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THE CONTRIBUTION OF THE INTERNATIONAL LAW COMMISSION TO INTERNATIONAL WATER LAW: DOES IT REVERSE THE FLIGHT FROM SUBSTANCE?*

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1. INTRODUCTION

In 1994, the International Law Commission (ILC) adopted the Draft Articles on the Law of the Non-Navigational Uses of International Watercourses.[1] Having been favourably reviewed by the General Assembly of the United Nations,[2] these Articles now form the negotiating text for a global treaty on international water law.[3] The fate of this treaty remains uncertain.[4] But irrespective of the results of the negotiations, the text formulated by the ILC may become an authoritative source of citations for States, scholars and other actors involved in disputes over water scarcity,[5] and is therefore likely to have a determinative influence on the development of international water law. For this reason a critical examination of the ILC Articles is imperative.

In this article I will examine one aspect of the work of the ILC: its attempt to alleviate the normative ambiguity of international water law by formulating substantive norms for the allocation and protection of water resources. I will argue that the ILC's proposals for the development of substantive water law are part of an emerging but as yet feeble challenge to the prevailing equitable utilization paradigm, that accords each riparian State equal rights to use rivers subject to indeterminate rules as regards sharing. The substantive norms would insulate

1. Draft Articles on the Law of the Non-Navigational Uses of International Watercourses, Rep. of the ILC on the Work of its Forty-Sixth Session (1994), GAOR, 49th Sess., Suppl. No. 10, UN Doc. A/49/10, p. 197 (hereinafter referred to as the articles). The Commission also adopted a Resolution on Confined Transboundary Groundwater, ibid. at p. 326.

2. See the discussion of the draft articles in the Sixth Committee at its 1994 session: UN Doc. A/C.6/49/SR. 17, 21, 22, 23, 24, 26, 27, 28 and 41 (1994). The General Assembly mandated a working group from its Sixth Committee to develop a 'framework convention on the law of the non-navigational uses of international watercourses' on the basis of the articles. GA Res. 49/52, UN Doc. A/RES/49/52 (1994).

3. I will use the term 'international water law' to précis what the ILC has called the 'law of the non-navigational uses of international watercourses' — a term not only long but also inaccurate as, in fact, many navigational uses *are* within the ambit of the articles, see Art. 1(2). When I use the term (general) international water law, I refer to those rules of general international law that apply outside the context of treaties for particular watercourses or regions.

4. At the time of writing, it is uncertain how much support the articles will find among governments. Few States have responded to the requests for comments (see *infra*, nn. 66-67). Of the States that did provide comments, some expressed a preference for a set of guidelines over a global treaty, see e.g., Comments of Canada, UN Doc. A/CN.4/447/Add.1 (1993) p. 6; Comments of the Netherlands, UN Doc. A/CN.4/447/Add.3 (1993) para. 4.

5. The ILC Articles provide an updated statement of the often-cited principles set forth in the 1966 Helsinki Rules adopted by the International Law Association, Rep. of the Fifty-Second Conference, Helsinki 1966, p. 478. While the articles on the whole draw in part on the Helsinki Rules, certain articles, in particular those on notification and consultation of planned measures (Arts. 11-19) are a marked improvement on the Helsinki Rules.

certain interests, such as the protection of vital human needs and ecosystems, from unfavourable balancing processes. However, the ILC Articles signify that this transformation of water law is incomplete. The contents and legal implications of the substantive norms remain unelaborated. When all rhetoric regarding protection of vital needs, ecosystem protection and sustainability are disposed of, international water law remains firmly rooted in the indeterminate paradigm of equitable utilization. If States intend to improve protection of certain interests from open-ended balancing, they would not be well recommended to adopt the articles in the form of a treaty without major amendments.[6]

The article will proceed as follows. In section 2 I will discuss the conceptual underpinnings of existing water law that help explain the need to develop substantive norms. In section 3 I will make some general observations on the role of the ILC in developing international water law. Sections 4, 5 and 6 examine the ILC's concept of substantive water law and discuss to what extent that challenges the dominant sharing rules. Section 7 discusses the legal nature of the substantive provisions proposed by the ILC. In section 8 I will draw together the leading threads.

6. See for earlier critical reviews of the ILC Articles adopted at first reading (1991): e.g., G. Handl, 'The International Law Commission's Draft Articles on the Law of International Watercourses (General Principles and Planned Measures): Progressive or Retrogressive Development of International Law?', 3 Colorado J Int. Env. L & Pol. (1992) pp. 123-143, at p. 133 (concluding that whereas in some instances the draft articles represent clear advances over traditional, customary international principles and criteria, in others 'the innovations they embody are of questionable merit, indeed evidence significant conceptual problems'); C.D. Hunt, 'Implementation: Joint Management and Remedies in Domestic Tribunals (Articles 26-28 and 30-32)', 3 Colorado J Int. Env. L & Pol. (1992) pp. 281-294, at p. 282 (stating that 'the draft articles, as a whole, do not adequately respond to the challenges that face the world at the end of the twentieth century'); G.D. Radosevich, 'Implementation: Joint Management and Remedies in Domestic Tribunals (Articles 26-28 and 30-32)', 3 Colorado J Int. Env. L & Pol. (1992) pp. 261-268, at p. 268 (concluding that the ILC draft is a retrograde step 'toward generality and mediocracy'). See for critical reviews of the articles adopted at second reading (1994): E. Hey, 'Sustainable Use of Shared Water Resources: the Need for a Paradigmatic Shift in International Watercourse Law', in G.H. Blake et al., eds., *The Peaceful Management of Transboundary Resources* (1995) pp. 127-152, at p. 127 (noting that 'fundamental changes' are required in the draft articles if these 'are to facilitate rather than hamper the implementation of Agenda 21'); R. Rahman, 'The Law of the Non-Navigational Uses of International Watercourses: Dilemma for Lower Riparians', 8 Fordham ILJ (1995) pp. 9-24, at p. 22 (stating that the articles 'appear to take a step backward on . . . fundamental issues'); E. Benvenisti, 'Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law', 90 AJIL (1996) pp. 384-415 (criticizing the rules on sharing, the absence of provisions on human rights and the over-emphasis on the potential of litigation).

2. THE CASE FOR THE DEVELOPMENT OF SUBSTANTIVE WATER LAW

2.1 The perseverance of conflicts of uses

International watercourses have played a critical role in the economic development of States. For instance, the building of dikes, dams and locks on the river Rhine and the extraction of its waters have paved the way for the booming industrial cities along the Rhine and have made this river one of the corner-stones of the economy of Western Europe.[7] What the Rhine was for Western Europe, the Nile was for Egypt, the Colorado river for the United States, the Ganges for India, and the Jordan for Israel.

However, the quantity and quality of the water of many watercourses is insufficient to allow each riparian State to fully realize the beneficial uses it aims for. The result is that uses of international watercourses are a pervasive cause of international conflicts.[8] Examples of rivers which are the subject of conflicts include the Rhine,[9] the Nile,[10] the Euphrates,[11] the Ganges,[12] and the Colora-

7. F. Pearce, *The Damned. Rivers, Dams and the Coming World Crisis* (1992) pp. 36-40.

8. See the overview of international conflicts of watercourses in P. Gleick, *Water in Crisis* (1993).

9. In the river Rhine, discharges of pollutants in France and Germany have endangered the use of the river for drinking water and agriculture in the Netherlands. See for a recent overview: A. Nollkaemper, 'The River Rhine: From Equal Apportionment to Ecosystem Protection', 5 Rev. EC & Int. Env. L (1996) pp. 152-160.

10. The future claims of Ethiopia to the waters of the Blue Nile are bound to reduce supplies in Egypt and Sudan. See the discussion by J. Dellapenna, 'The Nile as a Political and Legal Structure', in E. Brans et al., eds., *Water Scarcity: Emerging Legal and Policy Responses*, n.y.p.

11. The planned 22 dams and 19 power stations that are part of the Eastern Anatolian Project on the Euphrates in Turkey threaten supplies in Syria and Iraq. See 'Special Report on Power and Water – A New Source of Conflict for the Region', Reuter Textline, *Middle East Economic Digest* (25 January 1991) (describing the attenuated problems of Turkey, Syria and Iraq in reaching agreement over the water flow to be released by Turkey). Reportedly, recent dam projects in Turkey have been initiated without consultations with Syria and Iraq; see 'Turkey Urges Syria, Iraq to Negotiate Water Dispute', Reuters World Service (7 February 1996) available in LEXIS/Nexis, News Library.

12. India's diversion of water from the Ganges through the Farakka barrage has caused severe water shortages in Bangladesh during the dry season and massive floods during the monsoon. See M. Asafuddowlah, 'Sharing of Transboundary Waters: The Ganges Tragedy', in Blake et al., eds., op. cit. n. 6, at p. 209; Pearce, op. cit. n. 7, at pp. 269-270; 'Arid Bangladesh Accuses India of Choking Ganges', *The Times* (15 July 1994) (describing how the withdrawal of water from the Ganges in India has caused salinity because the enfeebled Ganges cannot hold back seawater rushing upstream from the Bay of Bengal, causing what has been called 'one of Asia's greatest man-made disasters').

do.[13] Politicians and scholars have alluded to the possibility that conflicts of uses may become causes of war.[14] Even if that prospect will not materialize, conflicts of uses will increasingly threaten human populations[15] and ecosystems[16] dependent on fresh-water resources.

International law can be instrumental in resolving conflicts of uses. History has shown that without a sufficiently detailed legal structure accepted by riparian States, the resolution of conflicts is all too often prone to failure. Accepted legal entitlements grant legitimacy to some claims and deny it to others. They help to shape a common understanding of riparian States' entitlements that can be the basis of agreed solutions to conflicts of uses. International law in itself will not provide solutions for conflicts of uses, but, as noted by Joseph Dellapenna, in many cases 'there can be no answer without international law.'[17]

States have negotiated hundreds of river-basin treaties to prevent and resolve conflicts of uses.[18] Recent treaties apply to the Meuse,[19] the Scheldt,[20] the Danube,[21] the Jordan and Yarmouk,[22] the Nile,[23] the Mekong,[24] the Orange

13. Irrigation in the Western United States by extracting water from the Colorado river has caused salinization that has adversely affected crop yields in Mexico. M. Reisner, *Cadillac Desert. The American West and Its Disappearing Water*, rev. edn. (1993).

14. See the references in S. McCaffrey, 'Water Scarcity: Institutional and Legal Responses', in Brans et al., eds., op. cit. n. 10.

15. Some 40 percent of the world population live in the 250 river basins whose water is competed for by more than one State; see 'The Water Bomb' (*The Guardian*, 8 August 1995).

16. Agenda 21, *Report of the United Nations Conference on Environment and Development*, UN Doc. A/CONF.151/26, Annex II (1992) para. 18.35.

17. J.W. Dellapenna, 'Water in the Jordan Valley: The Potential and Limits of Law', 5 Palestine YBIL (1989) pp. 15-47, at p. 19.

18. See the older overviews in *Legal Problems Relating to the Utilization and Use of International Rivers*. Report of the Secretary-General of the UN, Part II, UN Doc. A/5409 (1963); FAO, *Legislative Study No. 15* (1978).

19. Agreement on the Protection of the River Meuse, Charlesville Mezieres, 26 April 1994, 34 ILM (1995) p. 854.

20. Agreement on the Protection of the River Scheldt, Charlesville Mezieres, 26 April 1994, 34 ILM (1995) p. 859.

21. Convention on Cooperation for the Protection and Sustainable Use of the Danube River, Sofia, 29 October 1994, 5 YB Int. Env. L (1994) disk, doc. 16.

22. Art. 6 and Annex II of the Treaty of Peace Between Israel and Jordan, Arava/Arada Crossing Point, 26 October 1994, 34 ILM (1995) p. 43.

23. In February 1995, eight Nile States agreed on the Nile River Basin Action Plan, see 'Development Plan Approved for Nile Basin States', Xinhua News Agency (13 February 1995) available in LEXIS/Nexis, News Library.

24. Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, 5 April 1995, 34 ILM (1995) p. 864.

River between South Africa and Namibia,[25] and the boundary waters between Nepal and India.[26] The perpetuation and improvement of this practice holds the key to the resolution of conflicts of uses. However, there are many river basins that are not, or are only partly, covered by treaties. States located in such river basins may wish to turn to general international law to seek to protect their interests.[27] However, as I will explain in the next section, international law has little to offer for such States.

2.2 The ambiguity of the principle of equitable use

The conceptual backbone of international water law is the principle of equitable utilization. This determines that: 'Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner.'[28] The ILC concluded that 'there is overwhelming support for the doctrine of equitable utilization as a general guiding principle of law for the determination of the rights of States in respect of the non-navigational uses of international watercourses.'[29] The principle of equitable use has often been heralded. As it requires that States resolve conflicts of uses by balancing all the interests involved, it denies the legitimacy of claims that maintain that States would be entitled to either absolute sovereignty or absolute integrity over watercourses[30] or that historic uses would have priority over new uses of waters.[31]

25. 3 YB Int. Env. L (1993) p. 240.

26. 'India and Nepal to Sign Two Pacts on Sharing Water and Power', Deutsche Presse Agentur (12 February 1996), available in LEXIS/Nexis, News Library.

27. Illustrative is the position of Bangladesh that, being heavily dependent on policies of upstream users, 'has always attached paramount importance to the evolution and elaboration of universal rules of law that regulate international watercourses'; see Rahman, loc. cit. n. 6, at p. 10.

28. Art. 5(1). See for exhaustive overviews of practice and doctrine: Third Report of Special Rapporteur Schwebel, ILC Yearbook 1982 Vol. II, Part 1, para. 41 et seq.; Second Report of Special Rapporteur McCaffrey, ILC Yearbook 1986 Vol. II, Part 1, para. 75 et seq.; J. Lipper, 'Equitable Utilization', in A.H. Garreston et al., eds., *The Law of International Drainage Basins* (1967) pp. 15-88.

29. Second Report of Special Rapporteur McCaffrey, ILC Yearbook 1986 Vol. II, Part 2, para. 169.

30. Dellapenna, loc. cit. n. 17, at pp. 40-42 (discussing such claims made by Lebanon, Jordan, Syria and Israel). See generally on these claims: F.J. Berber, *Rivers in International Law* (1959) pp. 14-22; C.B. Bourne, 'The Right to Utilize the Waters of International Rivers', 3 Can YIL (1965) pp. 187-264, at pp. 206-207.

31. S.S. Elmusa, 'Dividing Common Water Resources According to International Water Law: The Case of the Palestinian-Israeli Waters', 35 *Natural Resources Journal* (1995) pp. 223-242, at pp. 234-236 (discussing Israeli insistence on priority of existing uses).

However, this does not mean that the principle of equitable use is in itself capable of resolving conflicts of uses. The principle is highly indeterminate. It relies on a contextual balancing of all relevant factors and circumstances[32] and does not provide ready answers to any conflict of use. Each interest is vulnerable to be overridden by another. The ILC lists at least 17 factors that need to be taken into account. These are grouped as (a) geographic, hydrographic, climatic, ecological and other factors of a natural character; (b) the social and economic needs of the States concerned; (c) the population dependent on the watercourse; (d) the effects of uses on other States; (e) existing and potential uses; (f) conservation, protection, development and economy of use of the water resource and the costs of measures taken to that effect; and (g) the availability of alternatives to a particular use.[33] These factors are not prioritized.[34] The principle does not *a priori* preclude States from sacrificing satisfaction of vital human needs for ill-fated plans to make deserts bloom. The weight of the factors depends on the circumstances. Even the direction in which they have to be weighed is unclear. Is a dryer State entitled to more or less water?[35] Christopher Stone notes: 'This is not just a case of critical vagueness; it's worse.'[36]

Applying the principle to the dispute between Palestine populations and Israel, Elmusa argues on plausible grounds that the criterion of social and economic needs would justify a substantial redistribution of waters from Israel to Palestine populations. Yet, the principle also gives Israel a ground to argue that adverse

32. See generally on the balance of interest as a fundamental concept for 'the determination of the limitations incumbent upon a state's contemplated use of a given internationally shared natural recourse': G. Handl, 'The Principle of "Equitable Use" as Applied to Internationally Shared Natural Resources: Its Role in Resolving Potential International Disputes over Transfrontier Pollution', 14 Rev. Belge (1979) pp. 40-62, at p. 45. See for a general discussion of the dominance of contextual equity in present international law: M. Koskenniemi, *From Apology to Utopia. The Structure of International Legal Argument* (1989) pp. 223-236.

33. Art. 6.

34. Art. 10(1) provides that 'In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.'

35. C. Stone, *The Gnat is Older than Man. Global Environment and Human Agenda* (1993) p. 166.

36. Idem. See also J.M. Wenig, 'Water and Peace: The Past, the Present and the Future of the Jordan River Watercourse: An International Law Analysis', 27 NY Univ. J Int. L & Pol. (1995) pp. 331, 348 (noting that 'consideration of all these factors without a method of gauging their relative importance cannot provide conclusive and realistic conclusions to disputes over international waters'); C. Tomuschat, 'International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law: The Work of the International Law Commission', in F. Francioni et al., eds., *International Responsibility for Environmental Harm* (1991) pp. 37-72, at p. 50 (noting that in a case of a lack of any mechanism for third-party dispute settlement, a balancing test will undermine the 'certainty of the law').

effects on irrigation and existing uses in Israel outweigh the needs of the Palestine population.[37] Also the conflict between India and Bangladesh is characterized by opposing claims that each are legitimized by the principle of equitable use. India claims water from the Ganges for its Calcutta port, to satisfy the growth of its population, industrialization, irrigation and agriculture. Bangladesh needs water for basic drinking water and irrigation and seeks protection from upstream floods. The principle of equitable use justifies opposing claims from both States without offering a resolution.

This means that the principle is little more than an open-ended framework for political compromise without an independent legal identity.[38] The flexibility of the principle makes that it easily dwindles into a 'might-is-right' paradigm. All too often, international water law has 'nothing better to offer than the law of the vendetta.'[39] The plight of Bangladesh exemplifies this – as a practical matter, this State simply has no chance of successful recourse to any law to protect what most would agree to be its legitimate and critical interests from upstream floods and droughts that in large part are caused by uses of the river in India.[40] If States are willing to agree on how to balance relevant factors, or to submit a conflict to third-party dispute settlement, the principle of equitable use may help them to resolve conflicts of uses.[41] But history has proven that we cannot presuppose such willingness. Indeed, it was the very *incapability* of the principle of equitable use to resolve conflicts of uses that induced the General Assembly in 1970 to initiate a process of progressive development of the law.[42]

37. Elmusa, loc. cit. n. 31.
38. Koskenniemi, op. cit. n. 32, at p. 233.
39. Dellapenna, loc. cit. n. 17, at p. 38.
40. *Supra*, n. 12.
41. P.K. Wouters, 'Allocation of the Non-Navigational Uses of International Watercourses: Efforts at Codification and the Experience of Canada and the United States', 30 Can. YIL (1992) pp. 43-88, at p. 87 (arguing that US-Canada practice shows that if States are willing to cooperate, the equitable use test 'can work' and is superior to more rigid substantive norms). Several scholars have applied the principle to actual conflicts of uses and argued that it could result in equitable outcomes; see e.g., Elmusa, loc. cit. n. 31; J.E. Cohen, 'International Law and the Water Politics of the Euphrates', 24 NY Univ. J Int. L & Pol. (1991) pp. 503-556, at p. 525 et seq.; Wenig, loc. cit. n. 36, at p. 345 et seq.; Benvenisti, loc. cit. n. 6, at p. 402 (arguing that the principle of equitable use helped during the negotiations of the Israeli-Palestinian water agreement to defer the explosive issue of water allocation to later stages when an improved atmosphere allowed a mutually satisfactory solution).
42. The General Assembly concluded that, first, despite the large number of watercourse agreements, in many river basins the only applicable law consists of 'general principles and rules of customary law', and, second, that these general principles and rules of customary law were unable to prevent legal problems from arising. See GA Res. 2669(XXV) (1970).

2.3 The case for developing of substantive law

The vulnerability of the doctrine of equitable use explains the need for substantive norms that would insulate certain interests from unfavourable balancing processes. The introduction of substantive norms is by no means self-evident, though. Traditionally, States and scholars have heavily relied on procedural mechanisms in order to alleviate the normative ambiguity of international water law. Examples of often used mechanisms are procedures for cooperation, joint management, notification and consultation.[43] The significance of these procedural arrangements for resolving conflicts is beyond dispute, and the ILC has rightly proposed such arrangements for inclusion in a global treaty.[44] However, the potential of procedural rules is too easily overstated. To vest hope in procedure is to assume that States would restrict their usage of water for the benefit of other water users, if only they would have more information concerning the transboundary effects of their usages, or if only to communicate more with other States. The validity of this assumption has proven to be uncertain at best. There are, for instance, few indications that India would alter its uses of the Ganges to protect the interests of Bangladesh, or that Belgium would reduce its use of the Meuse for waste disposal purposes to protect interests in the Netherlands, if only these States would have more information or communicate more often with their downstream neighbours.[45]

When States are not willing to compromise, procedural rules neither determine nor change the substantive entitlements of watercourse States. The pursuit of procedural sophistication of international water law is a flight from what eventually is inevitable: a decision on States' substantive rights and duties. In contrast to procedural arrangements, substantive norms can explicate political values. Thus, they may legitimize and justify claims of potentially affected States during the

43. See e.g., C. Bourne, 'Procedure in the Development of International Drainage Basins', 22 Univ. Toronto LJ (1972) pp. 172-206.; Benvenisti, loc. cit. n. 6. See generally T.M. Franck, *The Power of Legitimcay Among Nations* (1990) pp. 86-87 (discussing the virtues of what he calls 'process determinacy').

44. The ILC proposed provisions concerning, e.g., joint management (Art. 24(1)); notification and consultation (Arts. 11-19); exchange of information (Art. 9); and settlement of disputes (Arts. 32-33).

45. Cf., M. Koskenniemi, 'Peaceful Settlement of Environmental Disputes', 61 Nordic *JIL* (1991) pp. 73-87, at p. 85 (discussing the utopian premise that 'once we have full knowledge of the facts of environmental degradation and the means to prevent it, we are able to sort the problem out so that everybody will (of necessity) agree').

search for negotiated solutions and thus make the process of the balancing of interests more structured and goal-oriented.[46]

Treaty practice at river-basin level as well as a multitude of authoritative policy declarations have provided emerging authority for substantive norms for the allocation and protection of water resources. At river-basin level, many treaties reflect States' acknowledgement that the process of negotiated resolution of conflicts can be helped by prior formulation of substantive norms.[47] An important precendent applicable to many rivers is the 1992 Helsinki Convention on protection and use of transboundary watercourses and lakes.[48] Authoritative policy declarations, most notably Agenda 21, add further weight to emerging substantive norms. These norms seem to converge around minimum requirements for vital human needs, ecosystem protection and sustainability.[49] While the scope, contours and legal status of these substantive norms remains undefined, they all challenge the pre-existing doctrine of equitable utilization. Rather than accepting that any interest can be outweighed by any other interest, they suggest that uses that harm certain interests are *a priori* inequitable or, in the alternative, may be equitable yet are wrongful. They thus support a transition of international water law from a system characterized by an open-ended balance of interests to a system characterized by certain 'public interest limitations'.[50] The ILC has attempted to contribute to this development.

While the advantages of substantive norms are beyond dispute, any attempt to develop substantive law will encounter one serious barrier: political agreement on substantive values of water management will be hard to come by. Lack of political consensus on social values explains the prevailing deference to pro-

46. J. Brunnee and S.J. Toope, 'Environmental Security and Freshwater Resources: A Case for International Ecosystem Law', 5 YB Int. Env. L (1995) pp. 41-76, at pp. 57-58; Koskenniemi, loc. cit. n. 45, at pp. 73, 84-86.

47. Substantive provisions are a common feature of treaty law on a river-basin level; they cover such issues as minimum flow requirements (e.g., Art. 6 of the Agreement on the Mekong River Basin, *supra*, n. 24; Art. 1 of Annex II to the Israel-Jordan Treaty of Peace, *supra*, n. 22); prevention of harmful effects (Art. 7 of the Agreement on the Mekong River Basin, *supra*, n. 24); protection of water quality (Art. 3 of Annex II to the Israel-Jordan Treaty of Peace, *supra*, n. 22); and application of clean technologies (Art. 3(2)(b) of the Agreement on the Protection of the River Meuse, *supra*, n. 19).

48. Convention on the Protection and Use of Transboudary Watercourses and International Lakes, Helsinki, 17 March 1992, 31 ILM (1992) p. 1312. This treaty, open for accession to all member States of the Economic Commission for Europe (Art. 23), provides, *inter alia*, an obligation to protect the transboundary impact and conservation of ecosystems; see Art. 2(a) and 2(d).

49. See for references the discussion of these norms in section 6 *infra*.

50. See for a discussion of this concept in US water law: A.D. Tarlock, 'Current Trends in United States Water Law and Policy: Private Property Rights, Public Interest Limitations and the Creation of Markets', in Brans et al., eds., op. cit. n. 10.

cedural water law. Agreement on procedure requires less consensus about political values than agreement on substance and does not prejudice substantive policies of States.[51] Natural, geographic, social, economic and political characteristics of river basins vary widely and make international water law infertile territory for substantive norms.[52] As I will explain below, the ILC's assessment of the political feasibility of possible substantive restrictions on water usages has strongly influenced its conception of the law.

3. DEVELOPMENT OF SUBSTANTIVE WATER LAW: WAS THE ILC THE PROPER FORUM?

When in 1970 the General Assembly concluded that international law should be developed, it chose to assign this task to the ILC.[53] It took twenty-four years before the General Assembly received the result from the ILC in the form of the Draft Articles on the Law of the Non-Navigational Uses of International Watercourses.[54] In part, this time-span was caused by the institutional inertia that characterizes most of the work of the ILC,[55] by changes of Special Rappor-

51. Koskenniemi, loc. cit. n. 45, at p. 74.

52. See generally H.A. Smith, *The Economic Uses of International Rivers* (1931) p. 144; J. Bruhàcs, *The Law of Non-navigational Uses of International Watercourses* (1993) pp. 53-54. See also the Report of the ILC on the Work of its Forty-Third Session (1991). See further the Topical Summary of the discussion held in the Sixth Committee of the General Assembly during its Forty-Sixth session, prepared by the Secretariat, UN Doc. A/CN.4/L.469 (1992) para. 18 (referring to representatives who 'expressed doubts about the feasibility of drafting articles on the non-navigational uses of international watercourses that would be suitable for application to watercourses in general, since they varied so much in size, location, and characteristics'). Of course, this phenomenon too is not exclusively characteristic of international watercourses. Elsewhere I have discussed the consequences for legal development regarding issues like forestry and land-based marine pollution; see A. Nollkaemper: 'Protection of Forests through Trade Measures: The Search for Substantive Benchmarks', 8 Georgetown ILR (1996) (forthcoming); idem, 'Balancing the Protection of Marine Ecosystems with Economic Benefits from Land-based Activities: The Quest for International Legal Barriers', 27 Ocean DIL (1996) pp. 153-179.

53. GA Res. 2669(XXV) (1970). The General Assembly requested the ILC to 'take up the study of the law of international watercourses with a view to its progressive development and codification.'

54. *Supra*, n. 1.

55. The Commission has too many issues on its agenda, the sessions are short, the Drafting Committee has little time, and there is insufficient staff. See generally I. Sinclair, *The International Law Commission* (1987) pp. 32-42.

teurs,[56] and by changes in the membership of the Commission. However, most of all it was caused by controversies regarding the scope, object and contents of the articles.

The task which the Assembly put before the Commission was colossal. Resolving the normative indeterminacy of international water law requires the formulation of new principles, rights and duties. This can be part of what the Commission's Statute calls 'progressive development'.[57] But in retrospect, one must doubt whether the Commission was the proper institution to take on this task.[58] Once the Commission entered the realm of progressive development, questions of substance acquired highly technical[59] and political dimensions. Progressive development is per definition guided by policy values.[60] The

56. Five Rapporteurs worked on the issue: Richard D. Kearney (from 1974); Stephen M. Schwebel (1977), Jens Evensen (1982), Stephen C. McCaffrey (1985) and Robert Rosenstock (1992). The progress achieved by some reports was often undone after the appointment of new Rapporteurs, each of whom had their own ideas as to the course which should be followed. The Third Report of Special Rapporteur Schwebel (ILC Yearbook 1982 Vol. II, Part 1, p. 65) had a decisive influence on the eventual contents and shape of the articles, but the momentum that was caused by that report was lost after successive changes of Special Rapporteurs, who revisited many of the issues in that Report, while often arriving at the same conclusions.

57. Statute of the International Law Commission, UN Doc. A/CN.4/4/Rev. 2 (1982) Arts. 15-17.

58. Some States shared this doubt whether the development of international water law should have been entrusted to the ILC. For instance, Bangladesh proposed in 1970 that this task should be entrusted to an intergovernmental committee; see Rahman, loc. cit. n. 6, at p. 13.

59. Development of the law required consideration of the issues of hydrology and ecology that most lawyers can only understand at a superficial level. In 1974, the Commission recognized its lack of knowledge on technical aspects and asked governments whether special arrangements should be made for the Commission to obtain technical, scientific and economic advice through such means as the establishment of a Committee of Experts. Most States responding to the questionnaire responded favourably to this question: ILC Yearbook 1976 Vol. II, Part 2, para. 138. Upon a suggestion by Special Rapporteur Kearney (ILC Yearbook 1976 Vol. II, Part 2, para. 47), the Commission made requests for advice to international organizations of the UN family which are involved in river development (ILC Yearbook 1978 Vol. II, Part 2, para. 158). While Special Rapporteurs appear to have made ample use of technical expertise, there is little evidence to suggest that the Commission entirely comprehended the technical issues it discussed. For instance, technical dimensions plagued the discussion of the scope of the work of the Commission – the Commission had to consider whether it was correct in hydrological terms to require that waters are only a 'watercourse' if they flow into a common terminus (Art. 2(b)), and whether confined groundwater was sufficiently similar to 'related' groundwater to be made subject to the same rules; see the Commentary on Art. 2, paras. 4-6. Another technical issue that has not satisfactorily been dealt with was the scope and meaning of the concept 'ecosystem' introduced in Art. 20; see *infra* section 6.2.

60. B.G. Ramcharan, *The International Law Commission. Its Approach to the Codification and Progressive Development of International Law* (1977) p. 106.

Commission had to make choices between different normative claims.[61] It could only partially make these choices by doing what it does best: drawing conclusions on the basis of analysis of treaties and legal literature. No one would consider the Commission to be an appropriate body for, say, drafting a treaty on forestry or biodiversity – there are too few rules to codify and too many policy choices to make. In the field of watercourses, there is more to codify, but progressive development of substantive law likewise involves critical policy questions that may not be in their proper place in the ILC. As noted by Mahiou: the Commission is 'a codification body and not a "think tank".'[62]

Ideally, these problems are overcome by close integration between the Commission's technical work of studying and drafting the law, on the one hand, and the political guidance from States through direct comments or through the Sixth Committee of the General Assembly, on the other.[63] In reality, this integration turned out to be a fiction.[64] The General Assembly did not provide any guidance in its 1970 Resolution, other than that the outcome of the ILC's work should prevent 'legal problems' arising from conflicts of uses.[65] The ILC had hoped to receive policy input from States when it started its work, but only 21 States responded to a 1974 questionnaire.[66] When in 1991 the ILC asked governments to submit their comments on the draft adopted at first reading, again only 21 States replied.[67] The prospective guidance provided by the Sixth Com-

61. See generally: D.M. McRae, 'The International Law Commission: Codification and Progressive Development after Forty Years', 25 Can. YIL (1987) pp. 362-363.

62. Remarks by Mahiou, 2312th Meeting, ILC Yearbook 1993 Vol. I, p. 97.

63. S. Rosenne, 'The International Law Commission, 1949-59', 36 BYIL (1960) pp. 104, 161.

64. See generally McRae, loc. cit. n. 61, at pp. 361-362, 365-366.

65. 1970 Resolution, *supra*, n. 53. It is interesting to recapitulate a suggestion made by the Netherlands in response to a questionnaire included in the 1980 Report of the Secretary-General relating to the 'Review of the Multilateral Treaty-Making Process'. The Netherlands suggested that a procedure should be devised whereby the General Assembly 'would thoroughly discuss subjects which are suggested for inclusion in a legal instrument before requesting [the Commission] to draft such an instrument'; cited in Sinclair, op. cit. n. 55, at p. 117.

66. ILC Yearbook 1976 Vol. II, Part 1, p. 147. See for a summary ILC Yearbook 1976 Vol. II, Part 2, pp. 157-158. After 1976, 11 additional States responded to the questionnaire, bringing the total number of answers to 32. However, irrespective of the number of responses, the questionnaire would have yielded little in terms of substantive guidance – the questions were mainly targeted at the scope and outline of the work of the Commission, rather than in a substantive direction.

67. The Law of the Non-Navigational Uses of International Watercourses. Comments and Observations from States, UN Doc. A/CN.4/447 and Adds. 1, 2 and 3 (1993). The limited input from States has affected many other issues examined by the Commission; see McRae, loc. cit. n. 61, at pp. 364-65 (also noting that 'direct communications by individual states are . . . vital to the functioning of the Commission').

mittee in its annual discussion of the ILC reports was limited.[68] In the absence of political guidance, the Commission was to find its own approach to the mitigation of normative indeterminacy.

The Commission was well aware of the need to draft provisions that would be broadly acceptable. The articles reflect the ILC's attempt to balance the need to be sufficiently innovative to alleviate the normative ambiguity of international water law, on the one hand, while still drafting a text that would be acceptable throughout the world, on the other. On many points the latter objective prevailed.[69]

4. THE ILC'S CONCEPTION OF WATER LAW: AN INCOMPLETE PARADIGM SHIFT

Substantive norms have become omnipresent in the recent discourse of international water law. Scholarship and declaratory policies often refer to purported norms for the protection of human needs, ecosystems and sustainability as a layer of legal argument separate from the open-ended balancing approach. The ILC acknowledged this emerging discourse and attempted to build on it. The Commission's work can be characterized as a cautious search for norms that were *more* than just another factor in the list of factors to be considered under the principle of equitable use: factors that weighed heavier than other factors, or would even *a priori* (without applying a balancing test at all) determine the legality of a certain use. The Commission eventually singled out a large number of substantive norms for that purpose. These seek, *inter alia,* to prevent significant harm[70]

68. This, too, is a problem generally applicable to the work of the Commission; see McRae, loc. cit. n. 61, at p. 365 (pointing, amongst other factors, to the 'ritualistic quality' of the annual debate in the Sixth Committee).

69. One example where the perception of political feasibility seems to have been given too much weight is the provision on dispute settlement. The Commission declined to propose dispute settlement procedures that can be unilaterally initiated by States that consider that their rights are affected (Art. 33). This is apparently based on the Commission's assessment of the political acceptability of its Articles. That assessment may be correct. One wonders, however, if a decision that mandatory dispute settlement is undesirable was not best left to States, allowing the ILC to propose a construction that would offer the most effective contribution to the resolution of conflicts of uses.

70. Art. 7.

and harmful conditions,[71] and to protect human needs;[72] to protect the ecosystem of watercourses;[73] and the sustainability of water resources.[74]

At face value, these substantive provisions appear to undermine the principle of equitable use. Effects of water uses on other watercourse States, on water needs for vital human needs, and on conservation and protection of water resources are interests to be taken into account in the application of the principle of equitable use.[75] The formulation of *separate* substantive norms for each of these interests suggests that these interests are somehow to be insulated from a balance of interests, or at least to be given more weight and priority. After all, if they would be just like any other interests that could be balanced and outweighed by different values, there would be no need for the formulation of separate provisions.

However, the Commission has not drawn that conclusion. Its forward looking, somewhat idealistic, acceptance of substantive norms is accompanied by a sustained, arguably overly realistic, acceptance of the doctrine of equitable use. The Commission finalized its articles at a moment when international water law is about to venture in new directions. The agenda for the future discourse of water law has already been set and there is little doubt that that will converge around the notion of protection of vital human needs, ecosystem protection and sustainability. However, the authority for these developments, mostly dating from the 1980s, emerged too late for the Commission, which stuck to the convenient doctrine of equitable use.[76] The Commission has recoiled from elaborating the legal implications of the substantive concepts for the doctrine of equitable use. Two features in particular limit the effect of the substantive norms for the doctrine of equitable utilization.

71. Art. 27.

72. Commentary on Art. 7, para. 14 and Art. 10(2).

73. Art. 20 (obligation to protect ecosystems); Art. 21(2) (obligation to prevent significant harm resulting from pollution); and Art. 23 (obligation to protect the marine environment).

74. Art. 24(2)(a).

75. Art. 6(1)(b), (d) and (g).

76. Most of the authority for substantive norms emerged during the latter stages of the Commission's work. However, the Commission was apparently not willing or able to adjust its perspective in the light of these new developments and stuck to the doctrine of equitable use. In his First Report, Special Rapporteur Rosenstock noted that although since the adoption of the draft articles at first reading States had adopted Agenda 21, the Convention on environmental impact assessment (Espoo, Finland, 25 February 1991, 30 ILM (1991) p. 800), and the Convention on the protection and use of transboundary watercourses and international lakes (*supra*, n. 48) 'nothing in these instruments requires fundamental change in the text of the draft as it stands after completion of the first reading.' First Report of Special Rapporteur Rosenstock, UN Doc. A/CN.4/451 (1993) para. 4. See for a critical discussion of this proposition: Hey, loc. cit. n. 6.

First, the substantive norms have been drafted in ambiguous terms. As I will further explain below, they rely strongly on the concept of due diligence that provides only illusory substance; on threshold determinations (significant versus non-significant harm) that are far from being unambiguous; and on concepts (human health and safety, ecosystems, harmful conditions) that are defined in highly flexible terms.

Second, the Commission did not discard the open-ended balancing of interests. For some substantive norms the ILC expressly made clear that they would *not* undermine the freedom to balance interests.[77] For others, the effect on the principle of equitable use is poorly conceptualized, but also these appear not to preclude balancing. The uncomfortable relationship between the doctrines of substantive entitlements and balancing of interests is best illustrated by the Commission's acceptance of the ageing 'no-priority' doctrine. Article 10(1) emphatically provides that 'no use of an international watercourse enjoys inherent priority over other uses.' This suggests that all uses (whether for disposal of waste, vital human needs, or hydro-electricity) are equal. States should determine priorities in watercourse agreements or on a case-by-case basis. The need to protect drinking water, to protect the river's ecosystem or the need to boost agriculture are all simply factors to be taken into account in that endeavour. But this doctrine is difficult to reconcile with a set of provisions for the protection of substantive interests that suggest a hierarchy of values.

The result is that the system of substantive law drawn up by the Commission consists of two components that uneasily co-exist – a set of substantive norms and the doctrine of an open-ended balancing of interests. The articles show international water law as a body of competing doctrines. They grant legitimacy to claims that uses of water need to be adjusted to protect vital human needs or to protect the ecosystem, but these claims remain susceptible to counter-claims that the uses serve beneficial purposes.

This does not at all negate the efficacy of substantive norms. However, their legal significance is not that of 'trump norms' that *a priori* outweigh conflicting norms. Rather, they will have a slow and diffuse influence on the language and idiom of water law. They provide senses of direction, value and purpose within which the doctrine of equitable utilization has to be applied.[78] As such, they may in particular cases alter the outcomes of balances of interests. However, these diffuse patterns of influence may not be the legal protection that vulnerable watercourse States and ecosystems are looking for and that the General Assembly

77. A notable example is the principle of sustainable water utilization. *Infra*, section 6.3.

78. C. Stone, *Should Trees Have Standing. Toward Legal Rights for Natural Objects* (1974) p. 41. See generally on the role of language in the development of the law: D. Kennedy, 'A New Stream of International Law Scholarship', 7 Wisconsin ILJ (1994) p. 1.

envisaged when it called on the ILC to develop international water law back in 1970.

In the following sections I will discuss in more detail the ILC's proposals for the development of substantive international water law and examine to what extent these alter the legal protection of certain interests. In section 5, I will examine what has been the most fundamental attempt to objectify international water law – the formulation of a prohibition on all uses involving significant harm. In section 6, I will examine provisions that seek to protect more specific interests. In section 7, I will discuss the indeterminate legal status of the substantive norms – a distinct but crucial factor which further undermines their impact on the doctrine of equitable use.

5. CHALLENGING THE EQUITABLE USE DOCTRINE: A PROHIBITION ON CAUSING SIGNIFICANT HARM

The Commission's most fundamental attempt to improve the protection of the interests of watercourse States from uncertain balancing processes was to develop an obligation to prevent 'significant harm' to other watercourse States. The Commission extensively discussed whether it should formulate a strict prohibition on uses involving significant harm that would preclude a balance of interests.[79] Eventually it declined to do so. However, it tried to prevent uses involving significant harm from being exlusively covered by the doctrine of equitable use by introducing the concept of 'due diligence'. As I will explain below, this concept makes substantive protection illusory, and will sustain the ambiguity of States' entitlements.

5.1 The relationship with the principle of equitable use

Harm is an inevitable consequence of international watercourse usage. It is simply one of the factors to be taken into account in a balance of interests under the principle of equitable use. Sometimes it can outweigh beneficial uses; in other cases States whose water uses cause harm may find a defence in the claim that

79. See for an overview of the discussions on this point in the ILC: S.C. McCaffrey, 'The Law of International Watercourses: Some Recent Developments and Unanswered Questions', 17 Denver JIL & Pol. (1989) pp. 505-526, at pp. 508-510; C.B. Bourne, 'The International Law Commission's Draft Articles on the Law of International Watercourses: Principles and Planned Measures', 3 Colorado J Int. Env. L & Pol. (1992) pp. 65-92, at pp. 85-88; M. Fitzmaurice, 'The Law of Non-Navigational Uses of International Watercourses – The International Law Commission Completes its Draft', 8 LJIL (1995) pp. 361-375.

their use was equitable. Affected States then have to tolerate the harm. However, one may argue that once harm reaches a certain magnitude (in the ILC's terminology: 'significant' harm), international law should preclude such a defence.

The introduction of a strict prohibition on causing significant harm would have been a departure from customary law. State practice, judicial decisions and legal scholarship provide little authority for an absolute prohibition on causing transboundary harm.[80] Yet, at face value, a development of the law may seem an attractive proposition. An obligation to prevent significant harm would entail less legal uncertainty than the principle of equitable use[81] and would provide better protection for affected States.[82] In 1988 the Commission appeared to appreciate these advantages and proposed that uses involving significant harm should be prohibited. Watercourse States would not be allowed a defence that such uses were in fact 'equitable'.[83]

However, having been heavily criticized by legal scholars, and not supported by Special Rapporteurs McCaffrey and Rosenstock and certain other members of the Commission, this solution did not make it into the final articles. The Commission recognized that as a general rule, applying to all forms of harm and all interests, a strict prohibition on causing significant harm would be too rigid.

80. The few often cited precedents for a no significant harm rule in particular the *Corfu Channel* Case (*GB* v. *Alb.*) ICJ Rep. (1949) 4, 22; the Trail Smelter Arbitration (*US* v. *Canada*), 3 RIAA (1938) p. 1905 and 3 RIAA (1941) p. 1911; and the Lac Lanoux Arbitration (*France* v. *Spain*), 12 RIAA (1957) p. 281) are highly context-specific and *do not* apply to uses of transboundary watercourses under general international law. See for a critical review of the utility of these references: Bourne, loc. cit. n. 79, at pp. 85-88. See also Wouters, loc. cit. n. 41, (concluding that US-Canada practice does not support a priority for a prohibition on causing significant harm as the governing rule for allocation of uses of international watercourses).

81. The ILC considers the threshold of 'significant' to be one that can be established by objective evidence. Commentary on Art. 3, para. 14. However, this appears to be an overstatement of the objectivity of the concept; in the absence of third party dispute settlement questions as to what is 'harm' and what is 'significant' are likely to result in complicated debates. See Wouters, loc. cit. n. 41, at p. 83 (arguing that the imprecision of the concept of [significant] harm belies the argument that it would be easier to determine a breach of the no significant harm rule than the principle of equitable use). See generally on the problems of threshold determinations: McCaffrey, loc. cit. n. 79, at pp. 518-519; A. Nollkaemper, *The Legal Regime for Transboundary Water Pollution: Between Discretion and Constraint* (1993) pp. 35-38.

82. Not surprisingly, Bangladesh is a fervent defender of the strict prohibition of significant harm; see Rahman, loc. cit. n. 6, at pp. 23-24.

83. Commentary on Art. 8 (later renumbered Art. 7), ILC Yearbook 1988 Vol. II, Part 2, p. 36. Note that the text of Art. 7, as formulated in 1988 and retained in the 1991 articles adopted at first reading, does not necessarily result in this conclusion; Art. 7 was intended as an obligation of due diligence, and cases of significant harm where the State of origin had acted diligently were not prohibited by Art. 7 and could still be examined under Art. 5 – a construction similar to the approach adopted upon second reading.

In certain cases, States have a legitimate entitlement to use water resources, even if that use causes significant harm to another State. A prohibition on causing significant harm would frustrate such entitlements. Once a downstream State uses waters for, for instance, irrigation or hydro-electricity, any new use upstream could harm these existing uses. A prohibition on any uses involving significant harm would be 'slanted in favour of the early developer.'[84] As in many watercourses lower basin States tend to develop earlier, a strict protection of existing rights would therefore impede opportunities for newly developing upstream States that pursue legitimate interests for the welfare of their societies. A case in point is the Nile.[85] Legitimizing claims based on a strict prohibition on causing significant harm would limit the development potential of Ethiopia.[86]

This does not necessarily mean that a rule for significant harm has to be abandoned and that States seeking to protect themselves from significant harm have to resort to an unqualified balance of interests. There is ample room for a legal rule that would make significant harm *more* than just another factor in the balance of interests and that would, for instance, create a *presumption* that uses causing significant harm are inequitable and thus wrongful, supplemented by a procedurally circumscribed exception.[87] While the ILC indeed thought it

84. Bourne, loc. cit. n. 79, at p. 71.

85. The 1959 Nile Waters Agreement allocates the water of the Nile to Egypt and Sudan. Agreement between the United Arab Republic and the Sudan for the full utilization of the Nile Waters, Cairo, 8 November 1959, UN Legislative Series (ST/LEG/SER.B/12), Treaty No. 34. Continuing political turmoil has prevented Ethiopia from developing uses of the waters of the Blue Nile before it leaves the country. Already in the 1950s Ethiopia planned, with United States support, the damming of the Blue Nile which threatened Egypt's control over the river; political turmoil meant that the dams remained firmly on the drawing board, but recently the threats for Egypt have again become real. See Pearce, op. cit. n. 7, at p. 117; idem at p. 286 (noting that 'In Cairo the fear remains that, if Egypt was once "the gift of the Nile", it may now be the gift of sluice-gate operators in Sudan and Addis Ababa'). Reportedly, Egypt has insisted that it would not accept any interference with the river upstream that could harm historical uses. (See 'As Thick As Blood. Water in the Middle East', *The Economist* (23 December 1995). See also J.W. Dellapenna, 'Treaties as Instruments for Managing Internationally-Shared Water Resources: Restricted Sovereignty vs. Community of Property', 26 Case Western Reserve JIL (1994) pp. 27-56, at pp. 47-51.

86. Dellapenna, loc. cit. n. 85, at p. 51. See for a similar argument against the prioritization of the obligation not to cause significant harm in the context of the Jordan River: Wenig, loc. cit. n. 36, at pp. 356-357 (noting that because of insufficient water resources, inevitably appreciable harm will result to some if not all of the States).

87. Such a construction was proposed by Special Rapporteurs Schwebel and McCaffrey, who suggested creating a presumption that a State that caused significant harm would have committed a wrongful act, unless it could show that the use was equitable. Art. 8(1) proposed in the Third Report of Special Rapporteur Schwebel, ILC Yearbook 1982 Vol. II, Part One, p. 103; Second Report of Special Rapporteur McCaffrey, ILC Yearbook 1982 Vol. II, Part One, para. 184. A comparable construction is proposed in Article I of the Complementary Rules applicable to

undesirable to return to the principle of equitable use, its proposed provision lacks such clarity. It proposes to make the application of a prohibition on causing significant harm contingent on the 'due diligence' concept. Article 7 provides:

> '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.
> 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 utilization, designed to eliminate or mitigate any such harm caused and, where appropriate, the question of compensation.'

For all cases where States act 'diligently' in utilizing water resources, Article 7(2) reintroduces the principle of equitable use as the governing principle.[88] The fact that a particular usage will cause significant harm does then not in itself constitute a basis for barring it.[89] The harm, even though significant, is reduced to one factor in the balance of interests that continues to prevail.[90] When a State does *not* exercise due diligence, it will breach Article 7(1), will have no recourse to the argument that its use is equitable and will thus commit a wrongful act.

International Water Resources, adopted by the International Law Association, Rep. of the Sixty-Second Conference, Seoul 1986, p. 278 ('A basin State shall refrain from and prevent acts or omissions within its territory that will cause substantial injury to any co-basin State, provided that the application of the principle of equitable utilization . . . does not justify an exception in a particular case').

88. Nonetheless, there are three important differences between balancing under Art. 7(2) and balancing 'directly' under Art. 5: first, the procedure under Art. 7(2) is more likely to be conducive to a solution satisfactory to the States involved because of its express requirement of consultations to achieve an equitable result; second, under Art. 7(2) the burden of proof for establishing that a particular use is equitable and reasonable appears to lie with the State whose use is causing significant harm (see the Commentary on Art. 7, para. 14); third, Art. 7(2) expressly states that consultations may lead to payment of compensation as a method of balancing the equities – of course, this is not excluded under Art. 5, but the fact that it is expressly mentioned in the context of significant harm may make it a legal consideration that influences negotiations between riparian States.

89. Commentary on Art. 7, para. 2.

90. Similarly: Fitzmaurice, loc. cit. n. 79, at p. 371. In fact, this also follows from the procedural scheme set out by the Commission: States have to proceed by way of notification, reply and consultations 'with a view to arriving at an equitable resolution of the situation' (Art. 17(1)). Thus, when the procedures are followed, planned measures are not examined under the 'no significant harm' rule. Art. 7(2) ensures that this also holds true for uses *other* than planned measures that result in significant harm – for instance, existing diversions that only after many years begin to cause drought or salinization downstream.

5.2 The due diligence concept

The Commission's choice for the concept of due diligence as the determinative criterion for the prohibition of significant harm is not helpful for mitigating the ambiguity of international water law. While its reliance on due diligence is in line with traditional international legal thinking with regard to transboundary interference, the concept provides only illusory substance. The due diligence obligation is an obligation of conduct.[91] But it is a matter of some uncertainty what such conduct might be. Unfortunately and remarkably so in view of the amount of time which the Commission spent on this issue over the course of more than 14 years, it has not clarified what it had in mind when it formulated the due diligence concept.

Of course, the contours of the due diligence concept are well established. At a very minimum, they encompass procedural requirements. In cases of planned measures that may cause significant harm, for instance, States have to assess the possible effects of envisaged uses and to consult with potentially affected States as regards these effects and the ways by which to mitigate them. Also, a due diligence obligation imposes certain requirements of alertness, precaution and effort to reduce risks involved in, for example, the building of a dam that entails risks for downstream States.[92]

However, the concept otherwise remains poorly defined. The Commission faithfully cites the well-known authorities.[93] It notes that a State has breached its due diligence obligation to prevent significant harm 'only when it has intentionally or negligently caused the event which had to be prevented.'[94] It does not provide a single clue, however, as to what this means in what will be the majority of cases to be examined under Article 7: cases of water diversion, damming and irrigation.[95] The Commission cites an observation by Lammers that holds true in the context of pollution harm, but that cannot possibly apply to significant harm in general: 'a watercourse state can be deemed to have violated its due diligence obligation . . . if it knew or ought to have known that the particular use of an international watercourse would cause significant harm

91. Commentary on Art. 7, para. 4.

92. See in the context of harm resulting from pollution: J.G. Lammers, *Pollution of International Watercourses* (1984) pp. 350-351.

93. Notably the Alabama Arbitration, reported in J.B. Moore, *History and Digest of the International Arbitration to Which the United States has been a Party*, Vol. I (1898) p. 572.

94. Commentary on Art. 7, para. 4.

95. The examples given by the Commission are taken from treaties dealing with pollution issues, see the Commentary on Art. 7, paras. 6-7, but these examples (mostly revolving around the question of when a State is responsible for acts of private persons) are not helpful to non-pollution cases and in any case do not apply to Art. 7 but rather to Art. 21(2) (see below).

to other watercourse states.'[96] For the reasons explained above, this criterion would be unacceptably disadvantageous for an upstream State like Ethiopia, that plans to develop its uses of a watercourse to the detriment of already developed downstream States. Knowledge of the harm is not the issue here: the question is whether the upstream State has a legitimate entitlement to the water. The Drafting Committee responsible for the final drafting of Article 7 took yet another approach and noted that the due diligence obligation means that the State of origin has an 'obligation to consider the interests of the other riparian state'.[97] Does this mean that, for instance, India would be free to continue to extract water from the Ganges to the detriment of Bangladesh if it should only 'consider' the effects downstream, irrespective of the influence of such a consideration on its decisions?

The Commission's proposal has left States guessing as to what it actually is that Article 7(1) obliges them to do and protects them from.[98] Replacing the indeterminacy of the principle of equitable use with that of due diligence is a development of questionable merit. The result is that the long-debated attempt to protect watercourse States from significant harm must now be considered as a failed attempt at legal development that would sustain the ambiguity of water law.

6. CHALLENGING THE EQUITABLE USE DOCTRINE: THE EMERGENCE OF PRIORITY INTERESTS

While a general and absolute prohibition against causing significant harm is thus not helpful in mitigating the ambiguity of international water law, a more fruitful approach is to shield *particular* interests from open-ended balances of interests. I will discuss three values that the ILC has singled out for special protection: the protection of vital human needs, the protection of ecosystems, and the sustain-

96. Commentary on Art. 7, para. 8, citing Lammers, op. cit. n. 92, at p. 349. Elsewhere, the Commission suggests that due diligence may be defined in terms of States having to adopt 'all necessary', 'all appropriate' or 'all practicable' measures (Commentary on Art. 7, para. 6), although each of these terms has different legal connotations and are definitively not identical to an obligation to prevent harm once a State 'knows or ought to have known' that harm would occur.

97. See the draft articles on the Law of the Non-Navigational Uses of International Watercourses and Commentaries thereto, Adopted upon Second Reading by the International Law Commission at its Forty-Sixth Session, UN Doc. A/CN.4/L.493 (1994) para. 2.

98. See also the remarks of Arangio-Ruiz, ILC Yearbook 1988 Vol. I, p. 141, para. 22 (noting that since an affected State cannot prove that the conduct of the State of origin did not meet the standard of due diligence, 'the rule which established responsibility thus ran the risk of remaining a dead letter').

ability of water utilization. As I will explain below, while the ILC followed emerging authority for these norms, the legal consequences of these norms remain unclear and they stand in an uneasy relationship with the doctrine of equitable utilization.

6.1 Protection of vital human needs

A first and obvious interest that qualifies for special legal protection is the protection of vital human needs such as drinking water and household needs. Human needs are one factor to be considered in a balance of interests under the principle of equitable use[99] and as such can be overridden by plans to make deserts bloom. However, emerging discourse suggests that vital human needs should be shielded from such unfavourable balancing processes.[100] Of course, there can be no complete legal guarantees for the protection of vital human needs. Even if States were to accept absolute obligations to protect human needs, there is simply too little water to comply with such obligations. One can easily imagine a case when both an upstream and a downstream State invoke a norm that postulates that they are entitled to water in order to satisfy vital human needs. However, this possibility does not negate the potential of a substantive norm – also in such cases the parameters of the balance would be narrowed and would thereby be more favourable to human needs than under the doctrine of equitable utilization.

The ILC has responded to pleas to strengthen legal protection of vital human needs. However, its proposed construction is not persuasive. The Commission considers that whereas significant harm in itself can still be lawful (see *supra*), significant harm to 'human health and safety' is 'inherently inequitable and unreasonable.'[101] Although the legal construction is overly implicit (it is contained in the Commentary rather than in a separate provision) and also somewhat

99. Art. 6(1)(b) refers to the 'social and economic needs of watercourse States.'

100. Agenda 21, para. 18.47. See generally: Hey, loc. cit. n. 6, at pp. 130-133. At river-basin level certain precedents exist for the priority of human needs; see e.g., the 1944 Treaty between Mexico and the United States relating to the utilization of the waters of the Colorado and the Tijuna Rivers and of the Rio Grande, that provides the highest priority to domestic and municipal uses; III UNTS, no. 25, Art. 3. See also D.A. Caponera, *Principles of Water Law and Administration. National and International* (1992) pp. 147-148 (defending the no-priority doctrine, but stating that 'The only priority which might be established in a water law is that for household and domestic purposes [and for drinking purposes]').

101. Commentary on Art. 7, para. 14. The Commission did not define the term 'human health and safety'. But this term may be interpreted broadly and may cover, for instance, a case of upstream irrigation that causes downstream threats to human health by resulting in a lack of drinking water, disease or lack of food.

roundabout (the ILC makes a legal distinction that does not have any legal consequence: if States fail to act diligently and cause significant harm, the use is wrongful under Article 7(1); if they act diligently yet cause significant harm, the use is inequitable and thus also wrongful), the envisaged legal result is clear: once it has been determined that a use results in significant harm to 'human health and safety', a State of origin has no defence that its use was equitable.

However, the Commission did not entirely discard the balancing of interests. It states that in balancing interests under the principle of equitable use, States have to give 'special regard' to 'vital human needs'.[102] This suggests that we should employ a category of 'vital human needs' that do *not* fall into the category of 'human health and safety' and that deserve 'less legal protection'.[103] But such a fine distinction is confusing. The Commission considers, for instance, that water uses that adversely affect 'the production of food [required] in order to prevent starvation' endangers vital human needs other than human health and safety and would thus be considered under Article 10(2), rather than under the stricter Article 7(1). Even the requirement for water to sustain human life and to prevent starvation would thus be merely an interest in need of 'special attention' and theoretically can be outweighed by other interests.

No other section in the ILC's Commentary more clearly reflects it reluctance to make value judgments that would curtail the freedom to balance interests. If indeed the articles (or any authoritative instrument adopted on the basis thereof) are to insulate human needs from open-ended balancing processes, the text should be substantially improved. As it is, the doctrines of priority substantive interests, on the one hand, and open-ended balancing of interests, on the other, co-exist uneasily.

6.2 Protection of ecosystems

A second interest that many feel deserves more protection than may be obtained under the principle of equitable use is the protection of river ecosystems.

102. Art. 10(2). For reasons which are unclear this provision is not included in Art. 6, which would have been a much more appropriate place. See also Benvenisti, loc. cit. n. 6, at pp. 407-408.

103. The category 'vital human needs' presumably covers harm to human health and safety that does not attain the level of 'significant'. The Commission does not define vital human needs and leaves it unclear whether they would include, for instance, effects on people's livelihood such as forced resettlement in the case of building dams. See for examples of the wide variety of effects in the domestic context the effects of the proposed Three Gorges Dam project in China, as described in Second International Water Tribunal, *Dams* (1994) pp. 142-166.

Protection of watercourses is only one factor in the balance of interests[104] and can be outweighed by, for instance, interests of development of watercourses, and social and economic needs.[105] However, there is rapidly emerging authority for a rule that accords special legal protection to the interests of pollution prevention[106] and more generally to the protection of ecosystems.[107] The Commission recognized this authority, formulated a number of norms that appear to prioritize ecosystem protection, but ultimately did not appear to have discarded the balance of interests.

Ecosystem protection has not been effectively conceptualized in the articles. In fact, it is unclear whether the articles apply at all to a major part of river ecosystems: land areas adjacent to the main stream.[108] The Commission proposed Article 20 that appears to apply to land areas,[109] but the definition of the scope of the articles cast doubt on that conclusion.[110] To the extent that

104. Art. 6(1)(f). Note that this provision is narrowly formulated as it ony refers to the conservation and protection of 'the watercourse' and does not take into account the broader ecosystem interests of river-basins.

105. Art. 6(1)(f) and 6(1)(d).

106. See Lammers, op. cit. n. 92; Fourth Report by Special Rapporteur McCaffrey, ILC Yearbook 1988 Vol. II, Part 1, paras. 38-88.

107. See the references in the Commentary on Art. 20, paras. 5-9.

108. For instance, deforestation on the slopes in the river basins of the Himalayas is intractably linked to erosion and floods downstream; see L.A. Teclaff, 'Treaty Practice Relating to Transboundary Flooding, 31 *Natural Resources Journal* (1991) pp. 109-122, at p. 118. The canalization of the Rhine has caused drops in the river bed, lowering of the water-table in the alluvium along the flood plain and has resulted in several kilometers on either side of the river, fields and ancient forests of oak, elm and willow drying out. Pearce, op. cit. n. 7, at p. 38. The Maga Dam south of Lake Chad has dried out neighbouring areas and has thereby destroyed antelope habitats and undermined survival conditions for elephants. *Ibid.* at p. 168.

109. The Commission cites a definition of ecosystems that states that the term refers to 'an ecological unit consisting of living and non-living components that are interdependent and function as a community.' Commentary on Art. 20, para. 2. The Commission did not attempt to define what the boundaries of such a unit might be, and thus it remains uncertain to what extent the Commission intended land uses to be covered. See generally: R.W. Thomson, 'Ecosystem Management: Great Idea, But What is It. Will it Work, and Who Will Pay?', 9 Nat. Resources & Env. (1995) pp. 42-72, at p. 70 (noting, in a domestic context, that 'before the government can "manage along ecosystem boundaries" it must delineate ecosystems. Yet, how and where will the line be drawn?'). Cf., E.O. Wilson, *The Diversity of Life* (1992) p. 396 (defining ecosystem as 'The organisms living in a particular environment, such as a lake or a forest (or, in an increasing scale, an ocean or the whole planet), and the physical part of the environment that impinges on them').

110. Art. 1(1) states that the articles apply to uses of international watercourses and 'to measures of conservation and management *related to the uses of those watercourses*' (emphasis added). Art. 2(b) defines 'watercourse' as 'a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole.' Several members of the Commission and representatives in the Sixth Committee made a conscious effort to define 'watercourse systems' so as to *exclude*

river ecosystems *are* covered, their legal protection is uneven – they remain vulnerable to challenges based on balancing of interests.

Article 5 stipulates that when States utilize watercourses in an equitable manner, they shall do so 'consistent with adequate protection of the watercourse.' This suggests that this article requires a minimum level of protection of the watercourse – uses of watercourses that are not consistent with adequate protection are not equitable or reasonable. Although the question of what is 'adequate protection' invites obvious dispute,[111] this clause suggests that protection interests cannot be simply overridden by presumed beneficial interests. However, Article 5 is elaborated by two provisions that cast doubt on this conclusion and, in a retreat comparable to the Commission's treatment of vital human needs, opens the door to open-ended balancing.

First, the Commission formulated a separate provision for the protection of ecosystems: 'Watercourse States shall, individually or jointly, protect and preserve the ecosystems of international watercourses.'[112] The Commission considers the provision to be an application of the requirement of Article 5 which determines that, in pursuing equitable use, States shall use international watercourses 'consistent with adequate protection thereof.'[113] Conceivably, the destruction of the ecosystem of a river could thus conflict with Article 5 and thus block a defence that the use was beneficial.

However, it is unclear whether the Commission intended that legal result. Article 20 is a hortatory obligation. It is comparable to, for instance, Article 192

land in the watershed. Cf., the Second Report by Special Rapporteur Schwebel (noting that the employment of the term 'watercourse system' avoids the connotation of land area), ILC Yearbook 1982 Vol. II, Part 1, para. 512. Also after the finalization of the Commission's work, voices in the Sixth Committee were of the opinion that land uses are *not* covered by the scope of the articles: see the Report of the ILC on the Work of its Forty-Third Session (1991). See also the Topical Summary of the discussion held in the Sixth Committee of the General Assembly during its Forty-Sixth session, prepared by the Secretariat, UN Doc. A/CN.4/L.469 (1992) para. 46. See on the relationship between the scope of the articles and Art. 20: V.P. Nanda, 'The Law of the Non-navigational Uses of International Watercourses: Draft Articles on Protection and Preservation of Ecosystems, Harmful Conditions and Emergency Situations, and Protection of Water Installations', 3 Colorado J Int. Env. L & Pol. (1992) pp. 175-207; Brunnee and Toope, loc. cit. n. 46, at pp. 58-60.

111. The Commission has given a broad reading to the term 'adequate protection', that may cover control of floods, pollution, erosion, mitigation of drought and control of saline intrusion. Commentary on Art. 5, para. 4.

112. Art. 20.

113. Commentary on Art. 20, para. 3. However, this construction is not persuasive as Art. 20 appears to have a much broader scope (including land areas) than Art. 5.

of the United Nations Convention on the Law of the Sea.[114] But, whereas the latter provision finds detailed implementation in the Law of the Sea Convention, Article 20 stands isolated. The obligation is so generally formulated that it is difficult to know what it actually is that States would be obliged to do. The Commission has provided few indications as to what is meant by the protection of the ecosystem of a river. It is, for instance, remarkable that even though Special Rapporteur Schwebel already referred to this issue in 1980,[115] neither the text nor the commentary makes any reference to such a simple but important principle that when States build dams in an international watercourse that contains fish populations, they construct so as to ensure the conservation of the fish stock.[116] Due to its generality, it is very doubtful whether a State in whose territory an ecosystem is destroyed by usages in another State can establish wrongfulness on the basis of Article 20, without resorting to Article 5.

Second, although pollution is not the only and even not the main threat to river ecosystems,[117] the Commission formulated a special and apparently more stringent provision on pollution prevention. Article 21(2) reads in relevant part:

> '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 water-course'.[118]

114. United Nations Convention on the Law of the Sea, 10 December 1982, 21 ILM (1982) 1261. Cf., the analyis of the comparable Art. 192 of the United Nations Convention on the Law of the Sea: 'Commentary to Art. 192', in M.H. Nordquist et al., eds., *United Nations Convention on the Law of the Sea 1982 – A Commentary*, Vol. 4 (1991) p. 39.

115. ILC Yearbook 1980 Vol. II, Part 1, para. 27.

116. Other aspects which are missing include the notions of beneficial flooding to preserve wetlands and estuarine ecosystems (Teclaff, loc. cit. n. 108, at p. 115; T. Scudder, 'The Need and Justification for Maintaining Transboundary Flood Regimes: The Africa Case', 31 *Natural Resources Journal* (1991) pp. 75-107) and the preservation of watershed forests (Teclaff, loc. cit. n. 108, at pp. 118-119).

117. In many degraded watercourses, pollution has been only one cause of degradation, and moreover the cause that is the easiest to repair. In the river Rhine, for instance, further structural causes involve damming, cutting the river off from floodplains, and canalization – 'uses' that in combination with pollution virtually led to the death of the ecosystem in the 1970s. Pearce, op. cit. n. 7, at pp. 36-40; Nollkaemper, loc. cit. n. 9.

118. This provision has a broad scope. Apart from 'traditional' cases of pollution, such as the introduction of hazardous substances by an upstream industry, the rule also appears to apply to uses that decrease the flow of watercourses and result, for instance, in salinization of waters downstream. Art. 21(1) defines 'pollution of an international watercourse' as 'any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.'

Although drafted in more detail than Article 20, this provision too does not discard reliance on balancing interests. The Commission recoiled from an express value-judgment that a use that causes significant harm by pollution is wrongful, whatever the benefits of that use for a State of origin. First, the obligation to prevent significant harm by pollution is only a due diligence obligation.[119] Second, the Commission appears[120] to suggest that a State which acts diligently, yet causes significant harm, can invoke a defence that the use was equitable.[121] At earlier stages of its work, the Commission considered a prohibition on causing significant harm that would only in exceptional circumstances relieve a State of origin from responsibility.[122] A defence that a particular usage was nonetheless 'equitable' did not belong to these circumstances.[123] Eventually the Commission

119. In contrast to Art. 7, Art. 21 does not contain any wording to that effect. This suggests that Art. 21 should be read as an absolute obligation not permitting a defence of due diligence. See on the importance of formulation for the determination of the nature of an obligation: R. Pisillo-Mazzeschi, 'Forms of International Responsibility for Environmental Harm', in F. Francioni and T. Scovazzi, eds., *International Responsibility for Environmental Harm* (1991) pp. 15-35, at pp. 20, 24, 28; Nollkaemper, op. cit. n. 81, at p. 49. Only in one line in its Commentary did the Commission mention in passing that we are here concerned with a due diligence obligation; see the Commentary on Art. 21, para. 4. See McCaffrey, loc. cit. n. 79, at p. 520 (citing some members who opposed a due diligence test because it would place too heavy a burden on victim States). It may be that the Commission declined to change the standard of responsibility because the issue was being addressed in its work on international liability for injurious consequences arising out of acts not prohibited by international law. McCaffrey, loc. cit. n. 79, at p. 521 (indicating that the Commission wished to prevent an overlap of work and therefore it initially side-stepped the issue). However, logistic reasons for Commission procedure will provide little solace to States that invoke a water law treaty to seek protection from transboundary harm. Even if the Commission would finalize its work on liability with unexpected progressive outcomes, that would not affect the water law treaty that, if the aim of the General Assembly is realized, will be concluded before the Commission comes close to finalizing its discussion on liability.

120. The word 'appears' is appropriate – for no apparent reason the Commission did not discuss this critical question to which it had devoted so much of its energy in the context of Art. 7.

121. Since a State that acts diligently yet causes significant harm can act lawfully, it must also be able to act in conformity with the principle of equitable use.

122. See for a discussion of earlier ILC proposals to this effect: McCaffrey, loc. cit. n. 79, at pp. 524-525. Special Rapporteur Rosenstock proposed in his first Report that in the case of pollution Art. 5 would be subordinate to Art. 7, but that would be rebuttable by demonstrating 'extraordinary circumstances'; UN Doc. A/CN.4/451 (1993) para. 20.

123. There are also suggestions to that effect in the literature: Lammers, op. cit. n. 92, at pp. 363-364; Handl, loc. cit. n. 6, at p. 132.

did not pursue this option and formulated a regime that would leave the substantive provisions and the balancing doctrine to co-exist.[124]

The legal regime for ecosystem protection proposed by the Commission signals the evolution of normative expectations. Even the generally worded Article 20 can legitimate claims and may alter the outcomes of balancing acts.[125] However, the development of a legal rule that challenges the doctrine of sharing remains incomplete. Certain parts (land-areas) may fall outside the scope of the articles altogether; pollution is treated more stringently than ecosystem protection in general; and no case of ecosystem destruction appears to be insulated from balancing processes. The articles appear to leave open the possibility that States prioritize massive dams and industrial projects at the cost of downstream ecosystems. Both in terms of contents and envisaged legal effects, the articles provide only the starting point for a true challenge to the doctrine of equitable use.

6.3 Sustainability of water use

A third emerging substantive concept that may potentially may set certain parameters to what are acceptable outcomes of balancing processes is the concept of sustainability. This concept had made rapid headway in State practice and legal literature.[126] While its status and contents remain elusive, at a minimum, it appears to cover certain aspects considered above, including the protection of the watercourse and the protection of vital human needs, adding the need to consider long-term horizons in planning processes, and to shift from traditional notions of bilateralism towards common responsibility.[127] Conceivably, a thus constructed concept of sustainability could define normative contours for the

124. Art. 5 somewhat confuses this latter conclusion, as it states that, in pursuing equitable use, States 'shall use international watercourses consistent with adequate protection thereof.' This suggests that even when significant pollution is lawful under Art. 21(2) because the State of origin has acted diligently, Art. 5 may declare it unlawful. Or is it conceivable that significant harm from pollution is consistent with 'adequate protection'? The ILC has not adequately addressed these issues.

125. Cf., D. Bodansky, 'Protecting the Marine Environment from Vessel-Source Pollution: UNCLOS III and Beyond', 18 Ecology LQ (1991) pp. 719-720 (drawing a comparable conclusion with regard to the general obligations of the Law of the Sea Convention).

126. It is included, e.g., as an objective in Art. 2 of the 1994 Convention on the Protection of the Danube, *supra*, n. 21; Art. 2(5)(c) of the Helsinki Convention, *supra*, n. 48; Art. 1 of the Mekong Agreement, *supra*, n. 24. See generally for an overview of relevant authorities: Hey, loc. cit. n. 6.

127. M. Kroes, 'The Protection of International Watercourses as Sources of Fresh Water in the Interest of Future Generations', in Brans et al., eds., op. cit. n. 10; Brunnee and Toope, loc. cit. n. 46, at pp. 65-68.

freedom of balancing interests under Article 5 – not every water use is equally compatible with the notion of sustainability.[128]

The Commission recognized the potential impact of sustainability on the principle of equitable use. However, the emergence of the concept came too late for the ILC. Like its treatment of the concept of ecosystem protection, its treatment of sustainability shows that the Commission finalized its articles at a moment when international water law is about to venture into new directions. The Commission noted the emergence of the concept, but declined to formulate a provision that would make the obligation to share the waters of an international watercourse contingent on the objective of attaining sustainable utilization.[129] In what might be its most express decision not to make value-judgments that would pre-empt the freedom of states, the Commission instead opted for the utilitarian, value-neutral concept of optimal utilization.[130] Elsewhere, the articles do require countries to cooperate with a view to 'planning the sustainable development of an international watercourse.'[131] However, the Commission hastened to add that this would not undermine the freedom to balance all the interests involved.[132]

Like the concepts of protection of vital human needs and ecosystems, the concept of sustainability is supported by the Commission, but its contents and legal effects are poorly conceptualized and its efficacy in challenging the doctrine

128. Brunnee and Toope, loc. cit. n. 46, at p. 67 (arguing that the notion of sustainable development must be anchored in international watercourse law, and must be linked to the concept of equitable use).

129. Several members considered the concept too vague or to be stil evolving. See the dicussion by Kroes, loc. cit. n. 127. The Commission confined itself to citing from Agenda 21 in the Commentary on Art. 5, para. 3. See for a proposal to include an express definition of the concept of sustainable utilization in the articles: J.L. Westcoat, Jr., 'Beyond the River Basin: the Changing Geography of International Water Problems and International Watercourse Law', 3 Colorado J Int. Env. L & Pol. (1992) pp. 301-330, at p. 326.

130. Art. 5 requires that States shall use and develop international watercourses with a view to attaining optimal utilization. The Commission notes that optimum utilization refers to the greatest possible stafisfaction of all the needs of watercourse States (Commentary on Art. 5, para. 3). But the concepts are completely value-neutral. Do more chloride discharges in France, which sustain employment in Strasbourg, but cause financial damage in the Netherlands, enhance or reduce overall benefits? See generally: G. Hafner, 'The Optimimum Utilization Principle and the Non-Navigational Uses of Drainage Basins', 45 Austrian J Pub. IL (1993) pp. 113-146.

131. Art. 24(2)(a).

132. The Commentary on Art. 24, para. 3 notes that this provision 'in no way affects the application of articles 5 and 7.' This lack of clarity as to whether the concept had an independent meaning for the principle of equitable use was criticized in comments by the United States on the draft adopted upon first reading, which proposed to delete the concept: UN Doc. A/CN.4/447 (1993) p. 43.

of equitable use is illusory. The acceptance of separate norms for these interests combined with continued acceptance has transformed water law into a body of competing doctrines. As a practical matter, claims that uses of water need to be adjusted to protect vital human needs, ecosystem protection or sustainability remain vulnerable to counterclaims that the responsible uses serve beneficial purposes.

7. THE LEGAL STATUS OF THE SUBSTANTIVE NORMS: SUSTAINED AMBIGUITY

The slow advent of substantive norms, as examined in the previous sections, is matched by their indeterminate legal status. In the ILC's conception of water law, it is unclear whether States will actually be able to rely on the substantive norms as a matter of law – even irrespective of ambiguities in the formulation of these norms.

The ILC has not made a distinction between codification and progressive development during the course of its work,[133] but there is little doubt that the substantive provisions are not declaratory of customary law but are proposals for 'progressive development'.[134] The question for the ILC, and now for States, is whether the substantive norms should become binding on States as a matter of treaty law: (i) in cases not covered by specific watercourse agreements; and (ii) in cases where States have agreed or are to agree on such agreements. On both points, the ILC proposed highly cautious constructions that further diminsh the impact of the substantive norms for the doctrine of equitable use. The substantive norms are not only soft in terms of their contents, but also in terms of their legal nature.

133. See S.C. McCaffrey, 'Background and Overview of the International Law Commission's Study of the Non-Navigational Uses of International Watercourses', 3 Colorado J Int. Env. L & Pol. (1992) pp. 17-29, at p. 28. This conforms with long-established practice in the Commission; see Sinclair, op. cit. n. 55, at pp. 46-47.

134. Special Rapporteur Rosenstock was cited as stating that the articles 'reflect the law as it is and not as it should be'; see Rahman, loc. cit. n. 6, at p. 18. However, this is surely an overestimation of our knowledge of the opinions and practice of States on issues such as ecosystem protection and the protection of human needs. The exception is arguably the customary obligation to prevent significant harm resulting from pollution; see for an analysis of the relevant sources Lammers, op. cit. n. 92, but even here evidence is equivocal. See generally D. Bodansky, 'Customary (and not so Customary) International Environmental Law', 3 *Indiana Journal Global Legal Studies* (1995) pp. 105-119.

In line with its tradition,[135] the ILC decided to draft a treaty. But doubts as to the acceptability of its provisions forced the Commission to draft what it called a framework treaty.[136] This choice has obscured the envisaged legal effects of certain provisions. The framework treaty was not only to lay down certain legal rights and duties that could help resolve conflicts of uses in the absence of agreement,[137] but also to provide guidance and common ground to help States negotiate watercourse agreements.[138] Unfortunately, the Commission never expressly made a distinction between norms that were to be legally binding and norms that were to be 'merely' guiding rules. But it created the impression that its vaguely formulated substantive norms belonged to the second category.[139]

135. See Sinclair, op. cit. n. 55, at pp. 37-39.

136. The Commission agreed in principle on the framework approach in 1980; see ILC Yearbook 1980 Vol. II, Part 2, pp. 112-13. See the Commentary on the framework approach in the articles adopted upon second reading: Commentary on Art. 3.

137. Idem. The Commission created confusion on the last point by inserting Art. 3(1), that provides that: 'Watercourse States may enter into one or more agreements . . . which *apply* and adjust the provisions of the present articles to the characteristics and uses of a particular international watercourse' (emphasis added). The word 'apply' suggests that in the absence of watercourse agreement(s) the articles do not apply at all. During the 1994 debate in the Sixth Committee, some States indeed considered that the articles, even if adopted as a convention, would have no direct legal effects at all; see e.g., the remarks by Caflisch (observer for Switzerland), UN Doc. A/C.6/49/SR.22 (1994) para. 67. If the intention of the Commission to create legal rules that actually would govern uses in the absence of a watercourse agreement was a genuine one, and if the discussion of the Commission on the legal implications of the article for existing and future agreements (see above) was not entirely redundant, we must assume that the word 'apply' does not imply that the articles lack any effect in the absence of such application. This is also implied by Art. 33, which provides that 'any watercourse dispute concerning a question of fact or the interpretation or application of the present articles' shall be settled in accordance with that article.

138. Commentary on Art. 3, para. 2.

139. It appears that the Commission attempted to *imply* differentiation in the way in which the articles were formulated. Certain articles, by virtue of their formulation, would only serve as guidelines and thus could not be subjected to dispute settlement procedures. Unfortunately, this proves to be an extremely unreliable guide. As explained above, the text suffers from a defect common to all framework conventions: normative ambiguity.

The potential impact of the substantive provisions is further reduced as they would have no legal effect for existing[140] or future[141] agreements. They would leave States complete freedom to strike the balance as they prefer. Thus, whereas any negotiation would take place within the 'legal' framework of the equitable use doctrine, they would not in any way be hampered by substantive norms. The unsatisfactory result is that the articles contain no objection to an agreement to build a dam that yields hydro-electric power for riparian States, yet destroys the ecosystem of a river. They would contain a neutral stance towards, for instance, a treaty like that on the Gabcikovo barrage,[142] if that were to be concluded after the entry into force of the convention, even though many think that it insufficiently protects the ecosystem of the basin.[143] The articles would not contain any objection to an agreement that makes a desert bloom, but denies basic water supplies to populations living in the river basin.[144]

These constructions do not necessarily nullify the effects of the articles. As I have already suggested in section 4, the ILC's work has added to emerging authority that will influence the discourse, the language and the concepts that dominate the debate on international water law. The substantive norms may influence the negotiations of treaties on a river-basin basis and legitimize claims

140. Earlier drafts included a provision that the articles would not affect treaties currently in force. See Art. X as provisionally adopted by the Commission at its Thirty-second session in 1980; ILC Yearbook 1984 Vol. II, Part 2, p. 85. The present text does not contain such a clause. Special Rapporteur Rosenstock considered it undesirable to presume the continued validity of existing treaties which are inconsistent with the articles and suggested that States were in the best position to avoid the unintended application of the draft, for instance by making a declaration upon accepting the instrument. R. Rosenstock, *First Report on the Law of the Non-Navigational Uses of International Watercourses*, UN Doc. A/CN.4/451 (1993), para. 14.

141. Art. 3 provides that: 'Watercourse States may enter into one or more agreements . . . which apply and adjust the provisions of the present articles to the characteristics and uses of a particular international watercourse or part thereof.'

142. Treaty concerning the construction and operation of the Gacikovo-Nagymaros system of locks, Budapest, 16 September 1977, 32 ILM (1993) p. 1247.

143. See for an account of the history and environmental consequences of the dam: Pearce, op. cit. n. 7, at pp. 256-262; for an argument that the dam does *not* cause unacceptable environmental consequences: M.B. Liska, 'Development of the Slovak-Hungarian Section of the Danube', in Blake et al., eds., op. cit. n. 6, at p. 175.

144. It is only when a third State – which is not a party to an agreement – would be adversely affected to a significant extent that the Commission proposes to restrict States' freedom to conclude agreements. Art. 3(2) of the ILC Articles. On these points the ILC articles did not follow the example set by the 1992 Helsinki Convention, *supra*, n. 48, that does require that such arrangements conform to the main principles set forth in the Convention. Art. 9(1).

and counter-claims of States that seek to resolve a conflict of use.[145] Given that very few conflicts of uses are resolved by resorting to judicial means, these functions are critical. However, this is hardly the evolution of international water law that responds to the needs identified by the General Assembly 27 years ago: to improve the legal protection of watercourse States that have no recourse to any special agreement or to any dispute settlement body.

States now face the question whether to lay down the ILC's proposals in a treaty and to accord a firmer status to substantive norms of water law.[146] The wisdom of that choice will depend on the depth of commitment with which States are willing to accept any instrument. However, the above analysis suggests that if the substantive norms are to fulfil their function in alleviating the ambiguity of the principle of equitable use and to enhance the efficacy of procedural arrangements, States should dramatically improve on the text of the articles, not only in terms of content but also in terms of their envisaged legal effects.

8. FINAL OBSERVATIONS: BEYOND EQUITABLE USE?

The ILC has sought to alleviate the reliance on the indeterminate principle of equitable use by formulating not only procedural, but also substantive provisions for the allocation and protection of water resources. The provisions proposed by the ILC offer an improvement on the existing situation, where many substantive provisions lack authoritative formulation at the global level. However, the proposed substantive provisions will only very partially reduce reliance on equitable balancing. Three features stand out.

First, the substantive norms have been drafted in ambiguous terms that are hardly an improvement on the principle of equitable use. The articles rely strongly on the indeterminate concept of due diligence and employ poorly defined terms (human health and safety, ecosystems). Second, the substantive norms can be simultaneously invoked by opposing States. When different substantive provisions (e.g., vital human needs in India and ecosystem protection in

145. S. McCaffrey and R. Rosenstock, 'The International Law Commission's Draft Articles on International Watercourses: an Overview and Commentary', 5 Rev. EC & Int. Env. L (1996) pp. 89-96, at p. 94. See generally on the potential effects of 'soft norms': G. Handl, 'Environmental Security and Global Change: The Challenge to International Law', 1 YB Int. Env. L (1990) pp. 3-33, at pp. 7-8; remarks by W.M. Reisman in the Panel on 'A Hard Look at Soft Law', 82 Proc. Am. Soc. Int. L (1988) pp. 373-330; M.A. Levy, 'European Acid Rain: The Power of Tote-Board Diplomacy, in P.M. Haas, ed., *Institutions for the Earth. Sources of Effective International Environmental Protection* (1993) pp. 75-77.

146. The General Assembly has recommended that States negotiate a treaty. *Supra*, n. 2.

Bangladesh) conflict, a balance of interests is still needed. Third, the relationship of the substantive norms with the principle of equitable use is poorly defined. Also considering the absence of mandatory dispute settlement procedures, the combined effect of these features is that the ILC Articles, if adopted as law, will change little in the prevailing practice where conflicts of uses in river basins will need to be resolved by searching for contextual equity.

The substantive provisions may nonetheless fulfil a positive function. They may provide examples for watercourse agreements, provide legitimization (albeit of an uncertain legal nature) for claims and counter-claims, and thereby influence the contours of the balance of interests. This more diffuse function is perhaps as much as one can reasonably expect from a global instrument that will apply to a variety of conflicts in vastly different river-basins. However, also this function requires that States take a critical look at the conceptual problems displayed by the articles. In this article I have identified some of the problems that need to be resolved before the articles are adopted, either as a treaty or as a non-treaty instrument.

This brings us to the question whether international water law, as conceived by the ILC, is ripe for formulation in a globally binding treaty. This question should be answered in the negative. A treaty drafted along the lines of the articles is unlikely to change anything in the prevailing search for contextual equity. Drafting a treaty that will determine legal rights and duties requires a minimum standard of clarity and precision that the articles do not contain.

The progressive development of water law is a continuous and long-term process. The work of the ILC has been part of that process. Its contribution may best be optimized by not adopting as a treaty a text that resembles the proposed articles. Thereby, the articles will not have a freezing effect on the development of the law. They will then function as a useful but small part of that long-term process that does not directly result in rights and duties that States can rely upon in resolving conflicts of uses, but in slow changes to the idiom, language and conceptual basis of international water law, and in diffuse influences on States' perceptions of their priorities and entitlements – a process that takes much longer than the two decades during which the Commission has been involved with this issue.[147]

147. Westcoat, loc. cit. n. 129, at p. 330.