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***CONFERENCIA INTERNACIONAL SOBRE GESTIÓN DEL AGUA EN
PAÍSES FEDERALES Y SEMEJANTES A LOS FEDERALES.***

**The Hydrographic Basin in the Convention on the Law of non-navigational Uses of
International Watercourses, 21 May 1997**

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Abstract: Considering the hydrographic basin as the adequate unit for water management and organisation in numerous States, due to the adaptation to physical interdependence between all the components of each water system, has not been corresponded in the Law of international watercourses. The fear of the influence that could result from with respect to the effective exercise of sovereignty in the part of land territory of the basin has contributed to that result. That debate about the adaptation or not of this concept in the international legal regime of water resources takes place within the framework of the work carried out by the coding bodies of International Law in the United Nations, the ILC and the Sixth Commission of the General Assembly, with a view to adopting the New York Convention of 1997, which is configured as a very important text in the formation of a Law on international water resources of a general nature. In any case, although the final text of the Convention does not include the concept of basin, but rather, it chooses the international watercourse to refer to its territorial implications, it is not at all clear that the objective of excluding the application of the legal regime included in the Convention from the land area of the basin has been reached. In this regard, we must add that the express non-inclusion in the 1997 Convention has not made the concept of basin disappear from the international texts where those trans-boundary type water resources are regulated. On the contrary, it seems that, based on the greater need for concepts that permit an integrated management resulting from the current water crisis, not only do we find the concept of hydrographic basin as a basic element of many international texts, but we also find the identification of concepts that go deeper into that integrated management, such as river basin district or Integrated Water Resources Management, that go beyond the hydrographic basin.

Keywords: International hydrographic basin, international watercourse, New York Convention, integrated water resources management.

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I. INTRODUCTION

Two premises seem to be put forward as basic elements to be able to solve the current water crisis situation that the world is facing, and which can lead, within a few dozen years, to billions of people in dozens of countries, especially the poorest countries on the planet, to lack water to satisfy their most basic needs. The first is that water management formulas must be sought that will permit taking the greatest possible advantage of water, always bearing in mind sustainability as the essential principle. Thus, the hydrographic basin arises as an especially appropriate unit as it permits that integrated management, adapting the legal regime to the physical reality of water. The second premise is that this problem, including its legal side, must be addressed internationally. There are many reasons for this, including the fact that approximately

80% of the fresh water resources that exist in the world have a trans-boundary nature and are shared by two or more States, so they must be governed by international rules.

Taking these two premises into consideration must naturally lead to determining the hydrographic basin as a basic management unit on which that international fresh water legal regime should be based, extending to this the existing proposal in many States that bear in mind the adaptation of the basin concept for an orderly and sustainable management of the water resources and base their Water Law on this. But the situation is very different in the Law of international water sources and the implications that the consideration of the international hydrographic basin can have on the practical exercise of sovereignty have meant that this transfer has not been possible, at least not fully, thus trying to avoid the unavoidable, namely, the existence of practical limits to the exercise of sovereignty by the States in the current globalised scenario.

That debate related to the advantages and disadvantages of the concept of international hydrographic basin was developed within the framework of the adoption process of the Convention on the Law of the non-navigational uses of international watercourses, of 21 March 1997 (hereinafter referred to as “New York Convention”). This text is the most advanced attempt to date to adopt an international legal regime for water resources from a global perspective, so the attention paid to the concept of international hydrographic basin throughout the work that led to its final text, both within the framework of the IDC and of the Sixth Commission of the General Assembly of the United Nations, has special interest to be able to reach a conclusion about the place that this concept holds in the current Law on international water courses.

That is the aim of this study, so we will begin by outlining that international legal regime of non-marine water resources that will enable us to see more clearly the central role that the New York Convention is called to play. That analysis is the necessary basis to later address both the treatment of the hydrographic basin the debates that led to that Convention as the consequences of the absence, at least in principle or expressly, of that concept in the final text. Furthermore, we will point out how, despite the disadvantage that can derive from this for the consideration as the hydrographic basin as the management unit of international water resources, the special adaptation of this law has led not only to it having been rejected but that it has been recuperated as a basic element in numerous international legal texts, and other, even more extensive concepts have been outlined, which, in some way or another, are based on it for the organisation

and management of fresh water, both on a European Union level and in the broader scenario of the United Nations.

II. THE PLACE OF THE NEW YORK CONVENTION IN THE LAW OF INTERNATIONAL WATERCOURSES

The international legal regime of non-marine water resources presents a peculiarity from its origin that has even led to questioning its condition of genuine legal system, that is, its relative character. Indeed, this legal regime has been, and still is to a great extent, made up of a wide range of international, bilateral or multilateral agreements, which contain the rules applicable to each international watercourse, which in turn depend on the specific circumstances present in each case, very especially on the interaction of interests of the riparian States.

That wish to reflect the specificity of each international watercourse represents an important obstacle when identifying general principles that organise this legal system, which is considered by some as little more than a series of particular solutions. Several attempts have been carried out to overcome this state, seeking to adopt general agreements that establish legal regimes applicable to all the international watercourses, but it cannot be said that this objective has been achieved. A first attempt took place in the twenties of the previous century, via texts such as the Barcelona Convention on the Regime of Navigable Waterways of International Concern, of 20 April 1921, or the Geneva Convention relative to the development of hydraulic power affecting more than one state, of 9 December 1923, which, however, were not signed by a significant number of States, failing, therefore, in their objective of generalisation. The next attempt, at least translated into rules of positive law, as there have been others with the participation of international scientific organisations such as the *Rules of Helsinki* which we will refer to later, is the one that has been developed over the last few years, driven, to a great extent, by the current scenario of water crisis, where the need for national and global management of fresh water becomes more important.

The New York Convention is the most significant text within this attempt for generalisation, which the Helsinki Agreement on the protection and use of trans-boundary watercourses and of the international lakes, of 17 March 1992, also fits in to, as well as Directive 2000/60/EC of the European Parliament and Council, of 23 October 2000, which establishes a community framework of action in the field of water policy, which, however, would occupy a secondary plane as a result of its geographical scope, reduced to the European plane.

Considering the New York Convention as the text on which the new international watercourse law is based, is undoubtedly conditional upon its non-entry into force. One has to add to this that it cannot be expected for it to start to deploy full effects in the short run as, one decade after its adoption, only sixteen of the thirty States required by its article 36.1 have deposited their ratification, acceptance, approval or adhesion instruments.

Furthermore, if we consult the list of States that have already expressed their agreement to commit, we can see how the majority of the countries directly involved in the management of international watercourses are missing, namely, riparian countries of the large international rivers, without whose participation, the regime established in that text no longer has much meaning, a point that was already expressly indicated in the framework of the debates in this regard in the ILC¹. However, despite all those elements, the Convention is still considered as a key piece for the future international Law on water resources. We are going to see below the reason for that consideration, that is, the elements that the text contains to continue granting it such importance.

1. The contribution of the New York Convention to the identification of the general principles of the Law of international watercourses.

The failure of the New York Convention to enter into force has not prevented reaching a certain consensus with respect to the consideration that, despite all of this, this text occupies a central place in the process towards a Law of international watercourses, constituted as a genuine integrated legal order, which overcomes the aforementioned relativism phase. In this regard, it must be pointed out that although it is true that, as we will see below, the New York Convention does not eradicate that approach of the legal regime of water resources based on the specific circumstances of each case, it does establish a series of generally principles, with respect to which it satisfies a dual coding and progressive development function. Those principles are those of the equitable and reasonable utilisation and participation (article 5), the obligation not to cause significant harm (article 7) and the general obligation to cooperate (article 8 and following), as well as the obligations related to the protection, preservation and management of international water courses (article 20 and following).

¹ The sixteen States which, on 9 January 2008, have expressed their consent to commit to the New York Convention are: Germany, Finland, Hungary, Iraq, Jordan, Lebanon, Libya, Namibia, Norway, Netherlands, Portugal, Qatar, Syria, South Africa, Sweden and Uzbekistan. See http://www.internationalwaterlaw.org/intldocs/watercourse_status.html.

In that regard, it is clear that a general acceptance of the Convention, whose legal regime affects States from different regions in the world, and both those that are in the upper part of the international watercourses and those in the lower part, would considerably consolidate the value of those principles. But it cannot be denied either that the mere fact that it is reflected in the Convention represents a positive element, an advance towards it being considered as general principles on which the international water course Law must be organised. The Convention contribution in this point results from the circumstances that surrounded its adoption process, more specifically from the fact that its content is the result of an open debate, in which all the States had the opportunity to participate, developed in a universal framework, as is the General Assembly of the United Nations, which reinforces its legitimacy. Furthermore, a broad consensus was also achieved for the approval of its final content, which was only opposed by three States —Burundi, China and Turkey—, which supports the more or less universal scope of the principles included therein².

The contribution to the acknowledgement and delimitation of general principles is shown in the influence that the Convention has had, despite not having entered into force, and even before it was adopted. The legal regime of several agreements are inspired but taking the content of the Bill of articles as reference, such as the Protocol of 16 May 1995 on shared watercourse systems in the South African Development Community, the specific additional Protocol on shared water resources to the Treaty on the environment of 2 August 1991 between Chile and Argentina, or the Agreement of 5 April 1995 on cooperation for sustainable development in the Mekong River basin.

2. The New York Convention as a Framework-Agreement

However, the identification of the aforementioned general principles in the New York Convention does not necessarily mean that the existing peculiarity in this regulation area has been overcome. The specific interests of each riparian State in connection with each international watercourse still have decisive importance. The New York Convention responds to this by trying to make originally contradictory requirements compatible; in other words, trying to establish general principles, applicable to all the cases but not forgetting the guarantee to respect the specific interests present around each watercourse. This is achieved via its configuration as a Framework-Agreement,

² McCaffrey, S.C. and Sinjela, M. (1998), p. 106.

set forth in the First report of the second Special Rapporteur of the ILC on this matter, in 1979.

At that moment Stephen SCHWEBEL pointed out the problem in adopting provisions on the right of use of international watercourses, caused by the enormous diversity that exists in the different international river systems. That heterogeneity requires reaching an equilibrium, an intermediate point, when conforming the applicable legal regime so that the standards that form part of it are not so general that they are mere guidelines, not so safe or so specific, that they cannot be applied to all the questions that may arise in connection with a specific watercourse. The actual Rapporteur pointed out that the need to combine general principles and specific standards in connection with the Law on international watercourses, had some precedents, mentioning in this regard the case of the 1925 Geneva Convention, especially its articles 3 and 4, which foresaw the need for Agreements between States interested in executing works for the development of hydraulic power that might cause serious harm to another contracting State and which may have to be partly executed in the territory of another contracting State.

Thus the Special Rapporteur proposed an article 3 where it indicated that: “These articles may be complemented with *user agreements* between member States”, which in the final text of the Convention is expressed in the *Watercourse Agreements* with which the riparian States of each international watercourse may, as pointed out in article 3.3, apply and adapt its provisions to the characteristics and uses of a specific international watercourse or part of it.

Thus, the peculiarity still has, as mentioned above, an important place in the legal regime of international watercourses, as this is dictated by the interests of the States, but at least that nature of the New York Convention as a Framework-agreement offers the possibility of it being able to have an influence, and in some way re-construct, that fragmentation of regulatory systems applicable to the different watercourses so that they, at least have a minimal common denominator, which would be that represented by those general principles.

That condition of the New York Convention as the text on which an international legal regime for water resources with a general scope is aimed to be constructed, confers special importance on the exclusion of the concept of international hydrographic basin from its definite version, and it could even lead to considering the abandonment of this concept as the basis for that legal regime, replacing it with another less demanding concept for States, namely, the international watercourse system. However, things are

not so simple and it is advisable to bear in mind that the concept of international hydrographic basin was on the table throughout the debates of the ILC and the Sixth Commission and that, as several of the participants pointed out, the absolute rejection of the validity of this concept is not clear, as it is much closer to the international watercourse than it may have seemed in the beginning.

We analyse below the arguments used throughout the debates that led to the New York Convention, both by the defenders and by the detractors of the hydrographic basin concept, as well as the reasons that led to its exclusion from the final text. Furthermore, we will pay attention to the consequences of that decision in connection with the international legal regime of water resources and we will see how that exclusion has not eliminated the very widespread opinion that the basin is still the most appropriate unit for organising and developing those resources.

To make this examination, we are going to follow an outline in agreement with which, in principle, we will verify that the hydrographic basin was a concept that appeared to be generally accepted at the start of the debate that is going to lead to the adoption of the Convention. This is going to influence the first Special Rapporteurs who are going to advise the ILC to base their work on that concept. We will then analyse the positions adopted both by the different States and by the representatives in the ILC and in the Sixth Commission of the General Assembly and which led to its abandonment, and finally we will try to throw some light on the extent to which the alternative, finally accepted, formulas are going to permit achieving the objective pursued by those who opposed the hydrographic basin as the appropriate base to establish the legal regime for international water courses.

III. THE ACKNOWLEDGEMENT OF THE INTERNATIONAL HYDROGRAPHIC BASIN IN THE ORIGIN OF THE NEW YORK CONVENTION

The legal regime that regulates the use of trans-boundary water resources has experienced a considerable evolution, parallel to the changes in priorities between the different uses of those international resources, one of whose lines of force is the extension of the material object on which that regime is planned. Thus, there is a gradual shift from the International River Law, whose main and, in principle, exclusive, priority is placed on navigation to the International Watercourses Law, where the needs established by new uses, such as agricultural or industrial uses, are going to mean that attention is no longer exclusively paid to the international river or lake, but that other

components of the actual water system, such as tributaries, groundwater, etc. are going to be incorporated.

1. The appeal to the concept of basin in texts prior to the Convention

Different concepts arise within the framework of extending the object of regulation, such as the concepts of drainage basin, river basin or hydrographic basin, whose main element is that they respond to the physical inter-independence that exists among all the components of the water system and that are going to be reflected in different international texts.

However, although these three basin concepts are similar to each other, they do not coincide altogether in that they vary with respect to the series of components of the water system they include, which, as the first Special Rapporteur of the ILC, Richard D. KEARNEY, pointed out in his report, go from the international river and its tributaries and sub-tributaries, which include the most restricted of those concepts, the *river basin*, to the hydrographical network, including surface water and groundwater, flowing into a common terminus to the one that the most extensive one refers to, the *hydrographic basin*; on its part the concept of *drainage basin* is mainly used by the North American doctrine³. Those differences are, however, slightly relativised by their use throughout the work of the ILC, which uses them as if they were synonyms or interchangeable terms.

In connection with the appeal to the concept of international basin, the efforts made by different scientific organisations involved in that attempt to create a general legal regime for the water resources must be highlighted. That is the case of the Institute of International Law, which in article 1 of its Resolution of 1961 *related to the use of non-marine international waters (beyond navigation)*, pointed out that: “These rules and recommendations are applied to the use of waters that form part of a watercourse or of a hydrographic basin, which extends over the territory of two or several States”. But, the work of the Association of International Law must be highlighted, above all, which starts to take into consideration the concept of basin at the end of the decade of the fifties. Thus, whilst at its Dubrovnik Conference, in 1956, it talked about international river, considering as such any river that crosses or separates the territory of two or more States, scarcely two years later, at the New York Conference of 1958, it is affirmed that a system of rivers and lakes in a hydrographic

³ See REY CARO, E. (2003), p. 585.

basin must be treated as an integrated whole (and not fragmentarily), advancing, even, a concept of hydrographic basin, which, however, is slightly restricted as it is limited to the area that encloses the surface waters.

That restricted vision will soon be surpassed and at the Conference of that Association held in 1966, the *Helsinki Rules on the uses of the waters of international rivers*, are going to be adopted, which establish a legal regime for these that rests upon the concept of hydrographic basin, which is even defined in article II as: “[...] a geographical area extending over two or more States determined by the watershed limits of the system of waters, including the surface waters and groundwater, flowing into a common terminus”.

The *Helsinki Rules* are the clearest attempt to generally establish an international legal regime for water resources based on the concept of hydrographic basin, and in fact, when work first started at the ILC on the matter, the aim was, without success, for this regime to act as the foundation to adopt the New York Convention. But, furthermore, the basin is going to be reflected in other specific international texts, namely, in some of the agreements concluded in that period between the sixties and the seventies, prior to the work of the ILC, whereby certain international rivers are regulated, especially in the American and Africa areas. In that sense, in the American area, the cases of the Plata Basin Treaty of 23 April 1969, the Agreement on water quality in the Great Lakes of 15 April 1972 and renewed on 22 November 1978, concluded between Canada and the United States, or the Amazon Cooperation Treaty of 3 July 1978, can be mentioned. With respect to the agreements in the African area, the Act related to the navigation and economic cooperation between the States of the Niger Basin, of 26 October 1963, or the Convention and Statutes related to the development of the Chad Basin, of 22 May 1964, can also be mentioned.

Furthermore, the basin is indicated as the most adequate reference for water management in other international texts with a more political than legal value, but which represent the first attempts to establish behavioural guidelines in the correct use of water resources. This is the case of the European Water Charter, adopted on 6 May 1968 within the framework of the Council of Europe, in whose principle XI it is considered that water administration must be based on the *natural basin* rather than the political or administrative frontiers. Likewise, the Action Plan of the United Nations Conference on Water, of Mar del Plata, from 14 to 25 March 1977 can be mentioned,

which warns that the connected uses of the lands must be integrated into water resource planning, pointing out the need for the States to be coordinated at river basin level.

However, considering the concept of hydrographic basin as the main element on which the international legal regime of water resources should be based is also going to have its obstacles, which will be reflected later with greater clarity in the New York Convention adoption process. In this regard, the conclusion included in the arbitral sentence of 16 November 1957 must be indicated, where, on the subject of *the utilisation of the Lanos Lake waters*, the court acknowledges the reality of the river basin unit from the viewpoint of physical geography, but it considers that this does not necessarily have to have a legal sanction, but in the extent to which it corresponds to human realities. The court supported its conclusion in that case on the fungible nature of water, which permits its restitution without altering its quality in connection with human needs, which leads to the conclusion that a derivation with restitution, such as that contemplated by the French bill, does not modify the orderly state of affairs in agreement with the demands of social life. However, in some way or another a dissociation takes place between the physical reality of water and the legal regime with which this is regulated, which is later transferred to the debate developed at the ILC where the *political* reasons behind that line of arguments are expressly indicated.

The debate set out within the framework of the ILC in connection with the adoption of the New York Convention is inserted within the context, where it is clear from the very start that the classical perspective of international watercourses as a conduit that takes water through the territory of two or more States must be overcome, to bear in mind other elements that form a whole and which must be taken into consideration with a view to an integrated and global management of water resources. Thus, it is affirmed that the watercourse forms part of something that can be described as a *system* and that this is comprised of components that cover or may cover other units such as tributaries, lakes, canals, glaciers and groundwater which, by virtue of their physical relationships, form a unitary whole.

However, that clarity does not exist with respect to considering the hydrographic basin as the appropriate basis for developing the work. In fact, Resolution 2669 (XXV) of the General Assembly of the United Nations, of 8 December 1970, whereby the work of the ILC on this subject started, chose the progressive development and codification of the rules of International Law on *international watercourses*, rejecting the Finnish

proposal to base them on the Helsinki Rules, which, as already mentioned, rested upon the concept of hydrographic basin.

The different viewpoints that exist in this regard are going to be shown in the report of the Sub-commission of the law on non-navigational uses of international watercourses, created by the ILC in its 26th period of sessions, which addressed the meaning of the expression, international watercourses. In this report it was concluded that although different international texts rest upon the concept of river basin to establish the legal regime of international watercourses, it was deduced from international practice as a whole –treaties, state practice, studies of international organisations and research of international legal organisations- that the concept, international watercourse, did not have a sufficiently well-defined meaning to accurately delimit the scope of the work of the ILC. That is why the Sub-commission proposed that different questions should be posed to the States, including, firstly, those related to the scope that should be given to the definition of international watercourse and to the adaptation of the international hydrographic basin as the appropriate base for a study of the legal aspects of the uses of international watercourses, on the one hand, and of their contamination, on the other hand.

2. The presentation of the international hydrographic basin as the appropriate basis for the work of the ILC: first reactions

The answers to this questionnaire that the States gradually sent expressed a clear different of opinions, divided into two lines, each one of which acted as an agglutinating argument. In the case of the States that expressed their agreement to the concept of hydrographic basin, this argument was the adaptation of that concept to the physical interdependence of the resource, offering the downstream States greater guarantees with respect to possible abuses in the use of the international watercourse by the other upstream riparian States. Countries such as Argentina, Barbados, United States, Philippines, Finland, Indonesia, Netherlands, Pakistan and Sweden, which were among the twenty-one States that sent their answers at the onset, declared in this sense. Later, other countries such as Swaziland, Yemen, Greece, Luxemburg, Nigeria, Syria, Bangladesh or Portugal would join them.

At the opposite end, there were States such as Austria, Brazil, Colombia, Ecuador, Spain, Poland and Venezuela, also among the first to respond, who declared they were in favour of a more limited definition of the scope of the international watercourse, pointing to the opportunity to take the definition contained with the Final Document of

the Vienna Congress of 1815 as reference, in agreement with which, the aforementioned concept would be understood as referring to the rivers that cross or separate the territory of two or more States. This not only excluded groundwater but also the tributaries that did not directly present that international nature.

The countries in favour of this more restricted perspective basically founded their opposition on the concept of basin as the basis for the work of the ILC on more *political* arguments, especially on the fact that the States, that is, themselves, would find it difficult to accept that concept. In that sense, some called to precaution, indicating precedents where the excessive amplitude given to the subject of regulation had posed obstacles to the adoption of international legal instruments. Thus, for example, Austria warned that the legal, practical and political difficulties had led to the limitation of the European convention project for the protection of international watercourses to combat contamination, which to begin with was based on the hydrographic basins, to international watercourses. In this regard, Spain referred to the need to learn from the failure of the Barcelona Convention of 1921, which contained a broad concept of international rivers and which was rejected by many States as it encompassed watercourses considered national until then. Those precedents should lead to assume that although several States could agree to use concepts as hydrographic basin or river system, the rules of general international law are quite different and there was no reason, in the opinion of Spain, to believe that the States would be willing to accept at that moment in time what they had rejected fifty years ago.

More specific arguments were added to this, including reasons such as vagueness and indecisiveness, as well as uncertainty due to the advance of scientific research, of the actual concept of hydrographic basin. This latter argument was also used by Spain, which warned that the notion of hydrographic basin, which was founded on the notion of river system, did not seem to have a univocal meaning and in any case did not seem to have achieved a definite meaning for it. In short, the Spanish government considered that, bearing in mind the vague nature of the expression, hydrographic basin, and the constant modification of the technical approach to it as a result of scientific evolution, it would be preferable to remain on a classical level when regulating international watercourses. However, it was added that this should not prevent the technical or economic international bodies from developing and specifying the concept of *basin*, of *interdependent system* or *integrated water resources* or the States from adopting those notions on a bilateral or regional base.

More difficult to accept was another of the reasons put forward by some of these countries that opposed the hydrographic basin as the appropriate basis for the work of the ILC, such as Colombia, Poland or Venezuela, which minimised the importance of the element, which, for the States of the other group, were the main advantage of this concept, such as its adaptation to the physical reality of water. Indeed, those States pointed out that the indisputable reality represented, from the geographic perspective, of the concept of international hydrographic basin, made it very convenient from the viewpoint of water resource studies but not in connection with the establishment of the legal regime for the uses or for the contamination of the international watercourses.

Thus, for example, Poland stated that although the international hydrographic basin might constitute the appropriate basis for hydrographic basin use projects, it was not, however, for legal studies related to the use of international watercourses and to their protection against contamination, with respect to which that notion had a more accessory interest. In other words, in the opinion of the Polish Government, the physical unit of the waters of a hydrographic basin did not justify the deduction of a legal unit among the States of the basin, creating legal obligations on their account with respect to the use of the waters. Thus, the hydrographic basin was qualified as a *purely geographic* notion without any legal relevance, so the restriction of the sovereignty of the States over their waters could only give rise to agreements concluded between them. Namely that, recovering the aforementioned opinion expressed by the Arbitration Court on the subject of *the use of the waters of the Lanos Lake*, there was a separation between the physical reality and the legal regulation of this resource, so that the political conditioning factors led to establishing a legal regime that did not respond to the reality of the subject which that regulatory framework was aimed at.

A series of States took up intermediate positions, which, although they declared they were in favour of a more restricted posture with respect to the scope of the definition of international watercourse, their opposition to the concept of basin was not so clear or complete as that of the previous States, as their justification was based on pragmatic arguments, more specially on the wish not to block the legislative development by searching for definition for which there was no consensus at that time. In that line, we can mention the cases of Canada or the Federal Republic of Germany that did not want to close the doors to the possibility of returning to the concept of hydrographic basin in the future. In the case of Canada they pointed out that a legal definition must be a starting point and not a limiting factor that may prevent taking into

consideration any geographic unit at a later date that might be considered pertinent. An additional argument, which has some points in common with the above in connection with the separation between physical reality and legal regime, affirms that a distinction must be made between legal notions and applicable notions from the viewpoint of management, so that for whoever manages the resources the unit to take into consideration must normally be based on functional criteria rather than on legal or geographic criteria, as the problem to be solved is the problem of conflict between different uses.

The Federal Republic of Germany, on its part, although it expressed its support to the traditional definition of international watercourse included in the Final Document of the Vienna Congress, added that the fact that the water supply to countries downstream can depend both on the discharges of this resource made from a national tributary and those that are made directly from the international watercourse, must not be forgotten. Therefore, it could be useful to extend a legal study on the questions of quantity to all the aspects of the river basin, taking due account of the sovereign rights of the member States. Other countries, such as France and Nicaragua, were in some way or another in that intermediate terrain, too, as they considered that although the concept of international hydrographic basin was not acceptable in connection with the legal regime of the uses of international watercourses it could form a good basis with respect to their contamination.

Anyway, and although in many cases no reference was expressly made to it, the argument that agglutinated all the countries opposed to the hydrographic basin as the appropriate basis for work of the ILC was the resulting impact for the land territory including in the basin. This is the only way of explaining the consideration of that concept as appropriate to conduct technical studies, on adapting to the physical reality of the water resources, but not to establish a legal regime in connection with its use.

That position was supported by a bad interpretation of the consequences of supporting the legal regime of international watercourses in the hydrographic basin, as the consideration seems to be deduced that this would involve the establishment of a kind of co-sovereignty over those areas of all the riparian States of the international watercourse. That vision was expressed by some of the members of the ILC, such as the Soviet, Nikolai A. USHAKOV, who, in the 1983 session, pointed out that in his opinion neither the notion of international watercourse nor the notion of hydrographic basin had the least possibility of being accepted by the States, as they lead to the

possibility of a State without any relationship with a river that crosses the territory of another State being able to participate in the decision-making related to the use of the river, just because it is supplied by waters that come from its territory. It was, therefore, considered, that it would be better to return to the watercourses considered as rivers that cross the territory of two or more States.

However, also within that framework of the ILC more exact opinions were expressed with respect to the implications of the appeal to the concept of basin, and thus the Senegalese, Doudou THIAM, recalled that the drainage basin is being considered more and more, particularly by countries that follow integration policies, as a unit that can be exploited by the co-riparian States without exercising joint sovereignty over the basin. Furthermore, he warned of the risk of considering that the watercourse is international and the basin is not, as each co-riparian State would be free to act upon the basin, which may have serious consequences, for example, if a riparian State acts in such a way that the watercourse changes direction.

It is clear that this conclusion with respect to the submission of the territory included in the hydrographic basin to a kind of joint sovereignty, exercised by all the States of the basin, does not adapt to the reality of the consequences arising from establishing the international hydrographic basin as the basis for the legal regime of the uses of international watercourses. The basin option does not mean that the States concerned have to share the sovereignty over the part of the basin that enters their territory but, it really aims at coordinating the interests of all the riparian States of the international watercourses and making them compatible, which is necessarily going to require all of them to accept the establishment of certain limits regarding the activities that they can carry out in their territory and that may produce some type of consequence over the uses of the international watercourse.

In addition, as we will see below, it is not clear that the States that opposed the concept of international hydrographic basin have achieved their objective; in other words, on avoiding the establishment of an international legal regime for water resources that does not entail any impact on the activity carried out in the area of the land territory linked to the international watercourse. This is what we will refer to when we pay attention to the consequences arising from the concepts that the ILC chose and which were finally reflected in the 1997 Convention.

In that context of reactions found with respect to the proposal of basing the study of an international legal regime for the uses of international watercourses on the

hydrographic basin, the work of the ILC began, which would conclude with the adoption of New York. We will see below how, despite the opinion of the Special Rapporteurs, and in spite of everything, it seemed to favour the basin as the appropriate basis, those political circumstances would lead to posing different alternative concepts, at the onset, to avoid the difficult question of defining the material area for that work and later trying to find a concept that would meet a minimal acceptance by the States.

IV. THE EXCLUSION OF THE HYDROGRAPHIC BASIN IN THE NEW YORK CONVENTION IN FAVOUR OF OTHER LESS *DEMANDING* CONCEPTS

The answers provided by the States to the questionnaire that had been sent to them were interpreted by the first Special Rapporteur, KEARNEY, who, in his report, stated that a limited majority of States had expressed their support to basing the ILC work on the international hydrographic basin, with respect to which he also expressed his preference based on the acknowledgement that this represents of a hydrological water unit, so that its physical characteristics are taken into account and the possibility of reciprocal cause-effect relations in the entire river system is accepted. However, perhaps due to the paltry number of that majority, he advised the ILC to follow the opinion expressed by different States related to leaving the exact definition of the scope of the international watercourse concept until later, so that their work would not be delayed by terminological quarrels, which, as he himself point out, does not differ too much from the normal practice of the ILC, which delays the adoption of definitions, or at least adopts them provisionally, awaiting the refinement of legal provisions on the question to be examined.

At the same time, answers continued to arrive from States to the questionnaire and another four were added to the twenty-one that had answered in the beginning, which were divided with respect to the opportunity of taking the international hydrographic basin as the basis for the ILC work. Thus, two them, Swaziland and Yemen expressed their support for the basin and the other two, the Libyan Arab Jamahiriya and Sudan, on the contrary, although the latter maintained an intermediate position near to that previously indicated by France and Nicaragua, on considering that the notion of international hydrographic basin could be an appropriate basis for studying the legal aspects of the contamination of the international watercourses but hardly has any relationship with the uses of the watercourses, insofar as in the state of knowledge that existed at that time, that notion had few possibilities of being used to advantage.

That division of opinions was transferred to the discussion of the report of the Special Rapporteur within the ILC, which finally accepted the former's suggestion and decided that it was not necessary to define the meaning of the expression, international watercourse, at the start of the work of the ILC but that it was better to start formulating the general principles applicable to the legal aspects of the uses of the watercourses. The panorama did not seem to change too much with the change of Special Rapporteur, and thus Stephen M. SCHWEBEL, in his first report, continued to maintain the same opinion as his predecessor with respect to the special suitability of the basin.

More specifically, the new Rapporteur indicated that the watercourse unit is founded on the hydrological cycle and the drainage or hydrographic basin is an essential element of that process as it is the natural area for receiving waters within the complex process of returning the water fallen to the earth to the sea. In this regard, the basin, as a geographical and functional unit, is, in his opinion, a good starting point to formulate principles applicable to legal uses of international watercourses.

1. The polarisation of positions with respect to the basin from a geographic viewpoint

However, the Rapporteur SCHWEBEL also shared the pragmatic view expressed by KEARNEY, and acknowledged that the opposition to the basin of almost half the twenty-five states that, until that time, had responded to the questionnaire, was an element that could not be ignored. Furthermore, the new Rapporteur went deeper into that division of opinions extracting from their analysis, new lines of force that must be integrated into the debate. In that regard, he warned of the polarisation of positions from the geographic viewpoint, so that the majority of the countries that opposed the concept of hydrographic basin, which Yugoslavia had joined at that time, were located upstream, whilst those that had expressed their support were also in their majority, downstream States from the international watercourses.

That circumstance in some way undervalued the answers given by the States to the questionnaire in connection with the real objective of the question. That is, rather than answering if they considered that the concept of international hydrographic basin was appropriate to base the legal regime for the use of international watercourses, what the different States that had sent their answers had done was to give their opinion in the sense that if that concept of hydrographic basin was or was not in agreement with their interests.

In that regard, SCHWEBEL added in his first report that the position in favour of the hydrographic basin of two insular States, such as Philippines and Barbados, which because they did not have any international watercourses could be considered as more objective, as their answers were not *contaminated* by individual interests, was an element to be taken into consideration with respect to adapting the hydrographic basin to study the legal regime of the uses of international watercourses from the perspective of general interest, focused exclusively on the better management of water resources. However, the positive value that the impartial position of those States had for the Rapporteur was not seen in the same way by them. Thus, Philippines, on answering the questions formulated, declared in the sense that its answers had the problem of a lack of state practice on the matter which, in its opinion, was essential to be able to respond adequately. To which, the actual Rapporteur added that the position of those States had less practical relevance with a view to adopting and subsequently accepting the final text of the Convention, on recalling that the substantial support of the riparian States constitutes an essential element of any universal treaty on the law applicable to fresh water resources, which, in his opinion, should make those in favour of the hydrographic basin solution reflect.

In any case, the great reluctance of a certain number of States, for which, as Rapporteur SCHWEBEL warned, accepting the notion of hydrographic basin would mean going beyond what they are willing to assume for the moment, led to the latter proposing as a work hypothesis, waiting, with respect to preparing a definition of the field of application of the articles, until the legal clauses had been prepared, at least partially. Thus, in the draft of articles submitted to the ILC in 1979 the Special Rapporteur abided by the concept of *international watercourse*, indicating that the mention had a descriptive nuance and that it did not mean opting for any of the main definitions that could be applied to it, including that of hydrographic basin, which should be determined at a later date.

However, that opinion was not shared unanimously either at the ILC or at the Sixth Commission of the General Assembly, in whose debates contradictory positions were expressed. Some of the representatives of those bodies, such as those from Nigeria, Japan or India, coincided with the Special Rapporteur in that it was preferable to leave the definition of the concept of international watercourse until a later date. However, for others, the field of application of the draft articles should be defined without delay as the content of the rules included therein would depend on the

definition given to the international watercourses. The representatives from Kenya, the USSR and France declared themselves in this regard, and the latter pointed out that although that definition should not bring the work of the ILC to a standstill, it should not be deferred too much in time either.

2. The appeal to the notion of *system* and the return to notion of *international watercourse*

The second report by the Special Rapporteur, SCHWEBEL, indicated that it was essential to adopt a formula that clearly expressed that an international watercourse must not be considered simply as a natural canal through which water runs, and in his opinion that was achieved by using the expression *international watercourse system*, which as he himself pointed out has been frequently used with respect to international rivers, quoting, in this regard, the example of articles 331 and 362 of the Versailles Treaty or article 2 of the Convention whereby the definite statute of the Danube of 1921 is established, as well as the doctrine or works of scientific organisations, among which he mentioned the 10th Conference of the Inter-American Bar Association held in Buenos Aires in 1957.

With this, the Rapporteur did not modify his previous position in favour of adopting a definition that would not mean adopting definite positions with respect to the scope that must be given to the concept, *international watercourse*. Thus, he pointed out that the term *system* did not prejudice the subsequent use of the notion of *drainage basin* or of a more limited definition of international watercourse, providing a neutral working base that would permit the preparation of basic general principles applicable to the use of international watercourses. But, at the same time, he considered that the term, *system*, with respect to the previous term, *watercourse*, responded better to the existence of a series of hydrological components that form a unity with the international watercourse. In that regard, the Rapporteur acknowledged that the expression, *international watercourse system*, still had a certain lack of precision, but, in view of the different positions in this regard, this was a quality, as it permitted a certain flexibility with respect to the subsequent use of this expression, whose content could be modulated to give it a more restricted or a broader scope in connection with the components of the water system included therein.

At that time the replies to the ICL questionnaire sent by four new States were received – Greece, Luxemburg, Nigeria and the Arab Republic of Syria-, which responded affirmatively to the question about whether the international hydrographic

basic could be considered as the appropriate basis for studying the legal regime of the use of international watercourses. The statement made by Greece is worth underlining as it said that the traditional notion of international watercourse had been surpassed a long time ago and replaced by the modern and broader conception of international hydrographic basin, which also includes the tributaries of the international river plus the groundwater. Nigeria, on its part, added that the broadest and most comprehensive definition possible must be given to the concept of watercourse, taking or proposing the definition included in the *Helsinki Rules* as an example.

The ILC examined the second report by Rapporteur SCHWEBEL and the replies sent by the Governments of those four member States and chose to provisionally include the expression *international watercourse system* in the draft articles, which was defined as the unity formed by hydrographic components such as rivers, lakes, canals, glaciers and groundwater which, by virtue of their physical relationship, constitute a unitary whole. Furthermore, the ILC warned that the objective is not to prepare a definition but a work hypothesis.

The following step was to discuss that concept of international watercourse system within the framework of the Sixth Commission of the General Assembly, which took place parallel to the presentation by the Rapporteur SCHWEBEL of his third report, where he insisted on the opinion already expressed in his first report in connection with the need to shape the legal standards to the laws of physics that govern the ubiquitous behaviour of water, and to the receipt of the replies from Bangladesh and Portugal to the questionnaire sent by the ILC, both of which expressed themselves in favour of the concept of international hydrographic basin. Within the framework of that debate in the Sixth Commission, several delegations highlighted the utility of the term, system, or even qualified it as a clear progress, although some of those national representatives who considered it acceptable, such as Tunisia or Ukraine, stated the need to determine its elements or components more clearly.

However, that favourable position was not the only one expressed within the Sixth Commission, as there were also those who doubted the resulting progress from the choice of the term, system, criticising it for different reasons, one of which was the absence of state practice in this regard, which the representative of the USSR, for example, used to state that it would be preferable to preserve the expression, international watercourse, which could be defined on the basis of the existing International law. Spain was among the States that were reluctant to this concept,

expressing its serious doubts about this approach, even though it estimated that the States that share an international watercourse have the obligation to duly bear in mind the interests of the other States. Others, such as the Brazilian representative, considered that the term, system, was equal to the term, hydrographic basin, so they opposed its use by the ILC.

But, the change in Special Rapporteur, with the appointment of Jens EVENSEN, was going to represent the return to the previous concept of international watercourse and the abandonment of concept of system, something which, for the new Special Rapporteur, did not mean any in-depth modification but which was a simple change in terminology. But it was not viewed in the same way either by the members of the ILC or by the representatives in the Sixth Commission. For some of them, the concept of system constituted an essential element of the draft projects as it conveyed the hydrological reality, so, on abandoning that term, emphasis was placed on the water without bearing in mind its geographic or economic context. And some even expressed their preference for the concept of hydrographic basin, a more general and solid concept from the scientific viewpoint.

The Rapporteur, EVENSEN, in his first report, seemed to fall in with the pragmatic posture followed by his predecessors in the sense of acknowledging that a definition of international watercourses founded on the notion of hydrographic basin would not receive sufficient support among the members of the General Assembly of the United Nations, to be able to be useful as a starting point for a draft Convention in this regard. He also added the advantages brought about by the concept of international watercourse system, which was broad enough to include, apart from rivers, lakes and tributaries, other components such as canals, streams, aquifers and groundwater and, at the same time, be sufficiently flexible to be able, in each specific case and in each sphere of problems, to determine which components must be affected by the principles established with respect to the international watercourse systems in general or respect to the specific watercourse system.

However, that favourable posture for the use of the term, system, was counteracted in his second report, when the Rapporteur acknowledged that the objective of having chosen the term, system, which was to avoid the reserves and criticism that had been expressed with respect to the concept of international drainage basin, had not been achieved, and the actual term, system, had been subject to discussion, and in this regard, numerous doubts had been expressed in the 35th session of the ILC.

Furthermore, the doubts and division of opinions with respect to that term had also been transferred to the Sixth Commission of the General Assembly of the United Nations, when some national delegations had expressed their support to it whilst for others, that term did not differ in any way from the term, drainage basin, so it did not entail any practical advantage with respect to the former. Given that panorama, the Special Rapporteur concluded that, in view of the debates maintained in 1983 in the Sixth Commission, the term, system, could constitute a serious obstacle to adopt a generally acceptable instrument, whereby he proposed a return to the concept of international watercourse.

But this step backwards was not going to be carried out peacefully, but, as indicated in the preliminary report of the next Special Rapporteur, Stephen C. MCCAFFREY, it also gave rise to debates both in the ILC and in the Sixth Commission, when some of its members considered that abandoning the concept, system, was positive, as it thus eliminated the problem resulting from its territorial connotations, which could infer an idea of jurisdiction over land areas. However, others complained about the abandonment of a notion that they considered to be one of the cornerstones of the draft, requesting a return to that notion of system, because it was not possible to turn a blind eye to the natural nexus that existed between the different elements due to the simple fact that they form a system.

The difference in viewpoints was maintained to the point that the actual Rapporteur MCCAFFREY, on the occasion of his second report, verified that, based on the debates held until that time, in order to reach an acceptable definition of international watercourse or international watercourse system, the ILC ran the risk of spending all the time it had in its 38th session, to study this question, and he considered that the time and effort spent would not result in progresses for the rest of the draft articles, so he did not believe it necessary to define the expression, international watercourse, to be able to continue with the work related to the draft articles of the ILC. In this regard, he recommended the ILC to leave that definition on one side and base itself on the provisional hypothesis prepared and accepted in 1980.

MCCAFFREY returned to the question in his seventh report, trying to describe the components of the international watercourse, which he considered necessary to clarify the rights and obligations of the riparian states. In this regard, he suggested two alternatives: the international watercourse system and the international watercourse, showing his preference for the former, which would mean that the interdependence

between the different components of the watercourse would always be taken into account. However, after the debate in the ILC, in its 43rd period of sessions, the second alternative was finally chosen and incorporated into the draft articles. .

The question was recalled again by the last Special Rapporteur, Robert ROSENSTOCK, who, in his first report, at the end of the New York Convention adoption process, pointed out that certain Governments, in their observations, had proposed the re-opening of the debate in connection with the meaning of the term, international watercourse, but he deemed that a return to the analysis about the advantages and disadvantages of the use of the expression, international hydrographic basin, would not report any utility at that late stage and bearing in mind the commitments reached. One of the Governments that proposed re-opening this question was the Greek Government, for which, instead of the concept, international watercourse system, adopted by the ILC according to draft article 2, it would have been preferable to adopt the modern and scientifically more solid notion of international hydrographic basin.

Finally, article 2.a) of the New York Convention of 1997 includes a definition of watercourse in agreement with which it is understood as: “[...] a system of surface waters and groundwater constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus”. The option finally chosen is considered as perhaps the only one possible in practice to try to reconcile apparently contradictory viewpoints, that of those who consider the need to have a water resource management unit that adapts to its physical reality and those who do not want to accept the concept of basin due to its territorial implications.

However, in the majority of the cases, a certain deception is expressed due to the missed opportunity of choosing a less appropriate management unit than the basin from the viewpoint of controlling the watercourse. In that sense, it is indicated that the basin option would have been more useful especially from the environmental viewpoint, as it would permit bearing in mind and submitting to regulation the consequences which activities carried out on land, such as waste disposal or deforestation⁴ could have. However, the negative consequences of that opportunity seems to be compensated since, as we will see below, the concept of hydrographic basin has been recuperated once again in several international texts.

⁴ In this sense, see, for example ARCARI, Maurizio (1997), p. 10, or TANZI, Attila (1997), p. 964 and following.

V. CONSEQUENCES OF THE CHOICE OF THE CONCEPT, *INTERNATIONAL WATERCOURSE*

The fear of the possible implications that the concept of hydrographic basin could have on the practical exercise of sovereignty in connection with the part of land territory included in the basin had priority over any other consideration, leading finally to the choice of the term *international watercourse* to the detriment of the former term. Thus, at least at the beginning, the already mentioned separation between the physical reality of the water resources and the legal system that governed its uses occurred, excluding a concept that is accepted in many internal legal systems as the most appropriate for water management. However, from the analysis of the content of the New York Convention, especially from a global perspective, it is not at all clear that the final choice of the international watercourse concept will permit excluding the obligations related to the activities carried out in the land territory included in the basin from the obligations resulting from the Convention.

1. The proximity of the concept *watercourse* included in the Convention to the concept of *hydrographic basin*

The equivalences and differences between the concepts *watercourse* and *watercourse system* and the concept of *hydrographic basin* were the subject of debate within the ILC whose members were divided. On the one hand, there were some who, such as the Briton, Ian SINCLAIR, did not believe that the terms system and basin were synonyms, as the former is more restricted being limited to the freshwater elements of the watercourse and to the watercourse itself, excluding the land situated in the feed area. However, despite indicating that it understood the fear that, due to its excessive amplitude and lack of precision, the concept of hydrographic basin gives rise to, he stated that it was not possible to make a complete abstraction of what happens in the land when addressing the legal regime of the international watercourses, as industrial uses are very often one of the sources of contamination of international watercourses. In any case, that did not prevent him from concluding that, for the purpose of the draft articles, the notion of international watercourse, including the freshwater of the water course and the watercourse itself, can be taken as the basis for future work. The difference between system and basin were also defended by the Argentinean Julio BARBOZA, for whom, whilst the former is strictly functional, the latter refers to geographical, territorial and hydrological considerations.

Opposite that position, which seemed to leave a *dead zone* when regulating the uses of international watercourses, such as the effects that the activities carried out in the land zone of the hydrographic basin have on these uses, were those who considered that international watercourse and hydrographic basin are really synonyms or equivalent terms. The Frenchman, Paul REUTER, can be mentioned in this line, who pointed out that the draft articles presented at that time really contained two notions of international watercourse system: one in connection with which the Rapporteur had taken the concept of hydrographic basin into account, and which was included in article 1.1, which defined the international watercourse system as the system normally comprised by components of freshwater situated in two or more States of the system. But, there was a second notion with respect to which the concept of basin was rejected and which had a functional nature, which was contemplated in paragraph 2 of that same article, which indicated that insofar as: “[...] one or several parts of the system of a watercourse situated in one State of the system do not affect the uses of the watercourse system in another State of the system or will be affected by them, it will not be considered that those parties are included in the international watercourse system for the purposes of this Convention”.

In any case, for REUTER the notion of system had a physical, as well as geographic and water, nature, and it was not very different from the notion of drainage basin, adding that, in practice, it is impossible not to take into consideration the whole land territory where the river basin is situated, for example, in connection with the contamination of the international watercourses. The favourable position to the equivalence between watercourse system and drainage basin was shared by the Brazilian, Carlos CALERO RODRIGUES, who pointed out that both notions express the unitary physical nature of the watercourses. Thus, whilst the term, basin, designates in general the whole geographic area where the waters are found, the term, system, only provides it with a nuance, insisting on the hydrological part of the basin. However, he concluded that if the expressions, drainage basin or watercourse system are perfectly suitable for conducting scientific and technical studies, it is doubtful that they can be used to formulate rules of International law applicable to the non-navigational uses of international watercourses.

It can be deduced, however, from the opinions expressed, that the opinion of the different members of the ICL with respect to the possible equivalence between the concepts of watercourse system and hydrographic basin, were not suitable as a general

rule to identify their positions with respect to the suitability or not of the latter to act as a basis to establish the legal regime of international watercourses. In other words, in some cases, as indicated by CALERO RODRIGUES, acknowledging the equivalence between both did not mean considering that basin should be chosen, which must be explained by the political factor, indicated above, namely, in the fear that this could result in a limitation of the practical exercise of the sovereignty of the riparian states on the land part of the hydrographic basin.

In any case, as seen, several members of the ILC, such as REUTER or SINCLAIR, clearly expressed that the legal regime of the uses of international watercourses could not wash its hands of the activities carried out in the land area of the basin. In that regard, it was warned that a State could not refuse its responsibility for damages caused to other States as a result of the contamination of the watercourse resulting from those activities, which led, consequently, to pointing out that the concept of hydrographic basin could not be excluded from a legal text that regulated the entire issue.

The former Special Rapporteur of the ILC, Stephen C. MCCAFFREY, went even further in this regard when he stated the implicit inclusion of the hydrographic basin in the legal regime established by the New York Convention as a result of its functional equivalence with the watercourse, at least from a hydrological perspective⁵. Namely, that the objective of avoiding the *territorial problem* on opting for the international watercourse concept would not have been achieved, as on dealing with some aspects of the legal regime of the international watercourses, most especially insofar as contamination is concerned, attention must be paid to the activities carried out by the riparian States in the part of their territory linked to that international watercourse⁶.

However, the alternative of the international watercourse concept means that, to back up that responsibility, it is necessary to go to the principles established in the New York Convention, especially related to the obligation of not causing significant harm. The result is that the express exclusion of the hydrographic basin concept in the final text of the convention has not only not eluded whatsoever to a possible effect of that legal regime on the land part of the basin, but it has also brought about a reduction in its efficiency from the water management viewpoint. That reduction is because this legal regime pays attention to the effects that the activities developed on land have on the international watercourse from a reactive perspective. In other words, the possible

⁵ MCCAFFREY, Stephen C. (2003), p. 37.

⁶ PONTE IGLESIAS, M^a Teresa (1989), p. 42 & 48.

responsibility derived from the activities is only taken into account once they have been carried out, preventing the introduction of a planning element, which, if it had been possible to have chosen the hydrographic basin, would have permitted the establishment, by mutual agreement by the States that share the international watercourse, of a regime that would forbid carrying out activities in the land area of the basin with negative effects on the shared waters.

That limitation of the instruments that the Convention has in this point was indicated within the framework of the actual ILC by Ian SINCLAIR who pointed out that the negative regulation consisting in not causing significant harm is not sufficient to resolve the multiple problems posed by the contrasting uses of a scarce natural resource such as the waters of the system of an international watercourse. In that regard, he considered it essential to formulate a positive regulation requesting the cooperation among interested States. The determination of the hydrographic basin as the management unit of the international watercourses, managed by mutual agreement by all its States, could be a solution in that regard.

2. The use of the concept of *international hydrographic basin* and of other broader concepts after the New York Convention

The choice in the New York Convention, of the international watercourse concept represented, as already mentioned, a serious setback for the consolidation of the hydrographic basin as the management and planning unit of international water resources. However, that setback has not been definite and several international texts have based their legal regime on that concept, and in some cases they have even put forward other concepts that surpass and integrate the concept of hydrographic basin. The reason may be that since the conclusion of the New York Convention, and much more so since the moment when the majority of the debates took place about that issue in the ILC and the Sixth Commission, at the end of the seventies and the first half of the eighties, the water crisis scenario has worsened, as consequently an integrated approach, that permits using those resources as efficiently as possible, has become more necessary.

That change in scenario, in connection with the scenario where the debate on the use or not of the basin concept takes place, was expressed even before the adoption of the New York Convention and it can thus be mentioned how the Declaration on Water and Sustainable Development adopted during the Dublin Conference on Water and the Environment, held from 26 to 31 January 1992, not only indicates that the integrated

approach that reconciles economic and social development and the protection of the natural ecosystems, is a necessary condition for the efficient management of water, but it also adds that the most appropriate entity for that planning and management is the river basin, including surface water and groundwater.

Furthermore, that change in scenario has meant that some of the countries that had expressed their opposition to the concept of basin as a basis for the work of the ILC in connection with the legal regime of the use of international watercourses, have changed their position and current support it to management the international watercourses that affect them. That is the case of Spain that could be taken as a model of the diversity of existing determining factors in water management at an internal and international level; thus, although Spain is one of the pioneer countries in the foundation of its Water Law around the hydrographic basin, the possible consequences resulting from its prevailing position of upstream State of the flow of its international rivers led it at the time, as indicated above, to declare itself in favour of a classical concept of international watercourse for the work of the ILC. Currently, the management of the international watercourses that interest Spain rest upon the concept of basin, which, among other factors, is motivated by the requirements imposed by the European community law, more specifically by Directive 2000/60/EC.

In fact, in the Spanish case, the obligation imposed in this Directive, via the adoption of the Albufeira Agreement of 30 November 1998, on cooperation for the protection and sustainable use of the waters of the Hispano-Portuguese hydrographic basins, was anticipated, and in whose article 3 it defines the hydrographic basins of the river Miño, Limia, Douro, Tago and Guadiana as its field of application, defining, in its article 1.b) as such basins: “[...] the land area from which all the surface runoff flows through a series of streams, rivers and, in some cases, lakes towards the sea, entering it through a single river mouth, an estuary or a delta, and also associated groundwater”.

Leaving the Spanish case, it must be pointed out that the acceptance of the international hydrographic basin in legal texts has been especially significant in the European scenario and the Water Framework Directive is not totally to *blame* as other international texts, which also rest upon the same concept, have also contributed. This is the case of another of the outstanding texts, together with the New York Convention, with a view to shaping an international legal regime on water resources, with a general nature or vocation, although in this case with a regional scope, such as the aforementioned Agreement on the protection and use of transfrontier watercourses and

international lakes, of 17 March 1992. In article 2.6 of this text the hydrographic basin is established as the geographical framework of reference for preparing policies, strategies and harmonised programmes for the prevention, control and reduction of the transfrontier impact and protection of the environment of transfrontier waters.

On the other hand, the hydrographic basin is presented as a basic water resource management unit in different international agreements which regulate the uses of the most important watercourses of the European continent and which were adopted more or less at the same time as the New York Convention. Thus, mention can be made to the Agreement on the International Commission for the protection of the Elba, of 8 October 1990, the agreement on the cooperation for the protection and sustainable use of the Danube, of 29 June 1994, or the Agreement on the protection of the Rhine, of 22 January 1998.

But, although that need for an integrated management is felt in a special way in Europe, this does not mean that the hydrographic basin is only resorted to in European Law, as it is also reflected in texts adopted in other parts of the world. This occurs in Africa, with the Agreement on an Action Plan for the ecologically reasonable management of the common Basin of the Zambezi River, of 28 May 1987, or the already mentioned Protocol on shared watercourse systems in the South African Development Community, of 16 May 1995. Likewise, in Asia, the also aforementioned Agreement on cooperation for sustainable development in the Basin of the Mekong River, of 5 April 1995, can also be pointed out.

But the need for integrated management of the water resources has not only meant the recovery of a certain predominance of the hydrographic basin in the international legal regime of freshwater, but it has also led to the presentation of broader management concepts, that integrate the basin concept. Here we can highlight the concept of *river basin district*, included in Directive 2000/60/EC, and of *Integrated Water Resources Management* (hereinafter “IWRM”) coined within the framework of the United Nations. With respect to the first concept, the aforementioned Directive, in its article 2.15, defines the river basin district as: “[...] the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwater and coastal waters, which is identified under Article 3(1) as the main unit for management of river basins”.

That association of freshwater with sea water that is found near the river mouth is also in the basis of the other concept, of the IRWM. However, this second concept is

especially extensive, and perhaps somewhat indefinite, being developed in the Second Report of the United Nations on the *Development of Water Resources in the World*, which indicates the need to go further than the concept of basin when establishing the legal regime of the uses of water resources, so that not only are the activities that are carried in the area of land of the basin, and which may have effects on those water resources, encompassed in that regime, but it must also be taken into account that this interdependence is repeated in connection with the coastal areas. In other words, it must be taken into consideration that any activity carried out therein may have repercussions on the use of the water resources.

However, although the appearance of integrated water resource management models focused on concepts of this type is a positive element, it is advisable not to put too many hopes, at least in the short run, on its generalisation in the Law on international watercourses, since, as indicated in the United Nations report on the implementation of the IWRM, there are many obstacles to be overcome and it can only be said that the objective of freshwater management based on integrated models, has been achieved in a very small number of States. The balance carried out with respect to shared waters between several States is not very positive, either, indicating that the agreement between these is limited in the majority of the cases to the allocation of flows or the construction of infrastructures for the use of those resources, but integrated management models for those international watercourses are established in very few cases. The fear mentioned above about that method affecting the practical exercise of the sovereignty of the States over their own territory is not unrelated to this.

In any case, the United Nations warns of the need to carry out integrated management of these transfrontier water resources, which, as mentioned at the beginning, are a very important part of the freshwater reserves available on the planet. In this regard, it points out that the States must assume long-term commitments in connection with the management of transfrontier waters that are not limited to a technical cooperation, such as that related to the adoption of joint standards and methodologies to compile hydrological data and joint monitoring plans, but which harmonise water policies and adopt joint development plans for a basin and even much more important questions about how to share the benefits of the basins and aquifers.

VI. CONCLUSIONS

Transferring the solution adopted in many internal legal systems to the international scenario, especially in those cases where there is a decentralised water resource

management system, in agreement with which the hydrographic basin is presented as the ideal unit, has found the obstacle of the impact that this has on territorial sovereignty. The consequence is that the drafters of the New York Convention prefer to choose another concept which, due to being more restricted, does not adapt in the same way to the physical needs of the resource management. This election occurred despite being able to argue, on the one hand, that this impact of the area of land of the basin must be well understood, not being able to consider it in any case as the establishment of co-sovereignties between all the riparian States; and on the other hand, that taking the basin into consideration is per se unavoidable in practice, insofar as the appropriate management of a limited resource demands an integrated approach that will bear in mind all the factors that affect that resource. The activities that are carried out on the land and which may produce effects on the freshwater must be included.

It is true that, though finally adopted in 1997, the majority of the debates on this issue took place in the seventies and the first half of the eighties, when although the importance of the resource was already perceived, there was still not such an obvious feeling of crisis with respect to its availability as there is at the present time. The importance of that circumstance is perceived in connection with the replies sent by the States to the questionnaire that the ILC sent them at the time, and it can be verified that, although at the onset there was an almost equal division of forces, as time passed, the replies of the States were mainly inclined towards the acceptance of hydrographic basin as the appropriate basis to study the legal regime for the uses of the international watercourses. This may explain that, although the New York Convention of 1997 represented a wasted opportunity with respect to making the international legal regime on freshwater rest upon concepts more in accordance with the physical reality to be regulated, not all is lost and there are many documents that chose the basin as the basis for their regime, and that even propose surpassing it and setting forth even broader units, such as the river basin district, proposed by Directive 2000/60/EC, or the paradigm of the IWRM in the case of the United Nations.

All of this leads to the statement that the debate related to the organisation of the Law on international watercourses around the concept of international hydrographic basin is not nearly closed and that its advantages place it in a good position, especially if one does not forget a seemingly basic premise, especially in periods of scarcity, which is that this legal regime must be established on realistic bases, so that the individual

interests do not hinder the solution of a problem, which, due to being universal, requires a response on the same scale.

BIBLIOGRAPHY

— ARCARI, M. (1997), “The Codification of the Law of International Watercourses: The Draft Articles adopted by the International Law Commission”, *Yearbook of International law*, vol. XIII, page. 3—32.

— BERBER, F.J. (1959), *Rivers in International Law*, London, Stevens & Sons.

— BOISSON DE CHAZOURNES, L. & SALMAN, S.M.A. (2005), *Les ressources en eau et le droit international*, Leiden/Boston, Martinus Nijhoff Publishers.

— BRUHÁCS, J. (1993), *The Law of non-navigational uses of international watercourses*, London, Martinus Nijhoff Publishers.

— CAFLISCH, L. (1989), “Règles générales du droit des cours d’eau internationaux”, *Recueil des cours de l’Académie de Droit International de La Haye*, 219 (vol. VII), pages 9—226.

— CAFLISCH, L. (1997), “La Convention du 21 mai 1997 sur l’utilisation des tours d’eau internationaux à des fins autres que la navigation”, *Annuaire Français de Droit International*, vol. XLIII, pages 751—798.

— CASTILLO DAUDÍ, M. (1999), “La protección y preservación de los cursos de agua internacionales: el Convenio sobre el Derecho de los usos de los cursos de agua internacionales para fines distintos de la navegación de 21 de mayo de 1997”, *Yearbook of International law*, vol. XV, pages 115—158.

— MCCAFFREY, S.C. (2003), *The Law of International Watercourses. Non-Navigational Uses*, Oxford, Oxford University Press

— MCCAFFREY, S.C. and SINJELA, M., (1998), “The 1997 United Nations Convention on International Watercourses”, *American Journal of International Law*, vol. 92, January, no. 1, pages 97—107.

— PONTE IGLESIAS, M^a. T. (1989), *La contaminación fluvial: cuestiones de responsabilidad internacional*, Santiago de Compostela, Xunta de Galicia.

— REY CARO, E.J., (2003), “El derecho de los cursos de agua internacionales”, *Cursos Euromediterráneos Bancaja de Derecho Internacional*, vol. VII, Tirant lo Blanch, Valencia, pages 677—712.

— TANZI, A. (1997), “La Convenzione di New York sui corsi d’acqua internazionali”, *Rivista di Diritto Internazionale*, vol. LXXX, fasc. 4, pages 956—1002.

- TANZI, A. (2001), *The United Nations Convention on the Law of International Watercourses: A Framework for Sharing*, International and National Water Law and Policy Series, 5.

LIST OF DOCUMENTS

Yearbooks of the International Law Commission

- ILC Yearbook, 1974, vol. II (First part), pages 305 & following
- ILC Yearbook, 1974, vol. II (Second part), pages 37 & following
- ILC Yearbook, 1976, vol. II (First part), pages 161 & following
- ILC Yearbook, 1978, vol. II (First part), pages 271 & following
- ILC Yearbook, 1979, vol. II (First part), pages 145 & following
- ILC Yearbook, 1980, vol. I, pages 121 & following
- ILC Yearbook, 1980, vol. II (First part), pages 159 & following
- ILC Yearbook, 1980, vol. II (Second part), pages 101 & following
- ILC Yearbook, 1982, vol. II (First part), pages 79 & following
- ILC Yearbook, 1983, vol. I, pages 185 & following
- ILC Yearbook, 1983, vol. II (First part), pages 165 & following
- ILC Yearbook, 1984, vol. II (First part), pages 107 & following
- ILC Yearbook, 1985, vol. II (First part), pages 91 & following
- ILC Yearbook, 1986, vol. II (First part), pages 91 & following
- ILC Yearbook, 1991, vol. II (First part), pages 47 & following
- ILC Yearbook, 1993, vol. II (First part), pages 163 & following

Other documents

- Sentence du tribunal arbitral franco-espagnol en date du 16 novembre 1957 dans l’affaire de l’utilisation des eaux du Lac Lanoux, *Revue Générale de Droit International Public*, t. LXII, 1958, pages 79 & following
- Directive 2000/60/EC of the European Parliament and Council, of 23 October 2000, which establishes a community action framework in the field of water polices (OJ no. L 327, of 22 December 2000)

List of acronyms

- ILC Yearbook.....Yearbook of the International Law Commission
- Internacional
- Ann. IDI.....Annuaire de l’Institut de Droit International
- ILC.....International Law Commission

OJ Official Journal of the European Communities