Implications for cross-border management of potential UK accession to the UN Watercourses Convention

Report to WWF-UK (Final)

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Executive Summary

The purpose of this study is simply to assess the implications for the Northern Ireland authorities of UK accession to the 1997 UN Watercourses Convention, having particular regard to any additional legal obligations, and the associated resource costs, which accession might involve. The study has involved preliminary meetings with officials from the Northern Ireland Department of the Environment and the Loughs Agency, the inter-State agency jointly established to implement the common management regime for the Foyle and Carlingford catchments shared by Northern Ireland and Ireland, in order to identify their key concerns and to better understand the existing elaborate arrangements for transboundary cooperation. It then involved a legal analysis of the substantive and procedural requirements of the Convention itself and of the existing applicable legislative framework, including the EU Water Framework Directive (WFD) and relevant rules of domestic law.

Key Conclusions

- In respect of those areas where the UN Convention and EU Water Framework Directive overlap, both instruments cover the same basic unit of drainage, despite the use of different terminology.
- The UN Convention cannot be understood as introducing ecosystems protection requirements additional to and more stringent than those currently applying under the WFD.
- The detailed substantive rules set out under the Water Framework Directive and other applicable EU environmental directives, as well as under national statutory instruments and common law rules, would more than satisfy the due diligence obligation under the UN Convention to create a regulatory framework for the prevention or reduction of pollution, preservation of ecosystems, and consequent prevention of transboundary harm.
- The substantive principles set out under the UN Convention amount to little more than a codification and restatement of existing obligations applying to both States under customary international law.
- The procedural duties set out under the UN Convention, which are central to the due
 diligence requirements arising under the substantive obligations contained therein, are
 entirely compatible with the more stringent obligations set out under the Water
 Framework Directive and other applicable EU environmental directives, such as the
 EIA and SEA Directives.
- The procedural duties set out under the UN Convention are unlikely to result in any
 delay to the approval of proposed plans or projects in addition to that currently likely
 to be caused by virtue of the existing requirements for EIA under the EIA Directive,
 for SEA under the SEA Directive or for appropriate assessment under the Habitats
 Directive.
- The procedural rules set out under the UN Convention are almost certainly a conventional codification of existing customary rules and so will apply to both States regardless of accession to the Convention.
- No additional requirements in respect of institutional arrangements arise under the UN Convention requiring new mechanisms over and above those already in place for the management of watercourses shared between Northern Ireland and Ireland.

- No additional requirements in respect of dispute settlement, nor any additional exposure for the State or any of its citizens to liability for environmental damage or breach of environmental rules and standards, arise by virtue of UK accession to the UN Convention.
- Accession to the UN Convention would not have any direct or indirect resource implications for the Northern Ireland authorities in terms of administrative or enforcement staff or otherwise.
- Accession to the UN Convention will not give rise to any resource implications by virtue of monitoring requirements or requirements for reporting on compliance or enforcement.

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1. Introduction

The purpose of this study is to investigate, evaluate and summarise the potential and actual implications of UK accession to the 1997 UN Watercourses Convention for cross-border water management on the island of Ireland, having regard in particular to resource implications and potential liability issues. In essence, it is intended to assist officials in Northern Ireland, the United Kingdom and Ireland in advising decision-makers considering national accession to the Convention. It purports to present an analysis of the substantive and procedural requirements of the Convention itself and of the existing applicable legislative framework, including the EU Water Framework Directive (WFD) and selected rules of domestic law which relate to areas of activity also covered by the Convention. Of course, the UN Convention can largely be understood as a comprehensive and authoritative codification of already existing rules of customary international law, which apply to all States regardless of their accession to the Convention.

Therefore, the study focuses on a comparative analysis of the UN Watercourses Convention, applicable rules of customary international law, and the currently applicable WFD with a view to identifying any additional obligations, and the associated resource costs, which accession to the Convention might involve. As well as an examination of the core primary legal sources, *i.e.* the text of the UN Convention, the WFD, and further selected instruments, the study also relied on secondary sources, such as relevant case law of the European Court of Justice, and seminal academic literature on the historical evolution and practical implementation of the key requirements of the UN Convention and of the key requirements of applicable customary international law.

In order fully to understand the potential implications for the national authorities of accession to the UN Convention, it is necessary have a clear understanding of existing cross-border water management practices and institutions, as well as an overview of the applicable legislative framework. Therefore, preparatory meetings were conducted with Mr. Philip McMurray, official with the Water Policy Team at the Northern Ireland Department of the Environment, Mr.Gabriel Nelson, official with the Water Management Unit at the Northern Ireland Environment Agency and Mr. John McCartney, Director of Conservation and Protection of the Loughs Agency, the inter-State agency jointly established by the governments of the UK and the Republic of Ireland to implement the common management regime for the Foyle and Carlingford catchments shared by Northern Ireland and Ireland, established under legislation dating back to 1952. Indeed, the current level of North-South cooperation on shared watercourses can only be described as exemplary, going far beyond that which would be required under the UN Convention and resulting in a very comprehensive and effective regime for fisheries conservation and environmental protection for both international watercourses. Whereas the timeframe available for the initial conduct of this study, and the preparation of this draft report, did not permit detailed consultation with other interested bodies, such as the UK Department of Environment, Food and Rural Affairs (DEFRA) or the relevant authorities in Ireland, it is intended that these stakeholders might have an opportunity to make submissions on the basis of this draft.

A number of central issues and concerns were identified in the course of these meetings. Of primary concern was the need to ascertain that the requirements of the UN Convention do not include any new or additional substantive or procedural obligations which are not already imposed under the WFD and the provisions introduced in national law for its transposition, or under the rules and principles of customary international law. Closely related to this issue is

the question of whether accession to the Convention would be likely to give rise to any significant resource implications in terms, for example, of new institutional arrangements or additional reporting obligations. The officials interviewed were also concerned to ensure that the quite detailed procedural and informational requirements of the UN Convention should not result in undue delay of plans or projects with the potential to impact upon the shared international watercourses or their dependent ecosystems. In addition, these officials were concerned to ensure that the authorities in Ireland should be made aware of this study and of its findings, in a manner consistent with the spirit of cooperation which characterises North-South water relations in Ireland. Of course, although the main focus of this study has been to assess the implications of accession to the UN Convention for the Northern Ireland authorities, it is quite clear that many of the conclusions reached may also be of interest to, and apply in, Ireland.

As regards the basic structure of this study, it commences with an examination of the scope of application of both the UN Convention and the WFD and, thus, of the degree of overlap and correspondence between both instruments. It next examines the substantive rules and principles of the UN Convention and of international water law more generally, including the cardinal principle of equitable and reasonable utilisation, the obligation to prevent significant harm to other watercourse States, and the various obligations relating to the environmental protection of international watercourses, and compares these to the detailed substantive obligations set down under the WFD and related EU environmental directives as well as under national transposing legislation. The study also assesses the extent to which the substantive principles set down under the UN Convention are also customary in nature and, therefore, binding upon all States. The study then examines the nature and role of the detailed procedural obligations set out under the UN Convention. It then assesses the possible institutional implications of UK accession to the UN Convention in terms of any requirement to establish new and additional mechanisms for cooperation, before proceeding to examine the possible implications of the Convention's provisions on dispute settlement in the light of the existing arrangements applying to both EU Member States under the Brussels and Lugano Conventions. Finally, before concluding, the study examines whether the UN Convention could have any resource implications by virtue of monitoring requirements or requirements for reporting on compliance or enforcement.

2. Scope of Application of Legal Rules

As regards the scope of application of the UN Watercourses Convention and the EU Water Framework Directive (WFD) there would appear on first reading to be something of a mismatch as regards the type of water resources, the classes of freshwater bodies, and the unit of drainage covered by each instrument. First of all, the WFD aims at 'the protection of inland surface waters, transitional waters, coastal waters and groundwater', whereas the UN Convention only 'applies to uses of international watercourses and of their waters for purposes other than navigation and to measures of protection, preservation and management related to the uses of those watercourses and their waters'. Therefore, while the WFD encompasses freshwater as well as coastal and estuarine salt and brackish waters, the UN Convention is only concerned with the utilisation and protection of freshwater resources, except to the extent that watercourse States are expected to take measures to protect the

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¹ Article 1.

² Article 1(1).

marine environment.³ Secondly, the WFD encompasses both national as well as shared international water resources and all types of aquifers, whereas the UN Convention is only concerned with international (*i.e.* transboundary) watercourses and aquifers connected to such an international surface water system.⁴ Finally, as regards the nature of the hydrological unit to be subjected to legal management, the WFD adopts a river basin approach⁵ while the UN Convention employs the seemingly narrower concept of the watercourse.⁶

However, the fact that the scope of one instrument does not correspond precisely with that of the other, does not necessarily imply any inconsistency or incongruity as between the instruments. While the scope of application of the WFD is undoubtedly broader than that of the UN Convention, the key issue is that of the compatibility of the substantive and procedural rules established under each instrument where the scope of application of both overlaps, *i.e.* in respect of shared transboundary watercourses, of which two are formally recognised between the territory of Northern Ireland and the Republic of Ireland, the Foyle and Carlingford catchments. Importantly, the area of overlap between the two instruments includes the entire scope of application of the UN Convention, so that UK accession to the Convention would not introduce additional areas to be regulated which are not currently covered by the WFD.

In addition, though the UN Convention appears at first glance to employ the significantly narrower 'watercourse' concept, 8 rather than the 'river basin' approach adopted under the WFD, Article 1(1) of the Convention can be understood to mean that the Convention 'applies to land-based activities taking place within the river basin, and which might affect the protection, management or preservation of an international watercourse'. Further, the

³ Article 23 requires watercourse States to

^{&#}x27;take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, including estuaries'.

⁴ Some recent attempts at the articulation and codification of customary international law relating to international water resources have attempted to integrate the rules applying to international and to purely national watercourses, notably the International Law Association's 2004 Berlin Rules on International Water Resources Law, available at http://www.internationalwaterlaw.org/documents/intldocs/ILA Berlin Rules-2004.pdf However, in light of the fundamental principle of territorial sovereignty, this approach has little, if any, basis in international law.

any, basis in international law.

⁵ Under Article 3, Member States must identify "river basin districts" throughout the territory of the EU to which all water resources are to be assigned, and which are defined under Article 2(15) as

^{&#}x27;the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters ... identified ... as the main unit for management of river basins.'

⁶ Defined under Article 2(a) as

^{&#}x27;a system of surface waters and ground waters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus'.

⁷ For details on these catchments, see http://www.loughs-agency.org/site/ See also, Working Together – Managing our Shared waters: The North Western International River Basin District (December 2008) and Working Together – Managing our Shared waters: The Neagh Bann International River Basin District (December 2008). In relation to a third IRBD extending into Northern Ireland territory, the Shannon International River Basin District, as only a very small portion of the basin lies in Northern Ireland, the drafting of the plan has been led by the authorities in the Republic, though full consultation has been maintained with the authorities in Northern Ireland, who are represented on the Shannon District's Steering Group.

⁸ For an account of the deliberation of the International Law Commission (ILC) on this issue, see O. McIntyre, Environmental Protection of International Watercourses under International Law (Ashgate Publishing, Aldershot, 2007), 45-48.

⁹ Supra, n. 2. See A. S. Rieu-Clarke, P. Wouters and F.Loures, *The Role and Relevance of the UN Convention on the Law of the Non-navigational Uses of International Watercourses to the EU and its Member States*

inclusion in the UN Convention of the so-called 'ecosystems approach' to environmental protection of the watercourse would appear to enhance legal recognition of the physical unity of drainage basins and, thus, to extend the jurisdictional scope of the Convention, and arguably of customary international law on water resources, well beyond the confines of the 'watercourse'. Commenting on the International Law Commission (ILC) Draft Articles, which preceded the adoption of the UN Convention, leading authorities suggested that 'the ILC may be said to have brought much of the basin approach into the Draft Articles, while avoiding overt use of controversial terminology.' Therefore, the approach taken under both instruments in relation to the basic unit of drainage, and thus to the scope of application of each instrument, is broadly similar, at least at regards their area of overlap. At any rate, the UN Convention could not be understood as introducing ecosystems protection requirements additional to and more stringent than those currently applying under the WFD.

3. Substantive Rules and Principles

The substantive rules set out under the UN Convention can be categorised as falling into three groups. First of all, the requirement for all watercourse States to utilise an international watercourse in an equitable and reasonable manner; secondly, the duty imposed upon watercourse States to prevent significant transboundary harm to other watercourse States; and thirdly, various substantive requirements relating to environmental protection of the shared watercourse(s) in question. The cardinal rule of international water resources law, and thus the primary substantive rule as set out under the UN Convention, is that of equitable and reasonable utilisation, which enjoys 'overwhelming support ... as a general guiding principle of law for the determination of the rights of States in respect of the non-navigational uses of international watercourses'. The relationship between this complex principle and the duty to prevent significant harm, and to a lesser extent the other substantive rules, was the focus of much discussion, both in the deliberations of the ILC and in academic commentary. However, it is now quite apparent that the duty of prevention of harm and other substantive rules are subject to the principle of equitable and reasonable utilisation and subordinate to the overall balancing of interests of States involved therein.

(University of Dundee, Centre for Water Law, Policy and Science), at 11, citing S. McCaffrey, *The Law of International Watercourses* (OUP, Oxford, 2001), at 34-50.

¹⁰ McIntyre, *supra*, n. 8, at 47-48. See further, O. McIntyre, 'The Emergence of an "Ecosystems Approach" to the Protection of International Freshwaters under International Law', (2004) 19/1 *Review of European Community and International Environmental Law* 1.

¹¹ J. Brunée and S. J. Toope, 'Environmental Security and Freshwater Resources: A Case for International Ecosystem Law', (1994) 5 *Yearbook of International Environmental Law* 41, at 60. They further contend that 'the question of ecosystem orientation is addressed ... implicitly, through the reach of other rules suvch as those prohibiting harm to other watercourse States and their environment, rather than through the provision on scope'.

See also, J. Brunée and S. J. Toope, 'Environmental Security and Freshwater Resources: Ecosystem Regime Building', (1997) 91/1 *American Journal of International Law* 26.

¹² For example, Article 1(a) of the WFD lists first among the Directive's purposes, the establishment of a framework which

^{&#}x27;prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems'.

¹³ Second Report of Special Rapporteur McCaffrey (1986) ILC Yearbook, vol. 2, part 2, para. 169.

¹⁴ See further. McIntyre, *supra*, n. 8, at 104-116.

¹⁵ For example, Article 7 of the UN Convention, which sets out the duty to prevent significant harm, itself provides, in Article 7(2) that watercourse States whose use of a watercourse causes significant harm 'shall take all appropriate measures, *having due regard for the provisions of articles 5 and 6*', which set out the principle of

3.1 Equitable and Reasonable Utilisation

As suggested, the principle of equitable and reasonable utilisation is a somewhat vague and flexible principle whereby the utilisation rights of riparian States are to be determined in conformity with the concepts of equity and reasonableness, taking all relevant circumstances into consideration. It is the principle's inherent flexibility which makes it applicable to all shared watercourse systems, regardless of their geophysical, social or economic diversity, and its legal indeterminacy which makes it universally acceptable to riparian States. However, any modern articulation of the principle includes a non-exhaustive list of factors which are likely to be relevant to the equitable and reasonable utilisation of the shared watercourse and, therefore, which ought to be considered by watercourse States. 16 These factors have been identified on the basis of State practice globally and so are predominantly concerned with the allocation of quantum share of water between States in water-stressed regions, though they also apply to the allocation of uses of watercourses and water resources where quantum is not an issue. In the latter situation, the principle is primarily concerned with the environmental requirements and consequences of incompatible uses. Environmental protection and sustainability requirements are inherent to the formulation of equitable and reasonable utilisation employed in the UN Convention¹⁷ and this element has tended to enjoy ever increasing emphasis in recent years. ¹⁸ Clearly, in the case of watercourses shared between Northern Ireland and Ireland, where quantum share of water is unlikely ever to become a key concern, the requirements of environmental and ecological protection are of central relevance.

As explained further below, in the case of such a principle, which essentially creates a mechanism for considering and negotiating the legitimate interests and concerns of States, the pivotal role is played by procedural rules, which function to facilitate its practical application. According to one leading commentator, the concept of equitable and reasonable utilisation can be understood as a

equitable and reasonable utilisation. See further, McCaffrey, *supra*, n. 9, who asserts, at 357, that this formulation

'makes it functionally equivalent to the doctrine of equitable utilization' and that it 'is not only fully compatible with that of equitable utilization , it essentially merges with the latter principle'.

- ¹⁶ See Article 6(1) of the UN Convention, which as relevant factors:
 - (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
 - (b) The social and economic needs of the watercourse States concerned;
 - (c) The population dependent on the watercourse in each watercourse State;
 - (d) The effects of the use or uses of the watercourse in one watercourse State on other watercourse States;
 - (e) Existing and potential uses of the watercourse;
 - (f) Conservation, protection, development and economy of use of the water resource of the watercourse and the costs of measures taken to that effect;
- (g) The availability of alternatives, of comparable value, to a particular planned or existing use. ¹⁷ For example, Article 5(1) refers to the objectives of attaining 'sustainable utilization' and 'adequate protection of the watercourse', while Article 6(1)(a) refers to 'ecological' factors, Article 6(1)(d) to the 'effects of the use or uses ... on other watercourse States', and Article 6(1)(f) to 'conservation, protection ... and economy of use of the water resources of the watercourse'.
- ¹⁸ For a detailed discussion of this aspect of the principle, see McIntyre, *supra*, n. 8, at 359-380. Also, it is worth noting that the two cases relating to shared international rivers brought before the International Court of Justice in recent years have revolved around environmental issues: *Case Concerning the Gabčí kovo-Nagymaros Project (Hungary v. Slovakia)*, (1997), ICJ Reports 7; *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, International Court of Justice, 20 April 2010.

'method aimed at determining the utilization rights of riparian states, containing in particular the ways and means of settling conflicts of interest according to the prerequirements of equitability and reasonableness, on the one hand, and the procedure to be applied to achieve this end, on the other.' 19

In setting out the closely related concept of 'equitable participation', Article 5(2) of the UN Convention suggests the key role of participative procedural rules, which are generally included under the rubric of the duty of cooperation.²⁰

3.2 Duty to Prevent Significant Transboundary Harm

Though the principle of equitable and reasonable utilisation is the prevailing rule, the UN Convention, in line with all other significant codifications of ²¹ and conventions relating to ²² international water resources law, includes a second and closely related substantive rule concerning the obligation of States, in utilising an international watercourse, not to cause significant harm to other watercourse States. ²³ This obligation is clearly established in customary international law and can be traced back to the *Trail Smelter* arbitration ²⁴ and to Principle 21 of the 1972 Stockholm Declaration on the Human Environment. ²⁵ Though relating to a much broader notion of 'harm' to the interests of neighbouring watercourse States, the obligation contained in Article 7 of the UN Convention has obvious significance for the environmental protection of the watercourse itself ²⁶ and, thus, for the safeguarding of those States' interests in using the watercourse or its waters.

It is important to understand that this duty does not create an absolute obligation as to result but, rather, an obligation as to the conduct of watercourse States, based on internationally accepted standards of "due diligence". ²⁷ In relation to such conventional provisions one commentator notes that

'Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.

'Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.'

¹⁹ J. Bruhacs, *The Law of Non-Navigational Uses of International Watercourses* (Martinus Nijhoff, Dordrecht, 1993), at 159.

²⁰ Article 5(2) provides in full

²¹ For example, Article X of the ILA's Helsinki Rules deals with the duty to prevent 'substantial injury in the territory of a co-basin State' by virtue of 'water pollution. See *Report of the Fifty-Second Conference of the International Law Association* (Helsinki, 1966).

²² For example, Articles 2 and 3 of the 1992 UNECE Convention on the Protection and Use of Transboundary

²² For example, Articles 2 and 3 of the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (1992) 31 *ILM* 1312, focus on prevention, control and reduction of 'transboundary impact'.

²³ Article 7(1) of the UN Convention provides

²⁴ Trail Smelter Arbitration (U.S. v. Canada) (1941) 3 RIAA 1911, at 1964.

²⁵ Adopted at the 1972 United Nations Conference on the Human Environment, UN Doc. A/CONF.48/14.

²⁶ An examination of international treaty practice at the river basin level reveals substantive provisions dealing with, *inter alia*, minimum flow requirements, the prevention of harmful effects, the protection of water quality, and the application of clean technologies. See McIntyre, *supra*, n. 8, at 87-88.

²⁷ A. Tanzi and M. Arcari, *The United Nations Convention on the Law of International Watercourses* (Kluwer Law International, The Hague, 2001), at 152. The Commentary to the ILC 1994 Draft Articles refers approvingly to the definition of "due diligence" provided in the *Alabama* case which describes the concept as 'a diligence proportioned to the magnitude of the subject and to the dignity and strength of the power which is exercising it' and as 'such care as governments ordinarily employ in their domestic concerns'. See International

'It is clear that such agreements do not establish the strict obligation not to pollute (obligation of result), but only the obligation to "endeavour" under the due diligence rule to prevent, control and reduce pollution. For this reason the breach of such obligation involves responsibility for fault (*rectius*: for lack of due diligence).'²⁸

Therefore, the fulfilment of the due diligence obligation under Article 7 will usually involve the adoption, and effective enforcement, at the national or regional level, of appropriate legislative and administrative standards relating to environmental protection generally and to water pollution in particular. This requirement was recently stressed by the International Court of Justice in the *Pulp Mills* case, where the Court held that the obligation on the States to adopt rules and measures individually and within their domestic legal systems comprises a due diligence obligation as to the conduct of States, rather than an absolute obligation as to result.²⁹ In addition, in the absence in the UN Convention of detailed and strict substantive standards on the prevention of transboundary harm, which would have been inappropriate given the wide variety of natural, geographic, social, economic and political characteristics of river basins, compliance with the procedural rules set down therein is key to fulfilling the due diligence obligation under Article 7. Once again, in the *Pulp Mills* case the International Court of Justice stressed the 'functional link' between the procedural obligations to inform, notify and negotiate and the substantive obligation to prevent transboundary harm, which are 'intrinsically linked'. 30 Indeed, the Court expressly recognised the central significance of cooperative machinery, including procedural requirements and institutional arrangements, for both the principle of equitable and reasonable utilisation³¹ and the duty to prevent transboundary harm.³²

3.3 Environmental Protection

In addition to the environmental protection values embedded within the key substantive principles of equitable and reasonable utilisation and prevention of transboundary harm, the UN Convention elsewhere sets out express substantive obligations for watercourse States relating to environmental protection. These include an obligation to protect the ecosystems of international watercourses, to prevent significant harm from pollution, to prevent the introduction of new or alien species, and to protect the marine environment. These environmental rules remain, however, very closely connected with the two former substantive obligations. For example, the ILC considered the obligation to protect and preserve the ecosystems of international watercourses as an application of the requirement under Article 5 that, in pursuing equitable and reasonable use, States shall use international watercourses 'consistent with adequate protection' thereof. Similarly, it is quite clear that these environmental provisions serve to elaborate upon the normative meaning of the Article 7 duty

Law Commission, *Report of the International Law Commission on the Work of its Forty-Sixth Session* (1994), UN Doc. A/49/10/1994, at 236-237.

²⁸ R. Pisillo-Mazzeschi, 'Forms of International Responsibility for Environmental Harm', in F. Francioni and T. Scovazzi (eds.), *International Responsibility for Environmental Harm* (Graham & Trotman, London, 1991) 15, at 19.

²⁹ Supra, n. 18, Judgment, paras. 195-7. See O. McIntyre, 'The Proceduralisation and Growing Maturity of International Water Law: *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)* International Court of Justice, 20 April 2010', (2010) 22/3 *Journal of Environmental Law* 475-497, at 484-5. ³⁰ *Ibid.*, paras. 68 and 72.

³¹ *Ibid.*, *paras.* 75-6.

³² *Ibid.*, para. 77.

³³ Articles 20-23.

³⁴ Commentary of Article 20, *supra*, n. 27, para. 3.

of prevention in the case of environmental harm. According to leading commentators, the UN Convention is intended to apply 'one common standard of due diligence with regard to the no harm rule on the one hand, and the obligations of protection and preservation [of the environment and ecosystems of the international watercourse] provided for in Part IV on the other'. ³⁵ Indeed, the UN General Assembly's Working Group on the Convention appended an Interpretive Statement to its Report relating to Articles 21-23 which stated that '[a]s reflected in the commentary of the International Law Commission, these articles impose a due diligence standard on watercourse states'. ³⁶

Part IV of the UN Convention takes a broad ecosystems approach to the protection of international watercourses, not only making express provision for the protection and preservation of ecosystems,³⁷ but also for the introduction of alien or new species³⁸ and protection and preservation of the marine environment from impacts related to international watercourses.³⁹ These elements, along with the requirement to maintain minimum ecological flows, which can be inferred from Article 20, are commonly identified with an approach that focuses on the preservation of ecosystems dependent upon watercourses.⁴⁰ In addition, Article 21 provides an unusual level of detail in respect of the prevention, reduction and control of pollution.⁴¹ Article 21(2) provides that

'Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in the connection.'

Further, Article 21(2) provides that

'Watercourse States shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as:

- (a) Setting joint water quality objectives and criteria;
- (b) Establishing techniques and practices to address pollution from point and non-point sources;
- (c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.'

'Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses.'

'Watercourse States shall take all measures necessary to prevent the introduction of species, alien or new, into an international watercourse which may have effects detrimental to the ecosystem of the watercourse resulting in significant harm to other watercourse States.'

'Watercourse States shall, individually and, where appropriate, in cooperation with other States, take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, including estuaries, taking into account generally accepted international rules and standards.'

³⁵ Tanzi and Arcari, *supra*, n. 27, at 154.

³⁶ UN Doc. A/51/869 (1997), at 5.

³⁷ Article 20 states

³⁸ Article 22 states

³⁹ Article 23 states

⁴⁰ See generally, McIntyre, *supra*, n. 10.

⁴¹ Under Article 21(1), "pollution of an international watercourse" is broadly defined to mean 'any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.'

3.4 Conclusions in respect of Substantive Obligations

Therefore, though the principle of equitable and reasonable utilisation remains the cardinal rule of international water law, the general obligation to prevent significant harm and, in particular, the more specific obligation to prevent harm caused by pollution of an international watercourse, occupies an absolutely central position under the UN Convention. In addition to the inclusion of express provisions on environmental and ecosystems protection, the inclusion of the reference to 'sustainable utilization' in Article 5(1) 'further enhances the applicability of the basic water law principles to the environmental protection of the watercourse'. ⁴² Indeed, one very influential commentator observes that 'states increasingly treat pollution of international watercourses and degradation of aquatic ecosystems as a special form of harm, subject to a somewhat different regime from that applicable to allocation and utilization in general'. ⁴³ The Commentary to the International Law Association's 2004 Berlin Rules on Water Resources Law reaches a similar conclusion and categorically asserts that '[t]he customary international law dealing with international environmental problems has long made clear that environmental harm deserves special attention from other kinds of harm generally'. ⁴⁴ The current author has elsewhere suggested that

'possibly the single most important element in facilitating the effective consideration of environmental values within the equitable balancing process that is so central to the principle of equitable utilization is that of the extent of the detailed elaboration of environmental rules and principles in recent years and their consequent degree of normative specificity and sophistication.'

This point is aptly illustrated by the environmental protection requirements applying under the WFD and related EU environmental legislation. Of course, in respect of the watercourses shared between Northern Ireland and Ireland, where scarcity of water resources is not a key issue, environmental protection, and in particular the sustainable management of fisheries, is the primary concern. ⁴⁶

The primary substantive requirements of the WFD are environmental in nature and are set out in very considerable detail, reflecting the relative sophistication of the EU legal framework for environmental protection. Article 1 of the Directive sets out the instrument's key purpose, 47 while Article 4 sets out a range of environmental objectives for surface waters,

⁴⁴ ILA, *Berlin Rules on Water Resources Law* (2004), at 17. Available at http://www.internationalwaterlaw.org/documents/intldocs/ILA Berlin Rules-2004.pdf
⁴⁵ McIntyre, *supra*, n. 8, at 379.

(a) prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems;

(b) promotes sustainable water use based on a long-term protection of available water resources;

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⁴² Tanzi and Arcari, supra, n. 27, at 177. Indeed, in 1997 the International Court of Justice in the *Gabčíkovo-Nagymaros* case, *supra*, n. 18, closely linked the principle of equitable and reasonable utilisation to the principle of sustainable development, thus effectively confirming the significance of environmental considerations within the balancing process at the core of the former principle, and thus of international water law. See Judgment, para. 140 and Separate Opinion of Vice-President Weeramantry, Part A. This position was reiterated in the *Pulp Mills* case, *supra*, n. 18, Judgment, paras. 75-6 and 177.

⁴³ McCaffrey, *supra*, n. 9, at 364.

⁴⁶ This focus on fisheries reflects the traditional economic use of rivers in areas concerned.

⁴⁷ These include the establishment of a framework which

groundwater and protected areas.⁴⁸ The key aim is that of achieving "good water status" in all EU waters by 2015, with the criteria for determining such status assessed on the basis of detailed qualitative and quantitative factors set out under Annex V to the Directive. 49 Therefore, the substantive obligations in respect of environmental protection under the WFD, in conjunction with other applicable EU directives⁵⁰ are significantly more detailed, more comprehensive and more stringent than any obligations contained under the UN Convention. Consequently, the extensive corpus of UK and Northern Ireland legislation on water pollution, much of which is intended to transpose EU requirements into national legislation, creates a regulatory framework which extends significantly beyond the substantive requirements which can be identified under the UN Convention.⁵¹ The Foyle Fisheries Act (Northern Ireland) 1952, as amended, the key instrument of primary legislation applying to the two principal international watercourses shared between Northern Ireland and Ireland, is chiefly concerned with the protection of fisheries⁵² though also with pollution of waters⁵³ and, along with the many statutory instruments adopted thereunder, ⁵⁴ would more than satisfy the due diligence obligation under the UN Convention to create a regulatory framework for the prevention or reduction of pollution, preservation of ecosystems, and consequent prevention of transboundary harm. 55 The Foyle Fisheries Act, which uniquely constitutes a

(c) aims at enhanced protection and improvement of the aquatic environment, inter alia, through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing out of discharges, emissions and losses of the priority hazardous substances;

(d) ensures the progressive reduction of pollution of groundwater and prevents its further pollution.

48 In respect of surface waters, Article 4(1)(a) provides, *inter alia*, that

- (i) Member States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water ...
- (ii) Member States shall shall protect, enhance and restore all bodies of surface water ... with the aim of achieving good water status at the latest 15 years after the date of entry into force of this Directive ...
- (iv) Member States shall implement the necessary measures ... with the aim of progressively reducing pollution from priority substances and ceasing or phasing out emissions and losses of priority haxardous substances

⁴⁹ For example, in respect of surface waters, the quality elements for classification of ecological status are grouped under the following headings: biological elements; hydromorphological elements supporting the biological elements; chemical and physico-chemical elements supporting the biological elements; and specific pollutants.

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⁵¹ See the Water (Northern Ireland) Order 1999, S.I. No. 662 of 1999, which sets out detailed provisions on, *inter alia*, the functions of the Department of Environment, quality objectives, prevention of water pollution, water abstraction and impounding, enforcement, pollution control registers, and discharge consents.

⁵² Part IV of the Foyle Fisheries Act (Northern Ireland) 1952.

⁵³ Section 41 of the Foyle Fisheries Act 1952, as amended by section 15 of the Foyle and Carlingford Fisheries Act 2007.

⁵⁴ See, for example, the Foyle Area and Carlingford Area (Course Angling) Regulations 2009, the Foyle Area and Carlingford Area (Conservation of Eels) Regulations 2009, and the Foyle Area and Carlingford Area (Control of Fishing) Regulations 2010.

⁵⁵ For example, in the *Pulp Mills* case, *supra*, n. 29, Judgment, para. 184, the ICJ examined the parties' obligation to coordinate measures to avoid changes in the ecological balance of the Uruguay River and found that they had effectively discharged it by means of the promulgation of relevant standards by CARU, the bilateral river basin commission established by the parties. The Court also considered the obligation of the States concerned to adopt rules and measures individually and within their domestic legal systems, which it

common statutory framework simultaneously adopted under both the UK and Irish legal systems, might be regarded as an exemplar of the type of inter-State cooperation envisaged under Article 21 of the UN Convention, especially when considered in conjunction with the WFD and the other standards of EU water law which bind both States. Of course, in respect of the basins shared by Northern Ireland and Ireland, the work of the Loughs Agency and the Northern Ireland Environment Agency ensures that this regulatory framework is actively and efficiently policed and enforced. This legal framework is further augmented by the existence of common law grounds of action and remedies and by the application of other statutory environmental controls, such as those relating to waste management, hazardous substances or statutory nuisance.

It must also be remembered that the substantive principles set out under the UN Convention amount to little more than a codification or restatement of existing obligations applying to States under customary international law. Indeed, the restatement of these principles in the UN Convention has greatly enhanced their customary status, and thus their justiciability, even if the Convention should never enter into force. At any rate, the detailed rules necessary for the practical implementation of the broad substantive principles of international water law have long been in place by virtue of the WFD or other EU environmental legislation and / or by virtue of the comprehensive corpus of national environmental rules in force in both Northern Ireland and Ireland. For example, the measures required under Article 11 of the WFD include those required 'to promote an efficient and sustainable water use in order to avoid compromising the achievement of the [environmental] objectives specified in Article 4',⁵⁷ 'a requirement for prior regulation ... for point source discharges liable to cause pollution', ⁵⁸ and 'measures to prevent or control ... diffuse sources liable to cause pollution'. ⁵⁹ As the duty of prevention under Article 7 of the UN Convention is a due diligence obligation requiring, substantively, the adoption and effective implementation and enforcement of adequate national or bilateral controls, the UK authorities, and those in Ireland, need have no concerns about incurring State liability to pay compensation for significant transboundary harm under Article 7. The national or bilateral measures are clearly in place in respect of the shared basins, along with the institutional machinery necessary for their effective enforcement.

4. Procedural Rules and Principles

One of the most significant contributions of the UN Convention to general international water resources law is the detailed articulation of a set of procedural rules which States must observe when contemplating "planned measures". Essentially, these provisions require the State planning new uses of the watercourse or its waters or the permitting of new

found, at paras. 195-7, to be distinct from, but complementary to, the cooperative regulatory functions and to comprise a due diligence obligation as to the conduct of the States, rather than an absolute obligation as to result.

⁵⁶ Whereas the Loughs Agency has responsibility for controlling pollution impacting upon fisheries in the Foyle and Carlingford catchments, general responsibility for both point source and non-point source pollution comes under the remit of the Northern Ireland Environment Agency in Northern Ireland and the Environmental Protection Agency in Ireland.

⁵⁷ Article 11(3)(c).

⁵⁸ Article 11(3)(g).

⁵⁹ Article 11(3)(h).

⁶⁰ UN Convention, Part III, comprising Articles 11-19. Rieu-Clarke, Wouters and Loures refer to these provisions as "implementation instruments", *supra*, n. 9, at 14-15.

infrastructure, facilities or operations which might impact on other watercourse States to notify such other States and, where they object, to enter into consultations and negotiations with a view to reaching a resolution. These provisions are quite detailed requiring, for example, that the notifying State shall provide any additional information requested and shall not implement or permit the planned measures during the six month period for reply. Clearly, these procedural and informational requirements play a very significant role in the effective practical implementation of the substantive rules discussed above. For example, according to Prof. Stephen McCaffrey, probably the world's leading authority on international water resources law,

'The obligation of equitable and reasonable utilization is thus best understood as a *process*. A state's fulfilment of this obligation is dependent upon the regular receipt from other states of data and information concerning the watercourse, its provision of prior notification to other states of new uses that might affect them, and its conducting TEIAs [Transboundary Environmental Impact Assessments] to determine when activities in its territory might adversely affect other states' utilization of the watercourse. The same is, of course, true of other states sharing the watercourse.'62

Indeed, emphasising the central importance of procedural and participatory requirements, Article 5(2) of the UN Convention includes the principle of equitable and reasonable participation as the natural corollary of the principle of equitable and reasonable utilisation. Article 5(2) in turn links such participation to the general obligation on States to cooperate, which is set out in Article 8. 64

In acknowledging the 'functional link' between procedural and substantive obligations, in the *Pulp Mills* case the International Court of Justice went some way towards clarifying the respective roles of the interrelated hierarchy of substantive and procedural rules commonly found in treaty regimes and, by implication, in general international law. While the well-established principle of equitable and reasonable utilisation, and the closely related duty of prevention of transboundary harm, sit atop this hierarchy, the generality of the former and the due diligence nature of the obligations contained in the latter require that they must be made normatively operational by means of a number of procedural requirements, including the duties to notify, to consult and negotiate, and to exchange information; obligations commonly grouped together under the duty to cooperate. The Court noted that 'the two categories of obligations mentioned above complement one another perfectly, enabling the parties to achieve ... the optimum and rational utilisation of the River Uruguay'. The Court

⁶¹ Article 14.

⁶² *Supra*, n. 9, at 343.

⁶³ Article 5(2) provides in full:

^{&#}x27;Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.'

⁶⁴ Article 8(1) provides in full:

^{&#}x27;Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.'

65 Supra, n. 18, Judgment, para. 77, where the Court further observed that:

^{&#}x27;whereas the substantive obligations are frequently worded in broad terms, the procedural obligations are narrower and more specific, so as to facilitate the implementation [of the 1975 Statute] through a process of continuous consultation between the parties concerned.'

It is worth noting that Article 5(1) of the UN Convention describes the ultimate aim of watercourse States' equitable and reasonable utilisation and participation in the management of an international watercourse as that of 'attaining optimal and sustainable utilization thereof'.

recognised the central importance of cooperative machinery, including procedural requirements and joint institutional arrangements, for both the principle of equitable and reasonable utilisation, ⁶⁶ which it once again linked to sustainable development, ⁶⁷ and the duty to prevent transboundary harm. ⁶⁸ Indeed, the current author has elsewhere observed that 'this ''proceduralisation'' of international water law might be regarded as indicative of the growing maturity of this body of rules'. ⁶⁹

However, by far the most significant aspect of the *Pulp Mills* judgment for the development of international water law, and of international environmental law generally, is its finding that EIA is absolutely essential for effective notification of neighbouring States in respect of planned activities or projects which might cause transboundary harm. 70 Consistent with its understanding of the interrelated role of procedural and substantive obligations in this area, the Court also found that States must conduct an EIA in order to satisfy the due diligence requirements of the duty of prevention. ⁷¹ Indeed, the Court described the obligation to conduct an EIA as a 'requirement under general international law'⁷² and stated it in such a way as to leave no room for doubt that it applies generally to the duty of prevention of significant transboundary harm under customary international law, as endorsed in countless instruments, including Article 7 of the UN Convention and Rio Principle 2. Therefore, the Court has now confirmed what many commentators had long suspected, 73 *i.e.* that the transboundary aspects of the EIA study process play an absolutely pivotal role in facilitating realisation of many of the procedural rights and duties arising under the rubric of the duty to cooperate in good faith, including the duty to notify, consult and, if necessary, enter into negotiations with States likely to be affected. Of course, effective notification would consist of the transmission of the early results of a draft Environmental Impact Statement (EIS) produced as a result of an EIA study, whereupon the States concerned might, for example, consult in relation to the adequacy of the study and negotiate over whether further impacts should be considered or whether any mitigation measures identified would prove adequate and effective. In other words, the EIA process provides a universally accepted methodology for the generation, collation and presentation of information on impacts, upon which the duties to notify, consult and negotiate can be based. These procedural cooperative duties are in turn central to the requirements of due diligence arising under the general customary duty to prevent transboundary harm, but the Court also links the requirement for EIA indirectly to the principle of equitable and reasonable utilisation.⁷⁴

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⁶⁶ *Ibid.*, para. 75-6.

⁶⁷ See *Gabčikovo-Nagymaros* case, *supra*, n. 18, Judgment, para. 140 and Separate Opinion of Vice-President Weeramantry, Part A.

⁶⁸ *Supra*, n. 18, Judgment, para. 77.

⁶⁹ McIntyre, *supra*, n. 29, at 489.

⁷⁰ *Supra*, n. 18, Judgment, paras. 119-21.

⁷¹ *Ibid.*, Judgment, paras. 121 and 204.

⁷² *Ibid.*, Judgment, para. 204.

⁷³ See, for example, P-M Dupuy, 'Overview of the Existing Customary Legal Regime Regarding International Pollution', in D. B. Magraw (ed.), *International Law and Pollution* (Univ. of Pennsylvania Press, Philadelphia, 1991) 61. For a comprehensive account of this discourse, see McIntyre, *supra*, n. 8, at 229-239 and 367-372. ⁷⁴ *Supra*, n. 18, Judgment, para. 177 links procedural obligations generally, of which EIA is a key component, to the principle of equitable and reasonable utilisation, stating:

^{&#}x27;such utilization could not be considered to be equitable and reasonable if the interests of the other riparian States in the shared resource and the environmental protection of the latter were not taken into account.'

Though the WFD does not set out similar detailed rules on inter-State notification, exchange of information, consultation and negotiation, it does encourage Member States to report 'an issue which has an impact on the management of its water but cannot be resolved by that Member State' to the Commission and any other State concerned, and it requires the Commission to respond within six months. ⁷⁵ In addition, Article 13 provides that '[i]n the case of an international river basin district falling entirely within the Community, Member States shall ensure coordination with the aim of producing a single international river basin management plan'. Further, Article 14, which sets out requirements on public information and consultation, explains that through such means 'Member States shall encourage the active involvement of *all interested parties* in the implementation of this Directive', ⁷⁶ and could clearly include the relevant authorities in other Member States sharing a watercourse. At any rate, the requirement under Article 14 to make certain information available to the public is significantly more stringent than that under the UN Convention to share information with co-riparian State authorities.

In light of the significance of EIA for the effective implementation of the procedural rules set down under the UN Convention, it is important to note that any proposed project or utilisation of waters planned for the basins shared between Northern Ireland and Ireland, which would be likely to impact on the interests of the other riparian State, would be certain to be required to undergo EIA, including assessment of transboundary impacts, under EU law.⁷⁷ Article 7 of the amended EIA Directive requires, inter alia, that the Member State likely to be affected be informed of the proposed project and given reasonable time to indicate whether it wishes to participate in the EIA process. In addition, Article 7(4) requires the Member States concerned to 'enter into consultations regarding, inter alia, the potential transboundary effects of the project and the measures envisaged to reduce or eliminate such effects and shall agree on a reasonable time frame for the duration of the consultation period.' Therefore, any obligations imposed upon watercourse States by the procedural and informational requirements of the UN Convention are already included under the EU rules on EIA or, in respect of plans and programmes, the EU SEA Directive. 78 Similarly, any plan or project likely to have significant effects on a Natura 2000 protected site is required to undergo an 'appropriate assessment' of whether that plan or project is likely to adversely impact on the integrity of the site in question by virtue of Article 6(3) of the Habitats Directive. 79 In respect of concerns that accession to the UN Convention might result in projects being unduly delayed, it seems unlikely that the 'reasonable time in which to indicate whether it wishes to participate in the environmental decision-making procedures', which must be given to the Member State likely to be affected under Article 7(1) of the EIA Directive, would in practice amount to much less than the 'period of six months within which to study and evaluate [and communicate] the possible effects of the planned measures', which must be granted to notified States under Article 13(a) of the UN Convention. In addition, the possibility of this period being extended by a further six months under Article 13(2) is unlikely to arise in respect of Northern Ireland and the Republic, as both jurisdictions have

⁷⁵ Article 12.

⁷⁶ Article 14(1). (Emphasis added.)

⁷⁷ Directive 85/337 on the assessment of the effects of certain public and private projects on the environment [1985] OJ L175/40, as amended by Directive 97/11, [1997] OJ L73/5.

⁷⁸ Directive 2001/42/EC on assessment of the effects of certain plans and programmes on the environment.

⁷⁹ Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. J. Jans and H.B. Vedder, *European Environmental Law* (3rd. ed.) (Europa Press, Groningen, 2008), at 460 et seq.; G. Simmons, 'Habitats Directive and Appropriate Assessment', (2010) 17 *Irish Planning and Environmental Law Journal* 4.

adequate human, technical and financial resources to deal expediently with any notification received.

Of course, it should also be remembered that the procedural rules set out under the UN Convention are almost certainly a conventional codification of existing customary rules and so will apply to both States regardless of accession to the Convention. If one accepts that the applicable customary rules for the use of shared freshwater resources require that significant harm to other watercourse States should be avoided and, ultimately, that such use must be equitable and reasonable, it follows that a State will need to know of the current or proposed uses of a neighbouring State in order to ascertain whether any use will cause significant harm within its territory or to the shared water resource, or whether such use will be equitable and reasonable. 80

Therefore, one must conclude that the procedural requirements arising under the UN Convention create no new obligations over and above those arising under EU law and customary international law.

5. Institutional Implications

Unlike the 1992 UNECE Helsinki Convention, which requires parties to 'enter into bilateral or multilateral agreements or other arrangements' which 'shall provide for the establishment of joint bodies' having a wide range of environmental tasks, 81 the UN Convention does not require watercourse States to establish joint bodies. This approach reflects the position in customary international law, which will not impose a positive obligation and compel basin States to create such regimes. 82 However, the accumulated practice of States in participating in such arrangements could over time bolster the normative status in customary international law of the various rules comprising the duty to cooperate. This could, in turn, inform the normative content of such procedural rules by making it clear that bona fide participation in common management institutions would satisfy the obligations inherent therein. 83 In the Pulp Mills case, the Court emphasised the role of formally established joint institutional arrangements, without which it is very difficult to ensure effective procedural cooperation⁸⁴ In refusing to allow the established joint institution, CARU, to be circumvented, the Court stated that the overall objective of optimum and rational utilisation 'must also be ensured through CARU, which constitutes "the joint machinery" necessary for its achievement, and, further, that '[i]n addition to its [procedural] role in that context, the functions of CARU relate to almost all aspects of the substantive provisions of the 1975 Statute'.86

⁸⁰ On the customary nature of such procedural rules, see McIntyre, *supra*, n. 8, at 317-357. See further P. Okowa, 'Procedural Obligations in International Environmental Agreements', (1996) 67 *British Yearbook of International Law*, 275.

^{81 (1992) 31} *ILM* 1312, Article 9(1) and (2).

⁸² See further, McIntyre, *supra*, n. 8, at 34.

⁸³ See, for example, I. Kaya, *Equitable Utilization: The Law of the Non-Navigational Uses of International Watercourses* (Ashgate, Aldershot, 2003), who concludes, at 189, that

^{&#}x27;Under the light of the findings of the examination of the relevant sources of international law in the present study, it seems necessary to establish a treaty regime with an active and continuing revisional element which can only be achieved by setting up a joint water institution with adequate powers and means in each basin'.

⁸⁴ Supra, n. 18, Judgment, para. 89.

⁸⁵ *Ibid.*, para. 173. See also para. 75.

⁸⁶ *Ibid.*, para. 176.

However, the UN Convention actively encourages watercourse States to enter into joint management arrangements. The principle of "equitable participation", which is set out under Article 5(2) and is closely linked to implementation of the principle of equitable and reasonable utilisation, suggests the nature and scope of the role to be played by joint mechanisms.⁸⁷ In the context of the general obligation to cooperate, imposed upon watercourse States by Article 8 'in order to attain optimal utilization and adequate protection of an international watercourse', Article 8(2) expressly proposes the use of joint mechanisms and commissions.⁸⁸ It is to be assumed that such arrangements would also generally be regarded as effective in facilitating the regular exchange of data and information required under Article 9.89 In addition, Article 21 provides, in relation to the 'prevention, reduction and control of pollution' that '[w]atercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that might cause significant harm ... and that '[w]atercourse States shall take steps to harmonize their policies in this connection'. As the 'mutually agreeable measures and methods' envisaged under Article 21 for this purpose include, *inter alia*, '[s]etting joint water quality objectives and criteria', the potential role for common management machinery is obvious. Further, Article 24, which deals with the "management" of international watercourses, provides that '[w]atercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism'. 90 This provision suggests the efficacy of using permanent common management institutions for the purpose of basin-level planning, as it further provides that "management" refers, in particular, to

'Planning the sustainable development of an international watercourse and providing for the implementation of any plans adopted; and

Otherwise promoting the rational and optimal utilisation, protection and control of the watercourse. '91

Finally, the Convention envisages a role for common management mechanisms in relation to the settlement of disputes concerning the interpretation or application of the Convention. 92

In contrast, the WFD is quite specific in relation to institutional arrangements, requiring that co-riparian Member States 'shall ensure that a river basin covering the territory of more than

⁸⁷ Indeed, Tanzi and Arcari, *supra*, n. 27, at 109, argue that Article 5(2) 'not only requires coordination but also more significant forms of co-operation' and contend that a State's failure to participate actively in the procedural requirements inherent in equitable participation 'will make it difficult for that State to claim that its planned or actual use is ... equitable under Article 5 of the Convention'. ⁸ Article 8(2) provides that:

^{&#}x27;In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions.

⁸⁹ Article 9(1) provides that:

^{&#}x27;Pursuant to article 8, watercourse States shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.' ⁹⁰ Article 24(1). (Emphasis added).

⁹¹ Article 24(2).

⁹² Article 33(1) provides

^{&#}x27;If the parties concerned cannot reach agreement by negotiation ... they may jointly seek the good offices of, or request mediation or conciliation by, a third party, or make use, as appropriate, of any joint watercourse institution that may have been established by them ...'. (Emphasis added.)

one Member State is assigned to an international river basin district, 93 and further that '[f]or international river basin districts the Member States concerned shall together ensure this coordination [of the requirements of this Directive for the achievement of the environmental objectives established under Article 4, and in particular all programmes of measures] and may, for this purpose, use existing structures stemming from international agreements.⁹⁴

Following a joint consultation, Managing Our Shared Waters (March 2003), by the then Environment Ministers for Ireland and Northern Ireland, arrangements for implementation of the Directive in relation to the three cross-border IRBDs on the island of Ireland have been co-ordinated on a bilateral basis at Ministerial level in the respective jurisdictions by the Minister of the Environment in Northern Ireland and by the Minister for the Environment, Heritage, and Local Government in Ireland. The Ministers are assisted in their task of implementation by officials acting on a non-statutory basis, i.e. the North / South Water Framework Co-ordination Group and its related specialist technical groups. Co-ordination also takes place on an East-West basis, with Irish and UK officials participating in meetings of UK and Irish technical groups, respectively. Clearly, the establishment of the North Western International River Basin District⁹⁵ and the Neagh Bann International River Basin District, 96 along with the inter-State Loughs Agency 97 more than satisfies the relevant requirements of both the Convention and the WFD.⁹⁸

McCaffrey suggests that the OMVS, the joint institutional mechanism established by the parties to the 1972 Convention on the Statute of the Senegal River, is probably the most highly developed among such institutions, stating that '[i]ts broad responsibilities and supranational authority make the OMVS unique among institutional mechanisms for the integrated development and administration of international water resources'. 99 However, that title might credibly belong to the joint commission first established under the Foyle Fisheries Act 1952 which, though primarily concerned with a relatively narrow range of issues centred around the conservation, protection and improvement of fisheries and the aquatic environment on which they depend, even has the power to draft regulations which can be laid before the parliaments of each jurisdiction. 100

Therefore, one must conclude that no requirements in respect of institutional arrangements could possibly arise under the UN Convention requiring new mechanisms over and above

⁹³ Article 3(3).

⁹⁴ Article 3(4).

⁹⁵ See further, Working Together - Managing our Shared waters: The North Western International River Basin

District (December 2008).

96 See further, Working Together – Managing our Shared waters: The Neagh Bann International River Basin District (December 2008).

97 See further, http://www.loughs-agency.org

⁹⁸ In relation to the third IRBD extending into Northern Ireland territory, the Shannon International River Basin District, as only a very small portion of the basin lies in Northern Ireland, the drafting of the plan has been led by the authorities in the Republic, though full consultation has been maintained with the authorities in Northern Ireland, who are represented on the Shannon District's Steering Group.

⁹⁹ I. Dombrowsky, Conflict, Cooperation and Institutions in International Water Management: An Economic Analysis (Edward Elgar, Cheltenham, 2007) at 111, quoting S. McCaffrey, 'International Watercourses', in Rene-Jean Dupuy (ed.), Manuel sur les Organisations Internationales: A Handbook on International Organisations (Martinus Nijhoff, Dordrecht, 1998) 725, at 741. Section 13.

those already in place between Northern Ireland and Ireland for the management of their shared river basins.

6. Dispute Settlement

The UN Convention contains quite detailed provisions on the settlement of disputes between watercourse States, though it mainly seeks to encourage, rather than compel, States to engage in various modes of dispute resolution. Consistent with the UN Charter, Article 33 requires States to seek the settlement of disputes by peaceful means¹⁰¹ and, where they cannot reach agreement by negotiation, encourages them to

'jointly seek the good offices of, or request mediation or conciliation by, a third party, or make use, as appropriate, of any joint watercourse institutions that may have been established by them or agree to submit the dispute to arbitration or to the International Court of Justice.' 102

If the Parties remain unable to settle the dispute, any one of them can require that it be referred to an impartial fact-finding commission, comprising the only compulsory mode of dispute settlement under the Convention. ¹⁰³

However, it is apparent from a reading of Article 32, concerning the principle of "nondiscrimination" or equality of access to justice, that the Convention anticipates a significant role for private recourse by adversely affected private individuals to domestic courts and remedies in the avoidance and resolution of disputes over international watercourses. ¹⁰⁴ In effect, where watercourse States provide access to judicial or other procedures to their citizens or residents, they must provide access on an equal basis to similarly affected noncitizens and non-residents. Private domestic remedies are preferred on policy grounds, chiefly because they are generally considered to bring relief more expeditiously and costeffectively and because they avoid a dispute becoming unnecessarily politicised. Of course, in cases concerning claims for compensation for damage or injury caused, facilitation of redress at the private level is also consistent with the "polluter pays principle", as set out under EU Law. 105 The Commentary to the 1994 Draft Articles notes that the principle applies both to cases involving actual harm and to those in which harm is prospective in nature and thus, that it would guarantee equality of access to any domestic land-use planning, development control or pollution licensing procedures that might have a bearing on the proposed offending use. 106

Of course, as Member States of the EU, such transboundary disputes between Ireland and the UK are covered by the Brussels and Lugano Conventions on Jurisdiction and the

¹⁰³ Article 33(3). The details on the establishment, composition and functioning of the fact-finding commission are set out in Article 33(4)-(9).

¹⁰⁴ Article 32 provides in full:

'Unless the watercourse States concerned have agreed otherwise for the protection of the interests of persons, natural or juridical, who have suffered or are under a serious threat of suffering significant transboundary harm as a result of activities related to an international watercourse, a watercourse State shall not discriminate on the basis of nationality or residence or place where the injury occurred, in granting to such persons, in accordance with its legal system, access to judicial or other procedures, or a right to claim compensation or other relief in respect of significant harm caused by such activities carried on in its territory.'

¹⁰¹ Article 33(1), See Article2(3) of the United Nations Charter.

¹⁰² Article 33(2).

¹⁰⁵ See Article 191(1) of the 2007 Treaty on the Functioning of the European Union.

¹⁰⁶ Supra, n. 27, at 319.

Enforcement of Judgments in Civil and Commercial Matters. ¹⁰⁷ Indeed, in a case concerning transboundary damage caused by the pollution of the Rhine by salt, the European Court of Justice has found that Article 5(3) of the Brussels/Lugano Conventions 'must be understood as being intended to cover both the place where the damage occurred and the place of the event giving rise to it' ¹⁰⁸ and, pursuant to the same dispute, a number of Dutch public agencies eventually succeeded in having decrees licensing a French potash mining company to discharge waste salts into the Rhine annulled in the *Tribunal Administratif* of Strasbourg, on the grounds of the French administration's failure to comply with its duty under public international law not to permit the operation of activities that could have adverse effects outside French territory. The same Dutch public agencies ultimately recovered an award of 2 million French francs in damages from the Paris Court of Appeals in October 1990. ¹⁰⁹

At any rate, any dispute likely to arise concerning the use or protection of watercourses shared between Northern Ireland and Ireland would almost certainly involve an alleged breach of EU legislative requirements, such as those arising under the WFD or the EIA Directive and so would involve the usual legal procedures employed in respect of any such breach. Equally, any action concerning harm to the aquatic environment or ecosystems of such watercourses, or to land within the shared basins, might be brought under the national measures intended to implement the 2004 EU Environmental Liability Directive. 111

Therefore, one must conclude that no additional requirements in respect of dispute settlement, nor any additional exposure for the State or any of its citizens to liability for environmental damage or breach of environmental rules and standards, could arise by virtue of UK accession to the UN Convention.

Resource Requirements

The UN Convention does not contain any specific requirements on monitoring of international watercourse, except insofar as they are required to cooperate in the regular exchange of data and information as required under Article 9. In addition, discharge of the procedural obligations under the Convention relating to notification, consultation, negotiation and the exchange of information on planned measures, might in certain cases require some monitoring in order to understand possible effects on the condition of the watercourse. However, these vague and comparatively lax requirements fall far short of the monitoring requirements for the establishment of coherent and comprehensive monitoring programmes for surface waters, groundwaters and protected areas. Currently, monitoring of the shared water bodies for the purposes of the WFD, and for the purposes on reporting on the status of

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¹⁰⁷ See further, http://curia.europa.eu/common/recdoc/convention/en/index.htm

¹⁰⁸ Case 21/76 *Handelskwekerij G. J. Bier BV and Stichting 'Reinwater' v. Mines Domaniales de Potasse d'Alsace SA*, Judgment of 30 November 1976.

¹⁰⁹ See further, McCaffrey, *supra*, n. 9, at 259.

¹¹⁰ For a synopsis of this 'general procedural framework', see Rieu-Clarke, Wouters and Loures, *supra*, n. 9, at 18.

¹¹¹ Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage.

¹¹² For example, Article 9(1) merely requires watercourse States to exchange 'readily available data and information', while Article 9(3) requires that they 'employ their *best efforts* to collect and, where appropriate, process data and information in a manner which facilitates its utilization by the other watercourse States to which it is communicated.' (Emphasis added).

waters, is currently carried out on a joint basis by the Northern Ireland Environment Agency and the Irish Environmental Protection Agency, which would almost certainly exceed the strict requirements of the WFD.

Similarly, the UN Convention contains no mechanism for reporting on compliance and enforcement, unlike the WFD which requires Member States to submit river basin management plans and any subsequent updates to the European Commission¹¹³ and to submit interim reports on progress on the implementation of the planned programme of measures.¹¹⁴ Also, as noted above, the UN Convention does not require any institutional arrangements in addition to those already in place in respect of the basins shared between Northern Ireland and Ireland.

Therefore, it is difficult to imagine how accession to the UN Convention could have any direct or indirect resource implications for the Northern Ireland authorities in terms of administrative or enforcement staff or otherwise.

Conclusion

This study is intended to outline and examine the likely concerns arising among governmental officials about the possible implications of UK accession to the 1997 UN watercourses Convention. These concerns mainly centre around the possible resource implications for the authorities of additional legal or institutional obligations and of the resulting resource implications. Such concerns are all the more urgent in the current economic climate, when governmental authorities are struggling in the face of shrinking budgets and personnel to comply with all of the existing obligations arising by virtue of the EU WFD and other environmental directives.

On the basis of an in-depth expert assessment of the key provisions of the UN Convention, it is not possible to identify a single instance where UK accession could give rise to additional substantive, procedural or institutional obligations over and above those already applying under the EU Water Framework Directive, or under other EU or national legislative instruments. Thus it would not have any resource implications in terms of additional institutional structures or monitoring or reporting requirements. Nor would accession impact on the options available for the settlement of disputes arising, of any sort, relating to the use or protection of the basins in question. Neither are there any grounds for concern that the detailed procedurals requirements set out under the Convention would give rise to undue delays in the implementation of projects, plans or programmes likely to impact upon the basins, as such projects, plans or programmes would anyway be almost certain to be subject to EIA, SEA or appropriate assessment requirements under the EIA, SEA or Habitats Directives.

Therefore, it is possible to say with confidence that UK accession should prove to be entirely neutral in terms of resource implications for the authorities on both sides of the border. Neither could the Convention be expected to expose the authorities to any risk of State liability additional to that already existing under the rules of customary international law on shared water resources and on protection of the environment. Of course, accession to the Convention would not in any way affect the duty of both EU Member States to ensure

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¹¹³ Article 15(1).

¹¹⁴ Article 15(3).

compliance with the requirements of EU law or any risk of State liability for breach of such requirements.

In fact, the legislative and institutional arrangements already in place to facilitate the joint management of the two key basins shared between Northern Ireland and Irelands can be understood as surpassing any of the requirements contained under the Convention, or even under the WFD, and could be held up as an exemplar of the kind of far-sighted cooperation and of the 'community of interests' approach to which the UN Convention aspires.

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