

Citation: Kinna, R. (2015). "The UNECE Water Convention Viewed from the Perspective of the SADC Revised Protocol on Shared Watercourses". In *Tanzi, A., McIntyre, O., Kolliopoulos, A., Rieu-Clarke, A., and Kinna, R. (Ed.). The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes - Its Contribution to International Water Cooperation*. Leiden, The Netherlands: Brill | Nijhoff, pages 466-485. doi: https://doi.org/10.1163/9789004291584_033

The UNECE Water Convention Viewed from the perspective of the SADC Revised Protocol on Shared Watercourses

Rémy Kinna

1. Introduction

For reasons outlined in earlier chapters (see Chapter 2), the United Nations Economic Commission for Europe's (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes ('UNECE Water Convention')¹ will essentially function as a global transboundary water agreement based on its 2003 Amendment opening it up to ratification by nations outside those member States of the UNECE. However, it is pertinent to understand that the Convention was originally conceived as a predominantly pan-regional framework instrument. Adopted in 1992 and entered into force in 1996, it is one of two 'regional' agreements focusing broadly on the use, management and protection of transboundary freshwater resources. Significantly for this discussion, the other regional agreement being the Southern Africa Development Community (SADC) Revised Protocol on Shared Watercourses ('SADC Revised Protocol').²

Southern Africa as a region encompasses many shared international watercourses and lakes. Major watercourses which cross multiple State borders include the Limpopo (South Africa, Botswana, Zimbabwe and Mozambique) and Orange (South Africa, Namibia, Lesotho) Rivers as well as the fourth longest river on the African continent, the Zambezi River (Zambia, Democratic Republic of Congo, Angola, Namibia, Botswana, Zimbabwe, Mozambique, Malawi and Tanzania). Additionally, there are critical water resources located in shared international freshwater lakes such as Lake Malawi which borders Malawi, Tanzania and Mozambique. In a region where freshwater resources are increasingly scarce and water quality and related aquatic environments often increasingly degraded, the need for a framework to manage the equitable use and protection of these vital resources led many States to push for the development a regional legal framework which resulted in the original 1995 SADC Protocol on Shared Watercourses and then the SADC Revised Protocol.

This Chapter will firstly provide an overview of the context of international watercourses and lakes in the Southern Africa region before discussing the elements of the SADC Revised Protocol. In turn, the key principles and provisions of the Protocol will be analysed in comparison to those of the UNECE Water Convention. Finally, the separate and collective roles of the both the SADC Revised Protocol and now the potential for the UNECE Water Convention in the region will be investigated.

2. Southern Africa Shared Freshwater Bodies & the SADC Revised Protocol

A. Overview of transboundary freshwater resources in Southern Africa

Southern Africa as a geographic region roughly refers to the southern-most region of Africa covering Botswana, Lesotho, Namibia South Africa, Swaziland.³ However, the SADC has a larger expanse and stretches further north comprising 12 member States: Angola; Botswana; Democratic Republic of Congo; Lesotho; Madagascar; Malawi; Mauritius; Mozambique; Namibia; Seychelles; South Africa;

¹ Opened for signature 17 March 1992 (entered into force 6 October 1996).

² Opened for signature 7 August 2000 (entered into force 22 September 2003).

³ UN Scheme of Geographic Regions, see:

<<http://millenniumindicators.un.org/unsd/methods/m49/m49regin.htm>> accessed on 10 June 2014.

Swaziland; Tanzania; Zambia; Zimbabwe.⁴ In relation to transboundary freshwater resources, their boundaries (and those of another 11 non-SADC countries) ‘lie across 15 major perennial and ephemeral international river basins’⁵. Indeed, Southern Africa is one of the most hotly contested and therefore rapidly evolving geographical locations around the world for transboundary water management.

Within Southern Africa, ‘water is generally in short supply compared with that in other parts of the world’⁶. This is due to a number of critical factors, including but not limited to the following significant contextual issues: ‘(a) there is a great disparity in the availability of water between the relatively “wet” northern part of the region and the “dry” southern part, (b) the first-ever transboundary transfer of water (between Lesotho and South Africa) has occurred within the region, (c) discussions have taken place in many international water systems about sharing of water resources among basin countries, and (d) some planned water-transfer schemes have been the subject of disputes, in both environmental and security contexts’⁷. Furthermore, the ‘spatial and temporal variability and uneven distribution in rainfall received by countries in the region has led to the large-scale development of water storage and transfer infrastructure’⁸. [something on cc and increasing temperatures?]

Compounding the above is that there are both over-riding national as well as a combined regional institutional imperatives for socio-economic development; whereby this was the rationale for the formation of the SADC. In this respect, across Southern Africa, ‘poor access to adequate water sources is usually a major constraint to the improvement of the existing socio-economic situation in any country and limits the opportunities for further development’⁹. It is crucial to note here that, ‘Five of the SADC states have water resources dependency ratios of over 50% - i.e. they rely on water generated outside their borders to supply more than half of their total water resource stock’¹⁰. This worrying trend means States must not only utilise shared freshwater resources efficiently within their own borders, but places an added burden on many upstream States to factor in the often competing water uses of downstream riparians in order to equitably meet such neighbourly demands. Thus, given that the quantity and quality of freshwater resources is diminishing yet there are ever increasing demands from industrial uses to fuel socio-economic development as well as growing populations needing potable water, the SADC region provides a critical intersection of issues and challenges for transboundary water management. This has led to the development of legal instruments, policy measures and institutional arrangements in order to address these factors; most notably the SADC Revised Protocol and its related components detailed below.

B. Development and status of the SADC Revised Protocol

On a regional scale, the SADC Revised Protocol on Shared Watercourses is the main transboundary freshwater agreement in the Southern Africa region. Adopted in 2000, it supersedes the original 1995 SADC Protocol on Shared Watercourses.¹¹ The revision was undertaken to account for developments in international water law as reflected in the UN Convention on the Non-Navigational Uses of International Watercourses (‘UN Watercourses Convention’) adopted in 1997 which was the first global framework treaty on transboundary freshwater resources, specifically rivers, as well as to address certain limitations of the original Protocol of 1995. The Revised Protocol now essentially

⁴ See: <<http://www.sadc.int/member-states>> accessed on 10 June 2014.

⁵ Heyns, P. ‘Water-resources Management in Southern Africa’ in Mikiyasu Nakayama (ed.) ‘International Waters in Southern Africa’ (2003) 24(3) United Nations University Press, Tokyo, Japan, 6.

⁶ Heyns, above n5, 5.

⁷ Nakayama M. ‘Introduction’ in Mikiyasu Nakayama (ed.) ‘International Waters in Southern Africa’ (2003) 24(3) *United Nations University Press*, Tokyo, Japan., 1

⁸ Malzbender, D. & Earle, A. ‘Water Resources of the SADC: Demands, Dependencies and Governance Responses’ (2007) available at <http://www.acwr.co.za/pdf_files/IGD_Water%20Resources.pdf> accessed on 10 June 2014, 4.

⁹ Heyns, above n5, 5.

¹⁰ FAO, 2006 in Malzbender & Earle, above n8, 4.

¹¹ Protocol on Shared Watercourses in the Southern African Development (SADC) Region, adopted 16 May 1995 in Maseru, Lesotho.

mirrors the key provisions and principles in the UN Watercourses Convention, as will be elaborated in more detail below. On 7 August 2000, all but one (Zimbabwe) of the 14 members of the SADC signed the revised protocol on shared watercourses whereby this remains the current status.

(a) Key provisions and principles

The SADC Revised Protocol is a regional agreement with the overall objective ‘to foster closer cooperation for judicious, sustainable and co-ordinated management, protection and utilisation of shared watercourses and advance the SADC agenda of regional integration and poverty alleviation’¹². It begins by providing various definitions in Article 1, several of which were altered or added in order to mirror those of the UN Watercourses Convention. Hence, ‘Watercourse’ is defined as ‘a system of surface and ground waters consisting by virtue of their physical relationship a unitary whole normally flowing into a common terminus such as the sea, lake or aquifer’¹³. Art 1 goes on to define a number of key uses of shared watercourses, including but not limited to: ‘domestic use’ as constituting ‘use of water for drinking, washing, cooking, bathing, sanitation and stock watering purposes’;¹⁴ ‘environmental use’ which means ‘the use of water for the preservation and maintenance of ecosystems’;¹⁵ and ‘Industrial use’ as ‘the use of water for commercial, electrical power generation, industrial, manufacturing and mining purposes’¹⁶. ‘Pollution of a shared watercourse’ is also defined here as ‘any detrimental alteration in the composition or quality of the waters of a shared watercourse which results directly or indirectly from human conduct’.¹⁷

Crucially for the interpretation and *inter alia* the implementation of the SADC Revised Protocol, ‘significant harm’ is defined in Art 1(1) as ‘non-trivial harm capable of being established by objective evidence without necessarily rising to the level of being substantial’. It is one of the only major water treaties to explicitly define how to measure significant harm. In-turn, this has significant ramifications for implementing the obligation of a riparian State to cause no significant harm; one of the key principles of international water law and a foundational pillar upon which the SADC Revised Protocol as well as many other international water agreements are developed.

Article 2 set outs the overall objective described above, along with a list of aims which can assist in seeking to achieve this over-arching goal. In this regard, the Protocol seeks to: ‘promote and facilitate the establishment of shared watercourse agreements and Shared Watercourse Institutions for the management of shared watercourses’;¹⁸ ‘advance the sustainable, equitable and reasonable utilisation of the shared watercourses’;¹⁹ ‘promote a co-ordinated and integrated environmentally sound development and management of shared watercourses’;²⁰ ‘promote the harmonisation and monitoring of legislation and policies for planning, development, conservation, protection of shared watercourses, and allocation of the resources thereof’;²¹ and, ‘promote research and technology development, information exchange, capacity building, and the application of appropriate technologies in shared watercourses management’²². A notable aspect within these specific goals is the acknowledgement of the principle of ‘equitable and reasonable utilisation’ which along with the obligation to cause no significant harm mentioned above together form the bedrock of legal principles inter-acting at the heart of the SADC Revised Protocol and most other international water agreements. The nature of the relationship between these two principles in theory and practice is examined later.

Article 3 of the SADC Revised Protocol outlines the general principles which apply in achieving its over-riding purpose whereby it is important to outline each of them separately. Firstly, Art 3(1) sets out the ‘principle of the unity and coherence of each shared watercourse’ whereby in

¹² Art 2 SADC Revised Protocol.

¹³ Art 1 (1) SADC Revised Protocol.

¹⁴ Art 1(1) SADC Revised Protocol.

¹⁵ Art 1(1) SADC Revised Protocol.

¹⁶ Art 1(1) SADC Revised Protocol.

¹⁷ Art 1(1) SADC Revised Protocol.

¹⁸ Art 2(a) SADC Revised Protocol.

¹⁹ Art 2(b) SADC Revised Protocol.

²⁰ Art 2(c) SADC Revised Protocol.

²¹ Art 2(d) SADC Revised Protocol.

²² Art 2(e) SADC Revised Protocol.

accordance with this principle States ‘undertake to harmonise the water uses in the shared watercourses and to ensure that all necessary interventions are consistent with the sustainable development of all Watercourse States and *observe the objectives of regional integration and harmonisation of their socio-economic policies and plans*’²³. Significantly, the socio-economic policies and plans of member States is explicitly mentioned displaying the imperative to balance the use and management of shared watercourses with regional integration and development, particularly economic growth.

Second, the principle of absolute territorial sovereignty is inherently described in so far as ‘the utilisation of shared watercourses within the SADC Region shall be open to each Watercourse State, in respect of the watercourses within its territory and without prejudice to its sovereign rights, in accordance with the principles contained in this Protocol’²⁴. Hence, this arguably implies that riparian States can undertake any type of action with respect to the natural resources within their national border, without liability or obligations, unless otherwise outlined in the protocol or specific Agreements. This has implications for transboundary impacts and can also be contrasted with the United Nations Convention on the Non-navigational Uses of International Watercourses (‘UN Watercourses Convention’)²⁵ and the UNECE Water Convention, which advocate for the absolute integrity of State territory; under this principle States may use the water resources available within their borders as they see fit but not pollute the resources to the detriment of downstream riparians.

Third, existing rules and principles of customary and general international law must be respected by member States in so far as they apply to ‘the utilisation and management of the resources of shared watercourses’²⁶. This is in-line with other international water agreements around the world and simply codifies the inherent and over-riding application of recognised obligations under customary international law. Fourth, Art 3(4) refers to the principle of sustainable development in so far as it obligates State parties to ‘maintain a proper balance between *resource development for a higher standard of living for their people* and conservation and enhancement of the environment to promote sustainable development’²⁷. Sustainable development is generally defined as ‘development which meets the needs of current generations without compromising the ability of future generations to meet their own needs’²⁸. Noteworthy here is the explicit mention of riparian nations seeking to achieve a higher standard of living for their population which inherently invokes the Protocol’s underlying impetus on national and regional socio-economic development. Fifth, concerns the generally recognised principle of international law obliging riparian States to cooperate in the use and management of shared watercourses, especially ‘all projects likely to have an effect on the regime of the shared watercourse’²⁹. Sixth, Art 3(6) then codifies the duty on riparian States to exchange available information regarding a shared watercourse, including water quality and environmental conditions. Seventh, the SADC Revised Protocol encapsulates both the principle of equitable and reasonable utilisation as well as the principle of participation. To this extent, the former duty is provides that ‘a shared watercourse shall be used and developed by Watercourse States with a view to attain optimal and sustainable utilisation thereof and benefits therefrom, taking into account the interests of the Watercourse States concerned, consistent with adequate protection of the watercourse for the benefit of current and future generations’³⁰. The latter is contained in Art 3(7)(b) whereby riparian States shall actively participate in ‘the use, development and protection of a shared watercourse in an equitable and reasonable manner’. Participation in this sense includes ‘both the right to utilise the watercourse and the duty to cooperate in the protection and development thereof’³¹.

Eighth, which is to be considered in conjunction with Art 3(7)(a) and (b), is Art 8 and its sub-clauses. This provision lists a number of specific factors and circumstances that must be taken into

²³ [emphasis added]

²⁴ Art 3(2) SADC Revised Protocol.

²⁵ Opened for signature 21 May 1997, 36 ILM 700 (not yet in force).

²⁶ Art 3(3) SADC Revised Protocol

²⁷ [emphasis added].

²⁸ Art 49, Chapter 1, ‘Report of the World Commission on Environment and Development: Our Common Future’ (1987) available at <<http://www.un-documents.net/our-common-future.pdf>> accessed on 4 June 2014.

²⁹ Art 3(5) SADC Revised Protocol

³⁰ Art 3(7)(a) SADC Revised Protocol.

³¹ Art 3(7)(b) SADC Revised Protocol.

account in order for riparian States to utilise shared watercourses in an equitable and reasonable manner. These include, but are not limited to, the following matters listed in Art 8(a) which are:

- (i) geographical, hydrographical, hydrological, climatical, ecological and other factors of a natural character;
- (ii) the social, economic and environmental needs of the Watercourse States concerned;
- (iii) the population dependent on the shared watercourse in each Watercourse State;
- (iv) the effects of the use or uses of a shared watercourse in one Watercourse State on other Watercourse States;
- (v) existing and potential uses of the watercourse;
- (vi) conservation, protection, development and economy of use of the water resources of the shared watercourse and the costs of measures taken to that effect; and
- (vii) the availability of alternatives, of comparable value, to a particular planned or existing use.

Moreover, Art 8(b) then stipulates that the ‘weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors’. Consequently, ‘all relevant factors are to be considered together and a conclusion reached on the basis of the whole’ when determining what is considered reasonable and equitable. It is noteworthy here that Art 8 (a) and (b), including the list of factors and circumstances that must be taken into account, mirror to a large extent the equivalent provisions in the UN Watercourses Convention regarding equitable and reasonable utilisation upon which the SADC Revised Protocol was amended to align with. Ninth, Art 3(9) refers to the procedures regarding planned measures detailed in Art 4(1) of the Protocol whereby States must act in conformity with the associated principles which will be discussed below.

Tenth, and lastly, Arts 3(10)(a)-(c) concern the principle of ‘no significant harm’. This principle has been examined in previous chapters and relates to the general obligation in customary international law on States not to undertake activities inside their own territorial borders which can or may cause significant harm within the territory of others. Indeed, as mentioned prior, it is one of the pillars of international water law and in concert with the principle of equitable and reasonable utilisation it forms the bedrock of most contemporary water agreements, including this Protocol. Hence, Art 3(10)(a) dictates that all riparian States must ‘in utilising a shared watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other Watercourse States’. Moreover, Art 3(10)(b) goes on to provide that where such harm occurs, the State causing the harm must take all appropriate measures to mitigate it ‘having due regard for the provisions of paragraph (a) above in consultation with the affected States, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation’. This explicit cross-reference to the fact States must consider the original obligation to take all appropriate measures to prevent the causing of significant harm to other Watercourse States is significant when it comes to implementing the legal principle in relation to the principle of equitable and reasonable utilisation, as will be examined below in relation to its commensurate provisions in the UNECE Water Convention. Finally, Art 3(10)(c) allows for natural or juridical persons suffering injury caused by significant harm to a shared watercourse to seek legal recourse and/or compensation in the State(s) where the activities allegedly occurred which led to such injury. This is an important clause as it recognises the rights of individuals impacted by pollution activities within the watercourse, whereas most clauses for dispute resolution are addressed at State level. In sum, the principles listed in Art 3 are all critical to understanding the central purpose of the SADC Revised Protocol and its measures for achieving this.

The SADC Revised Protocol’s Article 4 and its sub-clauses outline specific provisions related to implementing the principles and accompanying legal obligations provided for in Art 3, as above. Due to the limited space available, this chapter will simply provide a very brief overview of each one, noting any significant difference or unique features. Art 4 contains specific provisions governing: prior notification and consent procedures for planned measures;³² protection and preservation of water resources and aquatic environments;³³ management of shared watercourses;³⁴ prevention and

³² Art 4(1) SADC Revised Protocol.

³³ Art 4(2) SADC Revised Protocol.

³⁴ Art 4(3) SADC Revised Protocol.

mitigation of harmful conditions either resulting from natural causes or human conduct;³⁵ and, the duty upon States to notify other potentially affected States, the SADC and other relevant institutions in a timely manner in the event of an emergency situation to a shared watercourse.³⁶

In terms of a focus on water quality standards as in the UNECE Water Convention, the SADC Revised Protocol allows for the introduction of permits for the discharge of waste into international watercourses by requiring that ‘any person intending to use the waters of a shared watercourse within their respective territories for purposes other than domestic or environmental use or who intends to discharge any type of waste into such waters, to first obtain a permit, licence or other similar authorisation from the relevant authority within the State concerned’³⁷. The Protocol goes further here stating that the permit or other similar authorisation ‘shall be granted only after such State has determined that the intended use or discharge will not cause significant harm on the regime of the watercourse’³⁸. This method of regulation has a bearing on State sovereignty and States ability to draft their own domestic water resource management legislation.

Article 5 concerns the institutional framework for implementation of the SADC Revised Protocol. Here, the Protocol establishes the SADC Water Sector Organs, including the Committee of Water Ministers, Committee of Water Senior Officials, Water Sector Coordinating Unit, and Water Resources Technical Committee and sub-Committees, as well as the basic functions of these and related institutions.³⁹ Art 5(3) is significant in so far it sets out provisions for ‘Shared Watercourse Institutions’ including that ‘Watercourse States undertake to establish appropriate institutions such as watercourse commissions, water authorities or boards as may be determined’⁴⁰. Furthermore, the responsibilities of these institutions must conform to the principles set out in the SADC Revised Protocol and the State parties must ‘adopt appropriate measures to give effect to the institutional framework’⁴¹ in order to implement the provisions of the Protocol.

Article 6 provides generally for forming watercourse agreements, including the right for watercourse States to ‘participate in the negotiation of and to become a party to any watercourse agreement that applies to the entire shared watercourse, as well as to participate in any relevant consultations’⁴². It goes further in stating that State parties *may* harmonise these agreements with the provisions of the SADC Revised Protocol, rather than obliging that they must do so.⁴³ Crucially, ‘nothing contained in such agreement shall affect the rights or obligations under this Protocol of Watercourse States that are not parties to such an agreement’⁴⁴.

Lastly, in terms of the substantive provisions of the Protocol, Article 7 concerns settlement of disputes whereby it dictates that ‘State Parties shall strive to resolve all disputes regarding the implementation, interpretation or application of the provisions of the Protocol amicably in accordance with the principles enshrined in Article 4 of the SADC Treaty’⁴⁵. Further, any disputes over shared watercourses between State Parties regarding the interpretation or application of the provisions of this Protocol which are not settled amicably, must be referred to the SADC Tribunal for a determination. Moreover, if a dispute arises between SADC on the one hand and a State Party on the other, a request shall be made for an advisory opinion in accordance with Article 16(4) of the SADC Treaty. Art 7 is critical in so far as State parties must refer unresolved disputes directly to the regional institutional secretariat for a determination. This approach differs from other agreements, including the UNECE Water Convention, as outlined below.

³⁵ Art 4(4) SADC Revised Protocol.

³⁶ Art 4(5) SADC Revised Protocol.

³⁷ Art 4(4)(b) SADC Revised Protocol.

³⁸ Art 4(4)(b) SADC Revised Protocol.

³⁹ Art 5(1) SADC Revised Protocol.

⁴⁰ Art 5(3)(a) SADC Revised Protocol.

⁴¹ Art 5(4) SADC Revised Protocol

⁴² Art 6(6) SADC Revised Protocol.

⁴³ Art 6(2) SADC Revised Protocol.

⁴⁴ Art 6(5) SADC Revised Protocol.

⁴⁵ Art 7(1) SADC Revised Protocol. See also, Declaration and Treaty of the Southern African Development Community, 1992, opened for signature 17 August 1992 (entered into force 30 September 1993) (‘SADC Treaty’)

3. Comparing the SADC Revised Protocol and the UNECE Water Convention

There are some key substantive and procedural similarities and differences between the SADC Revised Protocol and the UNECE Water Convention.

A. Significant similarities and differences between provisions of both instruments

Both substantively and procedurally, the Protocol replicates many of the provisions of the UN Watercourses Convention verbatim, thereby mirroring some of the key similarities and differences between the latter Convention and the UNECE Water Convention, as outlined previously in Chapter 4. Yet, there remain some important distinctions in scope and/or specificity between the Protocol and the Water Convention examined below.⁴⁶

a) *The duty to cause no significant harm*

The SADC Revised Protocol provision regarding the obligation of due diligence on States to take action to avoid causing significant harm is incorporated into the duty to do no harm, and the level of harm is also classified as ‘significant’. However, as opposed to the UNECE Water Convention, the SADC Revised Protocol takes the unique step amongst most existing watercourse agreements by defining ‘significant harm’ in Art 1(1). Significant harm is thus defined as meaning ‘*non-trivial harm* [emphasis added] capable of being established by objective evidence *without necessarily rising to the level of being substantial*’⁴⁷. Conversely, the UNECE Water Convention defines transboundary impact in Art 1(2) as ‘any *significant adverse effect* on the environment resulting from a change in the conditions of transboundary waters caused by a human activity’⁴⁸. Whilst it goes on to list what constitutes adverse effects it does not define ‘significant’ in respect of transboundary impact or how to quantify this level of impact. Undoubtedly, this is a critical distinction between the two instruments which bears on the ability to scientifically prove and legally establish in a court of law the level of harm caused. In-turn, this may make identifying and proving potential breaches of this central duty to cause no *significant* harm more challenging under the UNECE Water Convention.

Similar to the UNECE Water Convention, there are a number of related provisions in the SADC Revised Protocol which directly and indirectly attach to the duty to cause no significant harm which can be analysed with their comparable relationships within the UNECE Water Convention. Provisions to prevent, reduce and control pollution will be examined in the sub-section below. Notably, the SADC Revised Protocol provisions on no significant harm do not directly refer to the principle of equitable and reasonable utilisation, nor in determining what uses of a shared watercourse are equitable and reasonable in Arts 3(8)(a) and (b) do these provisions refer to no significant harm. Alternatively, the UNECE Water Convention general provision on the principle of equitable and reasonable utilisation refers explicitly to ‘taking into particular account [...] activities which cause or are likely to cause transboundary impact’⁴⁹. This may impact on the respective interpretation of both instruments in any dispute over transboundary harm as the relationship and resulting prioritisation of the rules of no significant harm and equitable and reasonable utilisation within these and other water agreements is a source of academic debate.⁵⁰ However, such nuances will seemingly remain a moot point until a matter is presented for dispute resolution by State parties to these agreements that tests and discerns a legally binding outcome for these potential interpretative discrepancies.

⁴⁶ See generally, Salman, S.M.A. ‘Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context’ (2001) 41 *Natural Resources Journal* 981, 1006–1022; Malzbender, D. & Earle, A. ‘The Impact and Implications of the Adoption of the 1997 UN Watercourse Convention for Countries in Southern Africa’ (2007) *WWF International – Global Freshwater Programme*, 36-51, 36-51.

⁴⁷ [emphasis added]

⁴⁸ [emphasis added]

⁴⁹ Art 2(2)(c).

⁵⁰ See, Malzbender & Earle, above n46, 38-40; Salman, above n46, 1007–1010.

b) *Water quality standards and pollutions prevention, control and reduction*

The UNECE Water Convention is much more stringent than SADC Revised Protocol on provisions regarding water quality standards along with measures to prevent, control and reduce transboundary water pollution. That is not to say that the Protocol does not codify measures in this regard which indeed it does, specifically in Art 4(2)(b) regarding prevention, reduction and control of pollution. Nevertheless, the UNECE Water Convention elaborates much more on aims, obligations, and duties regarding maintaining water quality standards and concurrent prevention, reduction and control of pollution (see Chapter 15). In achieving these objectives, significantly, the UNECE Water Convention adopts a ‘two-tiered approach’⁵¹ in so far as it firstly sets out general obligations in Part I of the Convention that apply to all State parties.

Moreover, Part II of the UNECE Water Convention stipulates more specific duties that must be implemented by ‘Riparian States’⁵² via specific international agreements pertaining to the particular transboundary water resources that they border and share. The obligations contained in Part II of the Convention relate generally to the protection of freshwater ecosystems through stringent safeguards on transboundary pollution and water quality monitoring standards. In this respect, the duties codified in the UNECE Water Convention are ‘more detailed than one would generally expect to find in an umbrella agreement; this is especially true with respect to provisions contained in Part II’⁵³.

This significant distinction between the two instruments is reflected in the title of the UNECE Convention regarding ‘protection’. Hence, it is not surprising that the UNECE Water Convention is focused predominantly on ‘strengthening national and international actions aimed at the protection and ecologically sound management of transboundary waters, both surface waters and groundwaters, and related ecosystems; prevention, control, and reduction of transboundary pollution; reasonable and equitable utilization of transboundary water resources’⁵⁴. Although the SADC Revised Protocol supports these goals with its provisions, it maintains more of a balance with prioritising socio-economic development of member States and regional integration via the reasonable and equitable utilisation of shared watercourses. Certainly in the future, the UNECE Water Convention provisions can enhance the basic provisions regarding no significant harm and transboundary impacts, especially water quality standard and the prevention, the of the SADC Member States should to the extent that SADC member States may wish to strengthen the applicable

c) *Development of water agreements and joint institutions under both instruments*

Firstly, the SADC Revised Protocol provides that member States ‘*may* enter into agreements, which apply the provision of this Protocol to the characteristics and uses of a particular shared watercourse or part thereof’⁵⁵. It additionally dictates that State parties ‘*may* harmonise such agreements with this Protocol’⁵⁶. Importantly, it also provides that no provisions of the Protocol shall affect the rights or obligations of member States arising from agreements in force for it on the date on which it became a party to the Protocol.⁵⁷ Hence there is no explicit obligation for member States to enter into water agreements with co-riparians over whole or parts of any shared watercourses; rather, it is simply encouraged. Moreover, based on this situation where such agreements already exist, harmonisation of their provisions with the Protocol is promoted instead of being obligated. This is in stark contrast to the UNECE Water Convention where the development of water agreements and their harmonisation with the Convention is not only supported but *obliged*. To this end, it provides that

⁵¹ Wouters, P. & Vinogradov, S., ‘Analysing the ECE Water Convention: What Lessons for the Regional Management of Transboundary Water Resources?’ 2004, Yearbook of International Co-Operation on Environment and Development 2003/04, 55-64, 56.

⁵² Riparian States are defined in the UNECE Water Convention as those States who are parties to the Convention and which border specific transboundary freshwater resources.

⁵³ Wouters & Vinogradov, above n51, 56.

⁵⁴ Wouters & Vinogradov, above n51, 56.

⁵⁵ Art 6(3) SADC Revised Protocol [emphasis added].

⁵⁶ Art 6(2) SADC Revised Protocol [emphasis added].

⁵⁷ Art 6(5) SADC Revised Protocol.

member States ‘shall on the basis of equality and reciprocity enter into bilateral or multilateral agreements or other arrangements, *where these do not yet exist, or adapt existing ones, where necessary to eliminate the contradictions with the basic principles of this Convention*, in order to define their mutual relations and conduct regarding the prevention, control and reduction of transboundary impact’⁵⁸.

In terms of the establishment of joint institutions under the framework instruments and/or any specific agreements between co-riparians, there is further difference between the SADC Revised Protocol and the UNECE Water Convention. Art 9(2) of the Convention stipulates that any agreements or arrangements developed by member states must ‘provide for the establishment of joint bodies’. It goes on to set out a detailed list of key tasks that such bodies are obliged to undertake.⁵⁹ On the other hand, the SADC Revised Protocol in its Article 5 focuses more broadly on the ‘Institutional Framework For Implementation’ by establishing ‘SADC Water Sector Organs’ within the SADC secretariat and codifying their and their sub-branches’ key objectives and functions. In terms of forming institutions between co-riparians, Art 5(3)(a) provides that ‘Watercourse States undertake to establish appropriate institutions such as watercourse commissions, water authorities or boards as *may be determined*’⁶⁰. Aside from the fact that ‘the responsibilities of such institutions shall be determined by the nature of their objectives which must be in conformity with the principles set out in this Protocol’, no other key tasks are set out for these institutions as per the UNECE Water Convention, leaving much greater scope for differentiation under the Protocol in form and function.

Transboundary basin and sub-basin institutions represent the most fundamental institutional component of the international architecture for managing transboundary surface and groundwater resources not only in Southern Africa, but around the world. The formation of the Orange-Senqu, and Limpopo, River Commissions (ORASECOM and LIMCOM respectively) under the jurisdiction of the SADC Revised Protocol are noteworthy examples.⁶¹ Indeed the legal and institutional arrangements over the Limpopo River are some of the most advanced of any implemented under the SADC Revised Protocol. The key over-arching international body governing cooperation within the Limpopo River Basin is the Agreement on the Establishment of the Limpopo Watercourse Commission Agreement (‘LIMCOM Agreement’)⁶². Established in 2003 via a treaty between Botswana, Zimbabwe, Mozambique and South Africa, it builds upon the previous Limpopo Basin Permanent Technical Committee (‘LBPTC’).⁶³ As an inter-governmental technical advisory institution, LIMCOM’s objective, as per Art 7, is to advise the State parties and provide recommendations regarding the measures for the protection, preservation and management of the Limpopo River and its tributaries. Significantly, many operational aspects of the LIMCOM Agreement and the LIMCOM Council are still being formulated however an interim Secretariat has been established, based in Maputo, to assist in the development of policies and governance structures.⁶⁴ Although it is the most recent agreement regarding the Limpopo River and its tributaries and therefore the most current statement of obligations for riparian States, the Preamble acknowledges applicable existing agreements including the UN Watercourses Convention as well as recognising the ‘spirit, value and objectives of the Revised Protocol on Shared Watercourses in the Southern African Development Community’. Concurrently, Art 2 of the LIMCOM Agreement provides that ‘without prejudice to the notification provisions’ nothing in the Agreement affects the rights of the Contracting

⁵⁸ Art 9(1) UNECE Water Convention [emphasis added]

⁵⁹ Art 9(2)(a)-(e) UNECE Water Convention.

⁶⁰ [emphasis added]

⁶¹ See, Malzbender & Earle, above n46, 31-32.

⁶² Agreement between the Republic of Botswana, the Republic of Mozambique, the Republic of South Africa, and the Republic of Zimbabwe on the establishment of the Limpopo Watercourse Commission (LIMCOM), 2003, opened for signature 15 September 2004 (entered into force 24 June 2005).

⁶³ Agreement between the Government of the Republic of Botswana, the Government of the People’s Republic of Mozambique, the Government of the Republic of South Africa and the Government of the Republic of Zimbabwe relative to the Establishment of the Limpopo Basin Permanent Technical Committee, 1986, opened for signature 15 June 1986 (entered into force 8 October 1988).

⁶⁴ See: <<http://www.limcom.org/en/Opportunities/limcom+executive+secretary.aspx>> accessed on 10 June 2014.

Parties to enter into agreements regarding any part of the Limpopo River, as long as ‘such agreements are not inconsistent with this Agreement’.

While the LIMCOM Agreement, as an example of transboundary river agreements in the region, along with SADC Revised Protocol and national water-related regulations collectively provide a sufficient framework for governance of shared watercourses in Southern Africa, ‘it is a severe lack of capacity in the region that constrains the effective practical implementation of the described water resources governance framework’⁶⁵. In practice, the SADC is traditionally quite bureaucratic and generally tends to operate in ‘silos’⁶⁶ rather than across sectors which can hamper any integrated approaches to implementation, monitoring and enforcement of regional water laws and watercourse agreements.⁶⁷ Institutionally, the secretariat for the SADC Revised Protocol is relatively small and sits structurally within the overall SADC secretariat, located in Gaborone, Botswana. It is important to note here that the ‘primary mandate of the SADC Water Sector Organs is to monitor the application of the SADC Protocol and the facilitation of the harmonisation of water law and policies between SADC Member States’⁶⁸. However, a critical barrier to effective implementation and enforcement is that ‘the SADC Water Sector Organs do not have the mandate to implement and enforce the SADC Protocol in the Member States. This obligation falls on the Member States, whose national laws must ensure that obligations stemming from international agreements such as the SADC Protocol or basin-wide water management agreements are being met’⁶⁹.

This is in contrast to the UNECE Secretariat and the UNECE Water Convention’s sub-bodies which are relatively very well resourced and considerably experienced in implementing the Convention and its suite of binding and non-binding measures. As a mostly ‘pan-European organization’⁷⁰ whose remit includes environmental matters,⁷¹ UNECE member States are the broad geographical focus of the UNECE Water Convention. In relation to transboundary waters, the UNECE Water Convention also laid the foundations for the European Union’s Water Framework Directive⁷² which ‘builds on the experience and knowledge acquired through the implementation of that treaty’⁷³. Thus, from a procedural and substantive standpoint, the SADC could look to benefit

⁶⁵ Malzbender & Earle, above n8, 16.

⁶⁶ Silos in this context refer to the practice of developing initiatives which are institutionally isolated from other parts of an organisation irrespective of whether those parts of the institution may be related to, or beneficial for, an integrated cross-sectorial approach to designing, implementing, monitoring and evaluating the project/programme.

⁶⁷ See, Tjønneland, E.N. ‘Making SADC work? Revisiting Institutional Reform’ in Dirk Hansohm, Willie Breytenbach, Trudi Hartzenberg, Colin McCarthy (eds.) for Namibian Economic Policy Research Unit, ‘Monitoring Regional Integration in Southern Africa’ (2005) 166-185, available at: http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/MRI_Book_2005.pdf at 181 which summarises: ‘its institutions are still weak and the organisation has not come far in the implementation of protocols and regional decisions. There is a major gap between what SADC wants to do, and actual developments and implementation on the ground’. For a general overview of the bureaucratic nature of the SADC Secretariat, see generally, Tjønneland, E.N, 2005.

⁶⁸ Malzbender & Earle, above n8, 16.

⁶⁹ Ibid.

⁷⁰ Member States of the UNECE are: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uzbekistan. See: <http://www.unece.org/oes/member_countries/member_countries.html> accessed on 10 June 2014.

⁷¹ Wouters & Vinogradov, above n51, 56.

⁷² For an overview of the EU Water Directive Framework, its aims and general provisions, see Wouters & Vinogradov, above n51, 60-61.

⁷³ A. Rieu-Clarke and F. Rocha Loures (eds.), ‘The UN Watercourses Convention in Force – Strengthening international law for transboundary water management’ (2013) Earthscan, 33, citing the ‘1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes: A booklet for all who care about and work for clean water’ (United Nations Economic Commission for Europe, 2004), found at <http://www.unece.org/env/water/documents/brochure_water_convention.pdf> accessed on 3 June 2014.

from best practices and knowledge transfer in terms of the already well-developed agencies and working sub-groups of the UNECE Secretariat implementing the Convention, as well as the pilot project activities and policy measures such as the comprehensive ‘Guide to Implementing the Water Convention’⁷⁴. Hence, the SADC Secretariat, its Water Sector Organs, as well as joint institutions established under the SADC Revised Protocol such as LIMCOM may potentially be able to learn from the considerable experience of the UNECE Secretariat, the sub-bodies of the UNECE Water Convention and joint institutions in this region in order to ‘strengthen water management institutions at all levels, particularly Shared Watercourse Institutions since they are best placed to develop management solutions for transboundary rivers’⁷⁵.

d) Settlement of Disputes

There is a significant differentiation between both instruments in terms of the settlement of disputes. The SADC Revised Protocol stipulates in Art 7 of its dispute resolution procedures that conflicts arising between member States that are unable to be resolved amicably in accordance with the principles set out in Art 4 must be submitted to the SADC Tribunal for an advisory opinion which will form a binding and final verdict.⁷⁶ This in contrast with the applicable UNECE Water Convention procedures set out in Art 22 leave resolution pathways open for States to determine whereby the ‘they shall seek a solution by negotiation or by any other means of dispute settlement acceptable to the parties to the dispute’⁷⁷. Subsequent methods allowed for by States are arbitration (with procedures set out in Annex IV) and, if agreed to by the State parties to the dispute, submission to the International Court of Justice (ICJ). Therefore, where the SADC Revised Protocol provides no guidance on how to resolve disputes other than if not resolved that they be submitted to its governing SADC Secretariat for an advisory ruling, the UNECE Water Convention rather provides for arbitration via specified processes or submission to the ICJ, where either method is agreed to by the respective State parties.

5. Can the UNECE Water Convention complement the SADC Revised Protocol?

Given that the UNECE Water Convention will soon be open to ratification by States outside the UNECE (see Chapter 2), the question remains about the potential role for the Convention to operate in conjunction with the SADC Revised Protocol. Fundamental elements exist which would be mutually complementary from the outset in coordinating and implementing both agreements.

Firstly, the UNECE Water Convention provisions can enhance the basic provisions of the Protocol regarding no significant harm and transboundary impacts, especially water quality standard and the prevention, control and reduction of pollution. Given its primary aim involves strengthening national laws the Convention incorporates a range of binding and non-binding instruments.⁷⁸ In the SADC, even though water quality is impaired by natural and anthropogenic factors, only some countries (eg South Africa and Botswana) have established water quality monitoring networks.⁷⁹ Hence, SADC member States may wish to strengthen the applicable provisions by drawing upon the Water Convention’s extensive and detailed provisions would certainly complement those of the Protocol.

Secondly, both the SADC Revised Protocol and the UNECE Water Convention allow for the formation of specific basin agreements and their associated institutions for the purposes of improving governance and effective transboundary water management.⁸⁰

⁷⁴ See:

(http://www.unece.org/fileadmin/DAM/env/water/publications/Guide_to_implementing_the_WC/ECE_MP.WAT_39_Guide_to_implementing_water_convention_small_size_ENG.pdf>.

⁷⁵ Malzbender & Earle, above n8, 17.

⁷⁶ Art 7(3) SADC Revised Protocol.

⁷⁷ Art 22(1) UNECE Water Convention.

⁷⁸ Wouters & Vinogradov, above n51, 56.

⁷⁹ Chilundo, M., Kelderman, P., O’Keeff, J.H. ‘Design of a water quality monitoring network for the Limpopo River Basin in Mozambique’ (2008) 33 (8-13) *Physical Chemical Earth* 655 at 656.

⁸⁰ See, Malzbender & Earle, above n46, 43-44; Salman, above n46, 1012-1015, 1018

Thirdly, both the Protocol and the Convention promote harmonisation of existing/new basin agreements with their respective principles and substantive rules which could aid regional coordination with non-SADC member States, providing greater legal clarity and improving regionally integrated water management.

Lastly, as stated above, the SADC Revised Protocol and the UNECE Water Convention set out separate dispute resolution provisions but together they may be seen as mutually supportive in a regional context.

Undeniably, the above similarities and distinctions would need to be examined in greater detail and potentially resolved prior to seeking to develop certain synergies and inter-linkages, along with the related institutional arrangements. Yet, there is certainly scope for substantive and procedural coordination of both the Protocol and the Convention; whereby such coordination will also need to take account of the entry into force of the UN Watercourses Convention. Overall, there appears to be significant legal scope for utilising the Revised Protocol's substantive and procedural inter-linkages and synergies with the UNECE Water Convention within a regional institutional framework in Southern Africa to enhance effective implementation of international watercourse laws.