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**Second report on the law of the non-navigational uses of international watercourses, by  
Mr. Stephen M. Schwebel, Special Rapporteur**

Topic:  
**Law of the non-navigational uses of international watercourses**

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#### ABBREVIATIONS

FAO	Food and Agriculture Organization of the United Nations
I.C.J.	International Court of Justice
<i>I.C.J. Reports</i>	<i>I.C.J., Reports of Judgments, Advisory Opinions and Orders</i>
ILA	International Law Association
P.C.I.J.	Permanent Court of International Justice
<i>P.C.I.J., Series A</i>	<i>P.C.I.J., Collection of Judgments</i> [through 1930]
<i>P.C.I.J., Series A/B</i>	<i>P.C.I.J., Judgments, Orders and Advisory Opinions</i> [from 1931]
UNEP	United Nations Environment Programme

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## CHAPTER I

### Status of work on the topic

#### A. The Special Rapporteur's first report

1. A first report to the Commission on the law of the non-navigational uses of international watercourses was introduced by the Special Rapporteur in 1979, at the Commission's thirty-first session.<sup>1</sup> Chapter I of the report dealt with the uncommon physical characteristics of water, that most common of chemical compounds. The nature of the hydrologic cycle, the limited capacity of water to purify itself and the factors governing the volume and flow of water were examined in order to ascertain the physical characteristics and limitations that must be taken into account if legal principles regarding water use are to be effective.

2. Chapter II of the first report took up the thorny question of the proper scope of a study of the non-navigational uses of the waters of international watercourses. It indicated that, in order to ensure harmony between the physical laws governing water and the legal rules governing the use of fresh water, the drainage basin must be taken as the unit for the formulation of such rules. It recognized, however, the divergencies in views among States on that fundamental issue of scope, and the position of a number of States that acceptance of the basin concept would go beyond what should be accepted at this time. In their view, earlier concepts, such as the definition in the Final Act of the Congress of Vienna (1815)<sup>2</sup> of

international rivers for the purpose of navigation only should be preserved and generally applied. Prior discussions in the Commission and in the Sixth Committee of the General Assembly regarding international watercourses had established the strength with which those divergent views were held. Accordingly, the report suggested that an effort should be made to move ahead with the preparation of articles, to the extent possible, without an initial definition of an international watercourse.

3. The great diversity of watercourses was discussed in chapter III of the report. It was recognized that there was a need for a method of dealing with watercourse problems that would permit the development of principles of general applicability within a framework sufficiently flexible to allow adaptation to the unique aspects of individual watercourses. To that end, chapter III proposed a series of articles on "user agreements". A user agreement would be applicable to a specific watercourse, and all States which contributed to or made use of the water of that watercourse could become parties to the agreement, whether or not they became parties to the draft articles which, it was contemplated, the Commission would produce.

4. Chapter IV contained a series of draft articles providing for the collection and exchange of data relating to the quantity, rate of flow and withdrawal of fresh water from international watercourses. Requirements for collection and exchange of data on water quality, however, would be dealt with in user agreements.

5. In presenting his first report to the Commission, the Special Rapporteur emphasized that the articles

<sup>1</sup> *Yearbook . . . 1979*, vol. II (Part One), p. 143, document A/CN.4/320.

<sup>2</sup> For the text of the Final Act, see A. Oakes and R. B. Mowat, eds., *The Great European Treaties of the Nineteenth Century* (Oxford, Clarendon Press, 1918), p. 37.

put forward were not offered for the purpose of adoption by the Commission; they were very tentatively submitted as food for thought, not consumption, to illustrate a proposed methodology to be followed in seeking to resolve some of the problems presented by this extremely complicated subject and to obtain the views of the Commission on the merits of that approach.

## B. Comment in the Commission on the Special Rapporteur's first report

6. The Commission did not take up the proposed articles with a view to their adoption, revision or rejection but instead engaged in a general discussion of the proposals that had been put forward.

7. The statements of Commission members indicated that there was broad support for the concept advanced by the Special Rapporteur of a "framework convention" which would "set out general, residual principles of law of the non-navigational uses of international watercourses", and would be supplemented by "user" or "system" agreements in which the States of a particular watercourse would provide for the detailed arrangements, rights and obligations governing the uses of the watercourse in question.<sup>3</sup>

8. A substantial number of questions were raised regarding both the manner in which those principles should be developed and the meaning and scope of the terms "user agreement" and "user State", and whether the term "user" was adequate to reflect the varying situations that would arise.<sup>4</sup>

9. Support was voiced by some members for formulation of principles that would deal with specific uses such as irrigation, hydroelectric production and domestic consumption. Other members of the Commission proposed development of "a set of norms and rules applicable to all kinds of uses of such watercourses".<sup>5</sup> A few members doubted that the subject was ripe for codification.<sup>6</sup>

10. In the closing debate, the Special Rapporteur suggested that it would be possible to take up, as the next step, any one of four aspects of the topic:

- (a) principles respecting specific uses;
- (b) rules on abuses of water and effects of the uses of water, such as pollution;
- (c) general principles applicable to the uses of water;

<sup>3</sup> See *Yearbook . . . 1979*, vol. II (Part Two), p. 166, document A/34/10, para. 134.

<sup>4</sup> See, for example, the statements by Mr. Riphagen (*ibid.*, vol. I, p. 111, 1554th meeting, para. 45) and Mr. Jagota (*ibid.*, p. 115, 1555th meeting, paras. 25–27).

<sup>5</sup> *Ibid.*, vol. II (Part Two), p. 165, document A/34/10, para. 125.

<sup>6</sup> *Ibid.*, para. 133.

(d) institutional arrangements for international co-operation regarding international watercourses.<sup>7</sup>

There was no consensus in the Commission on a preferred course of action. Discussion centred on principles relating to specific uses and principles applying to uses in general.<sup>8</sup>

## C. Comment on the topic in the Sixth Committee of the General Assembly

### 1. A FRAMEWORK AGREEMENT

11. In the course of the review of the report of the Commission on its thirty-first session by the Sixth Committee of the General Assembly, the subject of international watercourses received considerable comment. Some 45 States expressed views on various aspects of the subject. Those comments, in general, supported the proposal that the Commission should produce a set of articles which would provide a legal framework for the negotiation of treaties to govern the use of water of individual watercourses by the watercourse States. No State directly disagreed with that proposal, although a few States expressed the view that it would be premature to proceed with the proposal pending further development of the law of international watercourses.<sup>9</sup>

12. Twenty-three States supported the development of a framework agreement without qualification and an additional four States approved the approach, but with certain reservations.

13. Among the former, the representative of Venezuela, speaking on behalf of the signatories to the Andean Pact,<sup>10</sup> cited the Treaty on the River Plate Basin (Brasilia, 23 April 1969).<sup>11</sup> In particular, he drew attention to article VI of the Treaty, which stated that the parties thereto might conclude bilateral or multi-lateral arrangements with a view to furthering the general aim of developing the river basin.<sup>12</sup>

<sup>7</sup> *Ibid.*, para. 145.

<sup>8</sup> *Ibid.*, para. 146.

<sup>9</sup> See for example the statement of the representative of Turkey (*Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 51st meeting, paras. 49–50; and *ibid.*, *Sessional fascicle*, corrigendum).

<sup>10</sup> Cartagena Agreement (Subregional integration agreement (Andean Pact)) (Bogotá, 26 May 1969). Signatory States: Bolivia, Colombia, Ecuador, Peru, Venezuela. See American Association of International Law, *International Legal Materials* (Washington D.C.), vol. VIII, No. 5 (Sept. 1969), p. 910.

<sup>11</sup> To be printed in United Nations, *Treaty Series*, vol. 875. See also *Yearbook . . . 1974*, vol. II (Part Two), pp. 291–292, document A/CN.4/274, paras. 60–64.

<sup>12</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 44th meeting, para. 18; and *ibid.*, *Sessional fascicle*, corrigendum.

14. The representative of Jordan, while characterizing the approach of a framework agreement to be coupled with user agreements as "very interesting", was concerned that the "framework convention" envisaged "should not be so general as to defeat what surely must be one of the purposes of codification, namely, uniformity of the applicable law". He stated that political reasons might debar bilateral water agreements.<sup>13</sup>

15. The representative of Bangladesh considered that the Commission should "develop and codify the relevant principles of international law, lay down procedures for their application and... development, giving equal treatment to upper and lower riparian States". He declared that his delegation "strongly supported the formulation of general, universal rules on the law of the non-navigational uses of international watercourses... [which] set out rights and obligations".<sup>14</sup>

16. The representative of Uruguay, while favouring the framework agreement approach, was concerned that draft article 5 "seemed to limit the right of States to enter into bilateral agreements outside the framework of the projected convention". He also noted that draft article 6 seemed "to give general multilateral agreements precedence over specific bilateral or multilateral agreements, which was contrary to accepted principles of international law".<sup>15</sup>

17. States that did not take positions either for or against the concept of a framework agreement to be combined with individual agreements for individual international watercourses nevertheless appeared receptive to the Commission's continuing its work along those lines. For example, the representative of Canada "noted with interest the proposed formulation of a framework convention which would establish rules of general application. That would allow for the adoption of regional arrangements which, while governed by the general régime, could be adapted to the requirements of specific situations".<sup>16</sup>

18. In view of the predominant support by States in the Sixth Committee for the development of a set of draft articles that could be adopted as a "framework treaty", it is proposed that the Commission proceed to the consideration and drafting of the articles that could serve as the basis for the adoption of such a treaty.

## 2. GENERAL OR SPECIFIC PRINCIPLES?

19. Consideration of individual articles, nevertheless, must be preceded by a decision on which aspects

<sup>13</sup> *Ibid.*, 51st meeting, para. 57; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>14</sup> *Ibid.*, 50th meeting, paras. 34 and 35; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>15</sup> *Ibid.*, para. 52; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>16</sup> *Ibid.*, 41st meeting, para. 25; and *ibid.*, *Sessional fascicle*, corrigendum.

of fresh water use should be taken up as the first part of the Commission's work. Here again, the review of the topic in the Sixth Committee is instructive.

20. Of the four possibilities suggested by the Special Rapporteur at the close of the Commission's debate at its thirty-first session,<sup>17</sup> neither general rules on abuses of water nor institutional arrangements for State co-operation received support in the Sixth Committee. The need to set up some type of organization to deal with common riparian problems was referred to by a number of representatives, but there were no proposals to give institutional arrangements a priority position.

21. With respect to the pollution of international watercourses, the representative of Finland stated that that subject did not have to be given priority because a number of international organizations and other bodies were currently engaged in developing proposals on environmental protection, including water pollution control.<sup>18</sup> The representative of Bulgaria declared that the general rules to be prepared by the Commission might deal in particular with the aquatic environment, but he did not propose concentrating on such rules at the outset.<sup>19</sup> Similar views were expressed by the representative of Egypt.<sup>20</sup> The representative of Ethiopia stated that it would be inadvisable for the Commission to take up the problem of pollution.<sup>21</sup>

22. The two remaining suggested courses of action were the preparation of articles containing principles applying the specific uses of water, such as irrigation, hydroelectric production and industrial production, or the drafting of articles that set forth principles applicable to the use of fresh water in general.

23. The preparation of a set of general principles received substantial support from the representative in the Sixth Committee who commented on that aspect of the topic. Some 26 States agreed that the Commission should proceed with the development of general principles relating to the use of the water of international watercourses. In the large majority of cases, that position did not exclude addressing principles that could be applied to particular uses. The statement of the representative of Argentina was one of that nature: "The draft should take the form of a convention containing a small number of very general principles to serve as a guide for agreements between users in particular cases."<sup>22</sup> The representative of Niger stated

<sup>17</sup> See para. 10 above.

<sup>18</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 41st meeting, para. 18; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>19</sup> *Ibid.*, 46th meeting, para. 62; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>20</sup> *Ibid.*, 51st meeting, para. 27; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>21</sup> *Ibid.*, 43rd meeting, para. 21; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>22</sup> *Ibid.*, 46th meeting, para. 54; and *ibid.*, *Sessional fascicle*, corrigendum.

that his delegation "would favour the preparation of a code of conduct to which States wishing to conclude regional agreements could refer".<sup>23</sup> The representative of Spain "agreed with the view of the Special Rapporteur that what was needed was a set of articles laying down principles regarding the use of international watercourses in terms sufficiently broad to be applied to all such watercourses while at the same time providing the means by which the articles could be adapted to the singular nature of an individual watercourse".<sup>24</sup>

24. Representatives of a few States commented directly upon the issue. The representative of Iraq stated that

what was desirable was a set of norms and rules applicable to all kinds of uses of international watercourses rather than rules formulated strictly on the basis of an examination of the individual uses of such watercourses. It was, in fact, only logical to start with the formulation of general rules from which specific rules applicable to a particular use could subsequently be derived.<sup>25</sup>

25. The representative of India advanced a different view: "The Commission should give priority to drafting articles on the particular non-navigational uses of international watercourses."<sup>26</sup> But the representative of Denmark "hoped for the formulation of an umbrella agreement consisting of rules of a general nature which could be supplemented by specific rules for individual waterways".<sup>27</sup> The representative of France favoured the formulation of general rules and added:

Moreover, if those rules covered particular uses of the water of international watercourses, they should only be of a residuary nature. The proposal put forward by the Special Rapporteur that "user agreements" should supplement a general convention was therefore promising.<sup>28</sup>

The representative of Bulgaria supported the development of general rules, but "did not rule out the elaboration, on the basis of general rules and principles, of specific rules which might be applied to regional or specific conditions in international river systems".<sup>29</sup>

26. The Sixth Committee debate indicated that the Commission should begin its work by seeking to produce a set of legal principles that would be generally applicable to the use of the water of international

watercourses for purposes other than navigation. That position was advanced by the great majority of representatives as the preferable course, although without any indication of substantial opposition to the Commission's taking up instead the development of principles relating to specific uses. Nevertheless, there was sufficient concordance of view within the Sixth Committee that its opinion should be given considerable weight in reaching a decision on how to proceed. At the same time, the Commission should consider whether there were substantial grounds supporting work upon specific uses rather than upon the uses of water in general.

#### D. Advantages of initial development of general principles

27. The development of principles and rules tied to specific uses has one obvious advantage. The case for principles can be presented in a specific context, such as irrigation requirements, and the content of any principle can be judged with a reasonably accurate understanding of its consequences and its relationship to other—related—principles and rules. A similar illustration would be a principle that any watercourse State that builds a dam or other control structure in an international watercourse that contains a fish population of economic importance shall construct this work so as to ensure the conservation of the fish stock. Application of this rule to a river where a dam is proposed downstream from the spawning grounds of salmon would require devices such as fish ladders to permit the fish to reach the spawning grounds and to ensure that the new generation of fish could return to the sea.

28. A general principle relating to all uses is necessarily more abstract and its consequences less predictable than a rule tailored to deal with a particular consequence of a specific use. The core article of the resolution adopted in September 1961 by the Institut de droit international at its Salzburg session on the utilization of non-maritime international waters except for navigation is an example of extremely broad language:

##### Article 2

Every State has the right to utilize waters which traverse or border its territory, subject to the limits imposed by international law and, in particular, those resulting from the provisions which follow.

This right is limited by the right of utilization of other States interested in the same watercourse or hydrographic basis.<sup>30</sup>

29. The essential legal rule expressed is that the rights of a State are limited by the rights of other States. This is a postulate of international law so basic that it is unchallengeable. The remaining articles in the Institute's

<sup>23</sup> *Ibid.*, para. 32; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>24</sup> *Ibid.*, 44th meeting, para. 8; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>25</sup> *Ibid.*, 38th meeting, para. 45; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>26</sup> *Ibid.*, 51st meeting, para. 65; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>27</sup> *Ibid.*, 48th meeting, para. 3; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>28</sup> *Ibid.*, para. 16; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>29</sup> *Ibid.*, 46th meeting, para. 62; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>30</sup> *Annuaire de l'Institut de droit international*, 1961 (Basel), vol. 49, No. II (1962), p. 382. See also *Yearbook . . . 1974*, vol. II (Part Two), p. 202, document A/5409, para. 1076.

resolution deal with procedures for the settlement of disputes. These provisions are useful and cast some additional light on how rights of utilization may be exercised. However, they do not clarify what these rights are or what principles are applied to reconcile conflicting uses.

30. The building up of a body of rules dealing with specific uses could provide the basis for subsequently drafting general principles that would provide workable solutions for competing uses. However, this method has its drawbacks. It could result in the Commission becoming involved in disputes over detail that could not be easily resolved in the absence of an applicable general rule. In addition, the adoption at an early stage of articles containing rules generally applicable to watercourse use has the advantage of informing the members of the Commission of the general context in which more detailed rules may be developed. It is reasonable that Commission members should be concerned about adopting a rule dealing with specific activities without knowledge of how the rule

fits into a general scheme of things. That concern was raised by Sir Francis Vallat in his comment on future work on international watercourses at the thirty-first session:

It was important that the Commission [members] should not be asked to decide on isolated articles and that they should be able to see the articles in perspective. He hoped the Special Rapporteur would be able to broaden that perspective in time for the Commission's next session.<sup>31</sup>

31. While determination of the best organization of work on the subject is beset with uncertainties, there are thus sound reasons for postponing the development of rules for specific uses and for turning instead to a study of general principles of law that might be adopted as draft articles of a treaty to govern the uses of the water of international watercourses. This study will therefore proceed on that basis, fortified by the general support that this approach received in the Sixth Committee.

<sup>31</sup> *Yearbook . . . 1979*, vol. I, p. 116, 1555th meeting, para. 34.

## CHAPTER II

### Reconsideration of draft articles submitted by the Special Rapporteur in his first report

#### A. Scope of the topic

##### 1. SHOULD THERE BE A DEFINITION OF THE INTERNATIONAL WATERCOURSE?

32. Before proceeding to an examination of general principles governing the use of the water of international watercourses, the Commission should reconsider the articles that were put forward during its thirty-first session as a basis for discussion. The articles were the subject of considerable comment both in the Commission and in the Sixth Committee of the General Assembly. The nature of the comments ranged from approval to disapproval, particularly with regard to certain details of some of the proposals. Nevertheless, there was general agreement on the need for provisions that would set forth the scope of the draft articles, define the relationship of the Commission's work to agreements on individual watercourses and deal with the collection and exchange of essential information.

33. Debate both in the Commission and in the Sixth Committee confirmed the cleavage of opinion between adherents of the 1815 Vienna formula<sup>32</sup> of contiguous and successive rivers and supporters of a broader concept, such as that of river basin, drainage basin or

hydrographic basin. The issue was discussed at length in the report submitted to the Commission by the former Special Rapporteur, Mr. Kearney, in 1976,<sup>33</sup> and in the first report of the current Special Rapporteur.<sup>34</sup> The proposal in the latter report was to adopt as article 1 a working definition of scope,<sup>35</sup> which would leave that basic decision for determination when the substantive context of the draft articles had been at least partially developed.

34. A new element was the expression of view in both the Commission and the Sixth Committee that the scope of the articles should be fixed at an early stage. In the Commission, Mr. Njenga questioned whether the decision to defer a definition of international watercourses was a wise one: "since the very content of the rules would depend upon the way in which an international watercourse was defined, it was essential for the Commission to consider that matter at the earliest opportunity".<sup>36</sup> Mr. Thiam also expressed the view that the Commission should define what it meant by watercourses.<sup>37</sup>

<sup>33</sup> *Yearbook . . . 1976*, vol. II (Part One), p. 184, document A/CN.4/295.

<sup>34</sup> *Yearbook . . . 1979*, vol. II (Part One), pp. 151 *et seq.*, document A/CN.4/320, paras. 37 *et seq.*

<sup>35</sup> *Ibid.*, p. 144, para. 2.

<sup>36</sup> *Ibid.*, vol. I, p. 120, 1556th meeting, para. 23.

<sup>37</sup> *Ibid.*, p. 231, 1578th meeting, para. 6.

<sup>32</sup> See para. 2 and footnote 2 above.

35. In the Sixth Committee of the General Assembly, the representative of France advanced the view that “the question of defining the term ‘international watercourse’ must not paralyse the work of the Commission, but a solution to the problem must not be postponed for too long since it affected both the scope and the content of the process of codification”.<sup>38</sup> The representative of Kenya

urged the Commission to consider the definition of an international watercourse at the earliest opportunity. In considering the acceptability of any draft articles formulated, the question as to whether the articles referred to successive or contiguous rivers or to the broader international drainage basin would be of decisive importance to Governments.<sup>39</sup>

The representative of Niger considered that, while the Commission had been wise not to define an international watercourse, “some clarification was now required” and “a choice had to be made”. However, his delegation did not consider that “the choice of one concept rather than the other should necessarily apply to the draft articles as a whole; the choice should be made for each individual article”.<sup>40</sup>

36. The representative of the Soviet Union held that adoption of a definition could not be postponed and suggested that the term “international watercourse” “must be taken to mean waters flowing along a certain course”.<sup>41</sup> The representative of Japan, on the other hand, considered that a decision on the definition of international watercourses should be postponed.<sup>42</sup> The representative of India stated that the definition of an international watercourse could be dealt with by the Commission at a later stage. “perhaps by incorporating it in an optional clause”.<sup>43</sup> The other representatives who alluded to the topic did not comment specifically on the question of timing and presumably are prepared to leave the matter to the discretion of the Commission.

37. The force of the position that a definition of international watercourses has a direct bearing upon the content of the principles that the Commission may adopt cannot be denied. If the issue involved were merely a formal one, there would not have been the amount of dispute regarding the elements of the definition that has taken place within the Commission and in the General Assembly. Interests of States inevitably will be affected by the meaning adopted for the term “international watercourse”, and States thus

have a substantial reason for wanting to know what the principal effect will be of adopting one definition as opposed to another. But in the light of the difficulties posed by reaching agreement on a definition, the Commission decided in 1976 that the definition of “international watercourse” need not be pursued at the outset of the work.<sup>44</sup>

38. In preparing his first report, the Special Rapporteur thus sought to avoid proposals that would favour adoption of a definition. Nevertheless, draft articles 1 and 2,<sup>45</sup> which were put forward to illustrate the type of minimal provisions necessary to allow the Commission to move forward in the absence of a definition of an international watercourse, were the object of some criticism both in the Commission and in the Sixth Committee as going beyond the Commission’s terms of reference.

39. The criticisms of article 1 were concentrated on paragraph 1, which provided:

The present articles apply to the uses of the water of international watercourses, and to associated problems such as flood control, erosion, sedimentation and salt water intrusion.

## 2. USE OF THE WATER OF THE WATERCOURSE

40. Objection has been made that the Commission should be concerned not with the uses of the water of international watercourses but only with the uses of the watercourses. Yet it is difficult to see the utility of drawing a distinction between use of the watercourse and use of the water of the watercourse.

41. In the Commission, in an effort to explain that distinction, illustrations were given of uses of watercourses other than use of the water of watercourses: navigation, timber floating and production of energy.<sup>46</sup> Yet each of these activities involves the use of water and is traditionally so regarded. The common element—if energy production is given a highly restricted meaning—is that the use takes place “between the banks” of the watercourse or, as in the case of mill-ponds, immediately adjacent thereto. Such a definition would exclude all uses that depend upon the diversion or abstraction of water from the watercourse, including many power generation facilities. These excluded uses would encompass practically all use of water for irrigation and other agricultural production, nuclear and fossil fuel energy production, manufacturing, construction, mining and other extraction activities, and domestic and municipal consumption. It is essentially navigational uses that may often be largely limited to activity “within” the watercourse (apart from locks and canals, pumped

<sup>38</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 48th meeting, para. 16; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>39</sup> *Ibid.*, 43rd meeting, para. 6; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>40</sup> *Ibid.*, 46th meeting, para. 34; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>41</sup> *Ibid.*, 42nd meeting, para. 13; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>42</sup> *Ibid.*, para. 5; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>43</sup> *Ibid.*, 51st meeting, para. 65; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>44</sup> *Yearbook ... 1976*, vol. II (Part Two), p. 162, document A/31/10, para. 164.

<sup>45</sup> *Yearbook ... 1979*, vol. II (Part One), p. 144, document A/CN.4/320, para. 2.

<sup>46</sup> *Ibid.*, vol. I, p. 229, 1577th meeting, para. 15.

storage and regulating impoundments on tributaries), but the Commission is not charged with dealing with essentially navigational uses.

42. These multiple uses, which would be excluded by so narrow a definition, were specifically mentioned in the proposed outline of uses included in the questionnaire to States drafted by the Commission in 1974 and approved by the General Assembly for submission to States in its resolution 3315 (XXIX) of 14 December 1974. None of the replies from States proposed exclusion of those uses and a substantial number of States proposed additional uses based upon the use of water removed from the watercourses.<sup>47</sup> Additional replies have continued to come in from States, supporting the outline of uses proposed in the questionnaire. The discussion in the General Assembly, and the General Assembly's resolutions on the work of the Commission, have proceeded on the assumption that the draft articles would deal with the uses which it has recently been proposed to exclude.

43. Paragraph 61 of the Special Rapporteur's first report states that, in draft article 1, the phrase "uses of the water of international watercourses" has been adopted rather than "the uses of international watercourses", as in General Assembly resolution 2669 (XXV). The change is stated to have been proposed for the purpose of emphasis and is not considered to be essential. Paragraph 62 of the report enlarges briefly on this change by stating that the reference to water "places the accent on the fact that it is the water which plays the central and decisive role in the development of these draft articles".

44. However, the highly restrictive interpretation of the phrase "uses of international watercourses" that has been advanced makes it important to decide which phrase is to be used in article 1. It appears essential to use the words "uses of the water of international watercourses" in order to avoid dispute and confusion over what uses the Commission is dealing with.

45. For the same reason, it is also important that the Commission adopt an appropriate formulation of article 1 in the course of its thirty-second session. While it may be possible to postpone, at least for the current session, a choice between either the drainage basin concept or the 1815 Vienna formula,<sup>48</sup> it is not reasonable to proceed on a basis that is so unstructured that members of the Commission cannot be sure whether they are dealing with uses such as irrigation or domestic use, despite the fact that inclusion of such uses has been accepted from the outset of the Commission's work and overwhelmingly endorsed by States.

<sup>47</sup> For an analysis of replies by Governments to the Commission's questionnaire, see *Yearbook ... 1976*, vol. II (Part One), pp. 168-174, document A/CN.4/294 and Add.1, questions D and E.

<sup>48</sup> See para. 2 and footnote 2 above.

### 3. PROBLEMS ASSOCIATED WITH THE USE OF THE WATER

46. A second objection to article 1, paragraph 1, actually indicates the need for adoption of the article. A few representatives in the Sixth Committee raised objections to the final phrase of the paragraph: "and to associated problems such as flood control, erosion, sedimentation and salt water intrusion". The representative of the Byelorussian SSR stated that the draft "included subjects which had no bearing on the topic under discussion, such as flood control and erosion".<sup>49</sup> The representative of the USSR stated that "problems such as the control of floods, erosion and sedimentation, which were matters separate from the uses of the watercourses, were outside the limits of the subject".<sup>50</sup>

47. The questionnaire prepared by the Commission in 1974 contained as question F: "Should the Commission include flood control and erosion problems in its study?" There was substantial unanimity among the States replying to that question that the Commission should deal with those subjects.<sup>51</sup> A number of States suggested, as additional subjects, sedimentation and salt water intrusion, both in the replies to the questionnaire and in the debate in the Sixth Committee.<sup>52</sup> The report of the Commission on the work of its twenty-eighth session states that flood control, erosion problems and sedimentation should be included in the study.<sup>53</sup> As the first report of the present Special Rapporteur makes clear, salt water intrusion was added because it is a similar problem affecting the use of fresh water.<sup>54</sup>

48. It should also be noted that at the thirty-first session of the Commission the position was advanced that "it would be dangerous to extend the study to lakes, even though some lakes connected waterways".<sup>55</sup> If the term "international watercourse" is subject to such limited interpretation as this, then the term is not adequate for the drafting of articles by the Commission. The exclusion of lakes (and canals) would raise serious questions regarding the relationship of the draft articles to important watercourses. Lake Chad, Lake Léman, the Canadian-United States Great Lakes and Lake Titicaca are among those that come to mind.

<sup>49</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 44th meeting, para. 25; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>50</sup> *Ibid.*, 42nd meeting, para. 13; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>51</sup> See *Yearbook ... 1976*, vol. II (Part One), pp. 174-176, document A/CN.4/294 and Add.1.

<sup>52</sup> See for example the replies of the Netherlands and Poland (*ibid.*, p. 175).

<sup>53</sup> *Ibid.*, vol. II (Part Two), p. 162, document A/31/10, para. 166.

<sup>54</sup> *Yearbook ... 1979*, vol. II (Part One), p. 157, document A/CN.4/320, para. 58.

<sup>55</sup> *Ibid.*, vol. I, p. 229, 1577th meeting, para. 14.

#### 4. OTHER DEFINITIONAL PROBLEMS

49. Other consequential questions of definition are raised by objections in the Commission and in the Sixth Committee regarding the term "user State", which is defined in draft article 2 in the Special Rapporteur's first report as "a State which contributes to and makes use of water of an international watercourse".

50. In the Commission, Mr. Njenga was concerned whether the two elements of the phrase "contributes to and makes use of" were separate or cumulative. He submitted that Egypt, for example, "did not contribute to the waters of the Nile, but it none the less made use of those waters".<sup>56</sup> Mr. Ushakov viewed article 2 as based on the concept of the "international drainage basin".<sup>57</sup> The same view was expressed in the Sixth Committee by the representatives of Brazil<sup>58</sup> and the Soviet Union.<sup>59</sup>

51. In his first report, the Special Rapporteur stated, with regard to draft articles 2 ("User States"), 3 ("User agreements") and 4 ("Definitions"),<sup>60</sup> that the articles were proposed "without prejudice to the question whether it is a river, the river system or the drainage basin that is in point".<sup>61</sup> He also made it amply clear that the draft articles submitted did not answer the question whether the water of an international course comprised groundwater as well as surface water, and whether it embraced tributaries.<sup>62</sup>

#### B. Draft articles

##### 1. DRAFT ARTICLE 1: "SCOPE OF THE PRESENT ARTICLES"

52. Both draft articles 1 and 2 submitted in the first report<sup>63</sup> should be revised to deal, as far as is required, with the problems that have been examined. A formula to make it clear that an international watercourse is not to be regarded merely "as a pipe carrying water", in the graphic words of the representative of Thailand in the Sixth Committee,<sup>64</sup> is required to avoid being bogged down in recurring discussions over what uses

of water are to be dealt with and whether lakes (and canals) are included. The Special Rapporteur suggests that this aim could be achieved by referring in paragraph 1 of article 1 to "international watercourse systems". This would be the only material change in the proposed draft article, which would then read:

##### *Article 1. Scope of the present articles*

1. The present articles apply to the uses of the water of international watercourse systems and to problems associated with international watercourse systems, such as flood control, erosion, sedimentation and salt water intrusion.

2. The use of water of international watercourses for navigation is within the scope of these articles in so far as provisions of the articles respecting other uses of water affect navigation or are affected by navigation.

##### 2. THE INTERNATIONAL WATERCOURSE "SYSTEM"

53. The word "system" is frequently used in connection with "river". Article 331 of the Treaty of Versailles provides:

##### *Article 331*

The following rivers are declared international:

The Elbe (*Labe*) from its confluence with the Vltava (*Moldau*), and the Vltava (*Moldau*) from Prague;  
The Oder (*Odra*) from its confluence with the Oppa;  
The Niemen (*Russtrom-Memel-Niemen*) from Grodno;  
The Danube from Ulm;

and all navigable parts of these river systems which naturally provide more than one State with access to the sea...; together with lateral canals and channels constructed either to duplicate or to improve naturally navigable sections of the specified river systems, or to connect two naturally navigable sections of the same river...<sup>65</sup>

54. There are a number of other references in the Treaty of Versailles to river systems, for example article 362, which, in dealing with the proposed extension of the jurisdiction of the Central Rhine Commission, refers to "any other parts of the Rhine river system which may be covered by the General Convention provided for in article 338 above."<sup>66</sup>

55. The term "river system" is also employed in the Convention instituting the definitive status of the Danube (Paris, 1921). Article 1 of the Convention provides for freedom of navigation on the navigable course of the Danube and "over all the internationalized river system". Article 2 states that:

The internationalized river system referred to in the preceding article consists of:

The Morava and the Thaya where, in their courses, they form the frontier between Austria and Czechoslovakia;  
The Drave from Barcs;

<sup>56</sup> *Ibid.*, p. 120, 1556th meeting, para. 26.

<sup>57</sup> *Ibid.*, p. 119, para. 17.

<sup>58</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 45th meeting, para. 30; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>59</sup> *Ibid.*, 42nd meeting, para. 14; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>60</sup> *Yearbook ... 1979*, vol. II (Part One), p. 144, document A/CN.4/320, para. 2.

<sup>61</sup> *Ibid.*, p. 166, para. 91.

<sup>62</sup> *Ibid.*, p. 156, para. 55.

<sup>63</sup> *Ibid.*, p. 144, para. 2.

<sup>64</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 40th meeting, para. 50; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>65</sup> *British and Foreign State Papers, 1919*, vol. CXII (London, H.M. Stationery Office, 1922), p. 173.

<sup>66</sup> *Ibid.*, p. 184.

The Tiza from the mouth of the Szamos;  
The Maros from Arad;  
Any lateral canals or waterways which may be  
constructed...<sup>67</sup>

Similar uses of the term "river system" are to be found in other multilateral treaties dealing with freedom of navigation in European rivers.

56. The principles of law governing the uses of international rivers and lakes adopted by the Inter-American Bar Association at its Tenth Conference, held in November 1957 in Buenos Aires, uses the term "system" in a reformulation of the 1815 Vienna definition. The Conference resolved:

That the following general principles, which form part of existing international law, are applicable to every watercourse or system of rivers or lakes (non-maritime waters) which may traverse or divide the territory of two or more States; such a system will be referred to hereinafter as a "system of international waters."<sup>68</sup>

57. The term "river systems" also appears in basic scholarly texts. H. S. Smith, for example writes: "The study of practice leads irresistibly to the conclusion that it is impossible to lay down any general rule as to the priority of interests upon all river systems."<sup>69</sup> It is found in State practice, for example in the memorandum issued by the United States Department of State in the course of the negotiations with Canada on the Columbia River.<sup>70</sup> It is widely employed in scientific and technical writings and is commonly used in hydrographic descriptions and analysis. For example:

All river systems appear to have basically the same type of organization. The river system is dynamic in that it has portions that move and can cause events and create changes. There is not only unity displayed by important similarities between rivers in different settings, but also an amazing organization of river systems. This in part results from a delicate balance between the forces of erosion and the forces of resistance. The manner in which a channel moves across the valley floor, eroding one bank and building a nearly flat flood plane on the other, all the while maintaining a cross section similar in shape and size, is another aspect of the dynamic equilibrium that appears to characterize many channel systems...<sup>71</sup>

58. These examples of the use of the word "system" in relation to watercourses or rivers or international waters indicate its usage and utility as a term that will not foreclose ultimate adoption either of the drainage

basin concept or of a more limited definition of the international watercourse. At the same time, it cannot be used to support an argument that a watercourse has to be considered as a water pipe; it is not as limited as that. "International watercourse system" is a formula that provides a neutral working basis for the formulation of the key general principles that should apply to the use of the water of international watercourses. It is admittedly unclear at this stage of the Commission's work on the topic what the scope of the "international watercourse system" is; however, in view of the considerations set out above, that is a virtue of the phrase.

### 3. DRAFT ARTICLE 2: "SYSTEM STATES"

59. The utility of the term "international watercourse system" can be demonstrated in connection with the objections that have been raised to draft article 2 in the rendering submitted in the Special Rapporteur's first report. Instead of the dual requirement of contribution and use of water which gave rise to critical comment, the following article is now proposed:

#### *Article 2. System States*

**For the purpose of these articles, a State through whose territory water of an international watercourse system flows is a system State.**

60. The requirement laid down in the draft article is a geographic one which is simpler both to state and to apply than one based upon contribution to and use of the water. The test is one that relies upon the determination of physical facts. The key physical fact—whether some water in an international watercourse system flows through the territory of a particular State—is determinable by simple observation in the vast majority of cases.

61. The formulation proposed differs from that in article III of the Helsinki Rules on the Uses of the Waters of International Rivers,<sup>72</sup> which defines a "basin State" as "a State the territory of which includes a portion of an international drainage basin". The use of the phrase "drainage basin" in conjunction with the precise definition of such a basin in article II of the Helsinki Rules provides a hydrographic background for the definition which is at present lacking for the proposed draft articles. At the same time, the reference to the flow of water through the territory of the system State is intended as a reference to the hydrographic unity of the watercourse.

62. The formulation is not intended to determine the issue whether a State from whose territory ground water moves into an international watercourse system

<sup>67</sup> League of Nations, *Treaty Series*, vol. XXVI, p. 177.

<sup>68</sup> *Inter-American Bar Association, Proceedings of the Tenth Conference held at Buenos Aires from 14 to 21 November 1957* (Buenos Aires, 1958), vol. 1, p. 246. See also *Yearbook... 1974*, vol. II (Part Two), p. 208, document A/5409, para. 1092.

<sup>69</sup> H.S. Smith, *The Economic Uses of International Rivers* (London, King, 1931), p. 143.

<sup>70</sup> United States of America, "Legal aspects of the use of systems of international waters with reference to the Columbia-Kootenay river system under customary international law and the Treaty of 1909", Memorandum of the State Department, 85th Congress, 2nd Session, document No. 118 (Washington, D.C., U.S. Government Printing Office, 1958), p. 89.

<sup>71</sup> W.C. Walton, *The World of Water* (London, Weidenfeld and Nicolson, 1970), pp. 212–213.

<sup>72</sup> ILA, *Report of the Fifty-second Conference, Helsinki, 1966* (London, 1976), pp. 478–533. See also *Yearbook... 1974*, vol. II (Part Two), pp. 357–359, document A/CN.4/274, para. 405. The rules are hereinafter referred to as "Helsinki Rules".

is or is not a "system State". The word "flow" in its customary usage might seem to exclude groundwater because the movement of groundwater is usually that of seepage through permeable materials. None the less, "flow" is used in a technical sense in discussing groundwater. The movement of water in the saturated interstices of permeable rocks, for example, is known as a "laminar flow", even though under natural conditions a rate of movement of more than a few feet a day is quite unusual and some such movements may come to only a few feet a year.<sup>73</sup> The decision whether a State that contributes only groundwater to a watercourse system is or is not a system State should be determined as a corollary to whether (a) the drainage basin concept is to be ultimately agreed upon as the measure of the scope of the draft articles or (b) if not, whether any provisions respecting groundwater should be included in the draft articles and, if so, what provisions.

63. Provisions of this character are consistent with the suggestion made by the representative of India in the Sixth Committee: "Since the main issues concerning the scope of the articles would concern tributaries and groundwater, articles could also be drafted to cover those aspects."<sup>74</sup> Dealing with problems of scope in this manner would also meet the views of those representatives who said it was essential that the provisions defining the scope of the articles be made as clear as possible.

#### 4. DRAFT ARTICLE 3: "MEANING OF TERMS"

64. Pending such a decision, it would be useful to call to the attention of States that in the draft articles themselves a basic issue remains open, and what its major elements are. For this purpose a third draft article on meaning of terms is proposed that will not contain, at least at this juncture, any substantive provisions, but instead a statement of the unsettled issue:

##### **Article 3. Meaning of terms**

*[To be supplied subsequently.]*

[This article does not attempt to set forth any definitions of terms used in the draft articles because of a decision to leave open, temporarily, the question of the scope of articles. There are differences whether an international watercourse system should be considered as comprising:

- (a) only boundary waters and the main streams of watercourses crossing boundaries; or
- (b) river basins, including tributaries, whether or not solely within a system State; or

<sup>73</sup> Walton, *op. cit.*, p. 146.

<sup>74</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 51st meeting, para. 65; and *ibid.*, *Sessional fascicle*, corrigendum.

(c) drainage basins, including all water whether surface or underground within the geographic limits of a watershed, moving towards a common terminus; or

(d) some combination of the above.

Pending a decision on the foregoing issue, only terms not affected by the absence of a decision will be defined.]

#### 5. SUPPLEMENTING A FRAMEWORK TREATY BY SYSTEM AGREEMENTS

65. Chapter III of the first report of the Special Rapporteur recognized the diversity of watercourses and the consequent difficulty of drafting general principles that would apply universally to the various watercourses throughout the world. It pointed out that, for optimum development, each international watercourse required a regime tailored to its particular requirements, which should be the subject of an international agreement. It also pointed out that the historical record illustrated the difficulty of reaching satisfactory agreements on the use of the water of individual international watercourses without the benefit of generally accepted legal principles regarding the uses of such water. As a solution, the first report proposed preparation of a framework treaty that would provide the legal context within which interested States would be able to conclude treaties for individual watercourses.<sup>75</sup>

66. This plan was received favourably by the large majority of the States that commented on the proposal in the Sixth Committee. The representatives of 26 States<sup>76</sup> agreed that a framework or umbrella treaty, coupled with individual watercourse agreements, was a sound method of dealing with the problems arising from the diversity of watercourse systems.

67. The representative of Finland indicated some doubt whether the framework convention necessarily had to be supplemented by user agreements.<sup>77</sup> The representatives of Brazil<sup>78</sup> and Turkey<sup>79</sup> appeared to consider that a decision on adopting this method of work was premature.

68. Some States expressed specific concerns. For example, the representative of Jordan said that, while

<sup>75</sup> *Yearbook . . . 1979*, vol. II (Part One), pp. 165–166, document A/CN.4/320, paras. 86–91.

<sup>76</sup> Argentina, Bangladesh, Bolivia, Colombia, Denmark, Ecuador, Egypt, Ethiopia, France, Hungary, India, Iraq, Jordan, Kenya, Morocco, Netherlands, Niger, Pakistan, Peru, Syrian Arab Republic, Tunisia, Venezuela, United Kingdom, United States of America, Uruguay, Zaire.

<sup>77</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 41st meeting, para. 16; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>78</sup> *Ibid.*, 45th meeting, para. 30; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>79</sup> *Ibid.*, 51st meeting, para. 50; and *ibid.*, *Sessional fascicle*, corrigendum.

the approach might ensure flexibility, his delegation thought "that the 'framework convention' envisaged should not be so general as to defeat what surely must be one of the purposes of codification, namely, uniformity of the applicable law".<sup>80</sup> The representative of Jordan put his finger upon what is one of the most difficult aspects of the codification of water law: how the need for legal conformity can be balanced against physical diversity. The framework or umbrella treaty is one method of approaching this problem, but it will be necessary in developing a series of articles to bear constantly in mind the need for local or regional flexibility in the concrete case.

#### 6. DRAFT ARTICLE 4: "SYSTEM AGREEMENTS"

69. A decision to employ the approach of a framework convention is important to the orderly development of a set of articles. In the light of the widespread support for the proposal, the following article is suggested:

##### *Article 4. System agreements*

1. These articles shall be supplemented, as the needs of an international watercourse system may require, by one or more system agreements.

2. A system agreement may be entered into with respect to an entire international watercourse system, or with respect to any part thereof, provided that the interests of all system States are respected therein.

70. Article 4 is a revised and expanded version of draft article 3 proposed in the first report, which was limited to introducing the concept of "user agreements".<sup>81</sup> The proposed article 4 deals with two questions of principle that were left open in the first report. The first is the extent to which there is an obligation upon system States to negotiate and conclude a system agreement. The second is whether a system agreement should apply to the entire watercourse system or whether system agreements may be entered into for subsystems and other parts of the system.

71. Paragraph 1 of article 4 lays down a general principle that the framework treaty is to be supplemented by system agreements. In view of the diversity of watercourses and the need to adapt arrangements for the use of water to the specific conditions of the individual watercourses and to the varying requirements of the system States, the practical need for such agreements has long been recognized and can scarcely be argued. Moreover, in so far as such agreements may be necessary to prevent or resolve disputes between States, at any rate if such disputes are likely to

endanger the maintenance of international peace and security, the States concerned may be under an obligation under Article 33 of the Charter of the United Nations to seek to conclude such agreements. In such cases, they are incontestably under an obligation to seek a solution to such disputes by peaceful means.

72. It may further be maintained that an obligation to seek to conclude system agreements flow from the requirements of customary international law in the light of its current development.

#### 7. THE *North Sea Continental Shelf* CASES

73. There is an analogy between the obligation of States to negotiate in good faith, which the International Court of Justice found to exist in the *North Sea Continental Shelf* cases<sup>82</sup> in the continental shelf context, and the obligation of States to negotiate in good faith agreements with regard to the use of the water of international watercourse systems.

74. Members of the Commission are familiar with the important judgements of the Court in the *North Sea Continental Shelf* cases. It may accordingly suffice to recall that the cases essentially concerned the claims of two States that the application of the equidistance rule for delimitation of the continental shelf was required *erga omnes*. The two States—the Netherlands and Denmark—maintained that the equidistance rule, contained in a multilateral convention to which they were parties, had passed into customary international law. The third State involved, the Federal Republic of Germany, which was not a party to the convention, maintained that it was not bound by the equidistance rule but was entitled to a just and equitable share of the shelf based upon its geographical situation in the North Sea.

75. The Court held that the use of the equidistance method of delimitation of the shelf in those circumstances was not obligatory, since

[it] would not be consonant with certain basic legal notions which... have from the beginning reflected the *opinio juris* in the matter of delimitation; those principles being that delimitation must be the object of agreement between the States concerned, and that such agreement must be arrived at in accordance with equitable principles. On a foundation of very general precepts of justice and good faith, actual rules of law are here involved which govern the delimitation of adjacent continental shelves—that is to say, rules binding upon States for all delimitations;—in short, it is not a question of applying equity simply as a matter of abstract justice, but of applying a rule of law which itself requires the application of equitable principles, in accordance with the ideas which have always underlain the development of the legal regime of the continental shelf in this field, namely:

(a) the parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiation as a sort of prior condition for the automatic application of a certain method

<sup>80</sup> *Ibid.*, para. 57; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>81</sup> *Yearbook ... 1979*, vol. II (Part One), p. 144, document A/CN.4/320, para. 2.

<sup>82</sup> *I.C.J. Reports 1969*, p. 3.

of delimitation in the absence of agreement; they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it;

(b) the parties are under an obligation to act in such a way that, in the particular case, and taking all the circumstances into account, equitable principles are applied—for this purpose the equidistance method can be used, but other methods exist and may be employed, alone or in combination, according to the areas involved;

(c) for the reasons given..., the continental shelf of any State must be the natural prolongation of its land territory and must not encroach upon what is the natural prolongation of the territory of another State.<sup>83</sup>

76. In discussing the obligation to negotiate set forth in paragraph (a), the Court traced the obligation to the statement in the "Truman Proclamation" of 28 September 1945 that delimitation of lateral boundaries "shall be determined by the United States and the State concerned in accordance with equitable principles".<sup>84</sup> The Court continued, with respect to the obligation to negotiate:

...the Court would recall... that the obligation to negotiate... merely constitutes a special application of a principle which underlies all international relations, and which is moreover recognized in Article 33 of the Charter of the United Nations as one of the methods for peaceful settlement of international disputes. There is no need to insist upon the fundamental character of this method of settlement, except to point out that it is emphasized by the observable fact that judicial or arbitral settlement is not universally accepted.

...Defining the content of the obligation to negotiate, the Permanent Court, in its Advisory Opinion in the case of *Railway Traffic between Lithuania and Poland*, said that the obligation was "not only to enter into negotiations but also to pursue them as far as possible with a view to concluding agreements", even if an obligation to negotiate did not imply an obligation to reach agreement (*P.C.I.J., Series A/B, No. 42, 1931, at p. 116*).<sup>85</sup>

77. The Court thus states an obligation to negotiate with a view to arriving at an agreement on the continental shelf boundary. Does international law impose a similar obligation upon States as regards the apportionment of the use of that most vital of natural resources, water?

78. In discussing the criteria to be applied in determining boundaries on the continental shelf, the Court relied upon a number of circumstances, which point to the similarity of the basic issues involved in delimitation of the continental shelf and in balancing uses in an international watercourse:

The institution of the continental shelf has arisen out of the recognition of a physical fact; and the link between this fact and the law, without which that institution would never have existed, remains an important element for the application of its legal regime. The continental shelf is, by definition, an area physically extending the territory of most coastal states into a species of platform which has attracted the attention first of geographers and hydrographers and then of jurists. The importance of the

geological aspect is emphasized by the care which, at the beginning of its investigation, the International Law Commission took to acquire exact information as to its characteristics, as can be seen in particular from the definitions to be found on page 131 of volume I of the *Yearbook of the International Law Commission* for 1956. The appurtenance of the shelf to the countries in front of whose coastlines it lies, is therefore a fact, and it can be useful to consider the geology of that shelf in order to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of the appurtenance of the continental shelf to the State whose territory it does in fact prolong.

Another factor to be taken into consideration in the delimitation of areas of continental shelf as between adjacent States is the unity of any deposits. The natural resources of the subsoil of the sea in those parts which consist of continental shelf are the very object of the legal regime established subsequent to the Truman Proclamation. Yet it frequently occurs that the same deposit lies on both sides of the line dividing a continental shelf between two States, and since it is possible to exploit such a deposit from either side, a problem immediately arises on account of the risk of prejudicial or wasteful exploitation by one or other of the States concerned. To look no farther than the North Sea, the practice of States shows how this problem has been dealt with, and all that is needed is to refer to the undertakings entered into by the coastal States of that sea with a view to ensuring the most efficient exploitation or the apportionment of the products extracted—(see in particular the agreement of 10 March 1965 between the United Kingdom and Norway, article 4; the agreement of 6 October 1965 between the Netherlands and the United Kingdom relating to "the exploitation of single geological structures extending across the dividing line on the continental shelf under the North Sea"; and the agreement of 14 May 1962 between the Federal Republic and the Netherlands concerning a joint plan for exploiting the natural resources underlying the area of the Ems Estuary where the frontier between the two States has not been finally delimited). The Court does not consider that unity of deposit constitutes anything more than a factual element which it is reasonable to take into consideration in the course of the negotiations for a delimitation.<sup>86</sup>

79. The unity of deposits of natural resources of the continental shelf, while a substantial factor, is dwarfed by the unity of water in a watercourse. The need for agreements between the States concerned to ensure "the most efficient exploitation or the apportionment" of water can hardly be less than is the need to take into account the unity of any deposits in reaching agreement upon a continental shelf boundary.

80. The nature of the two situations is sufficiently analogous so that, if there is an obligation of international law to negotiate continental shelf boundaries taking the unity of resource deposits into account, there is equally an obligation under international law to negotiate with respect to the apportionment of the use of water. In each case, the legal regime responds to unique physical conditions. The continental shelf is a geological fact, being the natural prolongation of the land mass beneath the sea. In the case of fresh water, it is the hydrologic cycle of the water which is nature's governing fact, which provides

<sup>83</sup> *Ibid.*, pp. 46–47.

<sup>84</sup> *Ibid.*, p. 33.

<sup>85</sup> *Ibid.*, pp. 47–48.

<sup>86</sup> *Ibid.*, pp. 51–52.

a volume of water moving continuously through the States in a watercourse system to the sea. While the physical conditions differ, the need to take account of these physical characteristics, and to seek agreement on resource disposition, is plainly analogous.

#### 8. THE *Fisheries Jurisdiction* CASES

81. This conclusion is reinforced by the judgements of the International Court of Justice in the *Fisheries Jurisdiction* cases.<sup>87</sup> What were the respective rights in the exploitation of a natural resource—the stock of fish off the Icelandic coast—as between a claim by Iceland based upon jurisdiction over fisheries and claims by the United Kingdom and the Federal Republic of Germany based, *inter alia*, upon historic fishing rights off the Icelandic coast?

82. For present purposes, it is not necessary to examine the parallel *Fisheries Jurisdiction* cases beyond their impact on the duty to negotiate. With respect to that issue, the Court recognized the exceptional dependence of Iceland on its fisheries. It then stated:

The preferential rights of the coastal State come into play only at the moment when an intensification in the exploitation of fishery resources makes it imperative to introduce some system of catch limitation and sharing of those resources, to preserve the fish stocks in the interests of their rational and economic exploitation. This situation appears to have been reached in the present case. In regard to the two main demersal species concerned—cod and haddock—the Applicant has shown itself aware of the need for a catch limitation which has become indispensable in view of the establishment of catch limitations in other regions of the North Atlantic. If a system of catch limitation were not established in the Icelandic area, the fishing effort displaced from those other regions might well be directed towards the unprotected grounds in that area.<sup>88</sup>

It also found that the Federal Republic of Germany and the United Kingdom had special and historic fishing rights off the Icelandic coast and that these had been recognized by Iceland. Assertion of a right to exclude all fishing activities of foreign vessels in the 50-mile zone was not in accord with the concept of preferential rights, which “implies a certain priority, but cannot imply the extinction of the concurrent rights of other States”.<sup>89</sup> The Court then said “that in order to reach an equitable solution of the present dispute it is necessary that the preferential fishing rights of Iceland... be reconciled with the traditional fishing rights of the Applicant”.<sup>90</sup> The Court stated further:

Neither right is an absolute one: the preferential rights of a coastal State are limited according to the extent of its special dependence on the fisheries and by its obligation to take account of the rights of other States and the needs of conservation; the established rights of other fishing States are in turn limited by reason of the coastal State’s special dependence on the fisheries

and its own obligation to take account of the rights of other States, including the coastal State, and of the needs of conservation.<sup>91</sup>

83. The manner in which the coastal State’s right and the other fishing States’ rights are to be reconciled is described as follows:

It is implicit in the concept of preferential rights that negotiations are required in order to define or delimit the extent of those rights, as was already recognized in the 1958 Geneva Resolution on Special Situations relating to Coastal Fisheries, which constituted the starting point of the law on the subject. This resolution provides for the establishment, through collaboration between the coastal State and any other State fishing in the area, of agreed measures to secure just treatment of the special situation.

The obligation to negotiate thus flows from the very nature of the respective rights of the Parties; to direct them to negotiate is therefore a proper exercise of the judicial function in this case. This also corresponds to the Principles and provisions of the Charter of the United Nations concerning peaceful settlement of disputes. As the Court stated in the *North Sea Continental Shelf* cases:

“... this obligation merely constitutes a special application of a principle which underlies all international relations, and which is moreover recognized in Article 33 of the Charter of the United Nations as one of the methods of the peaceful settlement of international disputes” (*I.C.J. Reports 1969*, p. 47, para. 86).<sup>92</sup>

84. It is no less clear that an obligation to negotiate flows from the respective rights of States in the water of an international watercourse system. The movement of the water through the territory of one State into the territory of another, when considered in the light of the never ceasing changes in the amount of water available as a result of variations in the hydrologic cycle and the need for full and friendly co-operation among States to ensure the best use of this critical natural resource, is a special situation—indeed a unique natural condition—that can be dealt with only by agreements among the system States arrived at through negotiations carried on in good faith.

85. The judgements of the International Court of Justice in the *North Sea Continental Shelf* and the *Fisheries Jurisdiction* cases consequently indicate that there is a general principle of international law that requires negotiations among States in dealing with international fresh water resources. Draft Article 4 codifies this obligation in the context of the framework treaty.

#### 9. THE *Lac Lanoux* CASES

86. Moreover, the existence of a general principle of law requiring negotiations among States in dealing with fresh water resources is explicitly supported in the fresh

<sup>87</sup> *I.C.J. Reports 1974*, p. 3 and p. 175.

<sup>88</sup> *Ibid.*, p. 27.

<sup>89</sup> *Ibid.*, pp. 27–28.

<sup>90</sup> *Ibid.*, p. 30.

<sup>91</sup> *Ibid.*, p. 31.

<sup>92</sup> *Ibid.*, p. 32.

water context by the arbitral award in the *Lac Lanoux* case.<sup>93</sup>

87. The French Government proposed to carry out certain works for utilization of the waters of the lake, waters which flowed into the Carol river and into the territory of Spain. Consultations and negotiations on the proposed diversion of waters from the lake took place between the Governments of France and Spain intermittently from 1917 to 1956. Finally France decided upon a plan of diversion which entailed the full restoration of the diverted waters before the Spanish frontier. Spain nevertheless feared that the proposed works would adversely affect Spanish rights and interests, contrary to the Treaty of Bayonne of 26 May 1866 between France and Spain and an Additional Act of the same date. Spain claimed that, in any event, under the Arbitration Treaty concluded with France on 10 July 1929, such works could not be undertaken without the previous agreement of both countries. The French and Spanish Governments, having decided by an agreement signed at Madrid on 19 November 1956 to submit the case for arbitration, Spain asked the arbitral tribunal to declare that France would be in breach of the Treaty of Bayonne of 26 May 1866 and of the Additional Act of the same date if it implemented the diversion scheme without Spain's agreement, while France maintained that it could legally proceed without such agreement.

88. The *Lac Lanoux* case contains a great deal of high interest to the law of the non-navigational uses of international watercourses. For present purposes, however, only elements of it bearing on the obligation of States to negotiate the apportionment of the waters of an international watercourse will be addressed.

89. It is first of all important to note that that obligation was uncontested, and was acknowledged by France not merely by reason of the terms of the Treaty of Bayonne and its Additional Act but as a principle to be derived from the authorities.<sup>94</sup> Moreover, while the arbitral tribunal based certain of its holdings relating to the obligation to negotiate on the terms of the Treaty of Bayonne and the Additional Act,<sup>95</sup> it by no means confined itself to the interpretation of their terms. In holding against the Spanish contention that Spain's agreement was a precondition of France's proceeding, the tribunal addressed the question of the obligation to negotiate as follows:

In fact, to evaluate in its essence the need for a preliminary agreement, it is necessary to adopt the hypothesis that the States concerned cannot arrive at an agreement. In that case, it would have to be admitted that a State which ordinarily is competent has lost the right to act alone as a consequence of the unconditional

and discretionary opposition of another State. This is to admit a "right of consent", a "right of veto", which at the discretion of one State paralyses another State's exercise of its territorial competence.

For this reason, international practice prefers to resort to less extreme solutions, limiting itself to requiring States to seek the terms of an agreement by preliminary negotiations without making the exercise of their competence conditional on the conclusion of this agreement. Thus reference is made, although often incorrectly, to "an obligation to negotiate an agreement". In reality, the commitments thus assumed by States take very diverse forms, and their scope varies according to the way in which they are defined and according to the procedures for their execution: but the reality of the obligations thus assumed cannot be questioned, and they may be enforced, for example, in the case of an unjustified breaking off of conversations, unusual delays, disregard of established procedures, systematic refusal to give consideration to proposals or adverse interests, and more generally in the case of infringement of the rules of good faith.

...

... In fact, States today are well aware of the importance of the conflicting interests involved in the industrial use of international rivers and of the necessity of reconciling some of these interests with others through mutual concessions. The only way to achieve these adjustments of interest is the conclusion of agreements on a more and more comprehensive basis. International practice reflects the conviction that States should seek to conclude such agreements; there would thus be an obligation for States to agree in good faith to all negotiations and contacts which should, through a wide confrontation of interests and reciprocal goodwill, place them in the best circumstances to conclude agreements...<sup>96</sup>

As stated above, draft article 4 codifies the obligation to negotiate in the context of the framework treaty.

#### 10. DRAFT PRINCIPLES OF CONDUCT IN RESPECT OF SHARED NATURAL RESOURCES

90. It should finally be noted that the "Draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States", prepared by an Intergovernmental Working Group of Experts under the auspices of UNEP,<sup>97</sup> support a requirement for negotiations among States in dealing with fresh water resources. The relevance to that proposition of the following draft principles is obvious:

##### *Principle 2*

In order to ensure effective international co-operation in the field of the environment concerning the conservation and harmonious utilization of natural resources shared by two or more States, States sharing such natural resources should endeavour to conclude bilateral or multilateral agreements between or among themselves in order to secure specific regulation of their conduct in this respect, applying as necessary the present principles in a legally binding manner, or should

<sup>93</sup> United Nations, *Reports of International Arbitral Awards*, vol. XII (United Nations publication, Sales No. 63.V.3), p. 281. See also *Yearbook ... 1974*, vol. II (Part Two), pp. 194-199, document A/5409, paras. 1055-1068.

<sup>94</sup> *International Law Reports 1957* (London, Butterworth, 1957), pp. 111-112.

<sup>95</sup> *Ibid.*, pp. 139 and 141.

<sup>96</sup> See *Yearbook ... 1974*, vol. II (Part Two), p. 197, document A/5409, paras. 1065-1066.

<sup>97</sup> See the report of the Working Group on the work of its fifth session (Nairobi, 23 January-7 February 1978) (UNEP/IG.12/2), transmitted to the Governing Council at its sixth session (Nairobi, 9-25 May 1978) in a note by the Executive Director (UNEP/GC.6/17).

endeavour to enter into other arrangements, as appropriate, for this purpose. In entering into such agreements or arrangements, States should consider the establishment of institutional structures, such as joint international commissions, for consultations on environmental problems relating to the protection and use of shared natural resources.

...  
...

#### Principle 5

States sharing a natural resource should, to the extent practicable, exchange information and engage in consultations on a regular basis on its environmental aspects.

#### Principle 6

1. It is necessary for every State sharing a natural resource with one or more other States:

(a) to notify in advance the other State or States of the pertinent details of plans to initiate, or make a change in, the conservation or utilization of the resource which can reasonably be expected to affect significantly the environment in the territory of the other State or States; and

(b) upon request of the other State or States, to enter into consultations concerning the above-mentioned plans; and

(c) to provide, upon request to that effect by the other State or States, specific additional pertinent information concerning such plans; and

(d) if there has been no advance notification as envisaged in subparagraph (a) above, to enter into consultations about such plans upon request of the other State or States.

2. In cases where the transmission of certain information is prevented by national legislation or international conventions, the State or States withholding such information shall nevertheless, on the basis, in particular, of the principle of good faith and in the spirit of good neighbourliness, co-operate with the other interested State or States with the aim of finding a satisfactory solution.

#### Principle 7

Exchange of information, notification, consultations and other forms of co-operation regarding shared natural resources are carried out on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to avoid any unreasonable delays either in the forms of co-operation or in carrying out development or conservation projects.

#### Principle 8

When it would be useful to clarify environmental problems relating to a shared natural resource, States should engage in joint scientific studies and assessments, with a view to facilitating the finding of appropriate and satisfactory solutions to such problems on the basis of agreed data.

#### Principle 9

1. States have a duty urgently to inform other States which may be affected:

(a) of any emergency situation arising from the utilization of a shared natural resource which might cause sudden harmful effects on their environment;

(b) of any sudden grave natural events related to a shared natural resource which may affect the environment of such States.

2. States should also, when appropriate, inform the competent international organizations of any such situation or event.

3. States concerned should co-operate, in particular by means of agreed contingency plans, when appropriate, and mutual assistance, in order to avert grave situations, and to eliminate, reduce or correct, as far as possible, the effects of such situations or events.

...

#### Principle 11

1. The relevant provisions of the Charter of the United Nations and of the Declaration of Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations apply to the settlement of environmental disputes arising out of the conservation or utilization of shared resources.

2. In case negotiations or other non-binding means have failed to settle a dispute within a reasonable time, it is necessary for States to submit the dispute to an appropriate settlement procedure which is mutually agreed by them, preferably in advance. The procedure should be speedy, effective and binding.

3. It is necessary for the States parties to such a dispute to refrain from any action which may aggravate the situation with respect to the environment to the extent of creating an obstacle to the amicable settlement of the dispute.

### 11. CONDITIONAL CHARACTER OF THE OBLIGATION TO NEGOTIATE

91. Two additional points on draft article 4 require brief comment. The obligation to negotiate system agreements is not an absolute requirement. There are numerous streams that flow through the territory of more than one State that do not currently give rise to any inter-State problems regarding the use of water. There are other international streams where problems arise that are settled locally or through informal agreements. Even on a major watercourse system there may be cases in which physical conditions and the nature and extent of the use of the water are such as to accommodate existing needs of the system States.

92. These situations—and related human needs—are in a continuous state of change, however, with a consequent effect upon the obligation to seek agreement. Discussion by the International Court of Justice of the preferential rights of a coastal State by the *Fisheries Jurisdiction* case (United Kingdom v. Iceland) is relevant:

This is not to say that the preferential rights of a coastal State in a special situation are a static concept, in the sense that the degree of the coastal State's preference is to be considered as fixed for ever at some given moment. On the contrary, the preferential rights are a function of the exceptional dependence of such a coastal State on the fisheries in adjacent waters and may, therefore, vary as the extent of that dependence changes. Furthermore, as was expressly recognized in the 1961 Exchange of Notes, a coastal State's exceptional dependence on fisheries may relate not only to the livelihood of its people but to its economic development. In each case, it is essentially a matter of appraising the dependence of the coastal State on the fisheries in question in relation to that of the other State concerned and of reconciling them in as equitable a manner as is possible.<sup>98</sup>

93. In order to take into account the problem of changing conditions, as well as situations in which agreements are not required, paragraph 1 of article 4 provides for supplementing the draft articles "as the needs of an international watercourse system may require".

<sup>98</sup> *I.C.J. Reports 1974*, p. 30.

## 12. SUBSYSTEM AGREEMENTS

94. The final point arising out of paragraph 1 which requires discussion is the reference to "one or more system agreements". It may well be an excess of caution to specify that the system States are free to deal with the problems of a system in one agreement or in a number of agreements. The thought is clearly implicit in the prior reference to the needs of the international watercourse system.

95. The issue of multiple systems agreements for an individual watercourse is also the subject of paragraph 2 of article 4. Whether a system agreement should apply to the entire watercourse or whether there may be systems agreements applying to subsystems and to individual parts of the system is of consequence when there are three or more system States, because in such cases dealing with only a part of the watercourse may have advantages of simplicity and utility. In addition, while the interests of all the System States presumably will be taken into account when only part of a two-State watercourse is the subject of a treaty, this is not necessarily the case when two States enter into an agreement which relates to a system embracing more than two States.

96. It was noted in the Special Rapporteur's first report that the Convention relating to the development of hydraulic power affecting more than one State (Geneva, 1923),<sup>99</sup> which was offered as a prototype of the framework treaty, contemplated the negotiation of bilateral agreements that would deal with particular parts of international watercourses rather than the whole.<sup>100</sup> The Treaty on the River Plate Basin (Brasilia, 23 April 1969) was also discussed and its article VI was quoted:

The stipulations of the present Treaty shall not inhibit the Contracting Parties from entering into specific or partial agreements, bilateral or multilateral, tending towards the attainment of the general objectives of the Basin development.<sup>101</sup>

97. The Special Rapporteur's first report pointed out that technical experts on the subject considered that the most efficient and beneficial way of dealing with a watercourse was to deal with it as a whole and that this approach of including all the riparian States had been followed, *inter alia*, in the treaties relating to the Amazon, the Plate, the Niger and the Chad basins. The report also pointed out that some issues arising out of watercourse pollution necessitated co-operative action throughout the entire watercourse and cited the Convention on the protection of the Rhine against chemical pollution (Bonn, 1976) as an example of a response to the need for unified treatment.<sup>102</sup>

98. The general tenor of comments in the Sixth Committee favoured considerable latitude for States in working out agreements for individual watercourses. The representative of India remarked that "the Commission should not devote excessive attention to the question of the contents of user agreements between riparian States, which should be left to the States concerned".<sup>103</sup> The representative of Venezuela drew special attention to article VI of the River Plate Basin Treaty.<sup>104</sup>

99. Of the 200 largest international river basins, 52 are multi-State basins, among which are many of the world's most important river basins—the Amazon, the Chad, the Congo, the Danube, the Elbe, the Ganges, the Mekong, the Niger, the Nile, the Rhine, the Volta and the Zambezi.<sup>105</sup> In dealing with multi-State systems, States have often resorted to agreements regulating only a portion of the watercourse which are effective between only some of the States situated on it.

100. The *Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases by Basin* published by FAO<sup>106</sup> indicates that a very large number of watercourse treaties in force are limited to a part of the watercourse system. For example, for the period 1960–1969, the *Index* lists 12 agreements that came into force for the Rhine system. Of these 12 agreements, only one includes all the Rhine States as parties; several others, while not localized, are effective only within a defined area; the remainder deal with subsystems of the Rhine and with limited areas of the Rhine system.

101. There will be a need for subsystem agreements and for the agreements covering limited areas. In some watercourse systems, such as the Indus, the Plate and the Niger, the differences between subsystems are as marked as those between separate watercourse systems. Agreements on subsystems are likely to be more readily attainable than agreements on the watercourse system as a whole, particularly if a considerable number of States are involved. Moreover, there will always be problems whose solution is of interest to only a limited number of States of the system.

102. There does not appear to be any sound reason for excluding either subsystem or localized agreements from the application of the framework treaty. A major purpose of the framework treaty is to facilitate the negotiation of agreements on the use of water, and this purpose encompasses all agreements, whether covering an entire system or localized, whether general in nature or dealing with a specific problem. The

<sup>99</sup> League of Nations, *Treaty Series*, vol. XXXVI, p. 75.  
<sup>100</sup> *Yearbook ... 1979*, vol. II (Part One), p. 165, document A/CN.4/320, paras. 86–87.

<sup>101</sup> *Ibid.*, p. 167, para. 95 (see also footnote 11 above).

<sup>102</sup> *Ibid.*, pp. 168–169, paras. 98–100.

<sup>103</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 51st meeting, para. 65; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>104</sup> *Ibid.*, 44th meeting, para. 18; and *ibid.*, *Sessional fascicle*, corrigendum. See also para. 96 above.

<sup>105</sup> See *Yearbook ... 1979*, vol. II (Part One), p. 170, document A/CN.4/320, para. 108.

<sup>106</sup> FAO, Legislative study No. 15 (Rome), 1978.

framework treaty, it is to be hoped, will provide system States with a firm common ground as a basis for negotiation—which is the great lack in watercourse negotiations at the present time. No advantage is seen in confirming the application of the framework treaty to a single system agreement embracing the entire watercourse system.

### 13. PARTIES TO SYSTEM AGREEMENTS

103. The Special Rapporteur's first report included an article 5 on "Parties to user agreements",<sup>107</sup> which would have allowed States not parties to the framework treaty to be parties to a user agreement, and an article 6 on "Relation of these articles to user agreements".<sup>108</sup> Both were the subject of criticism. Neither article is essential to the development of the first part of the draft articles. A decision whether provisions dealing with these matters are required can be better made when the broad structure of the draft articles has been further developed.

104. There are, however, certain aspects of the relationship of States to system agreements that should be dealt with. For this purpose it is suggested that an article be adopted which is closely connected with the problems dealt with in article 4.

### 14. DRAFT ARTICLE 5: "PARTIES TO THE NEGOTIATION AND CONCLUSION OF SYSTEM AGREEMENTS"

105. The following draft article is proposed:

#### *Article 5. Parties to the negotiation and conclusion of system agreements*

1. All system States are entitled to participate in the negotiation and conclusion of any system agreement that applies to the international watercourse system as a whole.

2. Each system State whose use or enjoyment of the water of an international watercourse system may be affected to an appreciable extent by the provisions of a system agreement that applies only to a part of the system is entitled to participate in the negotiation and conclusion of that agreement.

106. Paragraph 1 of the article is self-explanatory. Inasmuch as the system agreement deals with the entirety of the international watercourse system, there is no reasonable basis for excluding a system State from participating in its negotiation or from becoming a party thereto. It is true that there are likely to be system agreements that are of little interest to one or more of the system States. But since the provisions of such an agreement are intended to be applicable

throughout the system, the purpose of the agreement would be stultified if every system State were not given the opportunity to participate.

107. Article 5 deals with the right to participate in the negotiation of an agreement rather than with the duty to negotiate, which is addressed in article 4. If there is a duty to negotiate, there is a complementary right to participate in negotiations. Article 5 is limited to identification of the States which are entitled to exercise this right under the varying conditions referred to in article 4.<sup>109</sup>

108. Paragraph 2 of article 5 is concerned with agreements that deal with only part of the system. It provides that all system States whose use or enjoyment of the system water may be appreciably affected by an agreement applying to only a part of the system are entitled to participate in the negotiation and to become parties to that subsystem agreement. The rationale is that, if the use or enjoyment of water by a State can be affected appreciably by the implementation of treaty provisions dealing with part of a watercourse, the scope of the agreement necessarily extends to the territory of the State whose use or enjoyment is affected.

109. Because water in a watercourse is in continuous movement, the consequences of action taken under an agreement with respect to water in a particular territory may produce effects beyond that territory. For example, States A and B, whose common border is the river Styx, agree that each may divert 40 per cent of the river flow for domestic consumption, manufacturing and irrigation purposes at a point 25 miles upstream from State C, through which the Styx flows upon leaving States A and B. The total amount of water available to State C from the river, including return flow in States A and B, will be reduced as a result of the diversion by 25 per cent from what would have been available without diversion.

110. The question is not whether States A and B are legally entitled to enter into such an agreement. It is whether a treaty that is to provide general principles for the guidance of States in concluding agreements on the use of fresh water should contain a principle that will ensure that State C has the opportunity to join in negotiations, as a prospective party, with regard to proposed action by States A and B that will substantially reduce the amount of water that flows through State C's territory.

111. There is similarity between the considerations involved in the hypothetical river Styx case and certain of the considerations involved in the *North Sea Continental Shelf* judgements.<sup>110</sup> In both cases there is a unity of natural resources, which requires the negotiation of agreements to resolve the problems of exploitation. A system State must have the right to

<sup>107</sup> *Yearbook ... 1979*, vol. II (Part One), p. 144, document A/CN.4/320, para. 2.

<sup>108</sup> *Ibid.*

<sup>109</sup> See para. 69 above.

<sup>110</sup> For reference, see footnote 82 above.

participate in negotiating and concluding an international agreement that may directly, and to an appreciable degree, affect the quantity or quality of water available to it.

112. The right is put forward as a qualified one. There must be an appreciable effect upon the use or enjoyment of water by a State to support participation of that State in the negotiation and conclusion of a limited system agreement.

113. Whether such a qualification is necessary and desirable should be decided principally on pragmatic grounds. If a system State is not affected by an agreement regarding a part of the system, the physical unity of the system does not of itself require that a system State should have the right to participate in the negotiation and conclusion of a limited agreement. The introduction of one or more system States whose interests are not directly concerned in the matters under negotiation would mean the introduction of unrelated interests in the negotiating process.

114. This is not to say that a system agreement dealing with the entire system or with a subsystem should exclude decision-making with regard to some or all aspects of the use of system water through procedures in which all the system States participate. For most, if not all, watercourses, the establishment of procedures for co-ordinating activities throughout the system is highly desirable and perhaps necessary, and those procedures may well include requirements for full participation by all system States in decisions that deal with only a part of the system. However, such procedures must be adopted for each watercourse system by the system States on the basis of the special needs and circumstances of the system. Here it is suggested that, as a matter of general principle, a system State does have the right to participate in the negotiation and conclusion of a limited agreement that may affect that State's interests in system water.

#### 15. THE "TO AN APPRECIABLE EXTENT" CRITERION

115. The remaining issue is whether the rule should include qualification of the degree to which the interests of a State must be affected in order to give that State a right to negotiate and become a party to a system agreement. It is necessary to decide whether such a qualification—"to an appreciable extent"—gives rise to more problems than it resolves. If an "effect" could be quantified, it would be far more useful. In so far as the Special Rapporteur has been able to determine, however, at any rate in the absence of technical advice, such quantification is not practicable.

116. While a decision on this issue has legal consequences, the decision itself should be made in the light of scientific, technical and mathematical considerations. The Commission will require assistance

from experts to reach a reasoned judgement on such a matter as this. For this and other reasons, a body of experts should be established to supply specialized knowledge on problems of this character—a question to which the Special Rapporteur will return.

117. In the absence of any mathematical formula for fixing the extent to which use or enjoyment of system water should be affected in order to support participation in a negotiation, effect on a system State to an "appreciable extent" is suggested as the criterion. This extent is one that can be established by objective evidence (provided that the evidence can be secured). There must be a real impairment of use or enjoyment.

118. What is intended to be excluded are situations of the kind involved in the *Lac Lanoux* case, in which Spain insisted upon delivery of water from the lake through the original system. The arbitral tribunal found that, "thanks to the restitution effected by the devices described above, none of the guaranteed users will suffer in his enjoyment of the waters . . . ; at the lowest water level, the volume of the surplus water of the Carol, at the boundary, will at no time suffer a diminution . . .".<sup>111</sup> The tribunal continued by pointing out that Spain might have claimed that the proposed diversionary works

. . . would bring about an ultimate pollution of the waters of the Carol or that the returned waters would have a chemical composition or a temperature or some other characteristic which could injure Spanish interests . . . Neither in the *dossier* nor in the pleadings in this case is there any trace of such an allegation.<sup>112</sup>

In the absence of any assertion that Spanish interests were affected in a tangible way, the tribunal held that Spain could not require maintenance of the original unreturned flowage. It should be noted that the French plan on which the Court relied had been adopted only after a long-drawn-out series of negotiations, beginning in 1917, in the course of which, *inter alia*, a mixed commission of engineers had been established in 1949 and a French proposal made in 1950 that would have appreciably affected the use and enjoyment of the waters by Spain; that proposal had later been superseded by the plan on which the Tribunal ruled.<sup>113</sup>

119. At the same time, "appreciable" is not used in the sense of "substantial". A requirement that use or enjoyment must be substantially affected before there can be a right to participate in negotiations would impose too heavy a burden upon the third State. The exact extent to which the use of water may be affected by proposed actions is likely to be far from clear at the outset of negotiations. The *Lake Lanoux* decision illustrates the extent to which plans may be varied as a result of negotiations, and such variance may favour or harm a third State. That State should only be required

<sup>111</sup> United Nations, *Reports of International Arbitral Awards* vol. XII (*op. cit.*), p. 303.

<sup>112</sup> *Ibid.*

<sup>113</sup> *Ibid.*, pp. 292.

to establish that its use or enjoyment of the water may be affected to some appreciable extent.

120. This appears to be the sense in which that qualification is used in article 5 of the Statute annexed to the Convention relating to the development of the Chad Basin (Fort Lamy, 22 May 1964), which reads:

The Member States undertake to abstain from taking, without prior consultation with the Commission, any measure likely to have an appreciable effect either on the extent of the loss of water or on the nature of the yearly hydrogramme and limnigramme and certain other features of the Basin . . . the conditions subject to which other riparian States may utilize the waters in the Basin, the sanitary conditions of the waters or the biological characteristics of its flora and fauna.<sup>114</sup>

121. Other examples of a use with this meaning are to be found in article 1 of the Convention between Norway and Sweden on certain questions relating to the law on watercourses (Stockholm, 11 May 1929):

1. The present Convention relates to installations or works or other operations on watercourses in one country which are of such a nature as to cause an appreciable change in watercourses in the other country in respect of their depth, position, direction, level or volume of water, or to hinder the movement of fish to the detriment of fishing in the latter country.<sup>115</sup>

and in article XX of the Convention regarding the determination of the legal status of the frontier between Brazil and Uruguay (Montevideo, 20 December 1933):

When there is a possibility that the installation of plant for the utilization of the water may cause an appreciable and permanent alteration in the rate of flow of a watercourse running along or intersecting the frontier, the contracting State desirous of such utilization shall not carry out the work necessary therefor until it has come to an agreement with the other State.<sup>116</sup>

122. It should also be noted that, in an article requiring notice and provision of information on proposed construction or installations that would alter the regime of a basin, the Helsinki Rules provide for furnishing such notice to the basin State "the interests of which may be substantially affected".<sup>117</sup>

123. For the reasons stated above, the Special Rapporteur prefers the criterion of "appreciable". In that regard, the "Draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States"<sup>118</sup> are instructive. In these principles it is provided that States should make environmental assessments before engaging in any activity with respect to a shared natural

resource "which may create a risk of significantly affecting the environment of another State or [other] States sharing that resource" (principle 4). Similarly, it is provided that advance notification shall be made of plans to make a change in the utilization of a shared natural resource "which can reasonably be expected to affect significantly the environment in the territory of the other State or States" (principle 6, para. 1(a)). A single definition follows the draft principles: ". . . the expression 'significantly affect' refers to any appreciable effects on a shared natural resource and excludes *de minimis* effects".

## 16. COLLECTION AND EXCHANGE OF INFORMATION

124. Chapter IV of the Special Rapporteur's first report<sup>119</sup> deals with the collection and exchange of data. Draft article 8<sup>120</sup> provides that each contracting State "shall collect and record data with respect to precipitation and evaporation of water and with respect to the stage of flow, mean velocity and abstraction of the water of an international watercourse in its territory". The modalities of collection and recording were left open for future exploration with the aid of expert advice. Article 9<sup>121</sup> provides for exchange of the data with other watercourse States on a regular basis and for the collection and exchange, on a "best efforts" basis, of additional data. Article 10<sup>122</sup> lays down rules regarding cost sharing.

125. The commentary in the report emphasizes that there can be no effective application of legal principles to the uses of the water of an international watercourse unless there is accurate and detailed knowledge regarding that water. Chapter I, section A, of the report, in its examination of the hydrologic cycle, refers to the broad variations occurring on a seasonal and annual basis, as well as in longer cycles, in the volume of available water for use in a basin. While the total amount of water in the total hydrologic cycle remains constant, the amount available within a basin or a river or a stream can and does vary within broad limits as the result of climatic and man-made changes.

126. The kind of information called for under draft article 8 would be required for the success of any attempt to deal with use of international fresh water on a co-operative rather than on an adversary basis. As the report of the Commission on its thirty-first session reveals, however, these proposals on data were greeted with a degree of criticism. Concern was expressed by some members that the requirements would be burdensome; it was suggested that the requirements should be cut back to a provision for co-operation of States in studying the problem of data collection and

<sup>114</sup> *Nigeria's Treaties in Force for the Period 1st October 1960 to 30th June 1968* (Lagos, Federal Ministry of Information, 1969), p. 220. See also *Yearbook . . . 1974*, vol. II (Part Two), p. 291, document A/CN.4/274, para. 55.

<sup>115</sup> League of Nations, *Treaty Series*, vol. CXX, pp. 277-278.

<sup>116</sup> *Ibid.*, vol. CLXXXI, p. 87.

<sup>117</sup> Article XXIX, para. 2. See *Yearbook . . . 1974*, vol. II (Part Two), p. 359, document A/CN.4/274, para. 405. See also article X, on pollution, where the standard of "substantial injury" and "substantial damage" is advanced (*ibid.*, p. 358).

<sup>118</sup> For reference, see para. 90 and footnote 97 above.

<sup>119</sup> *Yearbook . . . 1979*, vol. II (Part One), p. 143, document A/CN.4/320.

<sup>120</sup> *Ibid.*, pp. 144-145, para. 2.

<sup>121</sup> *Ibid.*

<sup>122</sup> *Ibid.*

exchange and that the formulation of obligations could be left to user agreements.<sup>123</sup>

127. Articles 8, 9 and 10 were intended to be illustrative of some of the technical difficulties that would have to be dealt with if workable rules in this field were to be developed. In that connection, the need to establish a body of experts to assist the Commission in dealing with issues such as information collection and exchange were emphasized.

128. In the Sixth Committee of the General Assembly, the question of collection and transmission of information was not the subject of much discussion. The representative of Egypt strongly supported recognition of the need for co-operation among States in this respect.<sup>124</sup> The representative of Thailand stressed that, "without data collection and exchange, little or no progress could be made in the law-making process".<sup>125</sup> A number of other States supported the need for provisions on data collection and exchange and had specific proposals regarding content. The representative of Niger was concerned that developing States might not have the technical resources to meet the requirements of the articles and proposed changes to make the article more flexible.<sup>126</sup> The representative of the German Democratic Republic considered that the obligation to collect and exchange data should be incumbent only upon States parties to a treaty, and that any such obligation should be governed by that treaty.<sup>127</sup> The representative of India proposed that the obligations covering exchange of data provided for in article 9, paragraph 1, "should be regulated by user agreements and not under the fundamental rules".<sup>128</sup>

129. The relative scarcity of comment may possibly reflect a general acceptance of the position that the collection and exchange of necessary information is an essential element of rules on the use of system water. The material collected in chapter IV of the Special Rapporteur's first report strongly confirms the general acceptance by States of the need for information, a need reflected in many treaty provisions.

#### 17. DRAFT ARTICLE 6: "COLLECTION AND EXCHANGE OF INFORMATION"

130. The draft articles proposed in the first report may be unduly specific for use in a framework

<sup>123</sup> *Ibid.*, vol. II (Part Two), p. 168, document A/34/10, paras. 142-143.

<sup>124</sup> *Official Records of the General Assembly, Thirty-fourth Session, Sixth Committee*, 51st meeting, para. 27; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>125</sup> *Ibid.*, 40th meeting, para. 50; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>126</sup> *Ibid.*, 46th meeting, para. 36; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>127</sup> *Ibid.*, 43rd meeting, para. 32; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>128</sup> *Ibid.*, 51st meeting, para. 65; and *ibid.*, *Sessional fascicle*, corrigendum.

agreement at a stage devoted to the presentation of general principles. However, the need for the collection and exchange of information is so essential that its expression can and should be cast in the form of a basic obligation. The following article is accordingly proposed:

#### **Article 6. Collection and exchange of information**

**System States shall undertake or make arrangements to accomplish, in the light of the economic development of and the resources available to the individual system States, the systematic collection and exchange, on a regular basis, of hydrographic and other information and data pertinent to existing and planned uses of the system water.**

131. Article 6 summarizes a number of the salient requirements regarding the collection and exchange of information regarding fresh water. It leaves to the States of the individual systems the task of working out the procedures for collection and exchange of information that are best suited to the needs of that system. This approach follows the tenor of comment in the Commission and in the Sixth Committee.

132. The article also leaves it to the system States to determine the manner in which provision is to be made regarding data collection and exchange. This would normally be done through a system agreement. However, in those systems where machinery already exists, such as river commissions, there may be administrative procedures in effect that will serve to achieve the necessary results.

133. The collection and exchange of information is to be carried out on a continuing basis. The reference to "systematic" collection and exchange and to existing and planned uses is regarded as making this aspect clear, as is the phrase "on a regular basis".

134. The kind of information to be supplied is expressed in general terms. The reference to existing and planned uses of the water gives some definition to the obligation. It is possible that there are very minor international streams in sparsely settled areas where the level of use is such that no information exchange is required. The reference to the stage of "economic development" is also pertinent.

135. The reference to "uses" of system water also serves to clarify "hydrographic and other information and data" which are "pertinent". It is a rare water course in which domestic consumption is not an important use. Consequently information regarding water quality would be pertinent information on the physical condition of the water in a substantial number of cases. It is for the system States concerned to determine what information regarding water quality should be collected and exchanged in the individual system.

136. The reference to planned as well as existing uses is essential because it is not possible to make plans for

the use of fresh water or to forecast, for example, the effects of the construction of works in the watercourse upon water conditions in system States without a considerable amount of hydrologic data. As a general rule, planning in one system State requires planning in other system States, and this, in turn, may react upon the planning in the first State. Without adequate information from all the States concerned, the planning can become guesswork.

137. The reference to the stage of economic development and available resources has been included in the light of the statement referred to previously that States should not be required to supply information if they do not have the means to do so.<sup>129</sup> This concern is a

<sup>129</sup> See paras. 126 and 128 above.

reasonable one. However, the solution to this problem may lie in a proper allocation of the costs of supplying information.

138. Article 6 does not deal with the issue of burden sharing, and this too, perhaps, is a subject best dealt with by system States for the individual systems.

139. The first report of the Special Rapporteur contained a considerable amount of analysis and precedent supporting the need for the collection and exchange of information among system States regarding system water. The Special Rapporteur does not propose to repeat those data or to add to them because the necessity for a general principle regarding the collection and exchange of information has not been challenged.

### CHAPTER III

#### General principles: water as a shared natural resource

##### A. Introduction

140. In recent years, the concept of shared natural resources, and of co-operation among States with respect to the mutually beneficial use and development of shared natural resources, has become widely accepted. Indeed, the concept of shared resources and co-operative use of them appears to have been the implicit assumption of extensive State practice which is deeply rooted in the history of international law and relations. It is the purpose of this chapter to relate the concept of shared natural resources to the water of international watercourses; to demonstrate the measure of acceptance of the concept of shared natural resources by the international community; to indicate that application of this concept to the law of the navigational uses of international watercourses has ineluctable implications for the law of non-navigational uses; and to illustrate that the concept of fresh water as a shared natural resource has had wide application in the sphere of boundary waters as well. At the outset of the chapter, a pertinent draft article is proposed.

##### B. Water as the archetype of the shared natural resource

141. If the concept of natural resources shared by two or more States has any core of meaning, it must be derived from the water of international watercourses. It was demonstrated in the first report of the Special Rapporteur that the physical facts of nature governing the behaviour of water that flows from the territory of one State to that of another give rise to inescapable interaction of that water. What happens to water in one part of an international watercourse generally

affects, in large measure or small, sooner or later, what happens to water in other parts of that watercourse.<sup>130</sup> A mass of scientific proof can be brought to bear to reinforce this incontestable truth. The time of the Commission will be saved if what is the fact is accepted as the fact and if the law is shaped to respond to the fact. The immediate essential fact is that the water of an international watercourse system is the archetype of the shared natural resource.<sup>131</sup>

##### C. Draft article 7: "A shared natural resource"

142. In the light of the foregoing considerations and those that follow in this chapter, the following draft article is proposed for the Commission's consideration

<sup>130</sup> *Yearbook ... 1979*, vol. II (Part One), pp. 145 *et seq.*, document A/CN.4/320, paras. 4–31. See also *Management of international water resources: institutional and legal aspects—report of the Panel of Experts on the Legal and Institutional Aspects of International Water Resources Development*, Natural Resources/Water Series, No. 1 (United Nations publication, Sales No. E.75.II.A.2), paras. 14–38. Changes in boundary waters, and in waters upstream, necessarily affect other boundary waters and waters downstream. Changes downstream in some cases affect waters upstream.

<sup>131</sup> Stating that there existed no satisfactory generic term for describing natural resources shared by two or more States, the Executive Director of UNEP limited himself to five of "the most obvious examples" of such resources, the first of which was: "(a) an international water system, including both surface and ground waters" (see report of the Executive Director of UNEP, "Co-operation in the field of the environment concerning natural resources shared by two or more States" (UNEP/GC/44 and Add.I), para. 86). The draft principles prepared by UNEP, to which that report relates, are discussed below (paras. 156–185).

as the first of the general principles governing the uses of the water of international watercourses:

**Article 7. A shared natural resource**

**System States shall treat the water of an international watercourse system as a shared natural resource.**

**D. Acceptance by the international community of the concept of shared natural resources**

143. While the concept of shared resources may in some respects be as old as that of international co-operation, its articulation is relatively new and incomplete. It has not been accepted as such, nor in these terms, as a principle of international law, although the fact of shared natural resources has long been treated in State practice as giving rise to obligations to co-operate in the treatment of such resources. It is only during the last decade that the concept of shared natural resources has come to the fore.

**1. CHARTER OF ECONOMIC RIGHTS AND DUTIES OF STATES**

144. The Charter of Economic Rights and Duties of States, adopted by the General Assembly on 12 December 1974<sup>132</sup> by 120 votes to 6, with 10 abstentions, contains the following article:

*Article 3*

In the exploitation of natural resources shared by two or more countries, each State must co-operate on the basis of a system of information and prior consultations in order to achieve the optimum use of such resources without causing damage to the legitimate interest of others.

145. This article was a source of controversy, being adopted in the Second Committee by 97 votes to 7, with 25 abstentions, and in plenary by 100 votes to 8, with 28 abstentions.<sup>133</sup> Neither article 3 nor the Charter of Economic Rights and Duties as a whole can be treated as declaratory or creative of international law, in view of the well-known limitations on the authority of the General Assembly and the fact that this controversial and controverted resolution of the General Assembly was expressly characterized by a number of States, in the course of its negotiation, at the time of its adoption, and thereafter, as not expressing or giving rise to obligations under international law.

146. Nevertheless, article 3 of the Charter of Economic Rights and Duties is of high interest to the Commission's concerns. In the first place, it assumes and expressly states what is the undeniable fact: that

there are natural resources shared by two or more countries. Secondly, it holds that, in the exploitation of such shared resources, "each State must co-operate". Thirdly, the basis of such co-operation is specified in terms resonant of this topic's concern with the collection and exchange of data and with negotiation among riparians: "on the basis of a system of information and prior consultations...". And, fourthly, the objective of such international co-operation is specified to be "the optimum use of such resources without causing damage to the legitimate interest of others". In all these respects, it is submitted, this article of the Charter of Economic Rights and Duties is eminently sound. Moreover, it can and will be shown in succeeding passages of this report that, while this Charter as a whole cannot be viewed as declaratory or creative of international law, its article 3 essentially expresses what are valid principles of existing international law, quite apart from any legal weight that may be attached as such to their rendering in the article.

147. The Charter of Economic Rights and Duties of States calls for a further observation. Article 3 follows and is juxtaposed by article 2, which provides, in paragraph 1, that:

Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities.

Article 2 then proceeds to specify what, in the view of a majority of the General Assembly, flows from the right so declared.

148. It is not at all necessary to accept the much disputed provisions of article 2 of the Charter of Economic Rights and Duties, in whole or in part, to perceive that article 3 is placed as, and is designed to be, an exception to article 2. That is to say, the General Assembly has adopted a resolution which asserts, in unqualified terms, the permanent sovereignty of every State over "its" natural resources, while having taken care immediately to specify that, in respect of natural resources "shared by two or more countries", other obligations come into play. This appears to be an important recognition by no fewer than 100 States that the principle of permanent sovereignty over natural resources does *not* apply to shared natural resources, and, hence, does not apply to the water of international watercourses.

**2. REPORT OF THE UNITED NATIONS WATER CONFERENCE**

149. The United Nations Water Conference convened in 1977, adopted a report<sup>134</sup> which contains much of relevance to the topic before the Commission.

<sup>132</sup> Resolution 3281 (XXIX).

<sup>133</sup> See *Official Records of the General Assembly, Twenty-ninth Session, Second Committee*, 1648th meeting, and *ibid.*, *Plenary Meetings*, 2319th meeting.

<sup>134</sup> *Report of the United Nations Water Conference, Mar del Plata, 14-25 March 1977* (United Nations publication, Sales No. E.77.11.A.12).

Of particular pertinence to the immediate point are the following recommendations of the Conference, which constitute part of the Mar del Plata Action Plan:

#### G. REGIONAL CO-OPERATION

##### *Development of shared water resources<sup>5</sup>*

84. In the case of shared water resources, co-operative action should be taken to generate appropriate data on which future management can be based and to advise appropriate institutions and understandings for co-ordinated development.

85. Countries sharing water resources, with appropriate assistance from international agencies and other supporting bodies, on the request of the countries concerned, should review existing and available techniques for managing shared water resources and co-operate in the establishment of programmes, machinery and institutions necessary for the co-ordinated development of such resources. Areas of co-operation may with agreement of the parties concerned include planning, development, regulation, management, environmental protection, use and conservation, forecasting, etc. Such co-operation should be a basic element in an effort to overcome major constraints such as the lack of capital and trained manpower as well as the exigencies of natural resources development.

86. To this end it is recommended that countries sharing a water resource should:

(a) Sponsor studies, if necessary with the help of international agencies and other bodies as appropriate, to compare and analyse existing institutions for managing shared water resources and to report on their results;

(b) Establish joint committees, as appropriate with agreement of the parties concerned, so as to provide for co-operation in areas such as the collection, standardization and exchange of data, the management of shared water resources, the prevention and control of water pollution, the prevention of water-associated diseases, mitigation of drought, flood control, river improvement activities and flood warning systems;

(c) Encourage joint education and training schemes that provide economies of scale in the training of professional and subprofessional officers to be employed in the basin;

(d) Encourage exchanges between interested countries and meetings between representatives of existing international or interstate river commissions to share experiences. Representatives from countries which share resources but yet have no developed institutions to manage them could be included in such meetings;

(e) Strengthen if necessary existing governmental and inter-governmental institutions, in consultation with interested Governments, through the provision of equipment, funds and personnel;

(f) Institute action for undertaking surveys of shared water resources and monitoring their quality;

(g) In the absence of an agreement on the manner in which shared water resources should be utilized, countries which share these resources should exchange relevant information on which their future management can be based in order to avoid foreseeable damages;

(h) Assist in the active co-operation of interested countries in controlling water pollution in shared water resources. This co-operation could be established through bilateral, subregional or regional conventions or by other means agreed upon by the interested countries sharing the resources.

87. The regional water organizations, taking into account existing and proposed studies as well as the hydrological, political,

economic and geographical distinctiveness of shared water resources of various drainage basins, should seek ways of increasing their capabilities of promoting co-operation in the field of shared water resources and, for this purpose, draw upon the experience of other regional organizations.

#### H. INTERNATIONAL CO-OPERATION

##### *Development of shared water resources<sup>5</sup>*

90. It is necessary for States to co-operate in the case of shared water resources in recognition of the growing economic, environmental and physical interdependencies across international frontiers. Such co-operation, in accordance with the Charter of the United Nations and principles of international law, must be exercised on the basis of the equality, sovereignty and territorial integrity of all States, and taking due account of the principle expressed, *inter alia*, in principle 21 of the Declaration of the United Nations Conference on the Human Environment.<sup>6</sup>

91. In relation to the use, management and development of shared water resources, national policies should take into consideration the right of each state sharing the resources to equitably utilize such resources as the means to promote bonds of solidarity and co-operation.

92. A concerted and sustained effort is required to strengthen international water law as a means of placing co-operation among States on a firmer basis. The need for progressive development and codification of the rules of international law regulating the development and use of shared water resources has been the growing concern of many Governments.

93. To this end it is recommended that:

(a) The work of the International Law Commission in its contribution to the progressive development of international law and its codification in respect of the law of the non-navigational uses of international watercourses should be given a higher priority in the working programme of the Commission and be co-ordinated with activities of other international bodies dealing with the development of international law of waters with a view to the early conclusion of an international convention;

(b) In the absence of bilateral or multilateral agreements, Member States continue to apply generally accepted principles of international law in the use, development and management of shared water resources;

(c) The Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States of the United Nations Environment Programme be urged to expedite its work on draft principles of conduct in the field of the environment for the guidance of States in the conservation and harmonious exploitation of natural resources shared by two or more States;

(d) Member States take note of the recommendations of the Panel of Experts on Legal and Institutional Aspects of International Water Resources Development set up under Economic and Social Council resolution 1033 (XXXVII) of 14 August 1964 as well as the recommendations of the United Nations Inter-regional Seminar on River Basin and Inter-basin Development (Budapest, 1975).

(e) Member States also take note of the useful work of non-governmental and other expert bodies on international water law;

(f) Representatives of existing international commissions on shared water resources be urged to meet as soon as possible with a view to sharing and disseminating the results of their experience

<sup>5</sup> This term has been used only for the uniformity of the text and its use does not prejudice the position of the countries supporting the terms "transboundary waters" or "international waters" in any of the problems involved.

<sup>6</sup> *Report of the United Nations Conference on the Human Environment* (United Nations publication, Sales No. E.73.II.A.14), chap. 1, sect. 111.

and to encourage institutional and legal approaches to this question;

(g) The United Nations system should be fully utilized in reviewing, collecting, disseminating and facilitating exchange of information and experiences on this question. The system should accordingly be organized to provide concerted and meaningful assistance to States and basin commissions requesting such assistance.

[...]<sup>135</sup>

150. These passages from the report of the United Nations Water Conference are noteworthy in the following respects, among others. They accept and apply the term "shared water resources"—albeit without prejudice to the position of countries supporting the terms "transboundary waters" or "international waters". The need for international co-operation, through international river commissions and otherwise, and generation exchange of data to that end, is stressed. The "right of each State sharing the resources to equitably utilize such resources as the means to promote bonds of solidarity and co-operation" is asserted. That there are "generally accepted principles of international law" which apply, even in the absence of bilateral or multilateral agreements, to the use, development and management of shared water resources is assumed and stated, and these principles Member States are to "continue to apply".

151. Subsequently, the Economic and Social Council<sup>136</sup> and the General Assembly<sup>137</sup> adopted resolutions strongly commending the report. By 128 votes to none, with 9 abstentions, the General Assembly adopted the report of the United Nations Water Conference and approved the Mar del Plata Action Plan, of which the recommendations quoted above form a part. The resolution urges Member States to take intensified and sustained action for the implementation of the agreements reached at the Conference, including the Mar del Plata Action Plan.

152. The recommendations of the Mar del Plata Action Plan and the resolutions of the Economic and Social Council and of the General Assembly approving them do not of themselves demonstrate or give rise to obligations under international law. But they are important in their indication that the world community as a whole recognizes both that the water of international watercourses is a shared natural resource and that there are "generally accepted principles of international law" which apply, even in the absence of bilateral or multilateral agreements, to the use, development and management of shared water resources.

### 3. CO-OPERATION IN THE FIELD OF THE ENVIRONMENT CONCERNING NATURAL RESOURCES SHARED BY TWO OR MORE STATES

153. In 1973, the General Assembly adopted a resolution which led to the preparation of draft principles discussed in the following section. Entitled "Co-operation in the field of the environment concerning natural resources shared by two or more States", resolution 3129 (XXVIII) of 13 December 1973 refers to the Declaration of the United Nations Conference on the Human Environment,<sup>138</sup> takes note with satisfaction of "the important Economic Declaration adopted by the Fourth Conference of Heads of State or Government of Non-aligned Countries, held at Algiers", declares itself conscious "of the importance and urgency of safeguarding the conservation and exploitation of the natural resources shared by two or more States, by means of an effective system of co-operation, as indicated in the above-mentioned Economic Declaration of Algiers",<sup>139</sup> considers it necessary "to ensure effective co-operation between countries through the establishment of adequate international standards for the conservation and harmonious exploitation of natural resources common to two or more States", and considers further that co-operation "must be developed on the basis of a system of information and prior consultation".

154. The striking support General Assembly resolution 3129 (XXVIII) gives to the themes of the present report is clear. The concept of shared natural resources is accepted. The need for establishing adequate international standards for their conservation and exploitation is asserted. Co-operation among States sharing natural resources is called for on the basis of (a) a system of information (a call which conjoins with draft article 6 of this report) and (b) prior consultation (a proviso which conjoins with draft article 4 of this report).

155. Equally in point are the principles whose preparation resulted from the foregoing General Assembly resolution.

<sup>138</sup> See *Report of the United Nations Conference on the Human Environment Stockholm, 5-16 June 1972* (United Nations publication, Sales No. E.73.II.A.14), part 1, chap. 1.

<sup>139</sup> "The non-aligned countries consider it necessary to ensure effective co-operation between countries through the establishment of adequate international standards for the conservation and harmonious exploitation of natural resources common to two or more States in the context of the normal and habitual relations existing between them.

"They also believe that co-operation between countries interested in the exploitation of such resources should be developed on the basis of a system of information and prior consultations . . ." (Fourth Conference of Heads of State or Government of Non-aligned Countries, Algiers, 5-9 September 1973, Economic Declaration, sect. XII (A/9330, p. 72)).

<sup>135</sup> *Ibid.*, chap. I.

<sup>136</sup> Resolutions 2115 (LXIII) and 2121 (LXIII) of 4 August 1977.

<sup>137</sup> Resolution 32/158 of 19 December 1977.

#### 4. THE DRAFT PRINCIPLES OF CONDUCT IN RESPECT OF SHARED NATURAL RESOURCES

156. An Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States was established by UNEP in 1975 pursuant to the provisions of General Assembly resolution 3129 (XXVIII).<sup>140</sup> The Intergovernmental Working Group held five sessions in the period 1976–1978. Interest in the activities of the Group grew and at the final session, held from 23 January to 27 February 1978, experts from 26 States took part.<sup>141</sup>

157. At the final session, in 1978, the Working Group adopted 15 draft principles which represented the consensus of the experts. These were accompanied by a variety of declarations and reservations, among which were statements that the experts from India, Poland, Romania and the USSR regarded the principles as having the character of recommendations.<sup>142</sup> The expert from Brazil reserved his position on all the principles.<sup>143</sup> The expert from Mexico considered that, although the draft principles were written for insertion in a document which was to have the form of a recommendation, that did not have any bearing on the legal force which most of the principles already possessed.<sup>144</sup>

158. In this connection, it should be noted that the principles are preceded by the following explanatory note:

The draft principles of conduct . . . have been drawn up for the guidance of States in the field of the environment with respect to the conservation and harmonious utilization of natural resources shared by two or more States. The principles refer to such conduct of individual States as is considered conducive to the attainment of the said objective in a manner which does not adversely affect the environment. Moreover, the principles aim to encourage States sharing a natural resource, to co-operate in the field of the environment.

An attempt has been made to avoid language which might create the impression of intending to refer to, as the case may be, either a specific legal obligation under international law, or to the absence of such obligation.

The language used throughout does not seek to prejudice whether or to what extent the conduct envisaged in the principles is already prescribed by existing rules of general international law. Neither does the formulation intend to express an opinion as to

<sup>140</sup> See para. 90 above. The Intergovernmental Working Group was originally constituted with experts drawn from the following 17 States: Argentina; Brazil; Canada; France; India; Iraq; Kenya; Mexico; Morocco; Netherlands; Philippines; Poland; Romania; Senegal; Sweden; Union of Soviet Socialist Republics; United States of America. An observer for Turkey was also present.

<sup>141</sup> Argentina; Bangladesh; Brazil; Canada; France; Germany; Federal Republic of Ghana; Greece; India; Iran; Iraq; Jamaica; Kenya; Mexico; Netherlands; Philippines; Poland; Romania; Senegal; Sweden; Switzerland; Uganda; Union of Soviet Socialist Republics; United Kingdom of Great Britain and Northern Ireland; United States of America; Yugoslavia. Experts from Austria, Japan and Turkey participated as observers. (See UNEP/IG.12/2, para. 11.)

<sup>142</sup> *Ibid.*, para. 15.

<sup>143</sup> *Ibid.*

<sup>144</sup> *Ibid.*

whether or to what extent and in what manner the principles—as far as they do not reflect already existing rules of general international law—should be incorporated in the body of general international law.<sup>145</sup>

159. Principles 1 and 2 are of substantial importance to the issues raised by draft article 7 and are therefore reproduced at this juncture:

##### *Principle 1*

It is necessary for States to co-operate in the field of the environment concerning the conservation and harmonious utilization of natural resources shared by two or more States. Accordingly, it is necessary that consistent with the concept of equitable utilization of shared natural resources, States co-operate with a view to controlling, preventing, reducing or eliminating adverse environmental effects which may result from the utilization of such resources. Such co-operation is to take place on an equal footing and taking into account the sovereignty, rights and interests of the States concerned.

##### *Principle 2*

In order to ensure effective international co-operation in the field of the environment concerning the conservation and harmonious utilization of natural resources shared by two or more States, States sharing such natural resources should endeavour to conclude bilateral or multilateral agreements between or among themselves in order to secure specific regulation of their conduct in this respect, applying as necessary the present principles in a legally binding manner, or should endeavour to enter into other arrangements, as appropriate, for this purpose. In entering into such agreements or arrangements, States should consider the establishment of institutional structures, such as joint international commissions, for consultations on environmental problems relating to the protection and use of shared natural resources.<sup>146</sup>

160. The principles do not contain a definition of the term “shared resources”. Attempts were made to draft such a definition. The Working Group, after mentioning a number of proposals made, states in its report: “The Working Group, for want of time, was not in a position to enter into an in-depth discussion of the question of the definition of shared natural resources, and therefore did not reach any conclusion.”<sup>147</sup>

161. In May 1978, the Governing Council of UNEP proposed that the General Assembly adopt the principles of conduct.<sup>148</sup> General Assembly resolution 33/87 of 15 December 1978 requested the Secretary-General to submit the principles to Member States for consideration and comment. Thirty-six Governments commented on the report of the Working Group of experts. The report of the Secretary-General on co-operation in the field of the environment concerning natural resources shared by two or more States contains the following summary of replies received:

<sup>145</sup> *Ibid.*, p. 10.

<sup>146</sup> *Ibid.*, p. 11.

<sup>147</sup> *Ibid.*, para. 16. See also the report of the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States on the progress made at its first session, held at Nairobi in January 1976 (UNEP/GC/74).

<sup>148</sup> UNEP Governing Council decision 6/14 of 19 May 1978; see *Official Records of the General Assembly, Thirty-third Session, Supplement No. 25 (A/33/25)*, pp. 154–155.

(a) Thirty of the 36 Governments whose views were received were generally in favour of the adoption of the principles. Without derogating from their favourable views on the principles, some of those Governments, however, expressed reservations on specific principles, or suggested alternative formulation of some of them. Some expressed the view that the adoption of the principles should not preclude the solution of specific problems on shared natural resources through bilateral agreements based on principles other than the 15 principles.

(b) Many Governments expressed views on the legal status of the principles. On this issue most of the Governments that regarded the principles as acceptable also wanted the principles to be regarded as guidelines only and not as an international code of conduct which was necessarily binding on States. Nearly all the Governments in favour of the principles wanted those principles to be used as the negotiating basis for the preparation of bilateral or multilateral treaties among States with regard to their conduct when dealing with natural resources they share in common. Some of them even indicated that similar principles were already being used by States to make treaties relating to shared natural resources.<sup>149</sup>

162. Two States, Brazil and Ethiopia, expressed strong opposition to the principles. A number of States were concerned that there was no definition of shared natural resources.<sup>150</sup>

163. The Secretary-General's report suggested that the General Assembly might wish to adopt the principles. At the thirty-fourth session of the General Assembly, a draft resolution was introduced in the Second Committee by Argentina, Bangladesh, Canada, Greece, the Netherlands, Norway, Pakistan, Sweden and Upper Volta entitled "Co-operation in the field of the environment covering natural resources shared by two or more States", paragraphs 2 and 3 of which would have had the General Assembly adopt the draft principles for the guidance of States and request States Members "to respect the principles in their inter-State relations".<sup>151</sup>

164. The draft principles were the subject of scattered comment by a relatively small number of States in the course of consideration of the report of UNEP in the Second Committee. The representative of Italy indicated that his Government had no basic objection to the principles, "particularly since they were guidelines without legally binding force", but expressed puzzlement at "the vagueness of the definition of shared natural resources".<sup>152</sup> The representative of Greece favoured adoption of the draft principles by the General Assembly, noting that, "while the scope and binding legal nature of the principles would be derived in the future from their incorporation in international agreements, it was obvious that they already had an intrinsic value ...".<sup>153</sup> The representative of Sweden stated that the Swedish Government:

... attached great importance to the adoption at the current session of the General Assembly of the 15 draft principles of conduct for the guidance of States in the use and conservation of shared resources. States should be called upon to respect the principles and to apply them within the framework of their relations. UNEP should be requested to encourage the elaboration and application of the 15 draft principles in the context of formulation of bilateral and multilateral conventions regarding natural resources shared by two or more States. The adoption of the principles would be an important step in the process of developing further the international law related to the protection of the environment.<sup>154</sup>

However, the representative of Japan said that "his delegation was not convinced of the need for hastily finalizing the issue of shared natural resources in the form of the principles on that subject, in view of the political, technical and legal difficulties, such as the definition of shared resources and the accommodation of national jurisdiction to the principles".<sup>155</sup>

165. The representative of Argentina, stating that the 15 draft principles "could be of useful application," noted that "Argentina had used the provisions contained in those principles in drafting its treaties with neighbouring countries concerning river basins".<sup>156</sup> He continued:

... That showed that the draft principles could contribute to the development of norms to be applied in legally binding form in bilateral and regional relations ... and his delegation was therefore in favour of the adoption of the principles together with a recommendation to States to apply them in their mutual relations.

The legal status of the principles had raised doubts among some delegations. His delegation believed that the explanatory note (UNEP/IG.12/2) was sufficiently clear in that regard; any United Nations resolution was, of course, of a recommendatory nature when addressed to sovereign States. With regard to the future of the draft principles, his delegation believed that it would be desirable for States to facilitate their effective entry into force by transforming them into obligatory norms through their incorporation in bilateral agreements or multilateral conventions. That would give an impetus to the progressive development and codification of international law, in accordance with the principles of the United Nations Charter.<sup>157</sup>

166. In contrast, the representative of India

... noted that less than half of the 36 Governments conveying their views on the subject had wholeheartedly supported the adoption of the draft principles by the General Assembly. Her delegation felt that they should merely provide guidelines for States and serve as recommendations. In the absence of any agreed and acceptable definition of shared natural resources, it would be premature to force the adoption of the draft principles.<sup>158</sup>

167. The representative of Portugal, however,

... agreed with the recommendations contained in the report of the Secretary-General on natural resources shared by two or

<sup>149</sup> See *Official Records of the General Assembly, Thirty-fourth Session, Annexes*, agenda item 60, document A/34/557, para. 6.

<sup>150</sup> *Ibid.*, annex.

<sup>151</sup> *Ibid.*, document A/34/837, para. 18.

<sup>152</sup> *Ibid.*, *Second Committee*, 28th meeting, para. 81; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>153</sup> *Ibid.*, para. 88; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>154</sup> *Ibid.*, para. 99; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>155</sup> *Ibid.*, 30th meeting, para. 59; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>156</sup> *Ibid.*, 31st meeting, para. 11; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>157</sup> *Ibid.*, paras. 11–12; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>158</sup> *Ibid.*, para. 26; and *ibid.*, *Sessional fascicle*, corrigendum.

more States (A/34/557). The views of the vast majority of States that had replied to the questionnaire clearly showed that the draft principles had been widely accepted as guidelines which should assist the conduct of States in that area. Their legal status as mere recommendations should dispel any doubts or reticence. His delegation wished to emphasize the high priority which should be given to arriving at an agreed definition of shared natural resources, without which the applicability of the principles could obviously be undermined . . . <sup>159</sup>

168. The representative of the Soviet Union expressed his delegation's agreement with the recommendation of the UNEP Governing Council that the General Assembly adopt the 15 draft principles and held that "the proposed principles . . . must take the form of recommendations", and that "work should be continued on the drafting of an acceptable definition of 'shared natural resources' ". <sup>160</sup>

169. The representative of Brazil expressed another position:

. . . His delegation had been unable to associate itself with the results of the work of the Intergovernmental Working Group of Experts, because the document it had produced proposed that States should adopt the same approach to questions of a completely different nature, such as the impact of transfrontier pollution and the economic use of a natural resource. The draft principles attempted to establish guidelines universal in scope, without taking into account the fact that the nature of problems linked to the conservation and utilization of natural resources differed from region to region. The document prepared by the Working Group contained certain provisions that would impose unacceptable limitations on the exercise of sovereignty. His Government believed that it should be stressed, firstly, that each State had full and permanent sovereignty over its natural resources, and, secondly, that each State had the right to use its natural resources according to its national policies, provided that it did not cause significant damage to another State or States. Any formulation which deviated from those two general rules weakened the principle of State responsibility and violated the principle of sovereignty. <sup>161</sup>

170. The representative of Venezuela declared that his Government was not able to take a definitive position on the draft principles for a number of reasons, stating:

Generally speaking, Venezuela was not opposed to the idea of establishing principles to guide States in the equitable and harmonious utilization and conservation of resources which, because of their particular characteristics, might require the co-operation of two or more States. It could agree to principles that were purely recommendatory and in the nature of general guidelines for co-operation in pursuance of bilateral or multi-lateral agreements concluded between the States concerned. However, it had some reservations regarding the principles as drafted. While a number of them were quite useful in so far as they related to the use of water resources, there were difficulties in applying those principles to other resources. Venezuela also had reservations regarding the use of international forums to solve problems which fell within the sovereign jurisdiction of States. <sup>162</sup>

171. The representative of Yugoslavia declared that:

His delegation attached great importance to the draft principles of conduct on the sharing of natural resources by two or more

States. In practice, his Government was already guided by the spirit of those principles. The conservation and harmonious utilization of natural resources shared by two or more countries obviously required broad co-operation and understanding. His delegation was therefore prepared to support any action which would lead to the adoption of the principles, and felt that Governments should be encouraged to apply them whenever they engaged in discussions on shared natural resources. <sup>163</sup>

The representative of Sudan, while generally supporting the draft principles, considered that, since only 36 States had commented upon them, adoption at the current session might be premature. <sup>164</sup>

172. Efforts were made to find a compromise solution in the Second Committee, but without success. Finally, the representative of Pakistan, on behalf of the sponsors, introduced a revised version of the draft resolution as the highest measure of agreement that could be reached in informal discussions. The operative paragraphs as proposed by Pakistan now read:

[The General Assembly]

. . .

2. *Adopts* the draft principles as guidelines and recommendations in the conservation and harmonious utilization of natural resources shared by two or more States without prejudice to the binding nature of those rules already recognized as such in international law;

3. *Requests* all States to use the principles as guidelines and recommendations in the formulation of bilateral or multilateral conventions regarding natural resources shared by two or more States, on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to enhance and not to affect adversely development and the interests of all countries and in particular of the developing countries. <sup>165</sup>

Agreement could not be reached on the proposed text, the representative of Pakistan stated, because a few delegations continued to press for the replacement of the word "*Adopts*" by the phrase "*Takes note of*". <sup>166</sup> The representative of Brazil proposed amending paragraph 2 of the draft resolution so as to substitute "*Takes note of*" for "*Adopts*". <sup>167</sup>

173. The Brazilian amendment was adopted by 59 votes to 25, with 27 abstentions. <sup>168</sup> As finally adopted by the General Assembly, the resolution provides: <sup>169</sup>

*The General Assembly,*

*Recalling* the relevant provisions of its resolutions 3201 (S-VI) and 3202 (S-VI) of 1 May 1974, in which it reaffirmed the principle of full permanent sovereignty of every State over its natural resources and the responsibility of States as set out in the Declaration of the United Nations Conference on the Human Environment to ensure that activities within their jurisdiction or

<sup>159</sup> *Ibid.*, para. 34; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>160</sup> *Ibid.*, para. 47; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>161</sup> *Ibid.*, para. 54; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>162</sup> *Ibid.*, para. 59; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>163</sup> *Ibid.*, para. 67; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>164</sup> *Ibid.*, para. 78; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>165</sup> *Ibid.*, *Annexes*, agenda item 60, document A/34/837, para. 19.

<sup>166</sup> *Ibid.*, *Second Committee*, 57th meeting, para. 19; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>167</sup> *Ibid.*, para. 23; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>168</sup> *Ibid.*, para. 45; and *ibid.*, *Sessional fascicle*, corrigendum.

<sup>169</sup> Resolution 34/186 of 18 December 1979.

control do not cause damage to the environment of other States and to co-operate in developing the international law regarding liability and compensation for such damages,

...  
*Also recalling* the Charter of Economic Rights and Duties of States, contained in its resolution 3281 (XXIX) of 12 December 1974,

...  
*Desiring* to promote effective co-operation among States for the development of international law regarding the conservation and harmonious utilization of natural resources shared by two or more States,

*Recognizing* the right of States to provide specific solutions on a bilateral or regional basis,

*Recalling* that the principles have been drawn up for the guidance of States in the conservation and harmonious utilization of natural resources shared by two or more States,

1. *Takes note* of the report as adopted of the Intergovernmental Working Group of Experts on Natural Resources Shared by Two or More States established under decision 44 (111) of the Governing Council of the United Nations Environment Programme in conformity with General Assembly resolution 3129 (XXVIII);

2. *Takes note* of the draft principles as guidelines and recommendations in the conservation and harmonious utilization of natural resources shared by two or more States without prejudice to the binding nature of those rules already recognized as such in international law;

3. *Requests* all States to use the principles as guidelines and recommendations in the formulation of bilateral or multilateral conventions regarding natural resources shared by two or more States, on the basis of the principle of good faith and in the spirit of good neighbourliness and in such a way as to enhance and not to affect adversely development and the interests of all countries, in particular the developing countries.

174. What conclusions are to be drawn from the adoption of the foregoing resolution in the light of its surrounding debate? A review of the record indicates that objections to adoption of the draft principles by the General Assembly were made on six grounds:

- (i) There was no definition of a "shared natural resource";
- (ii) There had been insufficient comment by States on the draft principles;
- (iii) Adoption of the principles by the General Assembly would constitute a premature commitment to the principles;
- (iv) The principles did not take into account the differences in regional problems;
- (v) The principles dealt with a field of co-operation among States in which research and actual experience were extremely limited;<sup>170</sup>
- (iv) Some of the principles constituted an encroachment upon sovereignty.

<sup>170</sup> To quote the representative of Brazil: "Those principles dealt with a highly controversial subject, namely, co-operation among States in a field in which both research and actual experience were still extremely limited." (*Official Records of the General Assembly, Thirty-fourth Session, Second Committee, 57th meeting, para. 21; and ibid., Sessional fascicle, corrigendum*).

175. These objections were advanced by a very limited number of States, so that it is not possible to tell what part they played in the vote in favour of "noting" and against "adoption" of the principles by the General Assembly. In any event, these objections have little instruction for the Commission's work on international watercourses.

176. The absence of a definition of shared natural resources in the draft principles does not bear upon consideration of the draft articles submitted to the Commission. Draft article 7 defines the water of an international watercourse as a shared natural resource. As noted at the outset of this chapter, while there is room for difference of view over the content of the concept of shared natural resources, if any meaning is to be attached to that concept it must embrace water which flows from the territory of one State to that of another.

177. That there was insufficient written comment by States on the draft principles is a criticism that fails to take account of the restricted number of States that characteristically respond, often belatedly, to requests for comments of this kind. Members of the Commission will, from experience, be aware that the number of State comments received by the Secretary-General in the case of the draft principles of conduct was not unusually low.

178. The objection that adoption of the principles by the General Assembly would constitute a premature commitment to the principles is questionable because, as the representative of Portugal put it, "all resolutions of the General Assembly were only recommendations, and the draft resolution itself clearly stated that the principles were of the nature of recommendations".<sup>171</sup> As far as the work of the Commission is concerned, any legal commitment by States to the principle contained in draft article 7 would arise only at such indeterminate future time as a treaty based on the draft articles was concluded, ratified and came into force.

179. As to the objection that the draft principles did not take into account the differences in regional problems, it may be noted that the draft articles submitted to the Commission are framed to be conjoined with system agreements that will deal with the distinctive character of diverse river systems.

180. The fifth objection, namely, that the subject of shared natural resources is one in which research and experience are extremely limited, clearly does not apply to the shared resource constituted by the water of international watercourses, as debate in the Second Committee recognized. There is a very large body of research and experience—and of State practice and treaty-making—in the sphere of international watercourses, especially on aspects such as navigation, irrigation and power.

<sup>171</sup> *Ibid.*, 58th meeting, para. 20; and *ibid.*, *Sessional fascicle, corrigendum*.

181. The sixth objection, that of encroachment on sovereignty, recalls the elements of the Commission's work. The first contentious case before the Permanent Court of International Justice gave rise to the classic statement of a governing axiom:

The Court declines to see in the conclusion of any Treaty by which a State undertakes to perform or refrain from performing a particular act an abandonment of its sovereignty. No doubt any convention creating an obligation of this kind places a restriction upon the exercise of the sovereign rights of the State, in the sense that it requires them to be exercised in a certain way. But the right of entering into international engagements is an attribute of State sovereignty.<sup>172</sup>

The task of codifying and progressively developing international law will inevitably produce proposals for treaty articles which, if they are to become provisions of treaties in force, will require States to exercise their sovereign rights in a certain way. That achievement constitutes no encroachment upon sovereignty, but rather its enlightened exercise. Moreover, in so far as draft articles codify existing customary international law—law which equally restricts the ways in which States are entitled to exercise their sovereignty—that too constitutes no encroachment upon sovereignty which is inconsistent either with the fundamentals of statehood or of international law.

182. The foregoing considerations apply to the work of the Commission at large. But there is a singular aspect of work on the topic of the law of the non-navigational uses of international watercourses which bears on invocations of sovereignty and which requires comment as well. To argue in respect of the draft principles of conduct that "some of the principles constituted an encroachment upon sovereignty itself... [and] imposed limitations on the fundamental principle of the full and permanent exercise of sovereignty by States over natural resources in their respective territories"<sup>173</sup> is to beg the question of what resources are "in" a particular territory. By its very nature, water flowing from the territory of one State to that of another is not "in", in the sense of being within the exclusive jurisdiction and domain of, just one State; it is shared between States, that is to say, in the words of draft article 7, the water of an international watercourse system is a "shared natural resource".

183. Whatever the force of the objections to adoption of the UNEP draft principles of conduct in their context—and some of those objections may well have validity in the context of the entire, undefined field of shared natural resources—it is submitted for the foregoing reasons that those objections do not detract from the value of the draft principles for the topic under the Commission's consideration. Nor do they depreciate the value of the concept of shared natural

resources or its cardinal application to the waters of international watercourse systems.

184. While clearly the substitution of the phrase "Takes note of" for "Adopts" in the circumstances described<sup>174</sup> demonstrates reservations by a plurality of the General Assembly about the draft principles of conduct in certain, apparently diverse, respects, the General Assembly, in paragraph 3 of its resolution 34/186,

*Requests* all States to use the principles as guidelines and recommendations in the formulation of bilateral or multilateral conventions regarding natural resources shared by two or more States...<sup>175</sup>

Although that request is not expressly directed to the Commission in its formulation of a draft multilateral convention on the primary shared natural resource, namely, the water of international watercourses, it would be difficult to maintain that in so requesting States to act the General Assembly meant to exempt the expert examination of the subject by the Commission.

185. Acceptance of this view does not mean that the commission should necessarily adopt the 15 guidelines as the basis for its work. The Commission should, however, in carrying out its task of codifying the law of the uses of international watercourse systems, take full advantage of the work that has been carried on under the aegis of UNEP, which is a very substantial contribution to the development of legal principles in the field of international environmental law.<sup>176</sup>

### E. Sharing the natural resource of navigation

186. Use of international watercourses for navigation may be the most widespread and certainly is the best established of the various uses that have given rise to the existing body of international law applicable to shared resources. The Commission is not directly addressing the world-wide custom that riparian States share in the right to free and unimpeded navigation of an international watercourse and share as well in the duty to assist in maintaining the watercourse in navigable condition. Nevertheless, in framing principles for the non-navigational uses of international watercourses, the Commission must take into account the legal rules regarding the navigable uses of those

<sup>174</sup> See paras. 172 and 173 above.

<sup>175</sup> The text as a whole was adopted in draft form in the Second Committee by 94 votes to none, with 23 abstentions (see *Official Records of the General Assembly, Thirty-fourth Session, Second Committee, 57th meeting, para. 55*; and *ibid., Sessional fascicle, corrigendum*), and in plenary meeting, in final form, without a vote (*ibid., Plenary Meetings, 107th meeting*).

<sup>176</sup> For an able summary and analysis of the draft principles, see A.O. Adede, "United Nations efforts toward the development of an environmental code of conduct for States concerning harmonious utilization of shared natural resources", *Albany Law Review*, vol. 43 (1979), pp. 488–512.

<sup>172</sup> S.S. "Wimbledon", Judgments, 1923: *P.C.I.J.*, Series A, No. 1, p. 25.

<sup>173</sup> As stated by the representative of Brazil in the Second Committee (*Official Records of the General Assembly, Thirty-fourth Session, Second Committee, 57th meeting, para. 21*; and *ibid., Sessional fascicle, corrigendum*).

waters that have developed in the course of the last two hundred years. Those rules, after all, derive from one use of the very resource in question, the international watercourse; it is a use of continuing importance; that use has been the subject of a substantial development of conventional and customary law; and at the very least, the body of law respecting navigation should provide sources and analogies for the law of the non-navigational uses of international watercourses.

### 1. THE *River Oder* CASE

187. The judgement of the Permanent Court of International Justice in the *River Oder* case<sup>177</sup> provides a lucid statement of the legal position of riparian States in respect of navigation. Pursuant to articles 341 and 343 of the Treaty of Versailles,<sup>178</sup> the Oder River was to be placed under the administration of an International Commission. The Commission considered that two tributaries of the Oder—the Netze and the Warthe—came within its jurisdiction. Both rivers rise in Poland and are navigable in Poland. Both crossed into then German territory where the Netze flows into the Warthe. The combined streams thereafter flow into the Oder. Under article 331 of the Versailles Treaty, the Oder “from its confluence with the Oppa... and all navigable parts of these river systems which naturally provide more than one State with access to the sea” are declared international and thus subject to the jurisdiction of the Commission.<sup>179</sup>

188. The Polish Government advanced the position that the parts of the Warthe and the Netze which were in Poland naturally provided only one State—Poland—with access to the sea. Therefore the portions of those two rivers in Poland were not subject to the jurisdiction of the Commission. The opposing position was that the provisions on access to the sea concerned “the waterway as such and not a particular part of its course”. The Court put the question in the following terms:

It remains therefore to be considered whether the words “all navigable parts of the river systems which naturally provide more than one State with access to the sea” refer to tributaries and sub-tributaries as such, in such a way that if a tributary or sub-tributary in its naturally navigable course traverses or separates different States, it falls as a whole within the above definition; or whether they refer rather to that part of such tributary or sub-tributary which provides more than one State with access to the sea, in such a way that the upstream portion of the tributary or sub-tributary is not internationalized above the last frontier crossing its naturally navigable course.<sup>180</sup>

189. After considering canons of interpretation and other constructions urged by the parties and deciding that they were not decisive, the Court made the following illuminating statements:

The Court must therefore go back to the principles governing international fluvial law in general and consider what position was adopted by the Treaty of Versailles in regard to these principles.

It may well be admitted, as the Polish Government contend, that the desire to provide the upstream States with the possibility of free access to the sea played a considerable part in the formation of the principle of freedom of navigation on so-called international rivers.

But when consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one State, and the possibility of fulfilling the requirements of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the problem has been sought not in the idea of a right of passage in favour of upstream States, but in that of a community of interest of riparian States. This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others.

It is on this conception that international river law, as laid down by the Act of the Congress of Vienna of June 9th, 1815, and applied or developed by subsequent conventions, is undoubtedly based.<sup>181</sup>

190. This holding is notable in placing the weight of the Permanent Court of International Justice behind the principle of “a community of interest of riparian States”. In speaking of a community of interest and of a “common legal right”—which it defines as “the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others”—the Court appears to assume that the international watercourse is a shared natural resource. And, as a former President of the International Court of Justice and member of the Commission has written:

Although this progressive principle was stated by the Court, as *lege lata*, in respect of navigation, its fundamental concepts of equality of rights and community of interests are applicable to all utilizations of international watercourses.<sup>182</sup>

191. Two further aspects of the *River Oder* case should be noted. The first is that by 1929 there was extensive State practice, often reflected in conventional law, in accordance with the Court’s finding. Such conventional law includes the prototype provisions of the Final Act of the Congress of Vienna (1815):

#### *Article 108*

The Powers whose territories are separated or traversed by the same navigable river undertake to settle by common agreement all

<sup>177</sup> Territorial Jurisdiction of the International Commission of the River Oder, Judgment No. 16, 1929: *P.C.I.J.*, Series A, No. 23.

<sup>178</sup> *British and Foreign State Papers, 1919* (op. cit.), p. 177.

<sup>179</sup> *Ibid.*, p. 173 (see para. 53 above).

<sup>180</sup> Territorial Jurisdiction . . . , *P.C.I.J.*, Series A, No. 23, pp. 25–26.

<sup>181</sup> *Ibid.*, pp. 26–27.

<sup>182</sup> E. Jiménez de Aréchaga, “International law in the past third of a century”, *Collected Courses of The Hague Academy of International Law, 1978–1* (Alphen aan den Rijn, Sijthoff and Noordhoff, 1979), vol. 159, p. 193.

questions affecting navigation thereon. They shall appoint for this purpose commissioners, who shall meet, at the latest, six months after the end of this Congress, and take for the basis of their work the principles laid down in the following articles.

*Article 109*

Navigation throughout the whole course of the rivers referred to in the preceding article, from the point where they respectively become navigable to their mouths, shall be entirely free, and shall not in the matter of commerce be prohibited to anybody, provided that they conform to the regulations regarding the police of this navigation which shall be drawn up in a manner uniform for all and as favourable as possible to the commerce of all nations.<sup>183</sup>

192. The Court in the *River Oder* case quotes these articles in its decision and then states:

If the common legal right is based on the existence of a navigable waterway separating or traversing several States, it is evident that this common right extends to the whole navigable course of the river and does not stop short at the last frontier; no instance of a treaty in which the upstream limit of internationalization of a river is determined by such frontier rather than by certain conditions of navigability has been brought to the attention of the Court.<sup>184</sup>

193. The second feature of interest is that articles 108–116 of the Final Act of the Congress of Vienna may be the earliest precedent for the adoption of a framework agreement within the context of which individual agreements would be negotiated by the system States to govern uses of the water of individual watercourse systems.

## 2. FRENCH DECREE OF 1792

194. There are, however, other early examples of the assertion of the principle that an international river gives rise to a common interest of all riparian States in the use of its waters. One of the most interesting of these is the Decree of the Executive Council of the French Republic of 16 November 1792, which stated:

That the stream of a river is the common, inalienable property of all the countries which it bounds or traverses; that no nation can without injustice claim the right exclusively to occupy the channel of a river and to prevent the neighbouring upper riparian States from enjoying the same advantages; that such [an exclusive] right is a remnant of feudal servitude, or at any rate, an odious monopoly which must have been imposed by force and yielded by impotence; that it is therefore revocable at any moment and in spite of any convention, because nature does not recognize privileged nations any more than privileged individuals, and the rights of man are for ever imprescriptible.<sup>185</sup>

195. The specific cause of this sweeping and strongly stated contention was article XIV of the Treaty of Munster (30 January 1648), in which Spain recognized the independence of the Netherlands United Provinces. Article XIV recognized the sovereignty of the United Provinces over the Scheldt estuary, which was the direct watercourse from Antwerp to the sea, and

authorized the closing of the waters by the Netherlanders.<sup>186</sup> The United Provinces in fact closed the Scheldt to Antwerp commerce. This closure remained in effect, despite efforts of the Emperor Joseph II of Austria to eliminate it in the 1780s, until French troops took control of Belgium and the Decree of 1792 was issued. Whatever the motivation of the French Republic may have been in issuing its decree, it indicates that the sharing of riparian States in the uses of the water of international watercourses is a principle with a genealogy extending back two hundred years.

196. While article 108 of the Final Act of the Congress of Vienna of 1815 clearly applies to all the States bordering on or traversed by a navigable river, article 109 is not equally clear on the question whether or not the ships of non-riparian States have a right to the same treatment as the ships of riparian States. This ambiguity has resulted in differing regimes for different watercourses and has been the source of numerous disputes, negotiations and conferences.<sup>187</sup> However, there has been no dispute that freedom of navigation on international rivers in the context of the Vienna settlement meant in practice "freedom of navigation for the riparian States without discrimination, it being understood that vessels of non-riparian States might also use the waters concerned, be it on less favourable terms or conditions".<sup>188</sup>

197. Under both conventional regimes and established practice, riparian States acknowledge duties to facilitate river traffic to and from the other riparian States and in fact carry out those duties routinely. Much more than mere passage is involved in the community of interests which the Permanent Court mentions in the *River Oder* case. Channels change, shoals form and shift, rivers flood, ships sink, streams dry up. These and a hundred other matters must be dealt with on a co-operative and continuing basis by the riparian States.

## 3. BARCELONA CONVENTION ON NAVIGABLE WATERWAYS

198. The only general treaty in existence dealing with these rights and duties is the Convention and Statute on the regime of navigable waterways of international concern (Barcelona, 20 April 1921).<sup>189</sup> This agreement had its origin in article 338 of the Treaty of Versailles. Articles 332 to 337 of that Treaty established rules governing a number of internationalized rivers, such as the Elbe, the Oder, the Niemen and the

<sup>183</sup> Reproduced in *P.C.I.J.*, Series A, No. 23, p. 27.

<sup>184</sup> *Ibid.*, pp. 27–28.

<sup>185</sup> G. Kaeckenbeeck, *International Rivers*, Grotius Society Publications, No. 1 (London, Sweet and Maxwell, 1918), p. 32.

<sup>186</sup> C. Parry, *Consolidated Treaty Series* (Dobbs Ferry, N.Y., Oceana Publications, 1969), vol. I (1648–1649), p. 76.

<sup>187</sup> See Kaeckenbeeck, *op. cit.*

<sup>188</sup> L.J. Bouchez, "The Netherlands and the law of international rivers", *International Law in the Netherlands*, H.F. van Panhuys *et al.*, eds., (Alphen aan den Rijn, Sijthoff and Noordhoff, 1978), vol. I, p. 251.

<sup>189</sup> League of Nations, *Treaty Series*, vol. VII, p. 35.

Danube. Under article 338, these rules were to be replaced by a general convention relating to waterways having an international character.<sup>190</sup>

199. The Statute (which is made an integral part of the Barcelona Convention by its article 1) contains the operative rules regarding international navigable waterways. The general definition of such waterways is contained in article 1 of the Statute:

In the application of the Statute, the following are declared to be navigable waterways of international concern:

1. All parts which are naturally navigable to and from the sea of a waterway which in its course, naturally navigable to and from the sea, separates or traverses different States, and also any part of any other waterway naturally navigable to and from the sea, which connects with the sea a waterway naturally navigable which separates or traverses different States.<sup>191</sup>

200. Each State party is required under the Statute to accord free access to flag vessels of all other States party (article 3) upon a footing of perfect equality (article 4), subject to limited exceptions such as sabotage (article 5). Common obligations of the riparian States are highlighted in article 10, which requires each such State to maintain the waterway in a navigable condition. This requirement is coupled with provisions concerning works construction and cost-sharing:

3. In the absence of legitimate grounds for opposition by one of the riparian States, including the State territorially interested, based either on the actual conditions of navigability in its territory, or on other interests such as, *inter alia*, the maintenance of the normal water-conditions, requirements for irrigation, the use of water-power, or the necessity for constructing other and more advantageous ways of communication, a riparian State may not refuse to carry out works necessary for the improvement of the navigability which are asked for by another riparian State, if the latter State offers to pay the cost of the works and a fair share of the additional cost of upkeep. It is understood, however, that such works cannot be undertaken so long as the State of the territory on which they are to be carried out objects on the ground of vital interests.

4. In the absence of any agreement to the contrary, a State which is obliged to carry out works of upkeep is entitled to free itself from the obligation, if, with the consent of all the co-riparian States, one or more of them agree to carry out the works instead of it; as regards work for improvement, a State which is obliged to carry them out shall be freed from the obligation, if it authorizes the State which made the request to carry them out instead of it. The carrying out of works by States other than the State territorially interested, or the sharing by such States in the cost of works, shall be so arranged as not to prejudice the rights of the States territorially interested as regards the supervision and administrative control over the works, or its sovereignty and authority over the navigable waterway.<sup>192</sup>

201. Professor Reuter appraises the Barcelona Convention as follows:

Although the Convention is binding on only some 20 States and has, because of its abstract nature, operated only infrequently, it is at present the only general source of international fluvial law.<sup>193</sup>

202. Professors Šahović and Bishop conclude that "since even the States that took part in the Conference failed to accept the Convention, its decisions have little or no legal significance."<sup>194</sup>

203. Nevertheless, even though the Convention was not universally accepted (the 21 States which ratified or acceded to it were Albania, British Empire, Bulgaria, Chile, Colombia, Czechoslovakia, Denmark, Finland, France, Greece, Hungary, India (which later denounced the Convention), Italy, Luxembourg, New Zealand, Norway, Peru, Romania, Sweden, Thailand and Turkey), it reflects substantial agreement, declaratory of existing international law, that navigation of an international watercourse is not controlled by unilateral decision. The language of the provisions regarding responsibility for upkeep of watercourses, for cost-sharing and for assumption of the obligation to construct works in the river may be wanting in a variety of ways. These provisions represent, none the less, agreement on the principle that navigation entails rights and duties exercised in common by riparian States for the benefit of all who navigate the river.

#### 4. SPECIFIC CONVENTIONS ON NAVIGABLE WATERWAYS

204. The numerous conventions which govern navigation on individual international watercourses witness to the existence of—and the recognition of the existence of—this community of interest.

205. The Scheldt, which has been referred to above,<sup>195</sup> constitutes an example of the development of a river region from a situation in which a lower riparian exercised a right to cut off all access of a major port from the sea to a situation in which the lower and upper riparians not only recognize freedom of navigation but are engaged in widespread co-operative action to ensure that vessels, both ocean-going and river-going, may use the watercourse for navigation in a safe and expeditious manner. This transition from conflict over rights of navigation on the Scheldt to co-operation in developing the river for navigational purposes through apportionment of benefits and costs parallels the development of navigational uses on the great majority of international watercourses. A few contemporary arrangements will now be cited which illustrate that, at least for purposes

<sup>190</sup> *British and Foreign State Papers, 1919 (op. cit.)*, vol. 112, p. 175.

<sup>191</sup> League of Nations, *Treaty Series*, vol. VII, p. 51. (It should be noted that article 1(c) states that tributaries are to be considered as separate waterways.)

<sup>192</sup> *Ibid.*, p. 57.

<sup>193</sup> P. Reuter, *Droit international public*, 5th ed. (Paris, Presses universitaires de France, 1976), p. 321.

<sup>194</sup> M. Šahović and W. W. Bishop, "The authority of the State: Its range with respect to persons and places", in *Manual of Public International Law*, ed. M. Sørensen (London, MacMillan, 1968), p. 327.

<sup>195</sup> See para. 195.

of navigation, international watercourse systems are treated as a shared natural resource.

206. A most recent illustration is the Treaty for Amazonian Co-operation (Brasilia, 3 July 1978):

*Article III*

In accordance with and without prejudice to the rights granted by unilateral acts, to the provisions of bilateral treaties among the Parties and to the principles and rules of international law, the Contracting Parties mutually guarantee on a reciprocal basis that there shall be complete freedom of commercial navigation on the Amazon and other international Amazonian rivers, observing the fiscal and police regulations in force now or in the future within the territory of each. Such regulations should, insofar as possible, be uniform and favour said navigation and trade.

...

*Article VI*

In order to enable the Amazonian rivers to become an effective communication link among the Contracting Parties and with the Atlantic Ocean, the riparian States interested in any specific problem affecting free and unimpeded navigation shall, as circumstances may warrant, undertake national, bilateral or multilateral measures aimed at improving and making the said rivers navigable.

*Paragraph:* For this purpose, they shall carry out studies into the means for eliminating physical obstacles to the said navigation as well as the economic and financial implications so as to put into effect the most appropriate operational measures.<sup>196</sup>

207. Another instructive recognition of the basic principle is found in the Statute annexed to the Convention relating to the development of the Chad Basin (Fort Lamy, 22 May 1964):

*Article 7*

The Member States shall establish common rules for the purpose of facilitating navigation on the lake and on the navigable waters in the Basin and to ensure the safety and control of navigation.<sup>197</sup>

208. No less instructive is the Convention regulating maritime and inland navigation on the Mekong and inland navigation on the approach to the port of Saigon (Paris, 29 December 1954):

*Article I*

On the basis of equality of treatment, navigation shall be free throughout the course of the Mekong, its tributaries, effluents, and navigable mouths located in the territories of Cambodia, Laos, and Vietnam, as well as on the waterways giving access to the Port of Saigon and to the sea.

For purposes of the customs laws and regulations of each riparian State, navigation between Phnom Penh and the sea by way of the Mekong and the waterways mentioned in the preceding paragraph shall be considered maritime navigation.

*Article II*

Such freedom of navigation is automatically granted to the States that have recognized the High Contracting Parties diplomatically. It shall become effective after the adherence of each State to the protocol annexed hereto prescribing the conditions of navigation.

<sup>196</sup> American Society of International Law *International Legal Materials* (Washington, D.C.), vol. XVII, No. 5 (Sept. 1978), pp. 1046-1047. Signatory States: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela.

<sup>197</sup> *Nigeria's Treaties in Force*. . . (*op. cit.*), p. 221. Signatory States: Cameroon, Chad, Niger, Nigeria.

As regards States that have not recognized the High Contracting Parties diplomatically, freedom of navigation shall be subject to their consent.

*Article III*

Each of the High Contracting Parties undertakes in respect of the other two, to refrain from adopting any measure that might directly or indirectly impair navigability or make it permanently more difficult, and to take, as promptly as possible, the necessary measures to remove all obstacles and hazards to navigation.

If such navigation requires regular upkeep, each of the High Contracting Parties shall, to that end, have an obligation towards the other two to take the measures and to carry out the necessary work in its territory as quickly as possible.

...<sup>198</sup>

209. One of the more complete, modern arrangements is illustrated by the treaty on the River Plate Basin (Brasilia, 23 April 1969):

*Article I*

The Contracting Parties agree to combine their efforts for the purpose of promoting the harmonious development and physical integration of the River Plate Basin, and of its areas of influence which are immediate and identifiable.

*Sole paragraph.* To this end, they shall promote, within the scope of the Basin, the identification of areas of common interest and the undertaking of surveys, programmes and works, as well as the drafting of operating agreements and legal instruments they deem necessary, and which shall tend towards:

(a) Advancement and assistance in navigation matters...<sup>199</sup>

210. Still other pertinent, illustrative treaty provisions are the following: the Act regarding navigation and economic co-operation between the States of the Niger Basin (Niamey, 26 October 1963), the Agreement concerning co-operation with regard to navigation in frontier waters between the German Democratic Republic and Poland (Warsaw, 15 May 1969), and the Treaty between Argentina and Uruguay concerning the La Plata River and its maritime limits (Montevideo, 19 November 1973).

*Act regarding navigation and economic co-operation between the States of the Niger Basin, 1963:*

*Article 3*

Navigation on the River Niger, its tributaries and sub-tributaries, shall be entirely free for merchant vessels and pleasure craft and for the transportation of goods and passengers. The ships and boats of all nations shall be treated in all respects on a basis of complete equality.<sup>200</sup>

*Agreement concerning co-operation with regard to navigation in frontier waters between the German Democratic Republic and Poland, 1969:*

*Article 2*

1. The Contracting Parties grant each other, on a basis of complete equality, the right to navigation in frontier waters.

<sup>198</sup> France, *La Documentation française* (Paris), 25 January 1955, No. 1973, p. 32. Parties: Cambodia, Laos, Viet Nam.

<sup>199</sup> American Society of International Law (*op. cit.*), vol. VIII, No. 5 (Sept. 1969), Signatory States: Argentina, Bolivia, Brazil, Paraguay and Uruguay.

<sup>200</sup> United Nations, *Treaty Series*, vol. 587, p. 13. Parties: Cameroon, Chad, Dahomey, Guinea, Ivory Coast, Mali, Niger, Nigeria, Upper Volta.

2. Sporting and tourist navigation shall be permitted only on the Oder.

*Article 3*

Co-operation on the basis of this Agreement for the safe and optimum conduct of navigation in frontier waters shall include, in particular, the following functions:

- (1) The preparation of rules concerning navigation and concerning the marking of frontier waters for navigation;
- (2) Supervision to maintain the order and safety of navigation;
- (3) Determination of the depth and breadth of the fairway;
- (4) Marking of frontier waters for navigation;
- (5) Removal of sunken vessels and other objects in the fairway which may become a danger to navigation;
- (6) Designation of moorings;
- (7) Conduct of aid and rescue operations;
- (8) Investigation of accidents occurring in the course of navigation.

*Article 4*

1. The Contracting Parties shall jointly prepare uniform rules concerning the regulation of shipping and the marking of frontier waters for navigation and shall put them into force on the same date.

2. Provisions not covered by the rules referred to in paragraph 1 which may affect navigation by the other Contracting Party shall be agreed upon with that Party.<sup>201</sup>

*Treaty between Argentina and Uruguay concerning the La Plata River and its maritime limits, 1973:*

CHAPTER II. NAVIGATION AND FACILITIES

*Article 7*

The Parties mutually acknowledge freedom of navigation, permanently and under all circumstances, on the river for vessels flying their flags.

*Article 8*

The Parties mutually guarantee the maintenance of facilities that have been available up to the present time for access to their respective ports.

*Article 9*

The Parties mutually pledge themselves to develop adequate navigation aids and buoy services within their respective coastal zones, and to co-ordinate the development of the same within waters of common utilization outside of the channels, in such manner as to facilitate navigation and to guarantee its safety.

*Article 10*

The Parties have the right to use all of the channels situated in waters of common utilization, under equal conditions and under any circumstances.

*Article 11*

Navigation shall be permitted in waters of common utilization by public and private vessels of the La Plata Basin countries, and by public and private merchant vessels of third flag States, without precluding rights which may have already been granted by the Parties pursuant to Treaties in force. In addition, one Party shall permit passage of war vessels of a third flag State when authorized by the other party, provided this does not threaten its public order or security.

*Article 12*

Outside of the coastal zones, the Parties, jointly or individually, may construct channels or undertake other works pursuant to provisions established in articles 17 to 22.

The Party who constructs or has constructed any works shall continue to be responsible for their maintenance and control.

The Party who constructs or has constructed a channel shall, in addition, adopt the relevant regulations, shall exercise surveillance thereover to ensure compliance with adequate means for this purpose, and shall be responsible for the extraction, removal or demolition of craft, naval artifacts, aircraft, sunken remains or cargo, or any other objects that are likely to constitute an obstacle or hazard to navigation, and which are located sunken or aground in said waterway.

*Article 13*

In those cases not covered in article 12, the Parties shall co-ordinate, through the Administrative Commission, a rational sharing of responsibilities for the maintenance, control and regulation of the various sections of the channels, keeping in mind the special interests of each Party and the works that each has undertaken.

*Article 14*

All regulations relevant to the channels situated in waters of common utilization, and any substantial or permanent modification thereto, must be effectuated subject to advance consultation with the other Party.

In no case and under no conditions may a regulation be adopted which might cause appreciable detriment to the navigation interests of either Party.<sup>202</sup>

211. One further example is the Convention regarding the regime of navigation on the Danube (Belgrade, 18 August 1948):

*Article 1*

Navigation on the Danube shall be free and open for the nationals, vessels of commerce and goods of all States, on a footing of equality in regard to port and navigation charges and conditions for merchant shipping. The foregoing shall not apply to traffic between ports of the same State.

...

*Article 3*

The Danubian States undertake to maintain their sections of the Danube in a navigable condition for river-going and, on the appropriate sections, for sea-going vessels, to carry out the works necessary for the maintenance and improvement of navigation conditions and not to obstruct or hinder navigation on the navigable channels of the Danube. The Danubian States shall consult the Danube Commission (article 5) on matters referred to in this article.

The riparian States may within their own jurisdiction undertake works for the maintenance of navigation, the execution of which is necessitated by urgent and unforeseen circumstances. The States shall inform the Commission of the reasons which have necessitated the works, and shall furnish a summary description thereof.<sup>203</sup>

5. HELSINKI RULES

212. The Helsinki Rules on the Uses of the Waters of International Rivers<sup>204</sup> address "Navigation" in chapter IV. The articles under that heading which are succinct, merit quotation.

<sup>202</sup> American Society of International Law (*op. cit.*), vol. XIII, No. 2 (March 1974), pp. 253-254.

<sup>203</sup> United Nations, *Treaty Series*, vol. 33, pp. 197 and 199. Parties: Bulgaria, Czechoslovakia, Hungary, Romania, Ukrainian Soviet Socialist Republic, Union of Soviet Socialist Republics, Yugoslavia.

<sup>204</sup> For reference, see footnote 72 above.

<sup>201</sup> *Ibid.*, vol. 769, p. 58.

## CHAPTER IV. NAVIGATION

*Article XIII*

1. This Chapter refers to those rivers and lakes portions of which are both navigable and separate or traverse the territories of two or more States.

2. Rivers or lakes are “navigable” if in their natural or canalized state they are currently used for commercial navigation or are capable by reason of their natural condition of being so used.

3. In this chapter the term “riparian State” refers to a State through or along which the navigable portion of a river flows or a lake lies.

*Article XIII*

Subject to any limitations or qualifications referred to in these chapters, each riparian State is entitled to enjoy rights of free navigation on the entire course of a river or lake.

*Article XIV*

“Free navigation”, as the term is used in this chapter, includes the following freedom for vessels of a riparian State on a basis of equality:

- (a) freedom of movement on the entire navigable courses of the river or lake;
- (b) freedom to enter ports and to make use of plants and docks; and
- (c) freedom to transport goods and passengers, either directly or through trans-shipment, between the territory of one riparian State and the territory of another riparian State and between the territory of a riparian State and the open sea.

*Article XV*

A riparian State may exercise rights of police, including but not limited to the protection of public safety and health, over that portion of the river or lake subject to its jurisdiction, provided the exercise of such rights does not unreasonably interfere with the enjoyment of the rights of free navigation defined in articles XIII and XIV.

*Article XVI*

Each riparian State may restrict or prohibit the loading by vessels of a foreign State of goods and passengers in its territory for discharge in such territory.

*Article XVII*

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

*Article XVIII*

Each riparian State is, to the extent of the means available or made available to it, required to maintain in good order that portion of the navigable course of a river or lake within its jurisdiction.

*Article XVIII bis*<sup>205</sup>

1. A riparian State intending to undertake works to improve the navigability of that portion of a river or lake within its jurisdiction is under a duty to give notice to the co-riparian States.

2. If these works are likely to affect adversely the navigational uses of one or more co-riparian States, any such co-riparian State may, within a reasonable time, request consultation. The concerned co-riparian States are then under a duty to negotiate.

3. If a riparian State proposes that such works be undertaken in whole or in part in the territory of one or more other co-riparian States, it must obtain the consent of the other

<sup>205</sup> Article XVIII bis was included in the Helsinki Rules subsequently (see ILA, *Report of the Fifty-sixth Conference (New Delhi, 29 December 1974–4 January 1975)* (London, 1976), p. xiii).

co-riparian State or States concerned. The co-riparian State or States from whom this consent is required are under a duty to negotiate.

*Article XIX*

The rules stated in this chapter are not applicable to the navigation of vessels of war or of vessels performing police or administrative functions, or, in general, exercising any other form of public authority.

*Article XX*

In time of war, other armed conflict, or public emergency constituting a threat to the life of the State, a riparian State may take measures derogating from its obligations under this chapter to the extent strictly required by the exigencies of the situation, provided that such measures are not inconsistent with its other obligations under international law. The riparian State shall in any case facilitate navigation for humanitarian purposes.

213. A commentary to article XIII of the Helsinki Rules quotes the interpretation of international fluvial law set forth by the Permanent Court of International Justice in the *River Oder* case, and says of it:

The Court’s statement in respect to the “perfect equality” of the co-riparian States is but a specific application of the principle of equality of rights in equitable utilization.<sup>206</sup>

214. This interpretation—to which, as noted above,<sup>207</sup> Judge Jiménez de Aréchaga subscribes—is also supported in one scholar’s acute examination of “equitable utilization”, in the following terms:

While this [*River Oder Case*] analysis was directed by the Court to the issue before it—the rights of navigation of co-riparians on an international river—both its language and its reasoning make it equally applicable to non-navigational uses. First, the Court expressly stated that it was applying “international fluvial law in general”. If only the law of navigation were intended, it could have been readily so stated. Secondly, “the requirements of justice and the considerations of utility” referred to by the Court apply with equal force to both navigational and non-navigational uses. Thus, there is no utilitarian or logical basis for distinguishing the two. Finally, if navigation on an international river—which involves the physical entry of foreign vessels into the territory of another State—does not violate State sovereignty, it would seem that, *a fortiori*, States would have the right to use the waters of such river within their own territory subject to “the perfect equality of all riparian States” so to do.<sup>208</sup>

**F. Boundary water sharing**

215. In fact, there is substantial direct precedent in treaty law and international practice for treating the waters of international watercourses as a shared natural resource, in addition to the body of related precedent found in the sphere of navigation. Some of this precedent will be drawn upon in future reports, which will address such general principles of law governing the use of the water of international

<sup>206</sup> ILA, *Report of the Fifty-second Conference, (Helsinki, 1966)* (London, 1967), p. 507.

<sup>207</sup> See para. 190.

<sup>208</sup> J. Lipper, “Equitable utilization”, in *The Law of International Drainage Basins*, eds. A.H. Garretson, R.D. Hayton and C.J. Olmstead (Dobbs Ferry, N.Y., Oceana Publications, 1976), p. 29.

watercourses as equitable utilization and not using what is one's own to the injury of others. At this juncture, material relating to the sharing of boundary waters will be set out, for it so well illustrates that it is an implemented assumption of States that the waters of an international watercourse constitute a shared natural resource.

216. The greater proportion of treaties concerning the sharing of fresh water deal with the use of boundary waters, presumably because the physical nature of water requires co-operation of States on both sides of a boundary river if anything more than the most elementary uses are contemplated. Whatever these treaties show about the content of customary international law, it is submitted that their assumption that boundary waters are a shared natural resource is beyond controversy.

217. A number of treaties regarding hydroelectric use were entered into prior to the First World War between European States. These accepted the necessity for co-operation and recognized that sharing the use of the water was the sensible solution. For example, the Convention between France and Switzerland (Bern, 4th October 1913) regarding the use of the Rhone River laid down the rule that each State was entitled to a share in the power produced, based upon the fall of the water in relation to the extent of river bank in its territory. Switzerland, therefore, was allocated all the power resulting from the fall of water in the area where it occupied both banks of the Rhone, while it would divide equally with France the power derived from the fall of water in the area where each was a riparian.<sup>209</sup>

218. A forerunner of this sharing of the use of the Rhone water was article 5 of a frontier agreement of 4 November 1824 between the Canton of Neuchâtel (Switzerland) and France:

The liberty of using the watercourse for mills and other works and for irrigation will not be subordinated into the limits of sovereignty. It will appertain to each bank to the extent of half the quantity of flowing water in the lower State.<sup>210</sup>

219. Then equal division of the use of water of boundary rivers has become a commonly used norm of sharing. The Agreement between Argentina and Uruguay concerning the utilization of the rapids of the Uruguay River in the Salto Grande area (Montevideo, 30 December 1946) provides in article 1:

The High Contracting Parties declare that, for the purposes of this agreement, the waters of the Uruguay River shall be utilized jointly and shared equally.<sup>211</sup>

220. The Treaty between the United States of America and Canada relating to the uses of the waters

of the Niagara River (Washington D.C., 27 February 1950) provides:

*Article V*

All water specified in article III of this Treaty in excess of water reserved for scenic purposes in article IV may be diverted for power purposes.

*Article VI*

The waters made available for power purposes by the provisions of this Treaty shall be divided equally between the United States of America and Canada.<sup>212</sup>

221. The Treaty between El Salvador and Guatemala for the delimitation of the boundary between the two countries (Guatemala, 9 April 1938) provides:

*Article II*

...  
Each Government reserves the right to utilize half the volume of water in frontier rivers, either for agricultural or industrial purposes...<sup>213</sup>

222. The Agreement between the Soviet Union and Iran for the joint utilization of the frontier parts of the rivers Aras and Atrak for irrigation and power generation (Teheran, 11 August 1957) contains a precise provision on division of the water:

The Imperial Government of Iran and the Government of Soviet Socialist Republics, signatories to this Agreement, taking cognizance of the friendly relations existing between the two countries and desiring further to strengthen these relations, do hereby agree to utilize their respective equal rights of fifty per cent of all water and power resources of the frontier parts of the rivers Aras and Atrak for irrigation, power generation and domestic use and, to this end, agree to the following joint enterprises:

*Article 1*

The parties hereto agree that the utilization of their above fifty per cent right on the part of each will require separate and independent division and transmission of water and power in each party's territory, in accordance with the provisions of a general preliminary project prepared for the joint utilization of the rivers and mutually agreed upon. If the activities of one of the parties in utilizing its fifty per cent of all resources are slower than those of the other, this fact shall not deprive that party of its right of utilizing all its share.<sup>214</sup>

223. A Convention between the Soviet Union and Turkey for the use of frontier waters and Protocol concerning the Araxe River (Kars, 8 January 1927), which entered into force on 26 June 1928, provides:

*Article 1*

The two Contracting Parties shall have the use of one half of the water from the rivers, streams and springs which coincide with the frontier line between the Turkish Republic and the Union of Soviet Socialist Republics.<sup>215</sup>

224. The redrawing of the map of Europe which occurred after the First World War caused a proliferation of boundary water issues resulting from the

<sup>209</sup> *Legislative Texts and Treaty Provisions concerning the Utilization of International Rivers for Other Purposes than Navigation* (United Nations publication, Sales No. 63.V.4), p. 708 (cited hereinafter as *Legislative Texts*).

<sup>210</sup> *Ibid.*, p. 701.

<sup>211</sup> United Nations, *Treaty Series*, vol. 671, p. 26.

<sup>212</sup> *Ibid.*, vol. 132, p. 228.

<sup>213</sup> League of Nations, *Treaty Series*, vol. CLXXXIX, p. 295.

<sup>214</sup> *British and Foreign State Papers, 1957-1958* (London, H.M. Stationery Office, 1966), vol. 163, p. 428.

<sup>215</sup> *Legislative Texts*, p. 384.

coming into being of numerous new boundaries based on rivers. These were, in the main, settled by treaty. One example of a common solution is found in the frontier agreement between Austria and Czechoslovakia (Prague, 12 December 1928), which provides:

*Article 28*

1. Each of the two States is entitled in principle to dispose of half the water flowing through frontier waterways.<sup>216</sup>

225. The Treaty between Denmark and Germany relating to frontier watercourses (Copenhagen, 10 April 1922) deals, *inter alia*, with the use of water for irrigation purposes:

*Article 35: Distribution of water in connection with irrigation works*

The proprietors on both banks of any one of the watercourses mentioned in article 1 have equal rights as regards the use of the water, so that, if irrigation works are erected upon one bank, only half the water of the watercourses may be assigned to these works. The Frontier Water Commission shall establish detailed regulations for the apportionment of the water in connection with the erection of irrigation works.

If, however, all the proprietors and usufructuaries of the land on the opposite bank of the watercourse between the point at which the water is diverted and the point at which it re-enters the watercourse give their assent, more than half the water may be applied to irrigation works on one bank.<sup>217</sup>

226. Another relatively recent example of 50–50 percentage sharing is the Agreement between Romania and Yugoslavia concerning the construction and operation of the Iron Gates water power and navigation system on the River Danube (Belgrade, 30 November 1963), which entered into force in 1964.<sup>218</sup> Under article 6, the Parties contribute equally to the costs of constructing control structures in the Iron Gates sector of the Danube and article 8 provides for equal sharing of the power produced.

227. Although the principle of equal sharing of boundary waters is generally accepted in treaties, the method of dividing either water use or energy on a 50–50 percentage basis is not the only solution employed. The agreement between Switzerland and Italy on the Averserrhein basin (Rome, 18 June 1949) is a somewhat specialized treaty, as the preamble indicates:

The Swiss Federal Council and the Government of the Republic of Italy,

Having considered an application by the Rhätische Werke für Elektrizität Company, Thusis, Switzerland, and the Edison Company, Milan, Italy, for the concession of the hydraulic power of the Reno di Lei and other watercourses situated in the Averserrhein basin,

Hereby recognize that the project submitted for the development in one single generating station of the hydraulic power of sections of Swiss and Italian watercourses will ensure the rational utilization of such power. They nevertheless note that the harnessing and utilization of such power, which can be ensured

only by one single enterprise, should be the subject of an international agreement taking account of the differences in the legislation of the two States.

They accordingly agree that the two Governments should authorize the construction, by a single concessionaire, of the installations necessary for the harnessing and utilization of such power and should share between them the energy produced, each one subsequently being free to use at its discretion and in conformity with the principles of its own legislation, the energy apportioned to it.

For this purpose, they have decided to conclude an agreement...<sup>219</sup>

228. Article 5 provides:

Taking into account the water and gradients to be used on the respective territories, it is agreed that 70 per cent of the hydraulic power produced in the Innerferrera generating station shall be attributed to Switzerland and 30 per cent to Italy...<sup>220</sup>

229. An exchange of notes constituting an agreement between Spain and Portugal on the exploitation of border rivers for industrial purposes (Madrid, 29 August and 2 September 1912) contains the provision that each Party is "entitled to half the flow of water existing at the various seasons of the year".<sup>221</sup>

230. This system of equal sharing was abandoned in the Convention between Spain and Portugal to regulate the hydroelectric development of the international section of the River Douro (Lisbon, 11 August 1927), in favour of sharing based on segmentation of the watercourse. It provides:

*Article 2*

The power capable of being developed on the international section of the Douro shall be distributed between Portugal and Spain as follows:

(a) Portugal shall have the exclusive right of utilizing the entire fall in level of the river in the zone included between the beginning of the said section and the confluence of the Tormes and the Douro.

(b) Spain shall have the exclusive right of utilizing the entire fall in level of the river in the zone included between the confluence of the Tormes and the Douro and the lower limit of the said international section...<sup>222</sup>

231. A somewhat similar type of sharing is provided for in the Agreement between the Soviet Union and Norway on the utilization of the water power of the Pasvik (Paatso) River (Oslo, 18 December 1957):

[Preamble]

The Government of Norway and the Government of the Union of Soviet Socialist Republics,

Desirous of further developing economic co-operation between Norway and the Soviet Union, and

Desirous, to this end, of utilizing the water-power of the Pasvik (Paatso) river, situated on the frontier between Norway and the Soviet Union, for their mutual benefit on the basis of an equitable apportionment between the two countries of the rights to utilize this water-power,

Have decided to conclude this Agreement [ . . . ]

<sup>216</sup> League of Nations, *Treaty Series*, vol. CVIII, p. 69.

<sup>217</sup> *Ibid.*, vol. X, p. 221.

<sup>218</sup> United Nations, *Treaty Series*, vol. 512, p. 42.

<sup>219</sup> *Legislative Texts*, p. 846.

<sup>220</sup> *Ibid.*, p. 847.

<sup>221</sup> See *Yearbook . . . 1974*, vol. II (Part II), p. 131, document A/5409, para. 584.

<sup>222</sup> League of Nations, *Treaty Series*, vol. LXXXII, p. 133.

*Article 1*

This Agreement concerns the apportionment between Norway and the Soviet Union of the rights to utilize the water-power of the Pasvik (Paatso) river from the river mouth up to the point 70.32 m above sea level where the river intersects the Norwegian-Soviet State frontier[...]

*Article 2*

The Soviet Union shall have the right to utilize the water-power of the Pasvik (Paatso) river:

(a) In the lower section, from the river mouth to altitude 21.0 m above sea level at Svan (Salmi) lake;

(b) In the upper section, from Fjaer (Høyhen) lake 51.87 m above sea level to altitude 70.32 m above sea level, where the river intersects the Norwegian-Soviet State frontier between boundary markers 9 and 10.

Norway shall have the right to utilize water-power in the middle section of the Pasvik (Paatso) river from Svan (Salmi) lake 21.0 m above sea level to altitude 51.87 m above sea level at Fjaer (Høyhen) lake.<sup>223</sup>

232. There are examples of still other types of sharing, as by the allocation of waters for a given time, such as alternate days.<sup>224</sup>

233. There are a number of boundary water treaties which recognize the interest of each riparian State in the water by requiring agreement on any change in the water regime. In effect, the decision on the nature and extent of sharing is postponed. Thus the Agreement between Hungary and Czechoslovakia concerning the settlement of technical and economic questions relating to frontier watercourses (Prague, 16 April 1954) provides:

*Article 9: Planning*

(1) The Contracting Parties shall establish joint directives for the preparation of general plans for all hydraulic works as specified in chapter I which are to be carried out on frontier watercourses. The plans must be prepared by joint agreement in accordance with the said directives. Each Contracting Party shall, at its own expense, prepare the plans for works to be carried out in its territory. The cost of joint plans for works to be carried out in the territory of both States shall be borne by the contracting Parties in accordance with a separate agreement.

(2) The plans and all substantial modifications thereof must be approved by the Contracting Parties. The transfer of flood-protection dikes further inland from the river, or the levelling off of dikes at a lower height than approved by a plan shall not be considered a substantial modification of the plan...<sup>225</sup>

234. Similarly, Poland and the Soviet Union agree, in article 9 of their Agreement concerning the use of water resources in frontier waters (Warsaw, 17 July 1964), that neither party may, save by agreement with the other party, carry out any work in frontier waters which may affect the use of those waters by the other party.<sup>226</sup>

235. A substantial number of treaties dealing with boundary waters, which treat those waters as a shared natural resource to which the principle of equality of right applies, establish some form of joint board of watercourse commission which is given a measure of authority in the application of that principle.

236. For example, the 1946 Agreement between Argentina and Uruguay concerning the utilization of the rapids of the Uruguay River provides:

*Article 1*

The High Contracting Parties declare that, for the purpose of this Agreement, the waters of the Uruguay River shall be utilized jointly and shared equally.

*Article 2*

The High Contracting Parties agree to appoint and maintain a Mixed Technical Commission composed of an equal number of delegates from each country which shall deal with all matters relating to the utilization, damming, and diversion of the waters of the Uruguay River.<sup>227</sup>

Other articles of the treaty provide that the Mixed Technical Commission shall establish its rules and plan of work, apply certain specified priorities of water-use, make decisions by majority vote, and, in the absence of a majority or agreement by the High Contracting Parties, further provide for submitting the resultant dispute to arbitration. Article 5 provides:

The High Contracting Parties agree that permission for the use and diversion, whether temporarily or permanently, of the waters of the Uruguay River and its tributaries upstream of the dam shall be granted by the Governments only within their respective jurisdictions and after a report by the Mixed Technical Commission.<sup>228</sup>

237. The 1954 Agreement between Czechoslovakia and Hungary concerning the settlement of technical and economic questions relating to frontier watercourses provides for equal sharing but prohibits construction of works that may have an adverse effect upon the watercourse (article 23). Under article 26, a Mixed Technical Commission is established to give advice on the consequences of the establishment of construction of works in the watercourse and on whether a special agreement to authorize such construction is required.<sup>229</sup>

238. The International Joint Commission (United States and Canada) is empowered, by the provisions of the 1909 Treaty between the United Kingdom and the United States of America relating the boundary waters and questions arising along the boundary between Canada and the United States (Washington D.C., 11 January 1909), to deal with the uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line... (article III).<sup>230</sup>

<sup>223</sup> United Nations, *Treaty Series*, vol. 312, pp. 274 and 276.

<sup>224</sup> See C. A. Colliard, "Evolution et aspects actuels du régime juridique des fleuves internationaux", *Collected Courses, 1968-III* (Leyden, Sijthoff, 1970), vol. 125, pp. 372-373.

<sup>225</sup> United Nations, *Treaty Series*, vol. 504, p. 258.

<sup>226</sup> *Ibid.*, vol. 552, p. 194.

<sup>227</sup> *Ibid.*, vol. 671, p. 26 (see also para. 219 above).

<sup>228</sup> *Ibid.*, p. 30.

<sup>229</sup> *Ibid.*, vol. 504, pp. 268 and 270 (see also para. 233 above).

<sup>230</sup> *British and Foreign State Papers, 1908-1909* (London, H.M. Stationery Office, 1913), vol. 102, p. 138 (see also *Legislative Texts*, p. 261).

The High Contracting Parties agree that they will not permit

the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the aforesaid International Joint Commission (article IV).<sup>231</sup>

Article VIII provides:

...The High Contracting Parties shall have, each on its own side of the boundary, equal and similar rights in the use of the waters hereinbefore defined as boundary waters....

The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary.

The requirement for an equal division may, in the discretion of the Commission, be suspended in the cases of temporary diversions along boundary waters at points where such equal division cannot be made advantageously on account of local conditions, and where such diversion does not diminish elsewhere the amount available for use on the other side...<sup>232</sup>

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<sup>231</sup> *Ibid.*, p. 139 (and *ibid.*).

<sup>232</sup> *Ibid.*, pp. 140–141 (and *ibid.*, pp. 262–263).

239. In addition, a cardinal provision empowers the International Joint Commission to examine and report upon the facts of particular cases and make recommendations, and thus establishes the Commission as an effective agency of co-ordination:

*Article IX.* The High Contracting Parties further agree that any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report whenever either the Government of the United States or the Government of the Dominion of Canada shall request that such questions or matters of difference be so referred.

The International Joint Commission is authorized in each case so referred to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

Such reports of the Commission shall not be regarded as decisions of the questions or matters so submitted either on the facts or the law, and shall in no way have the character of an arbitral award...<sup>233</sup>

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<sup>233</sup> *Ibid.*, pp. 141–142 (and *ibid.*, p. 263).