence" could, by itself, entirely solve the question of the conflict between "equitable utilization" and "no harm" in the case of pollution (Bourne, 1992). In this respect, it is emphasized that a more explicit answer to this question was envisaged in 1993 by special rapporteur Robert Rosenstock, who introduced a new draft article 7 on the duty not to cause harm; that text recognized the inequitable and unreasonable character of uses that cause harm in the form of pollution (see above). Unfortunately, this proposal was not considered by the Commission. The adoption of such an explicit solution may well have eliminated some of the ambiguities that still affect the wording of articles 7 and 21.

In concluding this review of article 21, it may be useful to briefly recall its third paragraph, which requires riparian States to enter into consultation, at the request of any of them, to establish lists of substances, the introduction of which into an international watercourse is to be prohibited, limited, investigated or monitored. This paragraph codifies a well-founded State practice, confirmed by a great number of international treaties relating to the protection of fresh and marine waters (see for example Annex II to the 1994 Sofia Convention for the

Protection and Sustainable Use of the Danube River). It is stressed here that the existence of lists of such substances, of which the discharge into rivers must be prohibited or subject to special regulation, could provide a useful parameter to assess the adherence by riparian States to the "due diligence" obligations set forth in articles 21 and 7 of the draft.

Conclusions

Following their submission to the General Assembly, the draft articles adopted on second reading by the ILC were discussed in the Sixth Committee in 1994. In general, States reacted positively, praising the final text adopted by the Commission as a balanced document (United Nations, 1995). Interestingly, a more thorough look at the summary records reveals that government representatives focused their comments especially on the issues reviewed in this paper. In this connection, two main points emerged from the 1994 debates in the Sixth Committee:

- First, the majority of the delegates agreed that Part II represented the core of the draft articles. But, apart from this unanimous admission, the views on the delicate question of the relationship between the articles on equitable utilization and the duty not to cause significant harm were divided. While a number of representatives welcomed the text of article 7 as elaborated in the second reading by the ILC as a viable solution to strike a balance between the two general principles, others criticized the unclear meaning of the new version of the article and, in particular, the subjective character of the "due diligence" standard introduced in the article. The same representatives proposed to revert to the 1991 version of article 7. The divergence of these reactions suggests that the solution adopted in the second reading of the draft had not completely solved the problem of the coexistence of the two fundamental principles of international water law.
- Second, a large number of representatives in the Sixth Committee praised the incorporation into the ILC draft of rules and principles relating to environmental protection. Moreover, some representatives felt that the draft articles should include additional concepts that had been formulated and developed in recent international instruments in the field of international environmental law. It was pointed out that, in particular, the general principles codified in articles 5, 6 and 7, should explicitly mention concepts such as "sustainable use", "sustainable development", "environmental impact assessment", "best available technologies", "best environmental practices". These suggestions prove that the question of environmental protection is an aspect inherent in any attempt to elaborate legal rules governing the economic exploitation of international watercourses.

Following the general debate on the ILC draft in the Sixth Committee, the General Assembly, by its resolution 49/52 of 9 December 1994, decided that, at

the beginning of the 1996 session, "the Sixth Committee shall convene as a working group of the whole ... to elaborate a framework convention on the law of the non-navigational uses of international watercourses on the basis of the draft articles adopted by the International Law Commission...".

The elaboration of a comprehensive legal regime of the utilization of international watercourses seems to approach its conclusion. This is an important achievement to which the ILC, with its outstanding effort at codification, developed during more than twenty years, has greatly contributed.

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