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# The UN Convention on International Watercourses and Integrated Water Management: a bridge built

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**Abstract.** The UN Convention on the Law of the Non Navigational Uses of International Watercourses incorporates principles regarding the management of international water resources. The most important principles are the duty of the riparian states to cooperate, not to cause significant harm, to protect the aquatic environment and to utilize the watercourses reasonably and equitably. The lack of hierarchy between these principles signifies that the necessary step for the sound management of shared natural resources is an integrated approach, which takes into account economic development, human needs and environmental protection. Moreover, the UN Convention proved to be useful for the International Court of Justice (hereinafter ICJ) in the settlement of the Gabčíkovo- Nagymaros dispute between Hungary and Slovakia for the Danube River. The Court highlighted the importance of the Convention by reminding the riparian states of their obligation to abide by its principles. On the other hand, the ICJ has used the principles of the Convention in the pending case of Pulp Mills between Uruguay and Argentina. This paper is going to show that the UN Convention is an international legal framework with general guidelines in order to create regional conventions, which promotes integrated water management as a solution to the emerging challenges of international water law and potential future conflicts.

## 1. Introduction

Until 1997 international law had made little progress on the management of international watercourses. The management of transboundary rivers and lakes had been the topic of attention of either riparian states or regional organizations. Treaties and agreements have been concluded, signed and still in effect but they only govern the relationship between states sharing a watercourse or states that are members of an organization. These legal regimes have been regional until recently, given not only the great number of watercourses but also the unique characteristics of each of those watercourses. [1] The international arena lacked a legal text to set the guidelines for the riparian states for the management of shared rivers and lakes.

Soon the international community realized that the management of international rivers and lakes includes the priorities of different users and since most of these watercourses flow between two or more states or form boundaries, the priorities give rise to regional conflicts. [2] Therefore, in May 1997, the General Assembly (hereinafter GA) of the United Nations (hereinafter UN) adopted the Convention on the Law of the Non Navigational Uses of International Watercourses. It is the first international legal instrument on the management of transboundary rivers and lakes; it is the first time that the international community has recognized the necessity to deal with this issue and the

Convention is an attempt to create an international framework with rights and obligations that should be respected by the riparian states.

This paper is going to show that the purpose of the UN Convention is the integrated management of international watercourses. In other words, it aims to provide the states with rules that oblige them to take into account all those factors that are necessary for the management of a shared watercourse. The riparian states when concluding agreements should put under consideration geographical, hydrological, economic, social and environmental factors that are going to assist them in managing their fresh water resource in a sound and sustainable manner.

The first part of the paper is going to present the characteristics of the Convention on International Watercourses and it is going to explain how a cumulative application of the obligations set forth by the articles of the text leads to integrated water management. On the other hand, the second part of the paper is going to deal with water related international disputes before the International Court of Justice (hereinafter ICJ). Specifically, it is going to examine the Gabčíkovo-Nagymaros case and the Pulp Mills case and how the ICJ has tried to settle the disputes according to the integrated approach provided by the UN Convention. The second of the disputes is still pending before the ICJ.

## **2. The Characteristics of the UN Convention on International Watercourses**

This part of the paper is going to attempt a brief overview of the characteristics of the UN Convention on International Watercourses and the obligations that it sets to the riparian states. It is going to demonstrate that the rules of the Convention aim at creating a legal basis for the integrated management of international watercourses by the riparian states.

### *2.1. The UN Convention on the Law of the Non-Navigational Uses of International Watercourses*

The Convention of 1997 is the result of the work of the International Law Commission and it codifies and evolves the law of international watercourses. The definition of an international watercourse, given in article 2 of the Convention, includes both surface and groundwater; this definition is in accordance with the hydrological reality and calls for the riparian states to focus on the relationship between all the parts of the system, not only the parts of the surface but also the groundwater parts, which comprise an international watercourse. Hence, any effect caused in a part of the system is going to affect the freshwater system in *toto*. [3] The articles of the UN Convention provide the states with flexible rules for the management of shared watercourses only if one or more of the states that are members to the UN Convention have not agreed otherwise. [4] For future agreements between member states the rules of the Convention are guidelines, allowing thus the states to keep their contractual flexibility. [5]

The UN Convention has seven parts: the first part is the Introduction (articles 1-4), the second part includes the General Principles (articles 5-10), the third part is the Planned Measures (articles 11-19), the fourth part refers to the Protection, Preservation and Management (articles 20-26), the fifth part comprises of the Harmful Conditions and Emergency Situations (articles 27-28), the sixth part is the Miscellaneous Provisions (articles 29-33) and the seventh part has the Final Clauses (articles 34-37). The major obligations for the riparian states that the international legal text adopts are four: the obligation to cooperate, not to cause significant harm, to utilize their freshwater resources in an equitable and reasonable manner and to protect their ecosystem.

### *2.2. The obligation to cooperate*

The obligation of the riparian states to cooperate is incorporated in article 8 of the UN Convention and it has the title: "General Obligation to Cooperate". The article says: "Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse." Therefore, the obligation set by the article is general. [6]

The obligation of the states that share a freshwater resource is not standing alone in the text of the Convention. On the contrary, it is accompanied by other obligations, which are enhancing the

cooperation between riparian states and could prevent damages to the watercourse and conflicts between the users of the resource.

So, article 9 obliges the states to exchange data and information regularly in order to facilitate the management of international watercourses. In article 12 the riparian states find the obligation to notify each other for planned measures with possible adverse effects, while articles 13-16 elaborate on the reply of the notification, the period for that and the absence of reply. According to article 17, the states sharing a river, a lake or an aquifer should consult and negotiate concerning planned measures. Finally, article 33 includes a form of cooperation, which is the peaceful settlement of disputes between the riparian states.

### *2.3. The obligation not to cause significant harm*

The second important obligation of the Convention on International Watercourses is article 7, the obligation not to cause significant harm to the other users of the resource. This rule does not express an absolute obligation. In other words, the cause of damage is not entirely forbidden. It is only forbidden to cause significant damage, while whenever such damage occurs the states should cooperate for its mitigation and should take all the necessary means for its control, as it is expressed in the second paragraph of article 7.

### *2.4. Equitable and reasonable utilization*

In article 5 we find the cornerstone rule for the management of international watercourses; it is the rule of equitable and reasonable use and participation. The principle of equitable and reasonable utilization obliges the states to certain behaviour and at the same time provides them with a right to act. In other words, a state should use its international watercourse in an equitable way towards the rest of the riparian states, omitting to proceed in actions that could disturb this equity, while on the other hand it has the right to an equitable share of the uses and benefits of the international freshwater resource.

The equitable and reasonable use of shared rivers and lakes can be achieved more efficiently through the cooperation of the riparian states. [7] In accordance with article 5, article 6 of the Convention of 1997 defines the factors that play an important role for the equitable and reasonable use of international watercourses. These factors can be geographic, hydrographic, hydrological, climatic, ecological, social and economics, while the list provided by article 6 is not exhaustive.

### *2.5. The obligation to protect and preserve the ecosystems*

Finally, articles 20-26 regulate the protection and the preservation of the ecosystems of international watercourses. The UN Convention follows an integrated approach, which is necessary for environmental security, as the states have the obligation to preserve and develop their natural resources. [8] Such integrated approach can be achieved only through legal regimes that regulate the ecosystem as a whole and not just the watercourses. The obligations and the rights of the riparian states must be settled according to the region and the needs of the ecosystem. [9]

The lack of hierarchy between these principles of international water law within the UN Convention signifies that the necessary step for the sound management of shared natural resources is an integrated approach that takes into account economic development, human needs and environmental protection. The path curved by the UN Convention is the most appropriate, efficient and aligned with the notion of sustainable development.

## **3. International Case Law on Transboundary Watercourses Disputes:**

This part of the paper is going to focus on two examples of case law that regard the management of international watercourses and have been brought before the ICJ for their adjudication. The first is the case of Gabčíkovo-Nagymaros between Slovakia and Hungary for one of the major European rivers, the Danube. [10] The second case is the Pulp Mills case between Argentina and Uruguay and concerns the Uruguay river and its pollution due to the construction of a paper mill on one side of the river. Contrary to the first one, the second case has not been yet adjudicated by the ICJ and it is the first

environmental dispute that the Court has to settle. Both of these cases are going to demonstrate how the ICJ has tried to apply the rules of the UN Convention in order to guarantee the sustainable development of the rivers and their integrated management.

### *3.1. The Gabčíkovo-Nagymaros case*

In the Gabčíkovo-Nagymaros case the Court highlighted the importance of cooperation between the nine riparian states of the Danube in order to develop commercially and economically. What is necessary to be done for the Danube is also necessary to be done for every international watercourse.[11] Moreover, the ICJ also underlined the obligation to negotiate in good faith; in other words, the Court in its decision of 25/09/2007 said that both Hungary and Slovakia had violated their international obligations and invited both states to negotiate in good faith in order to ensure the purpose of the UN Convention, taking into account the rules of international environmental law and international law on watercourses.

In this case, the ICJ enhanced the importance of adopting preventive measures for the relationship and the sustainable development of the common water resources. One of such measures is environmental impact assessment, which could be considered as one of the ‘appropriate measures’ of article 7 of the UN Convention in the obligation of the states to avoid causing significant harm. In reality, the conduct of environmental impact assessment allows the state that initiates the project to move the burden of proof to the states that have been affected. [12]

In the Gabčíkovo-Nagymaros case the Court seems to adopt the rule of equitable and reasonable utilization, on the grounds that this is the cornerstone rule in the law of international watercourses. According to MacCaffrey, this signifies that the Court is doubtful of the priority of the obligation not to cause significant harm for the settlement of complicated issues of allocation of the uses and benefits of international sources of freshwater. [13]

Finally, the ICJ highlighted the obligation of ecological protection of international watercourses by saying that the development of international law has strengthened the principle of community of benefits on a navigational river for its uses except navigation, as it is demonstrated in the UN Convention. In other words, the principle of equitable and reasonable utilization of an international watercourse reinforces the obligation to protect the ecosystems. [14]

### *3.2. The Pulp Mills case*

In the recent case of Pulp Mills the obligation to negotiate is set by the ICJ. Argentina claims that Uruguay has not abided by the Statute of River Uruguay of 1975 and the obligation to negotiate. The Court, in its decision of 13/06/2006 on the provisional measures that Argentina requested said that the states should proceed with negotiations in good faith, as it is set out in the Statute of 1975 and that the Administrative Committee for River Uruguay is the appropriate forum for their realization.

Moreover, the ICJ referred to the obligation of the riparian states to notify each other on their planned measures. Argentina has initiated the proceedings before the ICJ claiming the violation of the Statute of River Uruguay of 1975, when Uruguay gave its unilateral permission for the construction of a mill near the town of Fray Bentos, without abiding by the obligations to notify and negotiate the project, as they are set out in the Statute of River Uruguay. Argentina also requested by the Court to decide and declare that Uruguay had violated the procedural obligations of the Statute and among others the obligation to prepare environmental impact assessment. As for the settlement of the dispute, in order to ground the jurisdiction of the Court, Argentina refers to the first paragraph of article 60 of the Statute of River Uruguay, which allows that any dispute that regards the interpretation and the application of the Statute, which cannot be settled with direct negotiations can be put before the ICJ by one of the two member states. This is a recent example of the way to settle a dispute that arises over a common watercourse, when at least one of the two parties –Argentina in this case- considers that the negotiations have not resulted in a solution.

Finally, as it is mentioned above, the Pulp Mills case regards the pollution of an international watercourse. Argentina requested the Court to rule on provisional measures for the suspension of the

construction of the two mills on the river on behalf of Uruguay, claiming imminent danger. The Court recognized Argentina's concern for the protection of the environment and connected the present case with the Gabcikovo-Nagymaros case. However, it did not order provisional measures since, according to its opinion the facts on the present dispute have not proven that the construction of the mills threatens the ecosystem of the river and the interests of the citizens. The Court said that Argentina could not prove that the suspension of the mills will be capable of reverting or reconditioning the economic and social consequences that blames Uruguay for. In other words, it is exceptionally difficult to prove the existence of an imminent danger regarding issues of international watercourses. This is probably due to the technical issues, as well as to the legal parameters in analyzing this technical data.

#### 4. Conclusions

This paper has made an attempt to give a brief overview of the international legal framework that governs the management of international watercourses and to present the two most important international disputes that regard transboundary freshwater resources. Its aim was to provide the reader with the necessary information on the principles governing prevailing in international freshwater law and the attempts of the international community to set a regime for sound, sustainable and most of all integrated management of shared rivers and lakes.

The first part of the paper presented the legal text, which has been adopted under the auspices of the UN, the Convention on the Law of the Non Navigational Uses of International Watercourses. The nature of the Convention and its parts have been presented; the obligations of the riparian states have been analyzed, while special attention have been given to the obligation of cooperation, not to cause significant harm, to utilize the watercourse in an equitable and reasonable manner and to protect the ecosystem.

The second part of the paper focused on two international disputes over watercourses; the Gabcikovo-Nagymaros case and the Pulp Mills case. Both of them regard important rivers, such as the Danube and Uruguay. The ICJ tried to apply the principles of the UN Convention and to illuminate their importance for the management of the rivers. Without any doubt, the Court ruled –in the first case with a final judgment and in the second with a judgment on provisional measures- that riparian states should manage their international rivers in an integrated way.

Therefore, according to the international legal text and to international case law, the riparian states should coordinate for the management of shared freshwater resources. They should cooperate, take into consideration the interests of the others, apply equity and preserve the ecosystems. The bridge has been built for the integrated management of our valuable freshwater resources, as the only path for their protection.

#### References

- [1] Butts K H 1997 Parameters, US Army War College Quarterly 66
- [2] Benvenisti E 1996 *American Journal of International Law* **90** 384
- [3] MacCaffrey S C and Sinjela M 1998 *American Journal of International Law* **92** 97
- [4] Hey E 1998 *RECIEL* **7/3** 291
- [5] Calfisch L 1998 *World Bank Technical Paper* **414** 1
- [6] MacCaffrey S C 2000 *Journal of Land Resources and Environmental Law* **20** 57
- [7] MacCaffrey S C 2000 *Journal of Land Resources and Environmental Law* **20** 57
- [8] Dupuy R J 1991 *Colorado Journal of International Environmental Law & Policy* **2** 201
- [9] Brunnee J and Toope S J 1997 *American Journal of International Law* **91** 26
- [10] Liska M B 1995 *The Peaceful Management of Transboundary Resource* 175
- [11] MacCaffrey S C 2001 *The Law of International Watercourses- Non-Navigational Uses* 400
- [12] Farrajota M M 2005 *Water Resources and International Law* 281
- [13] MacCaffrey S C 2001 *The Law of International Watercourses- Non-Navigational Uses* 356
- [14] MacCaffrey S C 2001 *The Law of International Watercourses- Non-Navigational Uses* 392