Replies of Governments to the Commission's questionnaire

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

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THE LAW OF THE NON-NAVIGATIONAL USES OF INTERNATIONAL WATERCOURSES

(Agenda item 6)

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Replies of Governments to the Commission's questionnaire

[Original: English/French/Spanish]  
[1 April 1976]

Abbreviations

Note

Introduction

I. General comments and observations

Argentina

Austria

Hungary

Netherlands

Philippines

Spain

United States of America

II. Replies to specific questions

Question A. What would be the appropriate scope of the definition of an international watercourse, in a study of the legal aspects of fresh water uses on the one hand and of fresh water pollution on the other hand?

Argentina

Austria

Barbados

Brazil

Canada

Colombia

Ecuador

Finland

France

Germany, Federal Republic of

Hungary

Indonesia

Netherlands

Nicaragua

Pakistan

Philippines

Poland

Spain

Sweden

United States of America

Venezuela

Question B. Is the geographical concept of an international drainage basin the appropriate basis for a study of the legal aspects of the pollution of international watercourses?

Argentina

Austria

Barbados

Brazil

Canada

Colombia

Ecuador

Finland

France

Germany, Federal Republic of

Hungary

Indonesia

Netherlands

Nicaragua

Pakistan

Philippines

Poland

Spain

Sweden

United States of America

Venezuela

Question C. Should the Commission adopt the following outline for fresh water uses as the basis of its study: (a) Agricultural uses: 1. Irrigation; 2. Drainage; 3. Waste disposal; 4. Aquatic food production; (b) Economic and commercial uses: 1. Energy production (hydroelectric, nuclear and mechanical); 2. Manufacturing; 3. Construction; 4. Transport other than navigation; 5. Timber floating; 6. Waste disposal; 7. Extractive (mining, oil production etc.); (c) Domestic and social: 1. Consumptive (drinking, cooking, washing, laundry, etc.); 2. Waste disposal; 3. Recreational (swimming, sport, fishing, boating, etc.)?

Argentina

Austria

Brazil

Canada

Colombia

Ecuador

Finland

France

Germany, Federal Republic of

Hungary

Indonesia

Netherlands

Nicaragua

Pakistan

Philippines

Poland

Spain

Sweden

United States of America

Venezuela

CONTENTS

Abbreviations

Note

Introduction

I. General comments and observations

Argentina

Austria

Hungary

Netherlands

Philippines

Spain

United States of America

II. Replies to specific questions

Question A

Question B

Question C

Question D

147
Question E. Are there any other uses that should be included?

Argentina 172
Austria 172
Brazil 172
Canada 172
Colombia 172
Ecuador 172
Finland 172
France 173
Germany, Federal Republic of 173
Hungary 173
Indonesia 173
Netherlands 173
Nicaragua 173
Pakistan 173
Philippines 173
Poland 173
Spain 173
Sweden 173
United States of America 174
Venezuela 174

Question F. Should the Commission include flood control and erosion problems in its study?

Argentina 174
Austria 174
Brazil 174
Canada 174
Colombia 174
Ecuador 174
Finland 174
France 174
Germany, Federal Republic of 174
Hungary 175
Indonesia 175
Netherlands 175
Nicaragua 175
Pakistan 175
Philippines 175
Poland 175
Spain 175
Sweden 175
United States of America 175
Venezuela 175

Question G. Should the Commission take account in its study of the interaction between use for navigation and other uses?

Argentina 176
Austria 176
Brazil 176
Canada 176
Colombia 176
Ecuador 176

Question H. Are you in favour of the Commission taking up the problem of pollution of international watercourses as the initial stage of its study?

Argentina 178
Austria 178
Brazil 178
Canada 178
Colombia 178
Ecuador 178
Finland 179
France 179
Germany, Federal Republic of 179
Hungary 179
Indonesia 179
Netherlands 179
Nicaragua 180
Pakistan 180
Philippines 180
Poland 180
Spain 180
Sweden 180
United States of America 180
Venezuela 181

Question I. Should special arrangements be made for ensuring that the Commission is provided with the technical, scientific and economic advice which will be required through such means as the establishment of a Committee of Experts?

Argentina 181
Austria 181
Brazil 181
Canada 181
Colombia 181
Ecuador 181
Finland 182
France 182
Germany, Federal Republic of 182
Hungary 182
Indonesia 182
Netherlands 182
Nicaragua 183
Pakistan 183
Philippines 183
Poland 183
Spain 183
Sweden 183
United States of America 183
Venezuela 183

ABBREVIATIONS

ECE Economic Commission for Europe
EEC European Economic Community
OECD Organisation for Economic Co-operation and Development
UNEP United Nations Environment Programme
NOTE

For the texts of the treaties, reports, etc., listed below, which are referred to in this document, see the following sources:

Final Act of the Congress of Vienna (9 June 1815)

Regulation concerning the free navigation of rivers (Vienna, 24 March 1815)

Treaty of Versailles (28 June 1919)

Act regarding navigation and economic cooperation between the States of the Niger basin (Niamey, 26 October 1963)

Convention relating to the general development of the Senegal River Basin (Bamako, 26 July 1963)

Treaty on the River Plate Basin (Brasilia, 23 April 1969)

Convention for the prevention of marine pollution from land-based sources (Paris, 4 June 1974)

Convention and Statute on the Regime of Navigable Waterways of International Concern (Barcelona, 20 April 1921)

Helsinki Rules on the Uses of the Waters of International Rivers (1966)


INTRODUCTION

1. In paragraph 4 of resolution 3071 (XXVIII) of 30 November 1973 the General Assembly recommended that the International Law Commission should, at its twenty-sixth session, commence its work on the law of the non-navigational uses of international watercourses by, inter alia, adopting preliminary measures provided for under the Commission’s statute. Pursuant to that recommendation the Commission, at that session, set up a Sub-Committee to consider the question and report to the Commission, and it appointed Mr. Richard D. Kearney as Special Rapporteur for the topic. The Commission adopted the Sub-Committee’s report and included it in its report on the work of its twenty-sixth session. The Sub-Committee’s report contained a series of questions intended to elicit the views of States on certain preliminary aspects of the subject-matter with a view to facilitating the future study of the topic by the Commission.

2. At its twenty-ninth session the General Assembly, in connexion with its consideration of the Commission’s report, adopted resolution 3315 (XXIX) of 14 December 1974. In paragraph 4 (e) of section I of the resolution, the Assembly recommends that the International Law Commission should

Continue its study of the law of the non-navigational uses of international watercourses, taking into account General Assembly resolutions 2669 (XXV) of 8 December 1970 and 3071 (XXVIII) of 30 November 1973 and other resolutions concerning the work of the International Law Commission on the topic, and comments received from Member States on the questions referred to in the annex to chapter V of the Commission’s report.

3. By a circular note dated 21 January 1975 the Secretary-General invited Member States to communicate to him, if possible by 1 July 1975, the comments on the Commission’s questionnaire referred to in General Assembly resolution 3315 (XXIX).

4. As of 26 March 1976, replies to the Secretary-General’s note referred to above had been received from the Governments of the following States: Argentina, Austria, Barbados, Brazil, Canada, Colombia, Ecuador, Federal Republic of Germany, Finland, France, Hungary, Indonesia, Nicaragua, Pakistan, Philippines, Poland, Spain, Sweden, United States of America and Venezuela. A reply was subsequently received from the Government of the Netherlands.

5. The present document contains the above-mentioned replies, giving first the general comments and observations and then the replies to each of the specific questions reproduced below. The internal structure of each governmental reply and the categorization of the materials with respect to each question as presented by the Governments have been fully respected. When a Government has indicated that the text of a reply covers more than one question, the reply has been reproduced only once, under
I. GENERAL COMMENTS AND OBSERVATIONS

Argentina

[Original: Spanish]
[26 August 1975]

1. The Argentine Government accords high priority to the study undertaken by the International Law Commission and hopes that it can be completed with the promptness which this area of international relations requires. It reflects an aspiration which goes back to General Assembly resolution 1401 (XIV) and was affirmed and supplemented through resolutions 2669 (XXV), 2780 (XXVI), 2926 (XXVII), 3071 (XXVIII) and 3315 (XXIX).

2. This background in itself demonstrates the acute need, which becomes even more evident if one considers the development which has been taking place, in this and related matters, through the work of international bodies, the practice of States, legal theory, custom, international treaty law, and so on. The non-navigational use of international watercourses is a topic closely related to the subject of the relations of co-operation and friendship which should exist between States. The identification and formulation of legal rules by the Commission will contribute to the success of this undertaking. Furthermore, it is to be expected that the early completion of this work will be useful not only for the maintenance of these relations but also for the avoidance of possible disputes which is imperative in today's world characterized by a growing interdependence.

3. The Argentine Government believes that the study of this subject offers the opportunity for an effort to achieve this objective and trusts that its completion in the shortest possible time will be a new and valuable contribution by the International Law Commission.

Austria

[Original: English]
[18 July 1975]

Austria's comments have been made from the viewpoint of the experiences and interests of Austria as a land-locked country occupying the area above and below two international river catchment basins in Europe. Austria's attitude toward these problems largely corresponds to the views expressed in paragraphs 161, 162 (second sentence), 166 (last sentence), 167 (last sentence), 168 (from third sentence onward), 169 (last sentence), 170, 172 and 175 of the report of the Sixth Committee to the General Assembly at its twenty-ninth session.¹


Hungary

[Original: English]
[14 July 1975]

1. We stress that we consider the codification of international law on waters and the support and fastening of the activity of the Committee to be of vital national interest.

2. Our country is on a lower location and therefore in an extremely unfavourable position from the point of view of water exploitation. Our existing agreements with the neighbouring States on frontier waters offer only a few protections at a time of limited water reserves.

Netherlands

[Original: English]
[21 April 1976]

1. The differences between drainage basins as regards climate and the characteristics of the watercourses (natural composition, quantity of water, current velocity) on the one hand, and the use made of the water on the other hand, require a different régime for every drainage basin.
Nonetheless a number of fundamental rules need to be developed and codified that could apply throughout the world.

2. Among these universal rules are those indicating the substance and extent of the obligation resting on the individual States sharing the same drainage basin to cooperate in managing the water in the best possible manner for all the States in that basin.

3. In the opinion of the Netherlands Government, these universal rules also include rules on the control of water pollution in so far as its consequences can make themselves felt outside the territories of the States sharing the same basin. One example that comes to mind is the pollution of the sea by the dirty rivers that flow into it.

Philippines

1. The Philippines is far removed from the realities that give shape to the problems relating to non-navigational uses of international watercourses, simply because of the absence of any international river or watercourse within its jurisdiction. Problems peculiar to the subject do not impinge on our national experience to any significant degree, not as much at least as our obvious interest in the strictly navigational uses of such waterways. This consideration affects the nature of whatever contribution the Philippine Government may have on the subject.

2. The problems presented by the questionnaire are necessarily drawn from the experience of riparian States, and, for obvious reason, not from actual problems created by our own national experience. Necessarily, our comments cannot be based on State practice on the part of the Philippines.

Spain

1. The Spanish Government is pleased that the International Law Commission took the initiative of consulting States when embarking upon its work on the law of the non-navigational uses of international watercourses. Owing to the continuing dialogue between the Commission and Governments, the arduous work of codification and progressive development of international law will not only be properly prepared technically, but also be assured of broad political acceptance.

2. In this case the method followed is the surest guarantee that the Commission will act prudently and avoid the danger of a codification that goes beyond what States are currently prepared to accept. The Commission is undoubtedly also aware of the difficulty of establishing general principles of universal application in a field fundamentally governed by specific treaties covering the many different situations that arise in practice.

3. In this task the Commission has an excellent starting point, thanks to the studies prepared by the Secretariat (A/5409 and A/CN.4/274) and the progress report of the Sub-Committee on the Law of the Non-Navigational Uses of International Watercourses which met during the Commission's twenty-sixth session. The Spanish Government also has confidence in the ability of Ambassador Richard D. Kearney successfully to complete his important assignment as Special Rapporteur.

4. To supplement the data provided in document A/CN.4/274, a few references to recent Spanish international practice and legal doctrine are set forth below, in the hope that they may prove useful to the Commission.

Practice:

Franco-Hispanic agreement of 29 July 1963 on the development of the hydroelectric resources of the upper basin of the Garonne (Boletín Oficial del Estado, Madrid, 304th year, No. 184, 1 August 1964, p. 9948).

Spanish-Portuguese agreement of 16 July 1964 regulating the hydroelectric development of the international reaches of the river Duero and its tributaries (ibid., 306th year, No. 198, 19 August 1966, p. 10876).

Spanish-Portuguese exchange of notes of 22 June 1968 constituting an agreement on fishing rights in the international reaches of the Miño (ibid., 308th year, No. 185, 2 August 1968, p. 11406).

Spanish-Portuguese agreement of 29 May 1968 regulating the utilization and development of water-power in the international reaches of the Miño, Limia, Tagus, Guadiana, Chanza, and their tributaries (ibid., 309th year, No. 96, 22 April 1969, p. 5929).

Doctrine:


1 “Legal problems relating to the utilization and use of international rivers: report by the Secretary-General” (see Yearbook . . . 1974, vol. II (Part Two), pp. 33 et seq.).

2 “Legal problems relating to the non-navigational uses of international watercourses: supplementary report by the Secretary-General” (ibid., pp. 265 et seq.).

United States of America

The Government of the United States of America welcomes the opportunity to comment on the questions submitted by the International Law Commission regarding the scope and procedures of its study of the law of the non-navigational
uses of international watercourses. The ever growing world population places ever greater demands upon the static supply of fresh water. The development of equitable and operable principles to provide for the availability of this vital resource is a pressing requirement.

II. REPLIES TO SPECIFIC QUESTIONS

Question A

What would be the appropriate scope of the definition of an international watercourse, in a study of the legal aspects of fresh water uses on the one hand and of fresh water pollution on the other hand?

Argentina

[Original: Spanish]
[26 August 1975]

1. In view of the current acceleration in the development and progress of knowledge and of scientific and technological advances, the specification and limitation of definitions is unnecessary and even inappropriate. It is felt that this could give rise to prolonged academic discussions whose conclusions might be overtaken by events. Accordingly, the Committee on Natural Resources of the Economic and Social Council, for example, at its first session, agreed for practical reasons not to attempt to define a "natural resource". Similarly, the United Nations Conference on the Human Environment did not consider it necessary to define the environment. In spite of that, natural resources and the environment are universally identified and progress has been made in the consideration of these subjects without the restriction which definitions impose.

2. Notwithstanding the foregoing, and in a very general manner, it can be said that the term "international watercourse" should be understood to mean any collector of the drainage of a basin which extends beyond the limits of a single State.

3. International rivers are of special significance among international watercourses. In this connexion, it is appropriate to recall article 3 of the Inter-American Juridical Committee's Draft convention on the industrial and agricultural use of international rivers and lakes (1965), which states: "An international river is one that flows through or separates two or more States. The former shall be called successive, and the latter contiguous".

4. This geographical difference is quite often more apparent than real, since many rivers may be both successive and contiguous.

5. The principal and secondary tributaries of an international river must also be considered "international", even when they lie entirely within a national territory, since they form part of the river system of an international drainage basin.

6. The waters of international rivers are shared natural resources. Consequently, in a study of the legal aspects of their uses, one major element which must be taken into account is the system of information and prior consultation between the States sharing an ecosystem, as is stated in article 3 of the Charter of Economic Rights and Duties of States.2

7. This reply is valid both for a study of the legal aspects of the uses of international watercourses and for any study of pollution of such watercourses.

Austria

[Original: English]
[18 July 1975]

Reply to questions A, B and C

1. The Austrian concept of Wasservirtschaft (management of water resources) comprises the utilization of water resources, the protection of waters against pollution by man as well as the protection of man against the elemental force of water. Accordingly, comprehensive provisions relating to these concerns have been embodied in Austrian Water-Supply and Waterways Law for more than 100 years. Also, the bilateral agreements with Yugoslavia concerning the rivers Drava (1954)1 and Mur (1956),2 and with Hungary (1959) and Czechoslovakia (1970) deal with water utilization, water pollution and flood control.

2. The treaties on water management concluded by Austria with the neighbouring States are drafted in terms of border watercourses rather than geographical or hydrological drainage areas. Similarly, the Draft European convention for the protection of international watercourses against pollution3 of the Council of Europe, the blueprint of which related to "international drainage areas", had to be restricted to "international watercourses" because of legal, practical and political difficulties.

3. According to article 1 of the Convention, "international watercourse" means any watercourse, canal or lake separating or traversing the territories of several States.

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2 Ibid., vol. 396, p. 75.

Barbados

[Original: English]
[10 November 1975]

An international watercourse may be defined as one which, together with its tributaries and distributaries, lies in part within the jurisdiction of two or more States or which forms the boundaries between two or more States.

Brazil

[Original: English]
[3 July 1975]

1. The Brazilian Government considers that the study of the non-navigational uses of international watercourses

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The law of the non-navigational uses of international watercourses

1. The definition should refer to the strictly international reaches of a shared body of fresh water—in other words, a body of fresh water which crosses or forms an international boundary.

2. Two of the factors which lead to this conclusion are:

(a) A legal definition should be a workable starting point and not a limiting factor that would preclude consideration of any appropriate geographical unit when specific, concrete problems are considered. Because such a wide variety of problems will fall within the scope of the Commission’s study, the use of a large geographical unit for all legal purposes could prove awkward in certain circumstances.

(b) It is desirable to distinguish between legal and managerial concepts. From the resource manager’s perspec-

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tive, the proper unit of concern should normally be based upon functional rather than legal or geographical criteria, because the problem to be resolved is that of conflicting uses. Accordingly, from a managerial perspective, the optimum unit might simply be that area where the water uses of two or more States are interrelated. This is an approach which the Commission might consider when more specific topics are discussed at a later stage.

**Colombia**

[Original: Spanish]  
[9 July 1975]

1. The Government of Colombia considers that the scope of the definition of an “international watercourse”, in the study both of the legal aspects of fresh water uses and of fresh water pollution, should be simply that of an “international river”, as given in the Final Act of the Congress of Vienna of 1815, namely, a river which traverses or separates the territories of two or more States.

2. An international river may, of course, be successive—when it flows through the territories of two or more States—or contiguous—when it separates or serves as a boundary between States.

3. In the case of a successive river, although there may be agreements on navigation, fishing or other matters between two or more States there is no dual sovereignty. For that reason, a State traversed by the river must utilize the waters in such a way that it causes no appreciable damage to the other nations traversed by the same stream.

4. Conversely, in the case of a contiguous river, there is dual sovereignty at least in the reach which separates the territories of two countries. Consequently, for certain uses of the waters of such rivers, in addition to the considerations mentioned in the preceding case, account might be taken of the possibility of concluding bilateral or multilateral agreements between the nations concerned.

**Ecuador**

[Original: Spanish]  
[3 August 1975]

1. According to the most widely accepted definition, international watercourses are those which separate or pass through the territory of two or more States. In the opinion of the Government of Ecuador, a study of the legal aspects of the uses and pollution of international watercourses should be carried out on the basis of this definition which, in accordance with the geographical and political realities of the world, makes a distinction between contiguous and successive watercourses. This distinction, which relates essentially to rivers, was recognized in the Inter-American Juridical Committee in resolution (LXXII) of the Seventh International Conference of American States, which, leaving aside the territorial aspect, deals exclusively with the utilization of the water power of international waters for industrial or agricultural purposes. In a legal study of the subject, rules should be established to cover the special circumstances which may arise in connexion with the uses of a contiguous international watercourse and a successive international watercourse. On the side under their jurisdiction, States have the exclusive right to utilize the waters of contiguous rivers for industrial or agricultural purposes. In the case of successive watercourses, the international aspect of the uses of such watercourses obviously arises only at the point where such watercourses cease to be subject to the sovereignty of one State and come under the sovereignty of another State. Consequently, the obligation of the sovereign State in the upper reaches of a watercourse cannot go beyond ensuring that no extensive or irreparable damage is caused for the sovereign States in the successive parts of the watercourse. It is for this reason that Ecuador has opposed the view that “prior consultation” is necessary for the use of an international watercourse. Nevertheless, Ecuador has maintained that it is advisable to exchange information with States concerned in a watercourse, regarding the uses which those States intend to make of the watercourse. In this way, it will be possible to avoid undue limitations on the exercise of the sovereignty of a State to which the upper reaches of a river belong.

2. The foregoing view is suitably complemented by the principle of the responsibility of the State exercising sovereignty over the upper reaches of a watercourse, as referred to above.

3. The Government of Ecuador accordingly considers that the International Law Commission, for the purposes of the study entrusted to it, should establish rules governing the uses of a contiguous portion of an international watercourse, as well as various others ensuring the use of a successive watercourse under the various territorial jurisdiction of the States through which it passes.

**Finland**

[Original: English]  
[21 August 1975]

**Question A** concerns the appropriate scope of the definition of an international watercourse with regard to the legal aspects of fresh water uses on the one hand and of pollution on the other. The concept of international watercourse was used by the Government of Finland in its motion of 1970 to the General Assembly and later on included in General Assembly resolution 2669 (XXV) concerning the development of the rules of international law relating to international watercourses. The term “international watercourse” has generally been regarded to be broad enough to cover all the problems which have relevance in this connexion, and it did not look too technical. When compared with other terms which have been used instead of “international watercourse”, the scope of the latter is wider than that of “international river”, because watercourse also means lakes. On the other hand “international watercourse” might be practically regarded as equivalent to “international drainage basin”, provided that underground waters which are contained in the latter concept are not taken into account. Particularly for the purposes of the codification of international law of waters the term “international watercourse” seems to be as usable as the concept of “international drainage basin”, which
concept has been adopted by the International Law Association after a careful study of various alternatives (Helsinki Rules of 1966). A similar terminological problem was studied also in 1952 by ECE and the results of this study which led to the acceptance of the concept "rivers and lakes of common interest" have been published in an ECE document. Those studies have indicated that synonymous terms can be used for describing the same notion, provided that the terms chosen cover the main factors which with regard to watercourses have an international legal relevance. Firstly, the term should indicate that a watercourse or a system of rivers and lakes (a hydrographic basin) is divided between the territories of two or more States. The second factor of importance in this connexion is based upon the hydrographic coherence of the basin. Due to this coherence there exists, irrespective of the political borders, a legally relevant interdependence between the various parts of the watercourse belonging to different States. This interdependence which in each individual case should decide to what extent the drainage area will be subjected to an international legal regulation, does not concern the different uses of the watercourse and its water only; it has also bearing upon problems of pollution. For that reason there is no need to make distinctions concerning the scope of the definition of an "international watercourse" or an "international drainage basin" with regard to the legal aspects of fresh water uses on the one hand and of fresh water pollution on the other hand.

1 "Legal aspects of the hydro-electric development of rivers and lakes of common interest" (E/ECE/136-E/ECE/EP/98/Rev.1).

France

Reply to questions A, B and C

Nature of international watercourses

1. Questions A, B and C can actually be reduced to one, namely, whether the concept of an international drainage basin or that of an international watercourse is the appropriate basis, depending on whether the subject of the study is the use or the pollution of the waterway.

2. As far as the use of the watercourse is concerned, it would be almost unthinkable to adopt any concept of a waterway other than that of an international watercourse.

3. As regards pollution of the waterway, on the other hand, the drainage basin concept might be adopted for the purpose of considering measures to be taken, with the exception of such controls as would have to be organized at the individual State level. However, for reasons which are explained more fully with reference to question H, the French Government does not consider it advisable at this juncture for the International Law Commission to undertake a study of the pollution of watercourses.

Federal Republic of Germany

Reply to questions A, B and C

1. The Government of the Federal Republic of Germany holds the view that a study of the legal aspects of the non-

2. This definition is derived from articles 1 and 2 of the Regulation concerning the Free Navigation of Rivers of 24 March 1815 and from articles 108 and 109 of the Final Act of the Congress of Vienna of 9 June 1815. It has since been internationally accepted.

3. In the Western European sphere of law the same definition was accepted by the member States of the Council of Europe as the basis for their consultations on a draft European convention for the protection of international watercourses against pollution and was eventually included in the text of the draft convention. It was also embodied in the German-Dutch Frontier Treaty of 8 April 1960 which contains provisions in chapter 4, article 56 and following concerning the use of waters which cross or, in some of their sections, form the frontier between the Federal Republic of Germany and the Netherlands.

4. A study of the legal aspects of fresh water uses and of fresh water pollution should take into account the full scope of this definition, thus allowing for practical results to be deduced on a broad scale. It should not be confined, as was done at the International Transport Conference in Barcelona in 1921, to the navigable section of a watercourse, especially as this particular study is to be limited to the use of watercourses for purposes other than navigation.

5. For completeness, however, it may be necessary and useful to include in the Commission's considerations also the navigational uses of watercourses at least as far as their contaminating effect is concerned. The removal of bilge oil as well as of ship refuse and waste water is of considerable significance for the pollution load of watercourses and the problems involved in this are therefore the subject of international efforts to secure pollution control of navigable waterways. The endeavour to formulate principles designed to reconcile conflicting interests resulting from so-called positive and negative uses of watercourses should be based on the consideration of as many aspects of pollution as possible.

1 Treaty between the Kingdom of the Netherlands and the Federal Republic of Germany concerning the course of the common frontier, the boundary waters, real property situated near the frontier, traffic crossing the frontier on land and via inland waters, and other frontier questions (Frontier Treaty): for text see United Nations, Treaty Series, vol. 508, p. 148.

Hungary

Reply to questions A, B and C

No unambiguous answer can be given to the questions put in points A, B and C of the questionnaire because the geographical designations mentioned there, "international
watercourses” and “international drainage basin” are appropriate only for a part of the so far non-regulated legal relations. The non-regulated legal relations and the main conceptions of their regulations can be outlined as follows:

The international legal regulation of the questions concerning the utilization of waters or drainage basins extending over the territory of several countries is necessary partly because of the hydrological unity of waters and drainage basins and partly because of their hydrography due to political demarcation of frontiers.

From the conception of “hydrological unity” the following essential facts can be concluded:

1. Hydrological unity first of all means that an intervention into the relations of waters on any part of a watercourse or drainage basin (i.e., the utilization of waters) has an effect on another part of the watercourse or the drainage basin.

The hydrography of frontiers of the watercourses or drainage basins through political demarcation means that any intervention on the territory of a State (generally on a higher location) has possibly an effect on the territory of another State (generally on a lower location) and causes changes in the water relations there (generally at the expense of the State on lower location).

There are two main cases of harmful changes in water relations: either a change in the quantity of the water reserve (i.e., because of the utilization of water for industrial, agricultural or communal purposes, or turning the water to other drainage basins, etc., causing a decrease in the water-reserve, or causing an increase in it because of depleting the water reservoirs in time of floods), or else a deterioration in the quality of water because of the introduction of unacceptably cleaned industrial, agricultural or communal outlet water.

The aim of the international legal regulation is to eliminate harmful interventions in water relations by prohibiting or preventing them.

(a) The rule prohibiting harmful intervention—deduced from the “sic utere tuo . . .” that is generally accepted by international law—was formulated by the United Nations Conference on the Human Environment in Stockholm as follows: “. . . States have, . . . the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States . . .”.1 The United Nations recognized this rule to be authoritative “in such cases”.

Concerning waters, no specific geographical term of waters is necessary beyond this formulation, except the notion of “State territory”.

(b) In most cases the interventions causing damages to another State are not made by a State but by some economic organizations or legal entities functioning inside the boundaries of the State. The means of controlling such kinds of activities is the legal system of concessions for the utilization of waters enforced by the State. This system exists in all countries in a more or less developed form. Theoretically the above rule also decrees that the State is obliged to prevent or not to permit the activity that causes damages in another State.

However, it is necessary to elaborate further regulations in order to avoid harmful interventions because generally the authority on water rights has not the possibility to examine and judge the effect of the planned intervention that can be experienced in another State.

There were attempts to solve this problem in the agreements on the exploitation of frontier waters mainly in the relations of European socialist countries and in the relations of socialist and the neighbouring non-socialist countries. The following rules can be concluded from these agreements:

(i) The waters creating borders between two countries or the waters crossed by a border between two States are “frontier waters”;

(ii) All the interventions affecting the water relations on frontier waters can be done only with the concord of both States; certain agreements contain provisions even about the division of water reserves;

(iii) When waters are crossed by a frontier it is stipulated in some agreements that any interventions affecting the water relations can be made only with the consent of both States in the frontier area at a prescribed distance from it in both directions;

(iv) No consent of the other State is necessary to the interventions made on the above-mentioned area of frontier waters or outside of them when the agreements provide only for informing the other State about the effect of the intervention if it is observable on frontier waters.

According to these agreements the following can be concluded:

(i) Frontier waters have a special international legal status distinguishing them from any other waters;

(ii) However, this status does not concern either other waters flowing into frontier waters or the full length of the currents crossed by a frontier and still less the drainage basin.

The last criterion also indicates the insufficiency and limits of the outlined regulation. We have made several unsuccessful attempts to extend this distinctive status in the negotiations with our neighbours. There were two reasons for this failure:

(i) States regard the extension of the distinctive status of frontier waters to the whole drainage basin or to the full length of a current as an unjustified encroachment on their sovereignty;

(ii) The extension of special status, i.e., the obligation to co-ordinate interventions into all the waters is impossible in practice. Theoretically the limitation of interventions is possible, but this also cannot give protection against the total effect of minor interventions.

Further possibilities to eliminate the difficulties are the following:

(i) The bilaterally assured fixing of the quantity and quality of the water flowing across frontier waters either by the present co-ordination system or without it. For the description of this kind of regulation the necessary geographical terms are: “frontier waters”, “boundary section”, “frontier cut”.

(ii) In the latest bilateral treaties relating to the utilization of frontier waters the parties also assume the obligation of co-ordinating their long-range plans on water consumption. This obviously does not mean the co-ordination of detailed interventions but the co-ordination of the main directions of development. However, there is a possibility in this way to reach an agreement on the quality and quantity of waters flowing through a border.

2. There are some other questions originating from the hydrological unity of waters that are answered in the above-mentioned treaties on frontier waters. From these treaties several rules can be generalized concerning the co-operation of neighbouring countries, e.g.:

(a) Rules concerning the maintenance, control, embankment of the bed of frontier waters and concerning the exploitation, planning, execution and financing of these works;

(b) Rules giving a simplified way to cross the border for the workers who take part in the works stated above or in the co-operation on frontier waters;

(c) Rules prescribing the duty-free moving of machines and materials across the border;

(d) Rules concerning concessions in water rights etc.

In our opinion these rules are ripe for codification; there are no contradictions in the principle of their formulations between States on a higher or lower location.

For the formulation of these rules the following geographical terms are necessary: “frontier waters”, “border section”, “frontier cut”.

3. The co-operation of neighbouring countries in the defence against the damages caused by waters originates in the hydrological unity of waters. In the protection against floods and inland waters it is necessary for both countries to co-ordinate the building and maintenance of dikes on their territories or to make and operate the works of common interest, to inform each other about the hydrometeorological data, possibly to develop automatic measuring systems, to make radio or phone connexion between the protecting organizations, to offer effective help to the other party, etc.

The possible forms of necessary co-operation against the damages of pollution are:

(a) The establishment of a network to control the quality of the polluted water, and the maintenance of this network;

(b) The introduction of effective protection on the State’s own territory against the extremely polluted waters and informing in advance the country on a lower location about the pollution waves, etc.

For the description of the rules concerning the damages of waters, the necessary geographical terms are “frontier waters” and maybe “drainage basin”.

4. Finally, the co-operation of States located on the same drainage basin—and not necessarily neighbours of each other—in the intended development and utilization of the waters of the drainage basin also originates in the hydrological unity of waters. The treaties mentioned as examples in the seventh, eighth and eleventh paragraphs of the Sub-Committee’s report relate to this most comprehensive co-operation and for the regulation of this co-operation “drainage basin” is really the adequate geographical term.

We mention furthermore that in our opinion the uncertainty in the explanation of “international rivers” and “international drainage basin” that was well characterized in the sixteenth paragraph of the report, is due to the fact that the general legal relation concerning basically only the co-operation is not clearly discriminated from the other legal relations outlined above connected with the utilization of water.

The use of the attribute “international” is not correct, because without the detailed determination of the whole drainage basin it can also mean a special international legal status of whole currents such as the frontier waters have. This is unacceptable to the States on higher locations.

5. Summarizing our view, we underline the following:

(a) There is no geographical term so general that it could be applied to the description of all the legal relations relating to the waters or drainage basin which are on the territory of more than one State;

(b) “International river”, “international drainage basin” and “frontier waters” are geographically exactly determined and well explainable terms. Therefore, it is not necessary to study the meaning of these terms, but the question what term is suitable to the regulation of certain legal relations.

6. The following points can be proposed for the classification of these legal relations:

(a) The water exploitations having effect on the quantity and quality of waters;

(b) Other water exploitations;

(c) The co-operation of States which are either neighbours or on the same drainage basin in the utilization of waters.

\[\text{Indonesia}\]

[Original: English]

[17 July 1975]

The appropriate scope of the definition of an international watercourse in a study of the legal aspects of fresh-water uses on the one hand and of fresh-water pollution on the other hand, should be the aim for the welfare of the people.

\[\text{Netherlands}\]

[Original: English]

[21 April 1976]

(a) Brackish water

1. The subject of the study begun by the International Law Commission is the law of the non-navigational uses of
international watercourses. Yet in question A, and again in question D, mention is made of fresh water uses and fresh water pollution. The introduction of the term “fresh water” limits the scope of the study, in that it excludes those parts of international watercourses in which the water is brackish owing to the influence of the sea. Especially in such low-lying deltas as exist in the Netherlands it has been found that the salinizing effect of the sea can still be observed several dozen kilometres upstream from the point where the watercourse flows into the sea.

2. A distinction between fresh and brackish water may indeed be of some value for certain uses of the watercourse, such as irrigation of farm land, water use in some industrial process, the production of drinking water and the discharge of waste salts. With respect to other uses, however, for instance as cooling water, for recreation and for the discharge of waste chemical products this distinction is hardly—if at all—relevant.

3. The Netherlands Government considers that, in the interest of careful and balanced management of the watercourses in one and the same drainage basin, the definition of an international watercourse should be wide enough to include the part of it that contains brackish water.

4. The Government’s opinion is based partly on the experience it has acquired in negotiations with the Governments of States situated upstream from the Netherlands, for it has been found that, from the viewpoint of the State situated farther upstream, the fact that the brackish part of a watercourse is not taken into consideration allows the Netherlands so much more freedom in the uses it can make of the watercourse as to make it difficult to achieve equilibrium between the rights and obligations of the upstream and downstream States.

5. An additional argument that might be mentioned is that in 1971–1974, when a draft European convention between the member States of the Council of Europe for the protection of international watercourses against pollution was in the course of preparation, the basic principle originally adopted was the idea of fresh water protection. Yet in the course of the negotiations the experts of the member States came to the conclusion that the qualitative management of a watercourse should extend to the brackish lower reaches as well. This draft convention regards a watercourse as extending down to the base-line of the territorial sea.

(b) **Freshwater limit**

6. For those aspects of qualitative water management where it may be important to distinguish between the freshwater and the brackish-water parts of a watercourse, the draft European convention referred to in paragraph 5 above contains the following definition in its article 1(c):

“freshwater limit” means the place in the watercourse where, at low tide and in a period of low freshwater flow, there is an appreciable increase in salinity due to the presence of sea water.

7. The same definition was later included in the Convention concluded in Paris on 4 June 1974 for the prevention of marine pollution from landbased sources.

(c) **Watercourse**

8. For the purpose of the present study, “watercourses” should be taken to mean not only rivers but also canals and lakes through which the water may move, so that the use made of the water of one State may affect the possibilities of water use in another State.

**Nicaragua**

| Original: Spanish |
| 10 September 1975 |

1. The scope which should be given to the definition of an international watercourse must be considered from two different angles: the legal aspects of uses and the legal aspects of pollution.

2. From the viewpoint of the utilization of waters, it is necessary to limit it to the following cases: (a) navigable rivers which traverse the territory of two or more States (successive rivers), in which the waters are under two or more different jurisdictions but are subject to the principle of legal responsibility, which presupposes a prohibition on causing substantial injury to third countries; (b) navigable rivers in which the dividing line between two States follows the direction of the thalweg (contiguous rivers), in which sovereignty over their waters is shared; (c) non-navigable rivers which traverse two or more States; (d) non-navigable rivers which constitute the border between two or more States. The legal aspects of water pollution should be considered with due consideration for other factors which will be set out later on. When a frontier lies on one of the banks of a river, that river should not be deemed to be an international river.

**Pakistan**

| Original: English |
| 10 October 1975 |

All perennial rivers, streams, canals and even non-perennial streams which flow through more than one country should be included in the definition of international watercourses.

**Philippines**

| Original: English |
| 25 August 1975 |

The definition of an international watercourse should be based on the unity of all surface waters as a physical concept. This reflects the centuries-old practice of States in cases of politically divided watercourses or basins.

**Poland**

| Original: English |
| 27 August 1975 |

1. The study of the legal aspects of the non-navigational uses of international watercourses should encompass those...
international watercourses which separate or cut across the territories of more than one State. For several years now international law has been engaged in problems connected with rivers separating or cutting across the territories of two or more States and which may be called international and not national rivers, meaning that they are not flowing through the territory of one State exclusively.

2. Classical international law did not, however, define as an international river every river flowing through or constituting the frontier of two or more States. The internationalization of a river was connected with its navigational function and a river which in its naturally navigational course separated or cut across the territories of two or more States was considered an international river. (See the Final Act of the Congress of Vienna of 1815 and the regulations of the Treaty of Versailles of 1919; the notion of "river network" as well as the broader notion of "navigable waterways of international concern" were adopted in the Barcelona Convention and Statute of 1921 on the régime of navigable waterways and international concern.)

3. From the viewpoint of non-navigational use of rivers the notion of international river is connected with its geopolitical position, that is, with the fact that its watercourse flows successively through or separates the territories of two or more States.

4. The problem of navigation of a river may not be essential for its commercial, agricultural or domestic uses. In non-navigational use of rivers international law is interested in international rivers also defined as "common" or "multinational" rivers as opposed to "truly" national rivers, i.e., those in which the course from the spring to its sea estuary flows through the territory of only one State. At present, in international law, the notion "international river", besides its known classic interpretation, is used for the definition of every river, navigational or not, separating or cutting across the territories of two or more States.

5. For the purpose of non-navigational use of waters, the States are interested both in international rivers as well as in other internal watercourses, namely, in lakes cutting across international frontiers, which may be called international lakes, and in all other frontier waters.

6. The notion "frontier waters" is used in bilateral agreements on water economy concluded by Poland with her neighbouring countries (the Agreement between the Government of the Polish People's Republic and the Government of the Republic of Czechoslovakia on water economy in frontier waters of 21 March 1958; the Agreement between the Government of the Polish People's Republic and the Government of the USSR on water economy in frontier waters of 17 July 1964; the Agreement on co-operation in water economy in frontier waters concluded between the Polish People's Republic and the German Democratic Republic on 11 March 1965).

7. In those agreements the notion "frontier waters" embraces surface flowing and stagnant waters (rivers, streams, canals, lakes, ponds) which are run or cut across by the State frontier, at the points cut by the frontier line, as well as subsoil waters cut across by the State frontier line at the points cut by this line.

8. Answering the question posed, the Government of the Polish People's Republic wishes to state that in defining the notion of international watercourses different criteria should not be used for the definition of this notion in the case of studies on legal aspects of the use of international watercourses and in the case of undertaking studies on the legal aspects of pollution of those waters.

9. It seems that for the need of studies on legal aspects of the use of waters and their protection against pollution one should understand under the notion of international watercourses all flowing (rivers, canals, streams) or stagnant waters (lakes, ponds), navigational or not, which successively flow through the territories of at least two States or constitute the frontier between States.

10. At the same time, the Government of the Polish People's Republic wishes to call attention to the fact that recently in international practice the subject of legal considerations and regulations relative to the use of international watercourses and aimed at their concordant and mutually profitable use are not only surface waters separating or cutting across the territories of two or more States but also subsoil waters. This is undoubtedly due to the ever-greater possibilities of their location, settlement of their flow directions, as well as due to ever more universal and possible use of methods connected with the development of technology.

11. Thus, one should also give some thought to the possible inclusion in legal considerations on the use of international watercourses of subsoil frontier waters and those subsoil waters which successively cut across the territories of two or more States.

Spain

[Original: Spanish]
[22 September 1973]

Reply to questions A, B and C

1. Obviously, the first task must be to delimit the material scope of the study to be undertaken. In that connexion, the Spanish delegate pointed out at the 1228th meeting of the Sixth Committee on 12 November 1970, the various problems that would certainly arise. The terminology used can affect not only the different physical realities to be included, but also the different legal consequences to be covered. This point can better be appreciated if we consider separately the elements in the definition of the question raised in General Assembly resolution 2669 (XXV).

(a) "Watercourses"

2. Traditionally, international practice and theory have dealt principally with "rivers" although lately greater emphasis has been placed upon "waterways" or "watercourses", which include lakes, canals, dams or reservoirs and other surface waters.

3. In its questionnaire, the Commission includes the term "drainage basin". That term, which was based on the

2 ibid., vol. 552, p. 188.

concept of “river system”, does not appear to have only one meaning at the present time and at any rate it is doubtful whether its meaning has become fixed. Thus, the Panel of Experts on the Legal and Institutional Aspects of International Water Resources Development is of the opinion (quoted in para. 350 of document A/CN.4/274) that “basin” should encompass not only surface waters, but also underground and atmospheric water as well as frozen resources, thus arriving at the concept of “international water resources system”. On the other hand, the Secretary-General's report to the Committee on National Resources on river discharge and marine pollution (quoted in para. 335 of the same document) maintains that, as far as pollution is concerned, the river basin should be considered as part of a much larger interdependent system that would include the oceans.

4. In view of the vagueness of the term “drainage basin” and of the scientific developments which are constantly changing the technical approach to the subject, it might be preferable to keep the traditional term “watercourses” for the purpose of codifying international law. Obviously, this would not prevent the development and clarification of the concepts “basin”, “interdependent system” or “integrated water resources” by international technical or economic bodies or the adoption of such concepts by States either on a bilateral or regional basis.

(b) “International” watercourses

5. Traditionally, a distinction was made between rivers that are by their nature international and rivers that have been internationalized under a treaty or by custom. An attempt to establish a broad concept was made at the 1921 Barcelona Conference which drafted a Convention on the Régime of Navigable Waterways of International Concern. It is a well-known fact that many States did not ratify the Convention precisely because they could not accept that broad concept which would have included waterways that until then had been considered national.

6. This should serve as a lesson. The concept of “drainage basin” or “river system” implies the internationalization of watercourses that are wholly within the territory of a State. Undoubtedly, two or more States can agree to accept this with regard to a specific basin but the rules of general international law are quite another matter. There is no reason to believe that States are prepared to accept today what they rejected 50 years ago.

7. Consequently, it would be prudent to adhere to the traditional concept of watercourses of international character either because they constitute the boundary between two States (contiguous watercourses), or because they cross the territory of more than one State (successive watercourses).

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1. Questions A, B and C all deal with the definition of the term “international watercourse”. Consequently the United States will deal with these questions en bloc. In considering these questions, the United States found the comments of Dr. Bengt Broms, the Finnish representative in the Sixth Committee discussion of this aspect of the Commission’s report during the Twenty-Ninth General Assembly, to be a concise and penetrating analysis of the key issue:

The term chosen should be understood as indicating the fact that a watercourse or system of rivers and lakes (the hydrographic basin) is divided between two or more States. This division of the basin into various parts is combined with a second factor, the hydrographic coherence of the basin irrespective of the political borders. Due to this coherence, there exists an interdependence of legal relevance between the various parts of the watercourse or basin belonging to different States.

2. In other words, action taken, or not taken, affecting water in any part of a hydrographic basin may produce consequences in water at other places within the hydrographic basin without regard to the conceptual division of the basin into different political entities. This causal relationship demands that the water system in a basin be considered in its entirety for the purpose of attempting to establish international legal rules because it is only in that manner that a workable set of rights and obligations can be established.

3. Consequently the United States considers that the concept of an international drainage basin from the standpoint of physical geography would be the appropriate basis for study of the legal aspects both of the non-navigational uses of international watercourses and of the pollution of such watercourses. The United States would add, however, that relationships between international drainage basins, and in particular, diversions of water into and out of such basins, may have significant effects on the interests of States within the basin. Accordingly, the United States considers that relationships between international drainage basins, including the effects of diversions into and out of such basins, should be included within the study.

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2. In keeping with current trends in public international law, it would be possible to broaden the traditional definition of an international watercourse which, until now, has been tied to the criterion of navigability and access to the sea.

3. For these reasons, watercourses meeting the following criteria could be considered international watercourses:

(a) Geopolitical criteria: From the point of view of the preliminary study of the legal aspects of non-navigational fresh water uses on the one hand, and of fresh water pollution on the other, international watercourses would be not only those watercourses which traverse or separate two or more States (traditionally termed contiguous and successive), but also, possibly, watercourses pertaining to the same international drainage basin which covers the territory of more than one State. The traditional criterion of access to the sea for the definition of an international watercourse would thus be discarded. Lastly, suitable terminology would have to be developed for watercourses that could be considered international (rivers, streams, brooks, wadis, etc.).

(b) Socio-economic criteria: Watercourses used for economic purposes (navigation, irrigation, energy production, etc.), or social purposes (human consumption, etc.) could be considered international watercourses where such use serves the interests and needs of two or more countries, or where such use by one State may be directly detrimental to another or other States.

(c) Legal criteria: There are two cases to be considered:

(i) In the case of a mere preliminary study which does not call for the establishment of rights or obligations, watercourses which meet the above-mentioned criteria could be considered as coming within the same international scope. Recognition, by the States concerned, of the international nature of the watercourses covered by such a study would have declaratory value.

(ii) However, it should be stressed that in any attempt to arrive at a definition of such watercourses for the purpose of drawing up international legal rules, the use of these objective criteria must be tempered by the use of legal criteria. These criteria would be based on the common will of the States concerned expressly to recognize a special situation and to establish specific regulations to safeguard, co-ordinate and equitably serve a whole series of common interests. The instrument chosen to achieve this objective would be the internationalization of these watercourses, by means of bilateral or multilateral agreements and conventions having constitutive value. In that case, the scope of the definition of an international watercourse could be far more restrictive in that, for example, it would not cover the entire drainage basin.

4. A fundamental distinction must necessarily be made between the declaratory and the constitutive value of such internationalization. While Venezuela can recognize a watercourse as international for the purposes of a preliminary study, provided that such a watercourse meets certain prerequisites, that recognition merely has declaratory value, without involving the establishment of legal rules and obligations. On the other hand, when it subsequently comes to the point of proposing to codify the legal system covering international watercourses, acceptance by States will have to be formalized by the drafting and adoption of specific treaties.

Question B

Is the geographical concept of an international drainage basin the appropriate basis for a study of the legal aspects of non-navigational uses of international watercourses?

Argentina

Reply to questions B and C

1. In this connection it should be said that the English text of the questionnaire has been used because the Spanish version incorrectly translates "international drainage basin" as "cuenc\'a hidrol\'ogica internacional", when it should have been translated as "cuenc\'a de drenaje internacional".

2. We consider the geographical concept of an international drainage basin to be the appropriate basis for a study of the legal aspects of international watercourses and the pollution of international watercourses.

3. The concept of an international drainage basin, in its legal aspect, must conform to the acknowledged principle of good-neighbourliness which is fundamental in this branch of international law.

4. There is an extensive bibliography on the legal aspect and on the value of the concept of an international drainage basin, which has long been found in the literature. Among many authors, mention should be made of Herbert Arthur Smith, who, in his classic work The Economic Uses of International Rivers arrives at the following conclusion: "The first principle is that every river system is naturally an indivisible physical unit and that as such it should be so developed as to render the greatest possible service to the whole human community which it serves, whether or not that community is divided into two or more political jurisdictions".

5. The 1966 Helsinki Rules, prepared by the International Law Association after a series of meetings, are based on the use of the waters of an international drainage basin, the latter being defined in article II of the Rules.

6. A detailed and soundly based study on the value, from the legal standpoint, of the concept of international drainage basins was made in The Law of International Drainage Basins, published by the Institute of International Law of the New York University School of Law.

7. In The River Basin in History and Law, after a documented study, Ludik A. Teclaff demonstrates the value and appropriateness of the concept of an international

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drainage basin for the study of the legal aspects of the various uses of international watercourses.

8. Claude-Albert Colliard devotes chapter III of “Evolution et aspects actuels du régime juridique des fleuves internationaux”\(^4\) to the question of the optimum use of basins and endorses the modern concept of an integrated basin, an international drainage basin.


10. In “International Water Quality Law”,\(^6\) Albert E. Utton discusses at length the development of international environmental law pertaining to drainage basins.

11. In the light of the above-mentioned works and the wealth of information on State practice and on international legal theory and judicial decisions which they contain, it seems unnecessary to advance any further arguments at this stage in support of adopting the concept of an international drainage basin as the appropriate basis for the study in question.


\(^5\) United Nations publication, Sales No. E.75.II.A.2.

\(^6\) In Natural Resources Journal, University of New Mexico School of Law, April 1973.

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### Replies

**Austria**

[See above, p. 152, sect. II, question A, Austria.]

**Barbados**

[Original: English]

[10 November 1975]

1. The geographical concept of an international drainage basin is that a unit area is drained by a single river system passing through two or more States.

2. It is considered that this concept of an international drainage basin may be regarded as an appropriate basis for a study of the legal aspects of non-navigational uses of international watercourses for the reason that this principle suggests that the river system is an indivisible whole and on this basis States should be able to enforce their rights of irrigation or use such river courses for hydroelectric purposes.

3. If it is accepted that a river system is an indivisible whole then States should not be inhibited from utilizing rivers that flow through their territories.

**Brazil**

[Original: English]

[3 July 1975]

The position of the Brazilian Government on this question has already been presented in the reply to question A above.\(^1\) As it then emphasized, drainage basin is a territorial concept which may, under particular local characteristics and pertinent international acts, constitute not more than an appropriate unit for certain projects of development and physical integration, as is the case in the Treaty on the River Plate Basin, and in the process Brazil and Uruguay are carrying out for the Lagoa Mirim Basin. Such a concept, however, does not in fact have any bearing on the legal aspects of the uses of watercourses which do not, accordingly, depend on the concept of drainage basin.

\(^1\) See above, p. 154, sect. II, question A, Brazil.

**Canada**

[Original: English]

[25 September 1975]

*Reply to questions B and C*

No. The definitional point of departure should be “the international watercourse” as described above. The use of a geographically narrow definition as a starting point would not preclude consideration of a natural drainage basin, or of a functional unit as described above,\(^1\) where the circumstances of the case so require.

\(^1\) See above, p. 153, sect. II, question A, Canada.

**Colombia**

[Original: Spanish]

[9 July 1975]

*Reply to questions B and C*

1. The Government of Colombia considers that the definition of an international drainage basin as contained in chapter I, article II of the Helsinki Rules is appropriate in itself. It also believes that the said geographical concept may in many cases be exceeded for purposes of regional integration and development projects between two or more States.

2. Nevertheless, the definition of a drainage basin is not, in its view, the most appropriate basis for a study of the legal aspects of fresh water uses or of the pollution of international watercourses.

3. Providing legal mechanisms for the settlement of any disputes that may arise between States over waste use or the pollution of international watercourses would undoubtedly guarantee harmonious relations among the nations.

**Ecuador**

[Original: Spanish]

[5 August 1975]

1. In the light of the above,\(^1\) there is no need to expand the concept of an international watercourse to include the geographical concept of an international drainage basin for a study of the legal aspects of non-navigational uses of international watercourses.

2. In so far as the international aspects of the uses of a watercourse come into play only at the point where the watercourse leaves the sovereignty of one State and comes under the sovereignty of another State and the State owning...

\(^1\) See above, p. 154, sect. II, question A, Ecuador.
the upper course must avoid damage to the State owning the lower course, the legal concept of the watercourse suffices, de facto, to provide the basis for international regulations governing the matter. On the other hand, if reference were made to the geographical concept of a basin, it would leave open the possibility of undue and unacceptable restrictions which would affect not only the watercourse in question but also all those which constitute it, as well as those in the geographical areas through which they pass. Moreover, it is hard to see what the State owning the lower course would stand to gain from the inclusion in the relevant legal rules of the over-all geographical concept of a basin since the only real concern of that State is to receive the waters of the international watercourse under conditions which do not involve serious or irreparable damage.

Finland

[Original: English]
[21 August 1975]

In order to answer the question whether the concept of an international drainage basin is an appropriate basis for the study of the legal aspects of non-navigational uses of international watercourses, the nature of those aspects and the aim and scope of such a study must be clarified. The international law of waters differs in one essential respect from the other fields of the law of the environment. As for the international law of the sea, for example, some of the major problems concern parts of the environment beyond national jurisdiction, while legal aspects which have relevance with regard to international watercourses are in most cases connected with relations between States. That means that injurious effects on the environment of a broader nature are in principle not more common as a result of uses of international rivers or lakes, than those resulting from activities taking place within watercourses under national jurisdiction. The concept, geographical or hydrographical, to be applied as a basis for the study in question, should therefore contain the two basic elements already mentioned. It should mean an area which geographically or politically divided between territories of two or more States and, on the other hand, hydrographically indicate the legally relevant coherence and interdependence of the different parts. The concept of international drainage basin is thus most appropriate for a study of the legal aspects of non-navigational uses of international watercourses.

France

[See above, p. 155, sect. II, question A, France.]

Federal Republic of Germany

[Original: English]
[6 October 1975]

Reply to questions B and C

1. In the opinion of the Government of the Federal Republic of Germany, a study of the legal aspects of the various uses of international watercourses should, as a rule, not be based on the geographical concept of an international drainage basin.

2. This applies in particular with regard to pollution. A study based on the geographical concept of the drainage basin as a whole would disregard the self-cleansing capacity of rivers and lakes as the most important natural element of pollution control and of restoring an ecological equilibrium as prerequisite for a balanced pattern of uses. Such unrealistic assumptions do not allow of reality-oriented conclusions to be drawn.

3. The logical basis for any study of the legal aspects of inland water pollution thus seems to be the "international watercourses" in the sense of water traversing or forming the frontier of the territories of two or more States. Only trans-boundary pollution, as distinct from pollution confined to some point in the river basin, is of relevance to a legal study of the uses of the downstream sections of a watercourse.

4. This view is reflected in the provisions of the draft European convention for the protection of international watercourses against pollution1 concerning minimum quality standards at border-crossing points.

5. The concept of "international watercourses" as defined above was also accepted by the States bordering on the Rhine as the basis for their co-operation in the International Commission for the Protection of the Rhine against Pollution under the Berne Agreement of 29 April 1963.2 In order to safeguard pollution control pursuant to article 2 of the Convention, monitoring stations have been set up along the banks of the river at all points where it crosses the frontiers of the two States.

6. Apart from being the appropriate basis for considerations of uses affecting the quality of water or presupposing specific quality standards, the concept "international watercourse" also lends itself to a study of uses producing changes in quantity.

7. It should not be overlooked, however, that the supply of water to countries below stream may depend just as much on water withdrawals from a national tributary as on those from the international watercourse concerned. It may therefore be useful to extend a legal study of questions of quantity to aspects of the river basin as a whole, taking duly into account the sovereign rights of the riparian States.

8. Several treaties concerning river basins have been concluded in conformity with this principle, especially in the African sphere of law.

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2 Ibid., p. 301, paras. 138-141.
concept of an international drainage basin is considered as the appropriate basis for the study.

**Netherlands**

[Original: English]

[21 April 1976]

(a) **Drainage basin (uses)**
1. The reply to this question is in the affirmative. However, the Netherlands Government wishes to make two distinctions in its reply (see sub-sections (b) and (c) below).

(b) **Transfrontier effects**
2. It has been found impossible in practice to restrict the international control of the quantitative and qualitative management of a watercourse to laying down rules that are only applicable in places where the watercourse forms or intersects the frontier between two States. Study of the rules governing international co-operation in water management will therefore have to include the entire international watercourses from source to mouth, and all waters connected therewith, such as a canal which, though not in itself an international canal, is fed by or discharges into an international watercourse. Yet it is conceivable that in the rules arrived at by the International Law Commission in the course of its study a distinction may be made according to whether or not certain uses of the water at certain places within the drainage basin can affect the possibilities of using the water in another State.

(c) **Groundwater**
3. The term “drainage basin” also includes the groundwater. The use made of groundwater may indeed under certain circumstances (depending notably on the nature of the soil and on the slope of the impermeable layers) have an effect on the quality or quantity of the water in a watercourse. On the other hand there are geological situations in which the groundwater shows characteristics distinctly different from those of the surface water, and is not even connected with it. So the Netherlands Government can imagine that the study in question may be limited for the purpose of legal studies on the use and protection against pollution of international watercourses. In that event the term “hydrographic” basin would seem to be the more appropriate one. If the International Law Commission introduces this restriction it should however be borne in mind that, where the use of the groundwater affects the surface water belonging to the hydrographic basin, some of the legal rules applicable to surface water should be extended to groundwater.

4. Apart from the foregoing, special rules may be needed on the use of groundwater that affects the level or the quality of the groundwater in a neighbouring State.

**Nicaragua**

[Original: Spanish]

[10 September 1975]

1. It is felt that it would be inadvisable to adopt the geographical concept of an international drainage basin as an appropriate basis for the study of the legal aspects of the non-navigational uses of international watercourses.

2. It should be borne in mind that the traditional concept of international watercourses applies solely to contiguous and successive rivers and specifically and exclusively to the river bed.

3. The drainage basin is a territorial concept which can constitute a single unit for certain development and integration projects only when particular local characteristics are present and through the conclusion of special treaties.

**Pakistan**

[Original: English]

[10 October 1975]

Yes. The use of the international drainage basin concept would be very appropriate for a study of the legal aspects of non-navigational uses of international watercourses.

**Philippines**

[Original: English]

[25 August 1975]

Reply to questions B and C

The geographical concept of an international drainage basin is an appropriate basis for the study of the legal aspects of non-navigational uses of international watercourses. This would mean that politically divided basins should be treated as a functional legal unity. This holds true even in the problem of pollution of international watercourses.

**Poland**

[Original: English]

[27 August 1975]

1. The geographical concept of “international drainage basin” may constitute and constitutes the basis for the projects of a complex development of water basins.

2. But the Government of the Polish People's Republic considers that for the need of legal studies on the use and protection against pollution of international watercourses the concept may have only an ancillary significance. The physical unity of water basins may not be treated as a basis of legal obligations of States pertaining to the use of the waters of those basins. Of course, from the geographical point of view the physical unity of international drainage basin waters is beyond any doubt, but at the same time one cannot agree with deriving from this fact the existence of a legal unity between the States of this basin. The derivation from the physical unity of the water basin of the legal unity between States of this basin were represented in the doctrine of international law as the quality theory of river basin unity by E. Hartig and K. Kaufman and recently it has been adopted in the work of the International Law Association (Helsinki Rules on the Uses of the Waters of International Rivers, 1966, Article II). The theory of basin unity cannot explain why and which legal norms or principles of international law lead to the transformation of physical unity into legal unity (e.g. sea waters constitute to a larger extent
one geographical entity which, however, did not create one legal régime).

3. The decision of the Arbitration Tribunal issued in the French-Spanish dispute concerning the use of Lake Lanoux waters stated distinctly that the physical unity of the river basin is not a basis for recognizing the existence of a legal unity between those States (see “Affaire du Lac Lanoux”, sentence du Tribunal arbitral du 16 November 1957, in Revue générale de droit international public (Paris, 1958), vol. LXII, p. 103, para. 8).¹

4. Thus, it seems that from the legal point of view one cannot speak of the unity of the international drainage basin extending over the territory of more than one State if the States of this basin will not recognize the restriction of their territorial sovereignty on internal waters under their control. Of course, such a restriction could exclusively result from international agreements concluded by those States.

5. Taking into account the above reservations pertaining to the notion of international drainage basin itself and the non-existence of legal norms or principles substantiating the derivation from this physical and geographical unity of restrictions on State competence in use of waters constituting a part of the international drainage basin, it should be stated that in a number of international agreements on joint development of water basins the geographical concept of the water basin extending over the territories of several States is the basis of economic and technological projects for their development (e.g. the Convention of 1963 concluded between Guinea, Mali, Mauritania and Senegal on the development of the Senegal River Basin; the Act of 1963 concluded between Cameroon, Ivory Coast, Dahomey, Guinea, Upper Volta, Mali, Niger, Nigeria and Chad on navigation and co-operation between the Niger Basin countries; the Treaty of 1969 concluded between Argentina, Brazil, Bolivia, Paraguay and Uruguay on the River Plate Basin and the territories under its direct influence).

6. The concept of the international drainage basin should thus be understood as a geographical concept unquestionably necessary for the needs of the economic development of water basins.

7. But in the case of lack of special agreements on the use of those water basins the concept of the international drainage basin should not be used for deriving any legal consequences restricting the competence of States of those basins with regard to the use of waters on their territories.

8. Thus, the Government of the Polish People’s Republic is of the opinion that the concept of international drainage basin, due to the above reservations, should not constitute the fundamental basis for legal studies on non-navigational use of international watercourses.

¹ See also Yearbook ... 1974, vol. II (Part Two), pp. 194 et seq., document A/5409, part III, chap. II.

Spain

[See above, p. 159, sect. II, question A, Spain.]
basin is given above\(^1\) as a unit area divided by a single river system, passing through two or more States.

2. It is considered that this concept may be used as a basis for the study of the legal aspects of pollution of watercourses in that in a polluted river system the States with riparian rights are entitled to maintain an action without proof of damage against any offending State. Pollution is an infringement of a right of property of the owner.

\(^1\) See above, p. 162, sect. II, question B, Barbados.

**Brazil**

[Original: English]

[3 July 1975]

The concept of an international drainage basin does not seem to the Brazilian Government the most appropriate basis for a study of the legal aspects of pollution. When dealing with pollution of contiguous portions of watercourses, the problem is, actually, one that the two riparian States have in common. In the case of successive international watercourses, what is important juridically is whether or not the flow of water that passes from the territory of one State to another or other States is polluted. There are no repercussions if, for example, a tributary or sub-tributary of an international watercourse has been polluted, as long as that pollution does not exist downstream, by reason of natural dilution or adequate treatment of the waters. This reasoning, in our view, shows that the concept of drainage basin would be inappropriate as a framework for a study of the legal aspects of the question. In truth, that concept essentially applies to a territorial, static unit, while the conducting vehicle of pollution is the watercourse itself, a moving unit of the larger physical component.

**Canada**

[See above, p. 162, sect. II, question B, Canada.]

**Colombia**

[See above, p. 162, sect. II, question B, Colombia.]

**Ecuador**

[Original: Spanish]

[5 August 1975]

As to whether the geographical concept of an international drainage basin is the appropriate basis for a study of the legal aspects of the pollution of international watercourses, the answer must be in the negative. In the case of a contiguous international watercourse, the important legal consideration is that the portion of water belonging to one riparian State is not polluted by the uses of the other riparian State, affecting its own portion of water. In the case of a successive international watercourse, the important consideration, from the legal standpoint, is that the flow of water from the territory of one State to the territory of another should not be polluted. In this latter case, although there might be pollution at a point higher up the course, by the time the water reaches the territory of another State, this pollution may have disappeared as a result of spontaneous dilution or treatment received. The geographical concept of a drainage basin involves a static approach, intimately bound up with the land territory; the concept of a watercourse, on the other hand, is essentially dynamic; although, as a result of such factors as winds or streams, the pollution of a drainage basin can spread to other geographical areas, there is no doubt that the watercourse is a dynamic factor in the spread of pollution. The concept of a drainage basin therefore seems inappropriate as a basis for a study of the legal aspects of the pollution of international watercourses. Furthermore, the question appears to depart from the subject-matter of the study entrusted to the International Law Commission, which was not the law of the uses of drainage basins, but the law of the uses of international watercourses.

**Finland**

[Original: English]

[21 August 1975]

All that has been said above\(^1\) of the appropriateness of the concept of an international drainage basin with regard to uses of international watercourses concerns also the application of the same concept as a basis for a study of the legal aspects of pollution of international waters. The main reason why problems of pollution have international legal relevance within watercourses belonging to two or more States, is the hydrological coherence mentioned before, which results in that polluting effects originating from the territory of one basin State may easily spread themselves over the borders of other basin States. For this reason the concept of an international drainage basin is particularly well suited to be used as a basis for a study of the legal aspects of pollution of international waters, especially because it is broad enough to cover problems relating to pollution of underground waters of international concern also.

\(^1\) See above, p. 163, sect. II, question B, Finland.

**France**

[See above, p. 155, sect. II, question A, France.]

**Federal Republic of Germany**

[See above, p. 163, sect. II, question B, Federal Republic of Germany.]

**Hungary**

[See above, p. 155, sect. II, question A, Hungary.]
The comments offered with respect to question B\textsuperscript{1} are also applicable to the pollution aspect.

\footnote{See above, p. 163, sect. II, question B, Indonesia.}

**Netherlands**

[Original: English]  
[21 April 1976]

**Drainage basin (pollution)**

In the opinion of the Netherlands Government, the remarks made in sub-sections (a), (b) and (c) of its reply to question B\textsuperscript{1} apply equally to question C.

\footnote{See above, p. 164, sect. II, question B, Netherlands.}

**Nicaragua**

[Original: Spanish]  
[10 September 1975]

1. In the specific instance of pollution, it would be advisable to take into account the geographical concept of a drainage basin, without considering it, however, to be international in the sense normally accepted by international law.

2. The damage which the pollution of the waters forming the drainage basin can cause in the principal river makes it imperative to extend the scope of the study on the legal aspects of pollution.

**Pakistan**

[Original: English]  
[10 October 1975]

Yes.

**Philippines**

[See above, p. 164, sect. II, question B, Philippines.]

**Poland**

[Original: English]  
[27 August 1975]

1. In answering the above question one should, first of all, give some general thought to the question of relying in conducting studies on legal aspects of non-navigational use of watercourses and in studies on legal aspects of protection of those waters against pollution on various fundamental conceptions, such as, how would the situation appear if it was recognized that the concept of international drainage basin constituted the basis for studies on the legal aspects of water protection against pollution and not the basis for studies on legal aspects on the non-navigational use of those waters.

2. In the opinion of the Government of the Polish People's Republic the question of the protection against pollution of international watercourses should be considered simultaneously with the problem of non-navigational use of those waters on the basis of the same fundamental concepts.

3. That is why the remarks made with respect to question B\textsuperscript{1} pertaining to the concept of the international drainage basin relate at the same time to conducting legal studies on the protection of those waters against pollution.

4. Thus, similarly as in the case of non-navigational use of international watercourses also in the protection of those waters against pollution no legal consequences will result from the physical unity of the water basin exceeding the political frontiers for States of this basin.

5. Of course, in many cases the pollution of the tributary or sub-tributary of an international river flowing within the boundaries of one State may be damaging for the State to the territory of which the international river flows next. This State, however, can insist, not exactly on the protection of the tributary of the international river against pollution, but on ensuring to it appropriate quality of waters of the international river at the point where the river flows into its territory.

6. Naturally such problem does not arise in a case when the tributary or sub-tributary of the international river polluted by one State does not cause the pollution of the international river in its course flowing into the territory of another State due to self-purification of the river or treatment work conducted by the State of the upper course.

7. Thus, it seems that the geographical concept of international drainage basin can only be taken accessorily into account in studies on legal aspects of protection against pollution of international watercourses.

8. Efforts should be made to promote co-operation between States of the same water basins both as regards the use of basin waters and as regards protection against pollution, while the basis of such co-operation and possible competence restrictions, connected with the use of waters, on States with respect to waters of basins on their territories should be international agreements concluded by the States of the basin.

\footnote{See above, p. 164, sect. II, question B, Poland.}

**Spain**

[See above, p. 159, sect. II, question A, Spain.]

**Sweden**

[See above, p. 165, sect. II, question B, Sweden.]

**United States of America**

[See above, p. 160, sect. II, question A, United States of America.]
Since pollution of international watercourses may be due to causes other than the use of the surface water of the drainage basin and even to other factors, or to the use or pollution of the ground water of drainage basins which may not necessarily coincide with the surface water, the basis for the technical study of pollution of international watercourses, and consequently of the legal aspects of such pollution, should be broader than that provided by the drainage basin alone.

**Question D**

*Should the Commission adopt the following outline for fresh water uses as the basis of its study?*

(a) **Agricultural uses**:  
1. Irrigation;  
2. Drainage;  
3. Waste disposal;  
4. Aquatic food production;

(b) **Economic and commercial uses**:  
1. Energy production (hydroelectric, nuclear and mechanical);  
2. Manufacturing;  
3. Construction;  
4. Transportation other than navigation;  
5. Timber floating;  
6. Waste disposal;  
7. Extractive (mining, oil production, etc.);

(c) **Domestic and social uses**:  
1. Consumptive (drinking, cooking, washing, laundry, etc.);  
2. Waste disposal;  
3. Recreational (swimming, sport, fishing, boating, etc.).

**Argentina**

1. The proposed outline is acceptable.  
2. However, we would make the following comment: the aspects dealt with in items (a), (b) and (c) are all economic aspects of water uses. The word “economic” should therefore be deleted in item (b) and be replaced by the word “industrial”. Item (b) would then read: “Industrial and commercial uses”.

**Brazil**

The Brazilian Government considers the outline for water uses acceptable as a basis for the Sub-Committee’s study, as long as it is understood that the outline is only a method of work, and has no hierarchical connotations that might imply the priority of one aspect over any other. The relative degree of importance of the different types of use can, in fact, vary according to the interests of each State, and may, very often, even vary from one region to another within the same State. In any event, the Brazilian Government believes it would be more rational to organize the outline as follows:

(a) Social and domestic uses:  
1. Consumption (drinking, cooking, washing, etc.);  
2. Waste disposal;  
3. Recreational (swimming, sport, fishing, boating, etc.);

(b) Agricultural uses:  
1. Irrigation;  
2. Drainage;  
3. Waste disposal;  
4. Aquatic food production;

(c) Economic and commercial uses:  
1. Energy production (hydroelectric, nuclear and mechanical);  
2. Manufacturing;  
3. Construction;  
4. Transportation other than navigation;  
5. Timber floating;  
6. Waste disposal;  
7. Extractive (mining, oil production, etc.).

**Canada**

Commercial fishing should be added under “Economic and commercial uses”. “Cooling” should also be identified as a separate use in this category. The word “abstractive” should be substituted for “consumptive” in the “Domestic and social uses” category. Finally, aesthetic values should be listed under this last heading.

**Colombia**

My Government considers that the outline proposed as a basis for the study of water uses is appropriate and that no other uses need be included.

**Ecuador**

With regard to this item of the questionnaire, it should be pointed out that the outline for the study of fresh water uses
The International Law Commission has prepared a provisional list of non-navigational fresh water uses to be used as an outline for its study. The Government of Finland has no particular observations to make with regard to this list, which enumerates the different kinds of agricultural uses, economic and commercial uses and domestic and social uses. Such a systematic classification of uses might well be applied as a framework for future codification. It seems, however, to be necessary to consider already now, how far into the technical details of different uses the study should be extended. At least in the beginning of the work of the Commission the examining and analysing of rules and principles of a more general nature concerning the main parts of the international law of waters is in our view more useful than a circumstantial elaboration of all possible details.

Reply to questions D and E

Use of watercourses

1. Item (a) might be presented in a different manner, so as to distinguish between uses of the watercourse which have a quantitative effect on the water (influence on flow) and those which have a qualitative effect (deterioration or alteration of the water). This form of presentation would make the questionnaire more precise by removing certain ambiguities: for example, are not agricultural uses and domestic and social uses all economic uses? Furthermore, with regard to the quantitative effects on the water, a further distinction might be drawn between a use of the watercourse which reduces the quantity of water available downstream (domestic consumption, irrigation), and a use which changes the rate of flow downstream (drainage, dam construction, for example).

2. With regard to item (b), 7, it would be advisable to delete from the questionnaire the reference to the oil industry, since it has little bearing on the use of waterways. On the other hand, gravel extraction might usefully be included, in addition to quarrying.

Federal Republic of Germany

[Original: English]
[6 October 1975]

1. In the Federal Government’s view the Commission’s study should cover the whole range of uses referred to above even if these may vary in significance as between the individual riparian States.

2. A better categorization might also be achieved by a joint consideration of uses involving primarily qualitative and quantitative issues.

3. This would help at the same time to avoid overlapping which may result from a separate consideration of agricultural water uses as a subcategory of commercial as distinct from domestic and private uses.

4. It should be mentioned in this context that article 17 of the draft European convention for the protection of international watercourses against pollution defines as uses of international watercourses which may be affected by water pollution:

   - Production of drinking water for human consumption;
   - Consumption by domestic and wild animals;
   - Conservation of wild life, both flora and fauna, and securing conditions in which they thrive, and the conservation of the self-purifying capacity of water;
   - Fishing;
   - Recreational amenities, with due regard to health and aesthetic requirements;
   - The application of freshwater directly or indirectly to land for agricultural purposes;
   - Production of water for industrial purposes;
   - The need to preserve an acceptable quality of sea water.

Hungary

[Original: English]
[14 July 1975]

1. The classification and enumeration of water exploitations as it is generally outlined in paragraph 19 and in detail in paragraph 30 of the Sub-Committee’s report are in accordance with general practice in Hungary, too. We have to add, however, that this classification mainly deals with technical and economic questions and thus it is uncertain how suitable it is to the determination of legal relations regarding the utilization of water.

2. We mention as an example that from the point of view of pollution caused by the use of water, it is irrelevant that the pollution is caused by either agricultural, industrial or household and communal use of water. The industrial use of water has generally two forms: it takes out water for technological purposes and lessens the reserves and at the same time it deteriorates waters by letting the polluted water out. The generation of hydroelectricity has no effect on either the quantity or quality of water. The production of nuclear energy consumes a considerable quantity of water and can cause incalculable pollution; the production of mechanical energy requires a great quantity of water but does not cause pollution.

3. Therefore from the technical point of regulation, consequent upon our standpoint detailed in reply to questions...
The following classification seems to be more suitable:

- Water exploitations causing a deterioration in the quality of water reserves;
- Other water exploitations.


Reply to questions D and E

1. As the basis of its study, the Commission is recommended to take all aspects of water resources as a whole, and in particular:
   - Water management institutions, functions and power;
   - Beneficial water uses;
   - Harmful effects of water;
   - Water use, quality and pollution control;
   - Ground-water exploration and exploitation;
   - Water works and structures control;
   - Aquatic weeds control.

2. The outline of fresh water uses which the Government of Indonesia follows is as follows:
   - Living quarters uses:
     1. Consumptive (drinking, cooking, washing, etc.);
     2. City water supply (flushing, sewerage, sanitary, etc.);
     3. Hospital uses;
   - Agricultural uses:
     1. Food production;
     2. Fishing;
     3. Other agricultural production;
   - Hydropower;
   - Economic and commercial uses:
     1. Energy production (hydroelectric, nuclear and mechanical);
     2. Manufacturing;
     3. Construction;
     4. Transportation other than navigation;
     5. Timber floating;
     6. Waste disposal;
     7. Extractive (mining, oil production, etc.);
   - Domestic and social uses:
     1. Consumptive (drinking, cooking, washing, laundry, etc.);
     2. Waste disposal;
     3. Recreational (swimming, sport, fishing, boating, etc.).

Note: Some items mentioned above have been indicated in the Indonesian Water Law.

Netherlands

(a) Water uses other than transportation
1. It seems that the study will on the one hand have to embrace all kinds of uses which may affect the quantity or quality of the surface water. These may include public works for flood control or for coping with erosion problems, as well as sand and gravel-industry in rivers and lakes (see below, question F). On the other hand it will have to pay attention to the uses that are dependent on the quantity or quality of the surface water.

(b) Transportation
2. Transportation other than navigation, and timber floating (parts (b), 4 and 5 of question D), will, like navigation, probably only be relevant to the study in so far as they impair the quality of the water.

(c) Other risks
3. The question arises whether attention will not have to be given also to pipelines constructed in a basin, especially over or under a watercourse, for transporting liquid substances or gas, which create risks of serious impairment of the water quality in the case of accidents.

Nicaragua

1. The Government of Nicaragua feels that the plan suggested as the basis for the studies which are being conducted is satisfactory, since it encompasses all aspects of agricultural, economic, commercial, domestic and social uses, but feels that the topics alluded to in question F should be included.
2. Consequently, it feels that it should encompass, in addition to the problems of flooding and erosion, those relating to the following uses:
   - Agricultural uses:
     1. Irrigation;
     2. Drainage;
     3. Waste disposal;
     4. Aquatic food production;
   - Economic and commercial uses:
     1. Energy production (hydroelectric, nuclear and mechanical);
     2. Manufacturing;
     3. Construction;
     4. Transportation other than navigation;
     5. Timber floating;
     6. Waste disposal;
     7. Extractive (mining, oil production, etc.);
   - Domestic and social uses:
     1. Consumptive (drinking, cooking, washing, laundry, etc.);
     2. Waste disposal;
     3. Recreational (swimming, sport, fishing, boating, etc.).

Pakistan

Yes.

Philippines

Reply to questions D, E and F
1. The outline suggested for the work of the International Law Commission as a basis of study of fresh water uses is
an adequate one. However, the following items may be added:
(a) Tourist zones and resorts;
(b) Preservation of historic sites; and
(c) Protection of endangered species of plants and animals.
2. Flood control and erosion problems would be useful additions to the outline of study.

Poland

1. The Government of the Polish People's Republic is of the opinion that for the need of studies on legal aspects of non-navigational use of international watercourses the outline of water uses prepared by the Committee is acceptable, on the assumption that it does not constitute the hierarchy of uses (agricultural uses prior to commercial or domestic uses). As is known, various types of water uses are frequently antagonistic, and in practice the necessity arises of establishing a hierarchy for its use.
2. The priority of navigation proclaimed at the beginning of the nineteenth century by the regulations of the Vienna Treaty and also recognized in a number of other international acts (e.g. the Madrid Resolution of 1911, the Paris Convention of 1921 pertaining to the statute of the Danube river, the Pan-American Declaration of 1933) can no longer be maintained due to a considerable change of conditions—the development and dominant necessity of the use of international watercourses for other purposes as well.
3. It should be stated that article VI of the Helsinki Rules on the Uses of the Waters of International Rivers notes rightly that no use of international river waters should be given absolute priority over other uses. For defined geographical regions a certain use can be of decisive significance as, e.g., in particularly dry regions, the use of waters for irrigation of fields, or in other regions, the use of waters for industrial purposes, in cases when the water for domestic purposes may be derived from another source. A proof of the priority granted to a defined type of water use dependent on the needs of the given geographical region are international agreements concluded between the interested States (e.g. article VIII of the Treaty of 11 January 1909, concluded between Great Britain and the United States relating to boundary waters and questions arising between the United States of America and Canada, and article 3 of the Treaty of 3 February 1944, concluded between the United States of America and Mexico, relating to the utilization of the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo) from Fort Quitman, Texas, to the Gulf of Mexico. 4

4. In view of the particular importance of the use of waters by municipal agglomerations and the necessity to assure sufficient quantities of water in the case of a dynamic development of those agglomerations it seems that even for the need of studies on the above problem and without giving priority to any of the uses, as mentioned above, the outline proposed by the Committee should be reversed, as follows:
(a) Domestic and social uses:
1. Consumptive (drinking, cooking, washing, laundry, etc.);
2. Waste disposal;
3. Recreational (swimming, sport, fishing, boating, etc.);
(b) Economic and commercial uses:
1. Energy production (hydroelectric, nuclear and mechanical);
2. Manufacturing;
3. Construction;
4. Transportation other than navigation;
5. Timber floating;
6. Waste disposal;
7. Extractive (mining, oil production, etc.);
(c) Agricultural uses:
1. Irrigation;
2. Drainage;
3. Waste disposal;
4. Aquatic food production.

Spain

1. The outline of fresh water uses prepared by the Sub-Committee is perfectly acceptable, provided that it is not considered exhaustive and provided that it implies no established order of preferences, since those uses may vary greatly in importance depending on the watercourses, the riparian States and even on historical circumstances. Perhaps a more logical order would be: (a) Domestic and social uses; (b) Agricultural uses; (c) Economic and commercial uses. Under the present section (b) (Economic and commercial uses) a reference to tourism should be added, irrespective of the reference to recreational uses in section (c) (Domestic and social uses). A reference to drinking-troughs for animals might also be added under section (a) (Agricultural uses).
2. The interaction between navigational and other uses must inevitably be borne in mind. It is, in fact, quite unnatural to exclude navigation from this study, which nevertheless includes such uses as timber-floating and transportation other than navigation.

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1 See "Texte de résolutions adoptées en ce qui concerne la réglementation internationale de l'usage des cours d'eau internationaux"; Annuaire de l'Institut de droit international, 1911 (Paris), vol. 24, p. 365.

2 Declaration of Montevideo concerning the industrial and agricultural use of international rivers, approved by the Seventh Inter-American Conference at its fifth plenary session, 24 December 1933. Text in Yearbook ... 1974, vol. II (Part Two), p. 212, document A/5409, annex 1, A.

3 United Nations, Legislative Texts and Treaty Provisions concerning the utilization of international rivers for other purposes than navigation (United Nations publication, Sales No.: 63.V.4), pp. 362–263.
On the whole, it could be possible to treat the matter according to the outline of fresh water uses laid down in the questionnaire. However, from certain points of view it may be doubted if this is completely rational. Waste disposal could perhaps better be dealt with separately, independently of where the waste derives from. Aquatic food production and drainage may also be said to have very little in common. Further it is not wholly clear why the items “use for manufacturing” and “use for construction” have been separated. It must, though, be conceded that even with another division which takes more into account the technical manner for using water (building in water, water regulation, drainage, procuring of surface water, waste disposal, etc.), important demarcation questions arise.

United States of America

[Original: English]
[12 June 1975]

The outline of non-navigational uses affords a generally satisfactory checklist of uses to be studied.

Venezuela

[Original: Spanish]
[15 March 1976]

1. Use of water resources (outline parallel to that contained in question D, proposed by the Government of Venezuela):
   1.1 Use in an urban environment, including:
       Domestic consumption;
       Public consumption;
       Industrial consumption;
       Commercial consumption;
       Effluent disposal;
   1.2 Extra-urban industrial use, including:
       Energy production;
       Consumption for industrial purposes;
       Refrigeration;
       Transportation other than navigation;
       Waste disposal;
   1.3 Agricultural use, including:
       Irrigation;
       Consumption by livestock;
       Pisciculture;
       Waste disposal;
   1.4 Navigational use;
   1.5 Recreational use;
   1.6 Use for the maintenance of the ecological balance.
2. Conflicts inherent in the use of water resources:
   2.1 Water shortage situations;
   2.2 Floods;
   2.3 Erosion;
   2.4 Pollution.
(Proposal by COPLANARH (Comisión del Plan Nacional de Aprovechamiento de los Recursos Hidráulicos).)
to what has already been said about the importance of development of general rules and principles, it is necessary to point out that many of those rules and principles are common and equally relevant to most of the uses enumerated, and that beside a vertical, use-by-use study, an examination on the horizontal level of the common criteria and similar features of the uses should also be carried out by the Commission. The Salzburg Resolution of the Institute of International Law of 1961 and the Helsinki Rules of 1966 are good examples of the type of rules and principles which should form a basis for development and application of more detailed provisions. The list of uses should therefore be completed with a list of rules and principles, the latter being no less important than the former. There are still many significant and big-scale problems of a more general nature concerning the use and protection of international watercourses which need legal regulation. Such are, for example, the question of the use and division of boundary waters, the difference between consumptive and non-consumptive uses of an international watercourse, the constructions and installations needed for diverting or utilizing the boundary waters, problems concerning the constructions and installations needed for utilizing the boundary waters, seeing that these installations, particularly dams, must often be extended over the boundary line, and questions relating to regulation of the water flow and flood control.

1 See above, p. 169, sect. II, question D, Finland.


Indonesia
[Original: English]
[17 July 1975]
[See above, p. 170, sect. II, question D, Indonesia.]

Netherlands
[Original: English]
[21 April 1976]
A typically Dutch use of fresh water for agricultural purposes is the flushing out of polders, particularly those situated below sea level, which are affected by the continual encroachment of salt groundwater. This use is called “rinsing agricultural land”. It is not included in the irrigation referred to in part (a), 1, of the outline in question D.

Nicaragua
[Original: Spanish]
[10 September 1975]
In view of the broad scope of the topics set out under question D, Nicaragua considers that the list covers all the areas which should be studied.

Pakistan
[Original: English]
[10 October 1975]
The problem of sediment discharge should also be included.

Philippines
[See above, p. 170, sect. II, question D, Philippines.]

Poland
[Original: English]
[27 August 1975]
It seems that the outline adopted by the Commission as the basis of studies on the non-navigational use of international watercourses exhausts the problem entirely.

Spain
[See above, p. 171, sect II, question D, Spain.]

Sweden
[Original: English]
[24 June 1975]
The following items might possibly be added: Recovery of ground for housing and industrial purposes; discharging of excavated material; treatment of fresh water with chemicals to neutralize acidification, influence
the vegetation, the stock of fish etc.; underwater blasting for seismic measurements.

United States of America

[Original: English][12 June 1976]

Forestry could be added to the list of uses, as well as the use of water for thermal purposes (heat dissipation, etc.). A final addition to the list might be natural functions, including use as habitat for plant and animal species; transport of silt; and enrichment of flood-plains.

Venezuela

[Original: Spanish][15 March 1976]

The parallel outline submitted by the Government of Venezuela\(^1\) amplifies this question.

\(^1\) See above, p. 172, sect. II, question D, Venezuela.

Question F

Should the Commission include flood control and erosion problems in its study?

Argentina

[Original: Spanish][26 August 1975]

To the extent that such problems are directly related to the use of international watercourses, the Commission ought to consider them.

Austria

[Original: English][18 July 1975]

Since the management of water resources forms an integrated whole, the problems of flood control and erosion cannot be left out of account.

Brazil

[Original: English][3 July 1975]

The Brazilian Government believes that these problems, if occasioned by any form of use of the watercourses, and in cases in which there are really international repercussions as a result of significant harm to other States, should be included among the concerns of the Sub-Committee.

Canada

[Original: English][25 September 1975]

Yes.
considerable importance for the use of downstream sections of an international watercourse in connexion with its maintenance and expansion. It would therefore welcome an inclusion of these aspects in the study.

Hungary

We propose a positive answer to this question. It can be discussed among the items belonging to the other water exploitations.

Indonesia

Yes, the Commission should include in its study flood control and erosion problems as well as soil and water conservation problems.

Netherlands

The reply is in the affirmative; compare paragraph 1 of the reply of the Netherlands to question D above.¹

¹ See above, p. 170, sect. II, question D, Netherlands.

Nicaragua

In view of the importance of flood erosion and control for all countries as a means of protecting human life and conserving the natural wealth essential to the subsistence of mankind, it would be of vital importance to conduct studies on both those problems.

Pakistan

Yes. Developing countries face flood and erosion problems causing excessive loss to the standing crops and human life. It would, therefore, be appropriate to take these problems at the international level.

Philippines

[See above, p. 170, sect. II, question D, Philippines.]

Poland

It seems that the inclusion in the study on legal aspects of non-navigational use of waters and their protection against pollution, as the need arises, of flood control and erosion problems is apt, due to their decisive significance for the balance of international watercourses. Besides erosion, rubble movement should also be included in these problems, that is, besides the problem of soil erosion, also that of sedimentation.

Spain

Reply to questions F and H

1. Flood control and erosion problems (as well as the draining and reclaiming of unhealthy terrain or swamps) might be effectively tackled together with pollution control. The joint treatment of both aspects would foster an integrated approach to the protection or conservation of watercourses (including the water, the banks and the bed of the watercourse).

2. As for the possibility of giving priority to this aspect of the question in the Commission's study, it is evident that the Commission is in the best position to organize its own work. It should be pointed out, however, that there is a close connexion between the development of watercourses and the preservation of the quality of fresh water; sooner or later both aspects will have to be considered jointly. Moreover, although the urgency of the problem posed at present by pollution is bound to serve as an incentive to the Commission, the situation calls for concerted action by States on the regional or subregional level rather than the codification of rules of international law on the global level. This question (as is obvious from document A/CN.4/274¹) has aroused the interest of numerous agencies which are implementing various specific studies and projects; in order to avoid any duplication of work, the Commission should concentrate on formulating general and universally valid principles.

¹ "Legal problems relating to the non-navigational uses of international watercourses: Supplementary report by the Secretary-General": reproduced in Yearbook...1974, vol. II (Part Two), p. 265.

Sweden

Problems concerning flood control and erosion should be included in the studies.

United States of America

Yes. In fact, all factors affecting water levels, water flows and water quality should be examined.

Venezuela

The variety of possible uses and users of water resources, and the changes that can result from utilization by, and the
various activities of mankind, suggest that the study of the problem of water resources should be done on an over-all basis, analysing not only the possible uses and their interaction but also the conflicts that could arise from improper management of water resources, so as to ensure that water never becomes a restricting factor for the development of mankind.

Question G

Should the Commission take account in its study of the interaction between use for navigation and other uses?

Argentina

[Original: Spanish]
[26 August 1975]

1. The terms of reference of the Commission refer to "the non-navigational uses of international watercourses". The navigational uses of such watercourses have been the subject of study for quite some time. It would therefore seem best to avoid going into the navigation aspect in detail again.

2. However, in view of the close links between navigational and non-navigational uses and the various consequences which the latter may have for navigation, we believe that such interrelations should certainly be taken into account.

Austria

[Original: English]
[18 July 1975]

Yes.

Brazil

[Original: English]
[3 July 1975]

Since the study is about the uses of international watercourses for non-navigational purposes, the Brazilian Government is of the opinion that this subject can be considered in that context, while always taking into account the general principle of the particularities of the use of each watercourse.

Canada

[Original: English]
[25 September 1975]

Yes.

Colombia

[Original: Spanish]
[9 July 1975]

The Government of Colombia feels that the study of the interaction between navigation and other uses should be pursued. Nevertheless, it feels that navigation should not be considered to be one of the uses under discussion.

Ecuador

[Original: Spanish]
[5 August 1975]

Although the Commission has been entrusted with the study of the law of the non-navigational uses of international watercourses, it should be understood that the Commission must respect the existing rules regarding international river navigation and that it will consequently have to take account, in its study, of those rules and of the interaction between navigational and other uses, to avoid any conflict between rules; in other words, to ensure that freedom of navigation on navigable international watercourses is not jeopardized.

Finland

[Original: English]
[21 August 1975]

The work of the Commission cannot successfully be carried out without taking into account the interaction between the use for navigation and other uses of international watercourses. Navigation was excluded from the terms of reference of the Commission because some States deemed that its study should be postponed. The exclusion of navigation does not, however, mean that all aspects concerning it should be outside the scope of work of the International Law Commission. In the view of the Government of Finland, the said exception concerns only the navigation itself, its freedom and rights and obligations of flag or riparian States, as well as vessels. On the other hand, the fact that a watercourse is used for navigation is one of its characteristics and the interaction between the use for navigation and other uses of the same watercourse cannot be excluded from the work of codification.

France

[Original: French]
[11 July 1975]

Use of watercourses

It appears obvious that some degree of interaction exists between use for navigation and other uses. This interaction can occur in both the qualitative and quantitative effects of the use of the watercourse. To this extent, there appears to be no reason to consider the question in isolation, but instead within the framework of the outline suggested above.

Federal Republic of Germany

[Original: English]
[6 October 1975]

For the reasons stated above,¹ the Government of the

¹ See above, pp. 163 and 169, sect. II, questions B and D, Federal Republic of Germany.
Federal Republic of Germany is in favour of the Commission's considering also the interaction between use for navigation and other uses.

**Hungary**

[Original: English]
[14 July 1975]

1. The examples given do not represent clearly the relationship between the use of water for shipping and for other purposes. Shipping takes priority over the other uses of water, even the production of energy as it is regulated in article 8 of the Convention relating to the development of hydraulic power affecting more than one State signed on 9 December 1923. It is also to be taken into consideration that "Each riparian State is bound ... to refrain from all measures likely to prejudice the navigability of the waterway, or to reduce the facilities for navigation"—as is stipulated in article 10, paragraph 1, of the Statute annexed to the Barcelona Convention of 20 April 1921 on the régime of navigable waterways of international concern. Special documents and conventions regulate the freedom and order of shipping on great rivers of international interest (Danube, Rhine).

2. Nevertheless, no theoretical objection can be raised against a more detailed study of these questions.

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1 For the text of the Convention, see League of Nations, Treaty Series, vol. XXXVI, p. 77.

**Indonesia**

[Original: English]
[17 July 1975]

Yes, any interaction or conflict between the use for navigation and other uses should always be taken into consideration.

**Netherlands**

[Original: English]
[21 April 1976]

The reply is in the affirmative; compare paragraph 2 of the Netherlands Government's reply to question D above.

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1 See above, p. 170, sect. II, question D, Netherlands.

**Pakistan**

[Original: English]
[10 October 1975]

Yes.

**Philippines**

[Original: English]
[23 August 1975]

Yes.

**Poland**

[Original: English]
[27 August 1975]

In the studies on legal aspects of the non-navigational use of international watercourses, in considering the various types of this use, account should be taken, in this context, of their influence on the problems of navigation and vice versa.

**Spain**

[See above, p. 171, sect. II, question D, Spain.)

**Sweden**

[Original: English]
[24 June 1975]

It seems appropriate to take account in the study of the interaction between use for navigation and other uses.

**United States of America**

[Original: English]
[12 June 1975]

Yes.

**Nicaragua**

[Original: Spanish]
[10 September 1975]

1. Since navigational activities may have important repercussions on the utilization of waters for other uses, the study should unquestionably be conducted taking into account the interaction between the various uses it is desired to make of international rivers.

**Venezuela**

[Original: Spanish]
[15 March 1976]

Certainly. However, it is true that, technically speaking, navigation is only a means of transport and that the use of water for navigation is not the main priority, to which other uses should be subordinated, except as regards the legal
régime established in connexion with the delimitation of frontiers. If it were considered that, for technical or geopolitical reasons, a non-navigational priority should be given to an international watercourse, the States involved could enter into new agreements or conventions.

**Question H**

*Are you in favour of the Commission taking up the problem of pollution of international watercourses as the initial stage of its study?*

**Argentina**

[Original: Spanish]

[26 August 1975]

1. We do not believe that the Commission should take up the problem of pollution of international watercourses as the initial stage of its study, for the following reasons:

   (a) The Commission's terms of reference call for a study of the law of the non-navigational uses of international watercourses in general. Accordingly, the Commission should now begin a study of all such uses, and not specifically of the problem of pollution, which is a result of improper use.

   (b) We consider the outline of the study contained in question D of the questionnaire to be sufficiently broad.

2. With regard to the problem of pollution of international watercourses, it should be kept in mind that the water of an international river is a shared natural resource. The legal aspects in the field of environment concerning natural resources shared by two or more States are studied by the United Nations Environment Programme. The Executive Director of the Programme, in accordance with the decision entitled “Co-operation in the field of the environment concerning natural resources shared by two or more States”1 adopted at the third session of the Government Council (Nairobi, April–May 1975), will transmit his report on this subject2 to the Commission and will establish an intergovernmental working group of experts in order to prepare a draft code of conduct for the guidance of States in the conservation and harmonious exploitation of natural resources shared by two or more States.

3. In view of the foregoing, the Argentine Republic, as a developing country, gives the study of the law of the non-navigational uses of international watercourses priority over the study of the specific problem of pollution of such watercourses.

4. While recognizing the importance of considering in due course a study of pollution of water resources, we believe that the International Law Commission should first complete the task entrusted to it, and that it is for the Governing Council of UNEP to decide on an international code of conduct concerning shared natural resources. Then, at some subsequent stage it will be appropriate to take up the specific subject of pollution of international watercourses.

**Austria**

[Original: English]

[18 July 1975]

On past experience, the question of water pollution seems to be too difficult for the initial stages of international law studies; moreover, water pollution is usually the consequence of water utilization.

**Brazil**

[Original: English]

[3 July 1975]

The Brazilian Government considers it opportune for the Commission to begin its work with a consideration of this aspect of the problem, in view of its importance, complexity, and the fact that the field of law governing this theme is still in its infancy. The International Law Commission could, therefore, by a precise examination of the comparative law, arrive at a proposal of norms to regulate, in an effective manner, the pollution resulting from the uses of international watercourses or transmitted by States to other States by means of these watercourses. In this connexion, once again, it would be worthwhile to examine closely the precedent of the River Plate Basin, since, in the working sessions of the Group of Experts on Water Resources, which was convened by the Intergovernmental Co-ordinating Committee of the River Plate Basin, several recommendations were made that earned the unanimous approval of the five signatory States of the Treaty of the River Plate Basin.

**Canada**

[Original: English]

[25 September 1975]

No.

**Colombia**

[Original: Spanish]

[9 July 1975]

The overriding importance of the problem of international watercourse pollution would amply justify the Commission's dealing with it in the first part of its study.

**Ecuador**

[Original: Spanish]

[5 August 1975]

In dealing with the uses of international watercourses it must be understood that we are dealing with the use of fresh water in a manner which causes no harm to any living organism (human, animal or vegetable); that is to say that the problem of pollution and measures to prevent it is implicit in the topic. Consequently, from the outset of the

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study, attention must be paid to the problems caused by pollution resulting from the use of contiguous international watercourses, and pollution transmitted by one State to one or more other States along successive international watercourses.

Finland

Although it would not be wise to advocate that priority be accorded to any specific use, it might, on the other hand, not be feasible to deal with all the complex matters simultaneously. Experience will show at a later stage whether some parts of the codification will be ready earlier to be presented for adoption. This practical approach should also give an answer to the question whether the Commission should take up the problem of pollution of international watercourses as the initial stage of its study. Of course, the great significance of pollution problems are generally acknowledged and nobody will deny the necessity of their international legal regulation. On the other hand much activity, both on international and national levels, has taken place within the field of pollution abatement and control. There is no shortage of rules applicable as models for codification. In these circumstances the Commission is expected to start a selective and co-ordinating activity, with a view to setting down the basic principles and closing the gaps which still exist, inter alia with regard to State responsibility for pollution damages. Because of many other important questions still unsolved, and needing international legal regulation, the problem of pollution as such should not be given any preference. It might be most advisable to study this problem in connexion with general principles of the international law of waters. The simultaneous preparation of all the questions concerning the legal aspects of international watercourses would be the best approach also with regard to problems of pollution.

Organization of work

While the study of pollution is undoubtedly of the utmost importance, as the work in progress in almost every regional international organization (EEC, OECD, Council of Europe) demonstrates, the difficulties encountered at that level by States with common concerns give grounds for believing that the problem has not yet evolved to a stage at which it could usefully be dealt with on a world scale. Moreover, the work which the ILC would undertake on this question might constitute an unfortunate duplication of that now under way in the organizations referred to above.

Federal Republic of Germany

1. The Federal Republic of Germany has for a long time participated in the intensive efforts of most of its neighbour States to protect international watercourses from pollution. It considers this co-operation to be the prerequisite for success as reflected in the progress and agreements achieved so far and regards pollution as a vital issue in connexion with the uses of international watercourses. In view of the complexity of the subject it may be argued, however, whether the question of pollution is the appropriate starting point for the study.

2. The Federal Government is also aware of the fact that questions regarding both the quality and the quantity of water, including among the latter especially the growing recourse to rivers and lakes for the production of drinking water and for industrial and irrigational uses, are for many countries extremely important aspects of the use of an international watercourse. For this reason it feels that questions of quantity should at least be accorded the same attention in the Commission's study as pollution problems.

Hungary

1. It is certain that one of the most important problems of today is the problem of water pollution as it is raised in question H. The increasing water pollution further reduces the utilization of the heavily exploited water resources.

2. The same can be said about the utilizations of water that cause lessening in water reserves. According to preliminary accounts the surplus of water reserves will be exhausted in Hungary in 1980–1990, and there is a similar situation in other States, too.

3. If any other field of regulation is liable to get priority, according to our opinion it is reasonable to add it to the above-mentioned two questions.

Indonesia

Taking up the problem of pollution of international watercourses as the initial stage is very strongly recommended in order to ensure the safety of the utilization of water.

Netherlands

1. Many of the different uses affect one another and partially exclude one another. Water pollution is the result of some uses (industry, navigation, waste disposal) and threatens other uses (drinking water production, agricultural uses, recreation). Water pollution cannot be studied apart from the various uses, and conversely it is not possible to study the different uses without regard to their effect on the quality of the water.

2. In view of this interaction there is much to be said, in the opinion of the Netherlands Government, for approaching the complex of questions first from the pollution angle.
1. The listing under D should not be interpreted as the acceptance of an order of priority for the studies which are to be conducted.

2. It must be the responsibility of the Commission to determine such priorities, taking into consideration any problems which may emerge. It is felt that it would be imprudent to make an *a priori* judgement on that order since it will only be possible to determine the interrelations existing between the various aspects of the questionnaire which has been submitted as the work goes forward.

**Pakistan**

[Original: English]

[10 October 1975]

The problem of agriculture, commercial and economic uses is more important and urgent. Hence it should be taken up for study by the Commission before the problem of pollution of international watercourses.

**Philippines**

[Original: English]

[25 August 1975]

1. For the reason given with respect to question G,¹ the problem of pollution should be taken up as the initial stage of the Commission's study. Pollution that may arise either from navigation or particular non-navigational uses affects all possible fresh water uses of the waterway. It is a basic problem the solution of which is assumed by the possibilities of the multi-purpose development of the watercourse.

2. In this respect, it is suggested that account should be taken of the conclusions of the United Nations Conference on the Human Environment held at Stockholm in June 1972, particularly Recommendations Nos. 51 and 55 of the Action Plan adopted by the said Conference.²

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¹ See above, p. 177, sect. II, question G, Philippines.


**Poland**

[Original: English]

[27 August 1975]

1. Undoubtedly the problem of water protection against pollution is very significant at present. Thus it seems that the separation of water protection against pollution from non-navigational use of waters which in fact result in pollution would be an artificial structure. That is why the problem of water pollution should be considered simultaneously with its cause, i.e. domestic, agricultural and commercial uses.

**United States of America**

[Original: English]

[12 June 1975]

The United States considers that the problem of the pollution of fresh water is extremely important. It would support the Commission's taking up the study of pollution as the initial stage in its study or, at least, including this problem among the primary issues upon which attention will be focused.
The law of the non-navigational uses of international watercourses

1. The study of the problem of pollution per se cannot be a priority issue, for two reasons:
   (a) This problem basically affects the developed countries, which constitute a minority within the international community;
   (b) The problem cannot be separated from the question of the socio-economic uses of water. Pollution per se does not exist. Pollution is the result of misuse or abuse of resources.
2. Emphasis should therefore be placed, from the outset, on the co-ordination and regulation of the socio-economic uses of watercourses, which will, in any case, subsequently lead to a study on the pollution of watercourses.

Question I

Should special arrangements be made for ensuring that the Commission is provided with the technical, scientific and economic advice which will be required, through such means as the establishment of a Committee of Experts?

Argentina

1. We do not consider the establishment of a Committee of Experts necessary.
2. In accordance with the decision on water resources development entitled “International river basin development”, adopted by the Committee on Natural Resources of the Economic and Social Council at its fourth session (Tokyo, April 1975), the International Law Commission will receive for its study the “necessary advice on related technical, scientific and economic problems” from the Centre for National Resources, Energy and Transport and other organizations of the United Nations system having direct interest in the field.
3. In addition, the aforementioned decision appeals to the International Law Commission to give priority to the study of the law of non-navigational uses of international watercourses and to submit a progress report to the United Nations Water Conference, which is to take place in 1977.
4. Nevertheless, we believe that in accordance with the provisions of its statute the Commission could, if necessary, hold consultations on specific subjects. In any event, whatever advice and consultations the Commission may need should not retard its work on the topic, thus causing a delay in the completion of the important task entrusted to it.

Austria

Yes, within the limits of available financial means.

Brazil

It is the understanding of the Brazilian Government that the first point to be made here is that the Commission enjoys the natural and necessary autonomy to request advice in any way the members judge will best serve its work and whenever they deem it to be the most opportune. Unquestionably, the Commission has the right to act in this field with all the flexibility warranted by the complexity, technical and otherwise, of the subject with which it is dealing, and it can, therefore, either organize an Advisory Committee of Experts, or, which would seem to be more practical, call in ad hoc specialists, without discarding the possibility of combining the two alternatives. In any case, however, it is essential that the treatment of legal aspects should always be left entirely to the Commission, or, naturally, the Sub-Committee created by the Commission, which (in the meetings it has already held) has given a thoroughly convincing demonstration of its grasp of the facts.

Canada

The Commission should seek any technical, scientific or economic advice which may be necessary. On the basis of an assessment of the effectiveness with which the Commission is able to seek and receive technical, scientific or economic advice from other sources, the Commission may in the future wish to recommend the creation of a Committee of Experts. However, for the present, the need for such a committee has not been established.

Colombia

The nature of the topic which has been referred to the International Law Commission for study amply justifies calling on technical, scientific and geographic specialists for advice, or establishing a committee of experts to submit within a specified period of time a specialized report that would serve as a basis for the Commission’s legal analysis of the subject.

Ecuador

Regarding this question, the Government of Ecuador considers that the practices established within the United
Nations should be followed, that is, that both the International Law Commission and the Sub-Committee created specifically for the purpose of studying the question of the law of the uses of international watercourses must have the necessary facilities and co-operation to ensure that their work is as fruitful as possible. As part of this co-operation, the Commission and its Sub-Committee should be able to employ consultants, experts, specialists, technical and other necessary staff to ensure that the jurists on the Commission have access to all the information required for the successful accomplishment of their task. In seeking the necessary advice, the International Law Commission should endeavour to make use of existing United Nations agencies or bodies, thus avoiding the proliferation of ad hoc bodies and the creation of a larger international bureaucracy.

Finland

The last question concerns arrangements for ensuring that the Commission is provided with technical, scientific and economic advice which will be required because of the very complicated nature of its work. Before this question is answered it should be pointed out that the work of the Commission should be started by studying the already existing drafts, rules, resolutions and recommendations, irrespective of the nature of the body which has prepared them, if they are deemed to be relevant for the work of codification. By doing so, the Commission will avoid repeating studies and investigations of a basic nature, already competently carried out by other organs. It is, however, evident that the work of the Commission cannot be based exclusively upon already existing material. Some expertise should be made available and the establishment of a special committee of experts could be an appropriate solution. The terms of reference and the working methods of such a committee should, however, be carefully considered, because the work to be accomplished by the Commission is of a legal nature and should not be burdened by too complicated technical or scientific details. In this connexion it can be pointed out that there are international treaties of recent date, particularly concerning the law of the environment, which are legally not satisfactory, because the preparation of the said treaties has been dominated by technical and scientific expertise.

France

Organization of work

As for establishing a committee of experts, it appears that, under the terms of article 16 (e) of its statute, the International Law Commission may not establish a permanent body. The Commission may, however, consult any experts it deems to be necessary, but it should not resort to such consultations until it has determined the scope of the work to be done and identified the specific topics with which it feels able to deal. Since any consultation of experts entails additional financial commitments, sound judgement will have to be exercised in deciding at what point such consultations will become essential to the attainment of the objectives set. Consequently, the French Government feels bound to urge the International Law Commission to obtain competent opinions from the specialized international organizations with long experience of the problems of the use of watercourses (Central Commission for the Navigation of the Rhine, Danube Commission).

Federal Republic of Germany

1. In order to bring its study to a successful conclusion, the Commission should have at its disposal all necessary aids including in particular technological and scientific data and the latest legal texts on the subject. Its endeavours in this respect should be strongly supported and it should be left to the Commission's discretion to resort to such aids as it may think most helpful for its work.
2. The consultations held so far both in the Sub-Committee and the Commission suggest that a convincing and well-founded study of the legal aspects of the uses of international watercourses is to be expected.

Hungary

In connexion with question I, we are of the opinion that all the possible means are to be applied to contribute to and speed up the codification activity. Among others the establishment of an advisory committee of experts should also give help to the Committee. We consider the participation of Hungary in such a committee desirable and useful.

Indonesia

It will be more advantageous if the Commission could use the assistance of such a Committee of Experts.

Netherlands

Guiding the study

1. When legal rules are evolved on the subject of water management, notably qualitative water management, the Netherlands Government considers that good use can be made of the knowledge and experience of experts in the ecological and technical fields. It has also been found that the economic aspects of water management cannot be left out of consideration.
2. It therefore seems a good idea, as question I suggests,
to place the expertise and experience in these fields at the disposal of the International Law Commission. There are two possibilities. The Commission could indeed be assisted by a committee of experts. It could also, by means of supplementary questionnaires, offer the Governments the opportunity of giving fuller and more detailed comments on some aspects.

Nicaragua
[Original: Spanish]
[10 September 1975]

In view of the recognized ability and competence of the members of the Commission, it should devolve upon them to decide whether and at what stage technical, scientific, economic and any other kind of advice should be sought.

Pakistan
[Original: English]
[10 October 1975]

Yes. Technical, economic and scientific advice from those countries which share international drainage basins must be taken by including their experts in the Committee of Experts.

Philippines
[Original: English]
[25 August 1975]

The nature of the study does require that the work of the Commission should have all the benefits of the technical, scientific and economic advice of a Committee of Experts.

Poland
[Original: English]
[27 August 1975]

With respect to the necessity of considering, in conducting studies on the legal aspects of non-navigational use of international watercourses and their protection against pollution, complicated technical and economic problems, it seems desirable for the Commission to establish an auxiliary body such as a Committee of Experts and, as the need arises, ad hoc working groups. But above all the already existing bodies working on the use of international watercourses and their protection against pollution should be made use of, including, e.g., in the European region, in the United Nations Economic Commission for Europe, the Senior Government Advisers of ECE Member Countries on Environment or the Committee on Water Problems.

Spain
[Original: Spanish]
[22 September 1975]

1. It must be pointed out once again that the Commission itself is in the best position to decide on the adoption of its method of work within the limits of its Statute and its budgetary resources.

2. This is undoubtedly a multifaceted topic, and the law must take fully into account scientific, technical and economic factors which have some bearing on it.

3. In this regard, the Commission might do well to enlist the aid of an advisory committee of experts. Problems would inevitably arise, however, since such a body would, for the sake of greater effectiveness, have to be limited in size, and at the same time would have to be sufficiently representative of the different regions of the world and the various specialties involved. Moreover, the information provided in the Secretary-General's supplementary report on legal problems relating to the non-navigational uses of international watercourses suggests that there is already within the United Nations system a considerable body of data, studies and proposals which, taken in conjunction with the preparations for the United Nations Water Conference (scheduled for 1977), should adequately meet the present needs of the Commission. In this regard, the Commission acted wisely in deciding to request the international agencies involved to appoint one or several officials to channel information and extend co-operation.


Sweden
[Original: English]
[23 June 1975]

In view of the complicated character of the subject it seems advisable to create an Expert Group to assist and advise the Commission.

United States of America
[Original: English]
[12 June 1975]

Yes. The nature of the subject-matter is such that the Commission will require scientific and other specialized advice in the course of its work on international watercourses.

Venezuela
[Original: Spanish]
[15 March 1976]

In view of the complexity of the problem, it would certainly seem appropriate. However, it would be necessary to specify the exact composition and functions of such a committee so as to avoid infringement of the legitimate rights of any country concerned.