

# Transboundary Water Law and Policy – Exchanging Experiences across African River Basin Organisations

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## List of Abbreviations

AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
AUC	African Union Commission
BMZ	German Ministry of Economy Cooperation and Development
CFA	Cooperative Framework Agreement
CICOS	Commission Internationale du Bassin Congo-Oubangui-Sangha
DRC	Democratic Republic of the Congo
DSS	Decision Support System
EIA	Environmental Impact Assessment
ENTRO	Eastern Nile Technical Regional Office
ERU	Equitable and Reasonable Utilisation
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
ICJ	International Court of Justice
IFI	International Financial Institutions
IGAD	Intergovernmental Authority on Development
ILC	International Law Commission
IWL	International Water Law
IWRM	Integrated Water Resources Management
KfW	Kreditanstalt für Wiederaufbau
KV	Kilo Voltages (for electric power transmission)
LIMCOM	Limpopo Watercourse Commission
LVBC	Lake Victoria Basin Commission
M&E	Monitoring and Evaluation
MRC	Mekong River Commission
MSIOA	Multi Sector Investment Opportunity Analysis
NBA	Niger Basin Authority
NBI	Nile Basin Initiative
NBSF	Nile Basin Sustainability Framework
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
OKACOM	Permanent Okavango River Basin Water Commission
ORASECOM	Orange-Senqu River Commission
RSAT	Rapid Sustainability Assessment Tool
RBO	River Basin Organisation
SADC	Southern African Development Community
SAP	Strategic Action Plan
SEA	Strategic Environmental Assessment
TDA	Transboundary Diagnostic Analysis
TWM	Transboundary Water Management
TWP	Transboundary Water Planning
UN	United Nations
UNECE	UN Economic Commission for Europe
ZAMCOM	Zambezi Watercourse Commission
ZAMWIS	Zambezi Water Information System

# Executive Summary



## Background

The sustainable management of internationally shared watercourses poses a number of challenges for riparian states, ranging from allocation of water for conflicting uses to management of fish stocks, or from coordination of navigation activities to protection of the basin environment. The development of infrastructure projects for water resources utilization is particularly crucial in order to advance overall socio-economic development of riparian states and to improve the well-being of their populations – especially on the African continent. However, infrastructure projects in transboundary basins require very specific planning, development and management approaches in order to take account of the transboundary nature of the resources in question and to avoid unintended consequences.

Over the last 20 years substantial efforts have been made by states, supported by development partners, towards creating enabling environments for transboundary water resources development by establishing agreed mechanisms and processes for their management. For more than 15 years GIZ, through the German Ministry of Economic Cooperation (BMZ) as well as other German and international (co-)financing partners, has been supporting transboundary water management (TWM) in Africa as well as in other regions of the world. Amongst other things, this support has aimed at developing legal and policy frameworks for transboundary water management and at facilitating the establishment of organisational structures (e.g. River Basin Organisations, RBOs) to coordinate such mechanisms and processes. In addition to these developments at the basin and regional level, the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, which entered into force in August 2014, represents another key step forward in the sustainable management of shared water resources.

On this basis, considerable experience has been gained at the global, regional, basin and national levels in many of the world's 276 transboundary river and lake basins. In order to promote further transboundary water cooperation, the compilation and sharing of experience is key to assisting RBOs and regional institutions in managing shared water resources to the optimal benefit of all countries and riparian populations involved.

Therefore, a workshop was organized by GIZ in May 2015 that brought together high-level representatives of African RBOs and regional institutions, such as Regional Economic Communities (RECs), to discuss critical advances in the development and implementation of law and policy frameworks for transboundary water management. It focused, in particular, on the development of infrastructure on transboundary watercourses and the development and implementation of legal and policy frameworks that guide such infrastructure projects (see Annex 1 for more details).

## International Water Law and transboundary water policy areas

All RBOs worldwide are guided by International Water Law (IWL) principles incorporated into their founding legal and policy documents, or by virtue of generally applicable customary rules and principles. Recent years have witnessed significant developments in this field of international law and practice. Most importantly, a broad consensus has emerged regarding the key rules and principles of international water law – a process greatly assisted by the adoption and/or entry into force of a comprehensive suite of global instruments applying to shared water resources. These include the 1997 UN Watercourses Convention mentioned above, the opening to global accession of the 1992 United Nations Economic Commission for Europe

(UNECE) Water Convention (Helsinki Convention), the 2008 International Law Commission (ILC) Draft Articles on Transboundary Aquifers, and 2013 UNECE Model Rules on Transboundary Groundwaters. This consensus is reflected in regional water resources agreements (e.g. the 2000 Southern African Development Community (SADC) Revised Protocol on Shared Watercourses) and a number of river basin agreements in Africa such as the 2000 Orange-Senqu River Commission (ORASECOM) Agreement. Generally, this convergence around a number of key rules and principles renders the field of international water law more predictable and more rationally coherent, while it also gives rise to a wealth of generally relevant technical guidance and judicial deliberation, which serve to elaborate the normative implications of each. However, the practical measures required for effective implementation of these rules and principles remain highly uncertain.

Three core rules of IWL are central to transboundary water management: the Principle of Equitable and Reasonable Utilisation, the Duty to Prevent Significant Transboundary Harm, and the Duty to Cooperate. Following on from these three rules of IWL, five thematic policy areas are identified as central as representing the key functional responsibilities of basin organisations in operationalising their respective basin agreements. Together, the three IWL rules and the five thematic policy areas form the basis for an implementation framework for RBOs and other regional institutions.

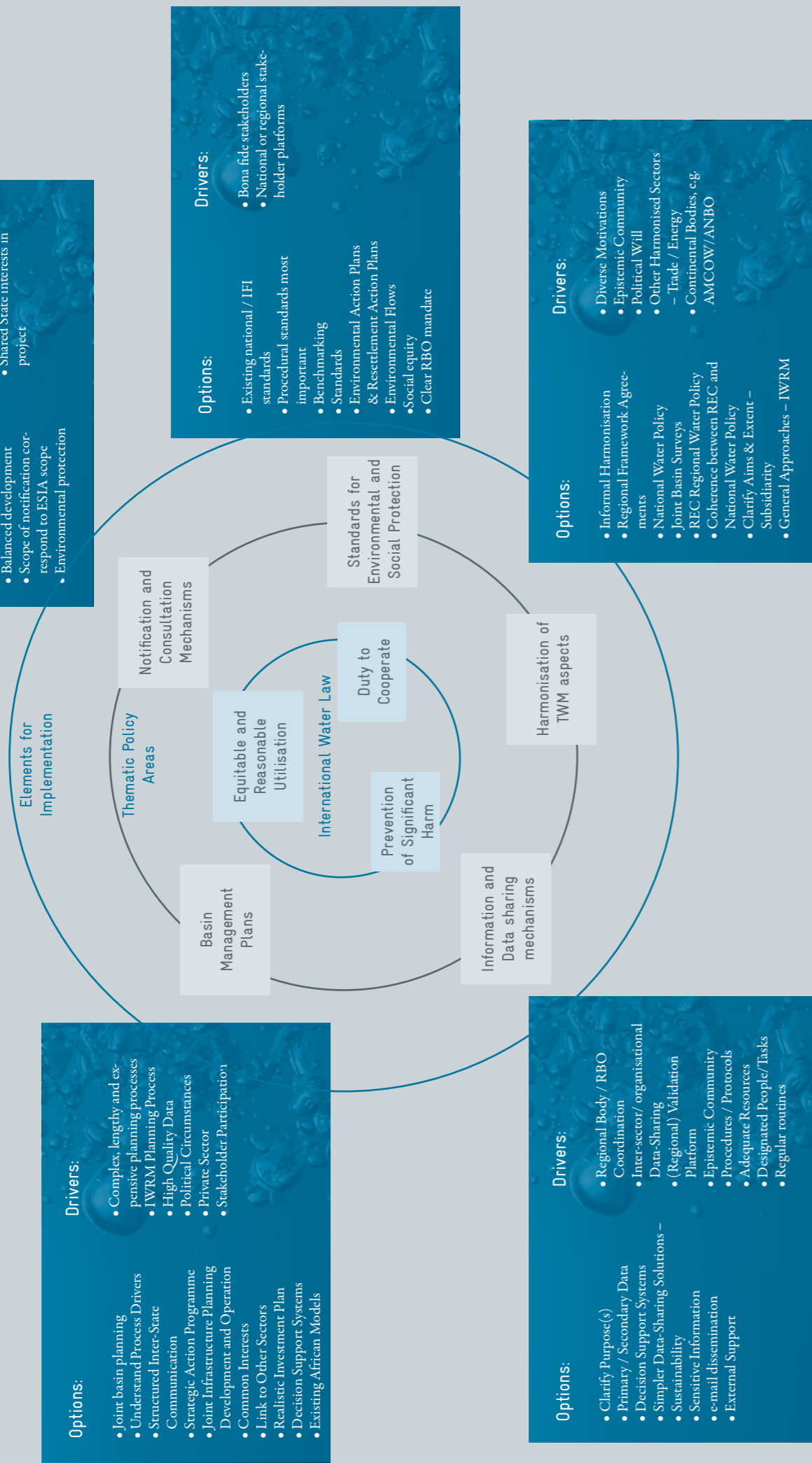
## Conclusions and Recommendations

- The cases examined revealed that many RBOs have significant experience of implementing their respective basin agreements and the legal and policy requirements emerging therefrom. The five thematic policy areas were rated highly relevant for implementing transboundary water management and facilitating water infrastructure development;

- Increased cooperation among RECs, basin states and African RBOs in the development of detailed technical guidance documents should be supported in order to assist the timely, consensual and collaborative implementation of the key requirements of international water law;
- Horizontal cooperation/learning between RBOs should be promoted in developing specific transboundary water policy document or guidelines, e.g. on notification procedures, since many RBOs are currently developing such guidance;
- Evidence of best practice should be gathered and critically assessed in relation to benefit-sharing arrangements among co-basin States, having particular regard to the potential role of RBOs. Such an exercise could enhance practical understanding of the means available to RBOs of implementing the IWL principle of Equitable and Reasonable Utilisation;
- Cutting-edge methodologies for effective ecosystems protection should be identified and further enhanced, notably including methodologies for the maintenance of and payment for ecosystem services and for identifying appropriate minimum environmental flows;
- Work on the development of an implementation framework for water law and policy should be continued. As the implementation framework is fundamentally based on lessons learned and best practice from RBOs, a structured approach is proposed for identifying and formulating additional relevant case studies within the five thematic water policy areas identified;
- As the Workshop participants have suggested, similar events should be conducted again (including additional RBOs and relevant organisations involved in TWM) in order to use peer-to-peer learning to develop further the implementation framework and to enhance RBOs' and other institutions' capacities in respect of water law and policy for infrastructure development.

Refer to Section 4.2 for a complete list of the Workshop conclusions and recommendations.

# Initial Implementation Framework for River Basin Organisations



## 1. Background

The sustainable management of internationally shared watercourses poses a range of challenges for riparian states. Such challenges include, for example, basin-wide monitoring, responding to floods, ensuring access to and allocation of water for different and sometimes conflicting uses, management of fish stocks, coordination of navigation activities or protection of the basin environment. These challenges tend to be exacerbated in times of economic, political or environmental change, threatening the overall sustainable development of the basin or even of an entire region. In order to respond to such challenges, riparian states in many transboundary basins have opted to jointly plan and manage their shared resources in a cooperative manner through the agreement of international water treaties and/or the establishment of RBOs (Schmeier 2013).

These intergovernmental bodies are often tasked with developing and implementing transboundary or basin-wide water management approaches and strategies, including the integrated planning of the use and/or protection of the basin's resources. This involves, in particular, the development of regional and/or basin-wide policies, protocols or other forms of commitment to certain principles and ways of managing shared resources, often including effective implementation of international water law principles. These principles embody the basic prerequisites for successful and sustainable river basin management, namely the exchange of data and information, the assessment of potential impacts of water resources utilisation projects and ways of dealing with conflicting water-related interests, as well as overall basin planning. In addition, member states often rely on RBOs and similar institutions to avoid, manage or resolve conflicts arising due to the myriad challenges alluded to above, in spite of the existence of specific policies and agreed principles.

This document results from an extensive process initiated by GIZ to identify and document the experience of RBOs in developing and implementing water law and policies in African transboundary rivers and lakes. The process of developing this document started with the preparation of a background document for a workshop for RBO practitioners at which to discuss their own transboundary water policy case studies and exchange the practical experience of implementing these policy frameworks in transboundary river basins. This post-workshop document comprises information from presentations (see Annex 1) on legal and policy measures in the transboundary river basin context, and summarizes the workshop findings in a workshop report. The target audience for the report includes practitioners, officials and experts engaged in formulating and implementing water law and policies for sustainable water resources management.

### 1.1 GIZ Support to Transboundary Water Management

For more than 15 years, GIZ, through the German Ministry of Economic Cooperation (BMZ), as well as other German and international (co-)financing partners, has supported transboundary water management objectives in Africa as well as other regions. Among other important objectives, this support has aimed at developing legal and policy frameworks for sustainable transboundary water management, and at facilitating the establishment of organisational structures (e.g. RBOs) to coordinate such mechanisms and processes. Examples of GIZ supported approaches include:

- The Nile Basin Initiative (NBI) Nile Basin Sustainability Framework and related policies, guidelines and strategies;
- The Niger Basin Authority (NBA) Water Charter and Annexes;

- The Lake Chad Basin Commission Water Charter and Annexes;
- The establishment of transboundary water policy frameworks under the SADC Protocol on Shared Watercourses, including a number of specific river basins (including the Orange-Senqu, the Limpopo, the Kunene, the Cuvelai and the Zambezi river basins);
- The implementation of the Agreement on the Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS) regarding inland navigation and water resources management;
- The African Ministers' Council on Water (AMCOW) African Water Agenda, including commitments by member States to establish adequate policy frameworks for transboundary water resources management.
- The Mekong River Commission (MRC) Rapid Sustainability Assessment Tool (RSAT), a comprehensive tool for assessing the basin-wide environmental and social impacts of hydropower projects, facilitating development of integrated basin management plans.
- Various negotiation processes and local-level pilot projects in Central Asia, aimed at strengthening the capacity of riparian State representatives in negotiating and implementing effective legal and policy arrangements for transboundary water resources management.
- During the last decade, RBOs as well as other forms of institutionalized cooperation over shared watercourses have achieved considerable successes and learned important lessons on how to establish, maintain and development cooperation across national boundaries for the sustainable development and management of international waters.

### 1.2 Approach and Methodology

Transboundary water management comprises complex political processes centred on rivers, lakes and/or aquifers. Arrangements for collaboration within transboundary basins are founded upon principles of international water law, which generally defines a common set of cooperative legal principles, and specify the mandate of the institution set up to manage the basin. Although the underlying legal principles are similar across most basins, the specific means of operationalizing an agreement may differ due to a range of factors, including the hydro-political context, security, sovereignty, trust, visionary leadership, development agenda, economic drivers, poverty, food security, etc. This report attempts to identify the experiences, different options and driving forces that may or may not generate concrete results in advancing cooperation, thus increasing the benefits flowing from shared watercourses. Some of the key elements of the approach employed are set out below.

This study applies a broad perspective to transboundary water management, taking account of key actors promoting cooperative action within shared basins and representing the principal levels of intervention in respect of international water resources in Africa, including:

- Pan-African level – e.g. perspective from AMCOW under the African Union Commission (AUC);
- Regional level – perspective from regional organisations, such as regional economic communities (e.g. SADC) or regional trade organisations (e.g. the Intergovernmental Authority on Development (IGAD));
- Basins level – perspectives from RBOs from Eastern, Southern and Western Africa;
- Country level – perspectives from selected member states of particular river basin organisations.
- These four levels each influence how water resources are planned and managed. In this context, it is important to highlight that this report focuses on identifying concrete examples of cooperative action and the respective processes of operationalizing legal principles and policy objectives laid out in the respective RBO agreements. It should be noted that this study is not a legal and institutional assessment of the RBO agreements or frameworks. Instead, it applies a pragmatic approach to quickly assess relevant practice by engaging with practitioners working with these issues on a daily basis. It focuses on five key thematic areas (see section 3) that are central to developing and implementing water law and policy provisions for transboundary watercourses:

1. Notification and consultation mechanisms;
2. Standards of environmental and social protection;
3. Harmonisation of transboundary water agreements;
4. Information and data sharing mechanisms;
5. Development and implementation of transboundary management plans.

These thematic policy areas function to facilitate effective implementation of the three core principles of international water law, i.e. Equitable and Reasonable Utilisation, Prevention of Significant Harm and Duty to Cooperate, which are central to the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses and to a range of other water-related instruments at the global, regional and basin level.

In order to gather the lessons learned along these five dimensions, a workshop was organized jointly by the NBI and GIZ in Entebbe, Uganda, in May 2015. It aimed at identifying and discussing experience and best practice in implementing transboundary water policies. The workshop was attended by 25 professionals representing ten different

Table 1: List of organisations participated in the TWM Policy Workshop Uganda, 11-13 May 2015

#	Organisation	Information
1	African Union Commission / African Ministers' Council on Water (AUC/AMCOW)	<ul style="list-style-type: none"> <li>• Regional organization for the African continent</li> <li>• Focus on transboundary aspects of national water policies</li> </ul>
2	Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS)	<ul style="list-style-type: none"> <li>• River Basin Organisation;</li> <li>• Intergovernmental organization;</li> <li>• Specialised institution of CEMAC (Economic and Monetary Community of Central Africa);</li> <li>• Member States: Republic of Cameroon, Central African Republic, Democratic Republic of Congo, Republic of Congo and Gabon.</li> </ul>
3	Eastern Nile Technical Regional Office (ENTRO)	<ul style="list-style-type: none"> <li>• Sub-basin Organization for Eastern Nile;</li> <li>• Intergovernmental Organization;</li> <li>• Member States: Egypt, Ethiopia, South Sudan and Sudan;</li> <li>• Project operational arm under the NBI for the Eastern Nile</li> </ul>
4	Intergovernmental Authority on Development (IGAD)	<ul style="list-style-type: none"> <li>• Intergovernmental organization;</li> <li>• Member States: Djibouti, Ethiopia, Kenya, Somalia, Eritrea, South Sudan, Sudan and Uganda.</li> </ul>
5	Lake Victoria Basin Commission (LVBC)	<ul style="list-style-type: none"> <li>• Specialized institution of the East African Community (EAC) responsible for coordinating the sustainable development agenda of the Lake Victoria Basin;</li> <li>• Member States: Burundi, Kenya, Rwanda, Tanzania and Uganda.</li> </ul>
6	Nile Basin Secretariat (NBI)	<ul style="list-style-type: none"> <li>• River Basin Organisation;</li> <li>• Intergovernmental organization;</li> <li>• Member States: Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Eritrea participates as an observer.</li> </ul>
7	Nile Equatorial Lakes Subsidiary Action Program – Coordination Unit (NELSAP)	<ul style="list-style-type: none"> <li>• Sub-basin Organization for Eastern Nile;</li> <li>• Intergovernmental Organization;</li> <li>• Member States: Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, The Sudan, Tanzania, and Uganda;</li> <li>• Project operational arm under the NBI for the Nile Equatorial Lakes.</li> </ul>
8	Orange-Senqu River Commission (ORASECOM)	<ul style="list-style-type: none"> <li>• River Basin Organisation;</li> <li>• Intergovernmental organization;</li> <li>• Member States: Botswana, Lesotho, Namibia and South Africa.</li> </ul>
9	Permanent Okavango River Basin Water Commission (OKACOM)	<ul style="list-style-type: none"> <li>• River Basin Organisation;</li> <li>• Intergovernmental organization;</li> <li>• Member States: Angola, Botswana and Namibia.</li> </ul>
10	Zambezi Watercourse Commission (ZAMCOM)	<ul style="list-style-type: none"> <li>• River Basin Organisation;</li> <li>• Intergovernmental organization;</li> <li>• Member States: Angola, Botswana, Malawi, Mozambique, Tanzania, Namibia, Zambia and Zimbabwe.</li> </ul>

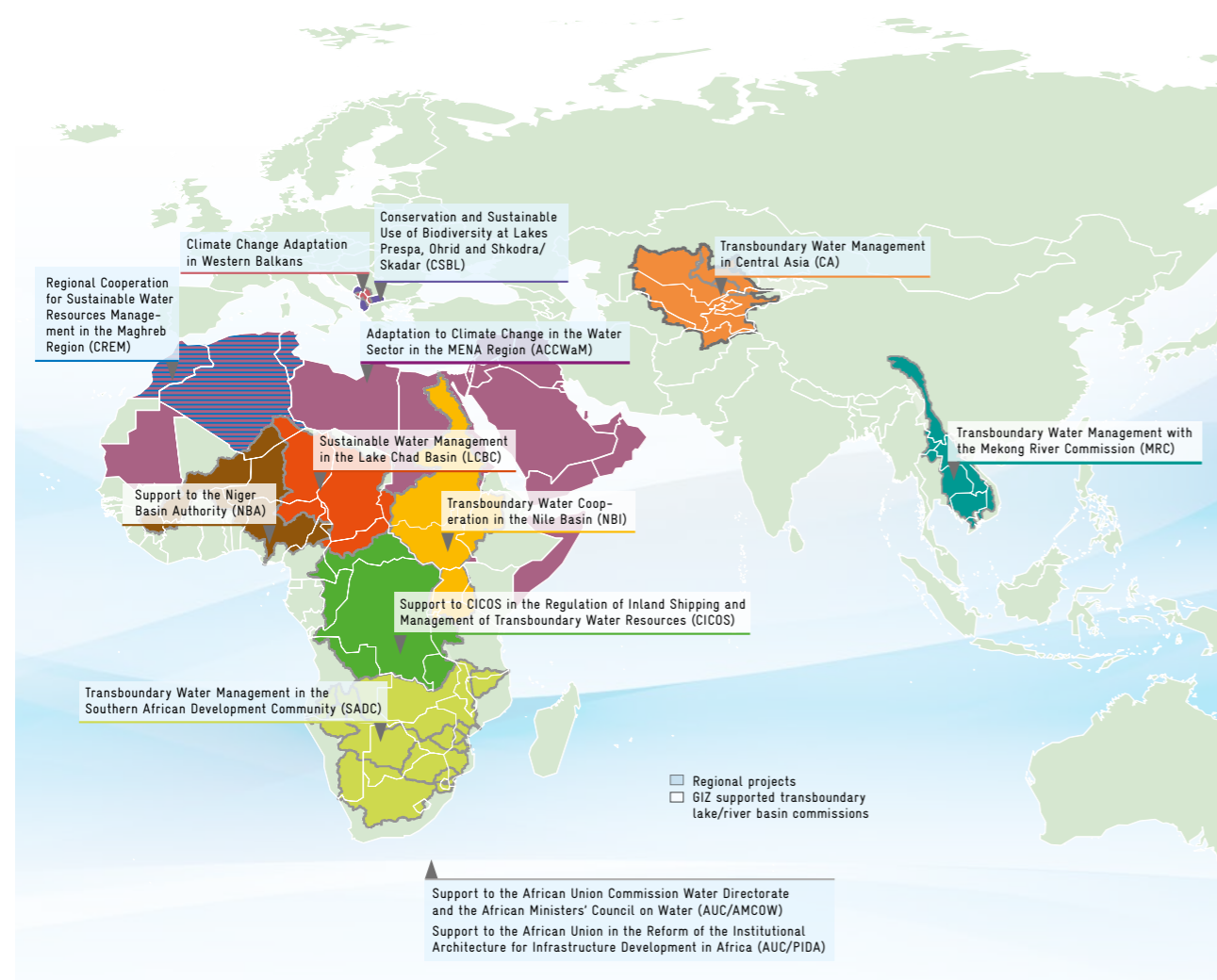
organisations engaged in different aspects of transboundary water management (Table 1) which cover key regions and basins in Africa (see figure 1).

This workshop report focuses on identifying the experiences of African RBOs in operationalizing their respective agree-

ments within the parameters of the aforementioned five thematic areas. Experience shows that every basin is unique, requiring tailor-made individual solutions and approaches to implementing the relevant legal and policy requirements. The key questions in defining the relevant experience include:

- Why was it decided to proceed in developing/elaborating a specific thematic policy area within a particular river basin? Was it explicitly stated in the basin agreement that a specific activity should be undertaken, was it decided by the RBO's decision-making body as a means of fulfilling the requirements stated in the agreement, was it based on inspiration obtained from another basin, was it promoted by a visionary individual (internal or external), was it a precondition to obtain a loan from an international financial institution (IFI), was it a donor driven requirement, or was it for another reason?
- What was actually done? Which standards or structures were used to undertake the activity? Which data sets were included in information system, which notification procedures were applied, which specific environmental or social standards were applied and what was the focus of the basin plan?
- How was the process undertaken?

Figure 1: GIZ projects worldwide in transboundary water management



## 2. Workshop thematic policy areas in the context of international water law

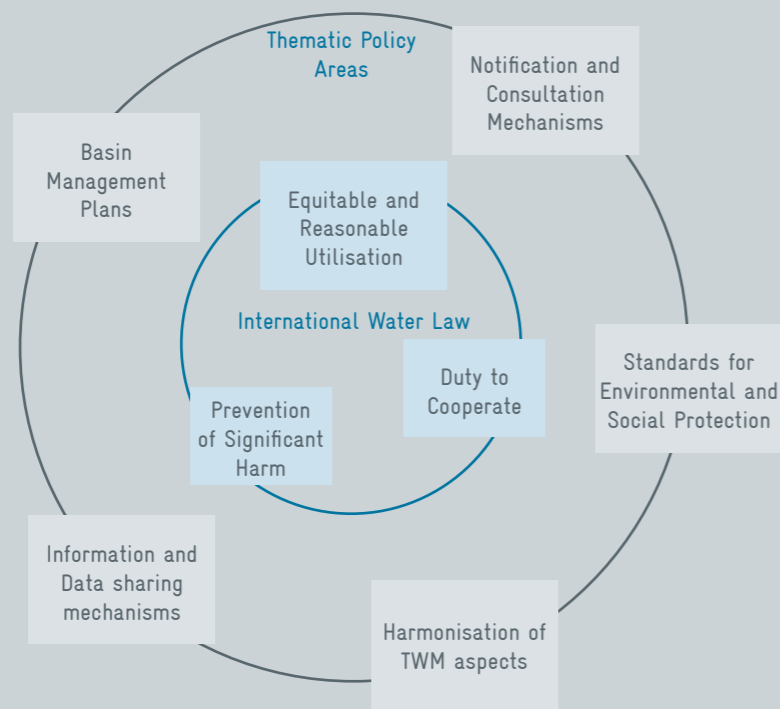
Almost all RBOs worldwide are guided by international water law principles through their founding legal treaties and policy documents and thus are driven by, whilst also themselves contributing to, the ongoing evolution and development of international water law. Recent developments in international water law will be presented below, followed by a presentation of the five thematic policy areas of the study and of how they link to the practice of international water law (see figure 2).

### 2.1 Recent development in International Water Law

Recent years have witnessed significant developments in the field of international water law (). Most importantly, a clear consensus has emerged regarding the key rules and principles of international water law – a process greatly assisted by the adoption and entry into force of a comprehensive suite of global instruments applying to shared water resources. 2014 saw the entry into force of the 1997 UN Watercourses Convention and the opening to global accession of the 1992 UNECE Water Convention. Along with the 2008 ILC Draft Articles on Transboundary Aquifers and 2013 UNECE Model Rules on Transboundary Groundwaters, these two conventions represent the global consensus that

has emerged regarding the three key rules of international water law (McIntyre 2008; McCaffrey 2014), i.e. Equitable and Reasonable Utilisation, the Duty to Prevent Significant Transboundary Harm (including environmental and ecological harm), and the Duty to Cooperate (incorporating a suite of procedural obligations regarding notification, consultation and negotiation in respect of planned projects and, more generally, ongoing exchange of information and dispute avoidance and resolution). This consensus is also reflected in regional water resources agreements (e.g. the 2000 SADC Revised Protocol on Shared Watercourses) and in specific river basin agreements in Africa (e.g. the 2000 ORASECOM Agreement). Generally, this convergence around a number of key rules and principles renders the field of international water law more predictable and more rationally coherent. At the same time, it also gives rise to a wealth of generally relevant technical guidance and judicial deliberation which serve to elaborate the normative implications of the different principles. However, the practical measures required for effective implementation of these rules and principles remain highly uncertain and the implementation of specific water law principles in the different basins often remains in its infancy – especially with regards to the development of water infrastructure (Rieu-Clarke 2014; Rieu-Clarke 2015).

Figure 2: Core international water law principles and thematic areas of this



During the last ten years, there has been significant elaboration of the normative content and meaning of the key substantive and procedural rules of international water law, and of the true nature of the inherent interlinkages between both types of rules. In fact, this important elaboration has largely come from the deliberations of courts and tribunals, e.g. the Pulp Mills and Kishenganga cases, even though the number of cases is small. Similarly, the 2010 International Court of Justice (ICJ) judgment in the Pulp Mills Case (Argentina v. Uruguay), clarifies precisely how procedural rules, facilitating adequate and meaningful communication between co-riparian States, play an essential role in ensuring that States meet their legally binding obligations to prevent significant transboundary harm and to utilise an international watercourse in an equitable and reasonable manner (McIntyre 2011). The Court also seized the opportunity provided by the Pulp Mills Case to highlight the critically important role played by RBOs in facilitating and managing such procedural inter-State communication.

Any examination of the key global or regional water-resources conventions suggests that international water law comprises a comprehensive suite of inter-related substantive and procedural rules as listed in Table 2.

As a key mechanism for such inter-state communication and cooperation in the context of a planned project, the

ICJ found that a requirement to undertake environmental impact assessment (EIA), which also takes account of transboundary impacts, has become established as a universally applicable requirement of general customary international law. It should be noted that most transboundary water agreements do not include EIA as an explicit requirement. The Court's finding is not only (or even principally) based on water agreements, but rather on the general practice of states regarding the application of EIA. Of course, some uncertainty remains as to the precise scope or intensity of the EIA process required.

Continuing recognition of the integrated nature of the procedural and substantive rules of international water law supports the view that the principal objective of this body of rules is that of promoting a 'culture of communication' among basin states, by means of which states can find ways to cooperate towards optimal utilisation and protection of shared watercourses through structured, formalised and incremental procedural engagement. The key substantive principles of international water law provide initial shared understandings and a common language to facilitate inter-state communication, while the procedural rules provide for a structured discourse, which proceeds for the starting point of shared understandings towards formal agreement on mutually beneficial solutions.

Table 2: Inclusion of IWL principles in selected water conventions / instruments

International Conventions IWL Principles	1997 UN Water Convention	1992 UNECE Helsinki Convention	2008 ILC Draft Arts on TB Aquifers	2000 SADC Protocol
Equitable and Reasonable Utilisation	Arts. 5,6	Art. 2.2(c)	Arts. 4, 5	Art. 3(7)(8)
Duty of Prevention of Significant Harm	Art. 7	Art. 2.1	Art. 6	Art. 3(10)
General Duty of Inter-State Co-operation	Art. 8	Arts. 2.6, 9, 11	Art. 7, 16	Art. 3(5)
Environment /Ecosystem Protection	Arts. 20-3	Arts. 2.2, 3	Arts. 10, 11, 12	Art. 3,
Prior Notification of Planned Measures	Arts. 11-16	Art. 9.2(h), (j)	Art. 15.1, 15.2	Art. 4
Consultation /negotiation	Art. 17	Art. 10	Art. 15.3	Art. 4
Exchange Information	Art. 8	Arts. 6, 9.2(c), 13	Art. 8	Art. 3(6)
Dispute Settlement	Arts. 30-33	Art. 22, Annex IV	Art. 15.3	Art. 7

In connection with the ongoing elaboration of substantive obligations of international water law, it is increasingly clear that legal requirements concerning the protection of water-related ecosystems have become even more important and more sophisticated in nature. For example, in the recent Kishenganga Arbitration (2013), an arbitral tribunal established by the Permanent Court of Arbitration pursuant to the 1960 Ganges Waters Treaty confirmed that India, which was constructing a hydropower dam upstream of Pakistan on a tributary of the Ganges, was bound to safeguard and maintain minimum "ecological flows" to Pakistan (Rieu-Clarke 2013). Similarly, international courts and tribunals, international organisations, water resources managers, diplomatic negotiators, and other actors in the field of international water law are increasingly committed to the adoption of an "ecosystems approach" to the management of shared waters and with the safeguarding of "ecosystems services" and the equitable sharing of benefits deriving therefrom.

The incorporation of environmental and ecosystems imperatives into the long-established principles of international water law is being accelerated by the recent tendency of international courts and tribunals adjudicating on disputes in this field to employ the doctrine of "systemic integration" to the interpretation of water conventions, or otherwise to employ an "evolutionary" interpretive approach. For example, in the Kishenganga Arbitration, the tribunal referred to Article 31(3)(c) of the 1969 Vienna Convention on the Law of Treaties, which provides that a treaty shall be interpreted taking account of 'any relevant rules of international law applicable in the relations between the parties'. This approach permits consideration of the great wealth of environmental commitments entered into by States in recent years, even in the interpretation of older water-related conventions, such

as the 1960 Indus Waters Treaty at issue in the Kishenganga case. More generally, this approach facilitates the convergence of this field of international law around a number of core rules and principles.

Likewise, while the social protection values inherent in the cardinal principle of international water law, that of equitable and reasonable utilisation, have been elaborated to some extent by the ongoing discourse on sustainable development, the emergence in international law of the human right to water has highlighted the significance of vital human needs within any equitable balancing of uses of shared water resources. The role of international water law in achieving the social protection envisaged under the human right to water paradigm is expressly acknowledged in General Comment No. 15, the seminal document in support of the human right to water adopted by the UN Committee on Economic, Social and Cultural Rights.

## 2.2 Notification and consultation Mechanisms

It is increasingly understood that the key substantive obligations of international water law, the principle of Equitable and Reasonable Utilisation and the Duty to Prevent Significant Transboundary Harm, are each "due diligence" obligations requiring states to meet certain standards of conduct in their dealings with co-riparian States. To a large degree, such due diligence standards are procedural in nature, requiring that states notify co-riparians of planned projects or uses likely to impact upon them and enter into consultations, and where necessary negotiations, in order to address the concerns or objections of such notified states. In order to ensure that such notification is meaningful and effective, states should conduct an EIA of the proposed

project in cooperation with the potentially affected co-riparian states.

The main objective for notification and associated consultation mechanisms is to ensure that due account is taken of the interests of co-riparians, to prevent significant harm by planned infrastructure projects (or measures) with potential transboundary impacts and to ensure the equitable and reasonable sharing of benefits. A state planning a project cannot take all reasonable measures to prevent harm unless the potentially harmed state has had an opportunity to consider and comment upon all aspects of the project. Similarly, the proposing State cannot ensure equitable and reasonable use where it has not sought and considered information on the interests and concerns of co-riparians.

Article 4(1) of the 2000 Revised SADC Protocol on Shared Watercourses, Article 4 (1) on ‘Planned Measures’ provides a good example of an overarching framework for notification procedures applied by RBOs in the SADC Region. The general procedure is that the state proposing a project submits a notification, including documentation on the proposed project together with an indication of its potential impacts (e.g. the EIA report), to the other riparian states in a basin with a copy to the Secretariat of the Commission. The notified state has a period of six months to respond, which can be extended by an additional six months where requested by one of the notified parties. The SADC Protocol provides further detailed guidance on the notification process. Ideally, the notification procedure would result in ‘No-Objection’ by the notified riparian states. It should be noted that many IFIs (e.g. AfDB, KfW, World Bank) require ‘No-Objection’ from co-riparian States as part of the approval process for a loan agreement. For example, World Bank Operational Policy and Bank Procedures 7.50, Projects on International Waterways (2001), stipulates that a state planning a project impacting an international waterway must notify all riparians at the earliest possible opportunity in the project cycle and, though the World Bank formally operates under a “no objection” rule, it has elaborated detailed procedures for addressing objections from co-riparian States. The 1991 UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), which applies to the majority of states in the pan-European region, and practice and guidance developed thereunder, provides a useful example of international best practice in respect of transboundary EIA.

It may be difficult to design an ideal notification and consultation process, which is applicable to all river basin organisations in Africa, since different RBO agreements have been developed within different contexts. Figure 3 presents an ‘ideal’ notification and consultation process, which was discussed at the workshop regarding its applicability in

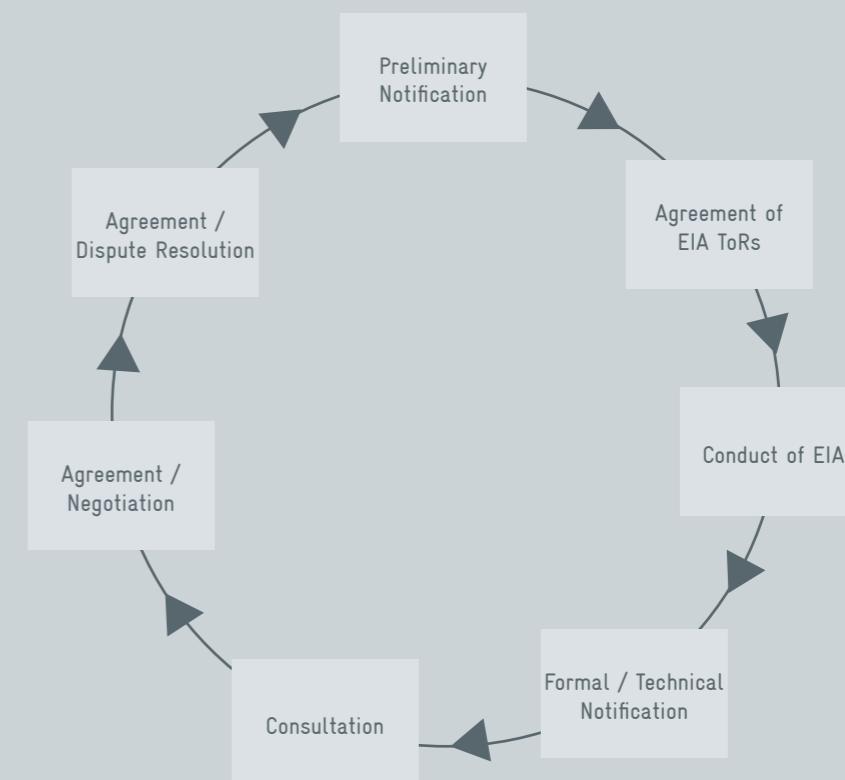
an African context (see Section 3 below). This framework is largely based on the judicial deliberations of the ICJ in the 2010 Pulp Mills Case, where the ICJ identified EIA addressing transboundary impacts as a generally applicable requirement of customary international law, and as an essential component of meaningful notification. The ICJ suggested that effective notification might usefully involve two or more stages, including preliminary notification, outlining the general nature of a proposed project, and full/formal notification, setting out all the technical details including the results of the EIA study.

## 2.3 Standards of environmental and social protection

The standards of environmental and social protection required under international water law have become more clearly understood in recent years, as have the approaches by means of which such standards are expected to be attained. In addition to the environmental protection provisions contained in almost all watercourse agreements, the existence and continuing development of a full range of international environmental regimes (e.g. the 1971 Ramsar Convention on Wetlands of International Importance and the 1992 Convention on Biological Diversity) have assisted in the elaboration of a comprehensive set of normative standards of environmental and ecological protection.

As regards social protection, the continuing elaboration of a comprehensive body of human rights requirements regarding, for example, involuntary resettlement and other displacement, as well as relevant IFI safeguard policies, highlight social issues and impacts which states should address in the utilisation and development of shared water resources. More specifically, the international discourse on the human right to water (e.g. UN GA resolution 64/292 dated 28 July 2010) has done much to clarify the concept of water-related vital human needs and thus, the legal obligations applying to watercourse states in taking account of the water needs of people under their own jurisdiction and under the jurisdiction of co-riparian states. For example, in the context of shared waters, states must refrain from interfering with the ability of co-riparian states to ensure that everyone enjoys access to a supply of sufficient, adequate and safe water. In 2002, the UN Committee on Economic Social and Cultural Rights adopted General Comment No. 15, in which four key aspects are identified as important for states to fulfil their obligations in connection with the human right to water:

Figure 3: Ideal schematic overview of the notification and consultation process (graph by authors)



- States must do all in their power, having regard to the resources available, to ensure that citizens enjoy sufficient, safe, acceptable, physically accessible and affordable water. Retrogressive measures are prohibited;
- States must adopt and implement a national water strategy and plan of action concerning realisation of the human right to water and addressing the needs of the whole population;
- States have to guarantee that the right to water is enjoyed without discrimination and must ensure special protection for women, children and vulnerable groups and communities; and
- States should have regard to their obligations under the human right to water in their international relations concerning shared water resources.

Processes of environmental and social impact assessment are now universally regarded as being required under general international water law, although states enjoy a considerable degree of discretion as regards the conduct of such assessments, despite the existence of benchmark-setting international instruments, such as the 1991 Espoo Convention. In addition, IFIs provide working examples of effective mechanisms for ensuring the implementation of environmental and social safeguards, often revolving around procedures for (transboundary) environmental and social impact assessments for infrastructure projects.

## 2.4 Harmonisation under transboundary water agreements

While international water law does not generally require states to harmonise their national water laws, it does encourage co-riparians to take joint action to protect international watercourses where appropriate, and to coordinate their national legal frameworks in this regard. For example, for the purposes of the prevention, reduction and control of pollution, Article 21(3) of the UN Watercourses Convention 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.’

Clearly, any such coordinated elaboration of national laws relating to the protection or use of international water resources is strongly suggestive of the need for cooperative institutional arrangements, such as RBOs. It is important to understand the transboundary aspects of national water policies and the means for aligning national law and policies to accommodate transboundary requirements.

2.5 Information and data sharing mechanisms

The exchange of information and data is absolutely essential for the type of inter-state cooperation required under international water law, not only information on the state and utilisation of shared water resources but also on the social and economic dependence of each watercourse state upon such waters and on the environmental impacts of water utilisation or other development. Only meaningful engagement between states centred on the active and structured exchange of critical information can ensure compliance with the substantive requirements of international water law. However, such exchange of information requires permanent institutional machinery to facilitate communication in an effective and structured manner. As it can gather the relevant technical expertise and can identify and build up a robust and comprehensive body of data – hydrological, environmental, economic and social – relating to a particular shared watercourse, an RBO is the optimal institutional structure for managing such exchange of information and data. To date, several RBOs have elaborated examples of comprehensive baseline studies, e.g. OKACOM and ORASECOM. The adoption of a basin-wide approach requires that comprehensive data and information is available for the RBO to fulfil its mandate in coordinating river basin management and development. Although the agreements establishing RBOs often provide the basis for ensuring that member states share data and information, this is not necessarily the case. In the SADC Region, for example, where river basin management is guided by the SADC Protocol on Shared Watercourses and operationalized through river basin agreements in the respective basins, many RBOs have developed additional data-sharing protocols that specify more detailed and far-reaching provisions. Information and data can be shared in many forms including, for example:

- Specific hydrological data shared between states to inform a river basin water balance assessment or a flood forecasting and early warning system, which informs the management and development of water resources in the river basin. Such sharing is coordinated by the RBO;

- Specific data and information relating to a development project shared by a notifying state and co-riparian states in order to inform a notification, consultation and/or negotiation processes. Such processes can be facilitated by the notifying state or an RBO;
- Information on guidelines, procedures and methodologies for RBOs and states to assist in the implementation of transboundary water management;
- General information on the basin (e.g. state of the basin reports, water atlas, river awareness kits, monographs, etc.) collected and coordinated by the RBO (or REC) to inform government officials, media, academics and other interested people and organisations on the general state of and issues in the basin;
- Information to the general public on issues prevailing in the river basin (e.g. video documentaries, newspaper articles, radio, etc.) Such information dissemination is often coordinated by an RBO or REC.

2.6 Development and implementation of transboundary management plans

Ultimately, the substantive obligations of international water law – the Duty to ensure the Equitable and Reasonable Utilisation of shared waters and the Duty to Prevent Significant Transboundary Harm – require that co-riparian states cooperate in the development and implementation of transboundary management plans. While such joint planning is not understood as a direct legal obligation under general international water law, it is implicit in the duty to cooperate in order to meet the substantive requirements. Of course, basin-wide planning may also be a requirement under specific river basin agreements. Such planning clearly requires permanent institutional structures with adequate technical capacity, ideally RBOs. The development and adoption of transboundary management plans may also give rise to further, ancillary requirements, such as strategic environmental or social assessments, which once again can only be coordinated effectively by adequately capacitated RBOs.

3. RBO Experiences in implementing transboundary water law and policies

The workshop included 17 presentations on different cases within the five thematic policy areas (listed below for each of the thematic policy areas and summarised in Annex 1). This section briefly presents the cases, synthesizes the key experiences and reflects on the subsequent discussions. As recommended at the workshop, the workshop outcome should further populate and develop the Figure 1 ‘circle diagram’ based on the RBO experiences into an ‘RBO Implementation Framework’. Key points from the presentations and discussions under each thematic policy area were captured as ‘elements for implementation’ and divided into two categories: ‘options’ and ‘drivers’, and are defined as follows:

- **Options** refer to different opportunities available, e.g. tools, approaches or mechanisms, to positively advance or successfully comply with the requirements of the thematic policy areas; and
- **Drivers** refer to those persons, organisations or behaviours that advance the process of implementing the thematic policy areas.

3.1 Thematic policy area #1: Notification and consultation Mechanisms

3.1.1 RBO experiences

The following three transboundary water policy cases were presented

NELSAP/NBI presented Case 1 as a concrete example of notification for a transboundary project to establish a hydropower scheme on the Rusumo Falls. The project had been underway for a number of years and a good cooperative environment had been established between the three main parties involved, i.e. Burundi, Rwanda and Tanzania. The initial project design was to construct a 90 MW hydropower scheme that included displacement of an estimated 90,000 persons. Through the notification process, and the subsequent environmental and social assessments, it was decided to change the original plan and instead establish an 80 MW hydropower scheme, which only involved the displacement of about 500 persons. The main lesson learned from this case was that effective communication between the parties based on the principle of good faith enabled them to work together in good faith, resulting in a largely positive result. This case provides an example of where the ‘preliminary notification’ process was applied; refer to Figure 3, above.

CICOS presented Case 2, focusing on the approach taken to develop its guidelines on prior notification. This case referred to a notification process recently undertaken on the feasibility study for the Inga III Lower Falls hydropower scheme. It was noted that clear guidelines were not yet in place and therefore that the process did not proceed very smoothly. This resulted, for instance, in a time frame for the notification process which was very short. A number of World Bank safeguards were triggered by this project and the WB therefore required no objections in line with the World Bank Operational Policy and Bank Procedures 7.50. The lessons learned suggest that adequate time should be

Case #	Title of Presentation	Transboundary Organisation
Case 1	Prior notification regarding the Regional Rusumo Falls Hydropower Project (Burundi, Rwanda and Tanzania)	NELSAP (NBI)
Case 2	CICOS guidelines on Prior notification	CICOS
Case 3	Notification procedures in the SADC Protocol on Shared Watercourses	ORASECOM

made available for the development process, that experiences from other basins should be used and adapted to the local context, and that the appropriateness of such draft procedures should be tested in advance. CICOS furthermore learned the importance of involving key stakeholders (i.e. lawyers, practitioners and investors) in the process of developing the notification procedures.

ORASECOM presented Case 3 on the notification procedures provided under the Revised SADC Protocol on Shared Watercourses. Based on the provisions of the SADC Protocol, ORASECOM and other RBOs in the SADC region are developing standard notifications procedures on planned measures. Generally, ORASECOM has a standing agenda item for meetings of the ORASECOM Commission under which parties inform each other on upcoming projects with potential transboundary impacts. In addition, ORASECOM has developed draft detailed procedures for notification and environmental assessments for the Orange-Senqu River Basin, aiming at further specifying the different steps to be taken within such a notification process. Currently, these procedures are under internal discussions by the parties, but are expected to be applicable in the near future.

3.1.2 Synthesis of discussion points

Options

- Where all basin states have been engaged early and in a genuinely cooperative manner, notification is largely an administrative and non-controversial process;
- Prior notification tends to be easier when members states have common interests that can be reciprocated (e.g. regional power supply);
- Notification might result in modification of the project design, even in advance of the completion of a full EIA process (e.g. Rusumo Hydropower scheme), thus potentially also adding to the quality and the effectiveness of the project;
- States will be more involved in the process and show increased buy-in where notification is established as a continuing process comprising several steps, including preliminary/pre-notification; cooperative development of EIA ToRs; full/technical notification, etc. Such a process can and should also have close linkages to the joint basin planning processes;

- Balanced development and comparable future opportunities across the basin can make the issue of prior notification a simple and straight-forward process;
- The full scope of the project should be notified and should include all related, ancillary aspects of the project (e.g. power distribution lines);
- It can be helpful to ensure early awareness among all basin states of (possible) projects through a strategic planning process at basin level;
- Issues of environmental protection should feature prominently in notification processes.

Drivers

- The notifying state takes responsibility for the notification process (e.g. Lesotho Highlands II project);
- Proactive involvement of a senior RBO official of (e.g. Executive Director level) is very important for ensuring that states have trust and confidence in the notification process;
- IFI involvement can assist (fast-track) the process of notification. IFI safeguard policy disclosure requirements are generally regarded helpful. It should however be noted that the World Bank’s ‘no-objection’ policy can make proposing States insecure about notification, since there are several conditions required before no-objections are given;
- It is fundamentally important to link the notification process to related legal obligations, including the precautionary principle and to the obligation to prevent significant transboundary harm;
- Not only does the notification process rely on good faith, but it can also help to promote good faith in relations between basin states.

3.2 Thematic policy area #2: Standards of environmental and social protection

3.2.1 RBO experiences

The following three transboundary water policy cases were presented:

ZAMCOM demonstrated (Case 4) the importance and benefits of engaging a wider range of stakeholders at the national level in order to advance the RBO agenda and to obtain national level buy-in. Over the years, ZAMCOM has expended significant time and effort in promoting stakeholder networks. An important lesson learned is that national stakeholder platforms can be effective in ensuring sustained, legitimate and orderly engagement, involvement and participation of relevant stakeholders in a law or policy-making process in the context of institutionalized water resources management. As a specific case, the national stakeholder platforms played a key role in the process of developing the widely accepted Integrated Water Resources Management Strategy for the Zambezi Basin. Key outstanding questions focus on how to ensure the optimal composition of stakeholders and whether such platforms are sustainable. NBI/ENTRO presented (Case 5) its Policy and Guidelines on Environmental and Social Safeguards. These are crucial in a region facing significant socio-economic growth and increasing pressure on the Nile’s water resources through water resources development and related investments, potentially placing riparian populations or the environment at risk. Mechanisms such as safeguards for avoiding, minimizing, mitigating and managing negative impacts are therefore crucial. In this context, there is a need to know what to safeguard, who to safeguard and what risks to safeguard against. Therefore, a number of studies were undertaken in the course of the development of the Environmental and Social Safeguards and Guidelines. Lessons learned indicate that most safeguards measures are interim, but that a lot has been achieved. Although an enabling environment has been established among the Nile riparian states, which is key to achieving sustainable goals, there is still a need to establish a firm legal basis for transboundary environmental and social safeguards policies (which might possibly include relying on those elements found in international conventions to which riparian countries have already committed).

ORASECOM presented (Case 6) its Transboundary Environmental Assessment Guidelines (ORASECOM, 2013). Current practice on notification and environment assessment is set out under the ORASECOM Agreement and the Revised SADC Protocol on Shared Watercourses (see Case 3). Ministers responsible for Water (i.e. ORASECOM Council of Ministers) recognised a need to develop further guidelines for transboundary environmental assessments of the impacts of development initiatives within the basin. The new draft guidelines clarify and strengthen the duty to notify and the related obligation to conduct transboundary EIA, using existing national EIA and SEA tools. The guidelines furthermore advise on the conduct of transboundary consultations in the context of the notification requirements imposed under the ORASECOM Agreement.

The guidelines are currently under consideration by the parties. Until their approval, the notification processes are undertaken in line with what is specified in the agreement only, which in essence mirror those outlined in the Revised SADC Protocol on Shared Watercourses.

3.2.2 Synthesis of discussion points

Options

- A wealth of relevant and applicable standards exists at the national level, especially regarding environmental protection (less so for social issues). National standards should be applied in the case of a single project, located within the territory of one state. Where there is potential transboundary impact, national standards should still apply to the extent that they correspond with generally accepted international rules and standards. IFI standards will be applied where appropriate;
- Often such safeguards are more concerned with procedural standards rather than substantive standards, especially regarding the conduct of EIA, SEA and SIA;
- Benchmarking is helpful in reaching the consensus required to commence a discussion on environmental and social standards, e.g. by referring to existing standards (e.g. EU, UNECE, IFIs, etc.);
- Standards may be articulated and implemented through Environmental Action Plans and Resettlement Action Plans and similar planning and management tools;
- More recently, specific standards are emerging for environmental flows for the purposes of ecological protection (e.g. ORASECOM – Lesotho Highlands II; CICOS – Congo / Lake Chad Project; Tanzania – Mara River).

Drivers

- It is important to identify bona fide stakeholders in order to ensure meaningful consultation with potentially impacted persons (or the public) and to avoid having the process dominated by advocacy groups;
- The establishment of national / regional stakeholder platforms (as found e.g. with ZAMCOM) can enhance processes for ensuring compliance with environmental and social standards

Case #	Title of Presentation	Transboundary Organisation
Case 4	National Stakeholder Platforms (NASC)	ZAMCOM
Case 5	NBI Policy and Guidelines on Environmental and Social Safeguards	ENTRO/NBI
Case 6	ORASECOM Transboundary Environmental Assessment Guidelines	ORASECOM

3.3 Thematic policy area #3: Harmonisation under transboundary water agreements

3.3.1 RBO experiences

The following three transboundary water policy cases were presented:

Case #	Title of Presentation	Transboundary Organisation
Case 7	Kenyan National Transboundary Water Policy	IGAD*
Case 8	IGAD Regional Water Policy	IGAD
Case 9	Harmonization of Laws, Policies and Regulations – Case for Transboundary Natural Resources Management in Lake Victoria Basin	LVBC/EAC

Note: \*It should be noted that this presentation was done by the former Head of the Transboundary Water Section in the Ministry of Water and Irrigation of Kenya, who is now working with IGAD.

Case 7 focused on the process of developing the Kenyan National Transboundary Water Policy. In Kenya, a number of transboundary issues identified in the national water resources as national issues, though it was acknowledged in 2010 that part of the water resource was in fact an international issue. There was a need to harmonise policies with neighbouring states as well as for joint planning, collaborative management and joint risk management as regards climate change and enhancing water resources security. Therefore, a transboundary water policy was developed in order to clarify the responsibilities and roles of various stakeholders across national borders, to resolve conflicts and inefficiencies associated with distribution of water resources between different water users, and to monitor the impacts of climate variability and associated disaster risk. The policy objective was to ensure sustainable management and utilization of transboundary water resources, to provide for improved institutional arrangements, to encourage cooperation amongst riparian states, and to facilitate joint information collection, planning and data sharing on planned measures. This, in fact touches upon all the thematic policy areas of the workshop. Lessons learned showed that it is difficult to plan and coordinate water programmes and projects within a transboundary context, and that it is important to identify concrete ‘benefits’ for the different stakeholders.

IGAD presented its Regional Water Policy (Case 8). IGAD’s mission is to assist and complement the efforts of its Member States to achieve, through increased cooperation: food security and environmental protection, promotion and maintenance of peace and security and humanitarian affairs,

and economic cooperation and integration. Being located in a highly water scarce region, the IGAD Member States are all aware of the strong nexus between water scarcity and conflict. Natural disasters are common and the region experiences extreme competition for water. There are more than 15 international rivers in the IGAD region, and so IGAD embarked on developing its regional water policy in order to promote a common regional approach to water resources management, including collaborative action to increase resilience to climate change. There is also a particular need to resolve conflicts and inefficiencies associated with distribution of water between different users. The lessons learned identified real challenges in creating adequate awareness of the need for the development of a Regional Water Policy and Protocol. Being a diverse and highly water scarce region, there was a great need to create confidence in the policy development process right from the beginning. To support confidence building, both comprehensive capacity building and enhancement of detailed understanding of the water resources are required. This includes a better understanding of groundwater resources as groundwater plays a crucial role in securing water for people in this water scarce region. The Lake Victoria Basin Commission (LVBC) presented (Case 9) on the harmonization of laws, policies and regulations by the riparian States. LVBC is a specialized institution of the East African Community (EAC), responsible for coordinating the sustainable development of the Lake Victoria Basin. The Lake Victoria Basin has been endowed with abundant resources, but in recent years significant degradation of natural resources has occurred due to pollution from industrial and urban effluents, land degradation, invasive

weeds and deforestation. In order to counter such adverse developments, EAC developed a Protocol on Environment and Natural Resources Management (signed on 3rd April 2006, but not yet ratified by all EAC member states), to be implemented by the LVBC. The lessons learned from the work undertaken by the LVBC suggest that transboundary resources still remain highly vulnerable to degradation, especially from anthropogenic activities. All member states have elaborated national policies and laws for management and development of transboundary natural resources (TNR), but these are often conflicting and do not support a common goal. Currently, there is an urgent need to harmonise national policies and legislation to enable Member States to work together to reverse the degradation of the lake and its natural resources.

3.3.2 Synthesis of discussion points

Options

- It is helpful to commence with informal harmonisation – draft instruments, soft-law guidelines, MOU, etc.;
- A regional framework agreement, e.g. the Revised SADC Protocol, has served as a driver for the harmonisation of national water law in the SADC region;
- A transboundary water policy may be included within the National Water Policy (Sudan) or adopted as a separate instrument to provide emphasis (Kenya). Transboundary water planning is most useful for countries which share much of their water resources;
- Agreed joint basin surveys can promote harmonisation in basin States;
- Where there is sufficient trust among basin states and an awareness of the need for a coordinated approach, a Regional Water Policy (RWP) may be adopted by a REC based on a Regional Synthesis Report (IGAD 2015). A RWP can only be developed on the basis of a sophisticated understanding of the hydrological, ecological, economic and social aspects of the basin / resource;
- It is very important to ensure coherence, both formally and in practice, between the Regional Water Policy and the National (Transboundary) Water Policy, which depends largely on the national administrative culture

- in each basin state. Often, there is limited cooperation/ coordination between national ministries within one state;
- It is very important to clarify the aims of any harmonization of legal and policy frameworks and application of the principle of subsidiarity where a harmonising Regional Water Policy has been adopted. It is necessary to decide whether harmonisation aims to ensure similar approaches, to exploit synergies, or merely to ensure that national approaches are not contradictory to the transboundary objective?
  - Widespread acceptance among basin States of a general management approach is helpful in achieving consensus on harmonised policy and legal frameworks;

Drivers

- Adoption of harmonising measures may be driven by different motivations, e.g. the East African Community was motivated by the imperative of regional integration;
- Development of a Regional Water Policy can be greatly assisted by an ‘epistemic community’ / ‘community of practice’;
- Strong political will is required for effective harmonisation, e.g. EAC and Lake Victoria Basin Commission.
- Lessons may be learned from other harmonised sectors, e.g. trade, immigration, etc.
- Continental bodies (e.g. AMCOW and/or ANBO) may have a role in promoting harmonised approaches to transboundary water management, at least in respect of challenges that are universally relevant or generally relevant at the continental level.

3.4 Thematic policy area #4: Information and data sharing mechanisms

3.4.1 RBO experiences

The following transboundary water policy cases were presented:

Case #	Title of Presentation	Transboundary Organisation
Case 10	Monitoring of environment and security in Africa	CICOS
Case 11	Nile Decision-Support System	NBI
Case 12	NBI Interim Procedures on Data and Information Sharing and Exchange	NBI
Case 13	OKACOM Protocol on Hydrological Data Sharing for the Okavango River Basin	OKACOM

CICOS presented (Case 10) an example of an EU-funded programme to monitor environmental security issues in Africa based on the Global Monitoring for Environment and Security (GMES) Programme for Europe. In this context, CICOS acts as CEMAC's designated partner organization within a broader program, with particular responsibility for Water Monitoring for Fluvial Transportation and Environmental Assessment. The program is based on the use of earth observation data and remote sensing in order to provide accurate, timely and easily accessible information with the aim of improving decision-making capacities in African states. One challenge faced by CICOS is that only ten in-situ hydro-met stations are currently operating in the Congo River Basin. Attempts are being made to use remote sensing in monitoring water and environment issues in the Congo Basin, e.g. a low flow warning system and a water balance monitoring system. Key lessons include the need to strengthen cooperation at all levels (continental, regional and national) and to raise awareness among both practitioners and decision-makers as well as to develop the capacity of trainers and facilitators to promote earth observation processes and implement them on the ground.

NBI presented (Case 11) the Nile Basin Decision-Support System (DSS) as a common analytical platform for the Nile River Basin. The DSS is a comprehensive analytical framework that integrates information management systems (database, GIS, data processing tools, etc.), water resources modelling systems and a number of different analytic tools (e.g. optimization, benefit-cost analysis, multi-criteria analysis). One of the key lessons learned from NBI's application of this framework is that it tends to function as more than just a 'tool'. Instead, it also operates as a means for standardizing practices (i.e. structured decision-making, water resources planning, scenario analyses). The DSS facilitated the sharing of data, information, models and analytical results between member states. Moreover, the DSS also promoted effective communication by establishing a common language (scenarios, indicators, multi-criteria decision-making, etc.). Applying the tool to practical problems at country level, however, remains a challenge. The same holds true for the maintenance of such an ambitious system, requiring considerable human and financial resources and thus a serious commitment from the actors involved. Overall, the DSS is considered a learning process for building awareness on key water management issues.

NBI further presented (Case 12) on the process employed to develop its Interim Procedures on Data and Information Sharing and Exchange. Recently, when NBI member countries launched a number of projects worth more than USD 200 million, there were no formal arrangements in place for providing access to data in support of the implementation of these projects. This highlighted the need to formalise information and data sharing procedures. Because the

Cooperative Framework Agreement (CFA) process was not concluded at the time, it was decided to develop an 'interim' procedure rather than a 'protocol', although there was still some resistance to the exercise. The NBI Interim Procedures for Data and Information Sharing and Exchange were approved in 2009, with the objective of facilitating the implementation of NBI programs and projects. One key lesson that the Nile Commission provided concerned the fact that a clear mandate (COM instruction), which was critical in overcoming the challenges arising. Clarification of the application of the interim procedures to the 'facilitation of implementation of NBI programs and projects', which was key arriving at a 'compromise'. The process of developing procedures helped to build consensus around the provision of access to data. Ultimately, however, access to data at the national level largely relied on personal relations and communications instead of formalized procedures.

OKACOM presented (Case 13) concerning development of the Protocol on Hydrological Data Sharing for the Okavango River Basin. The Protocol mainly covers the sharing of hydrological and meteorological data including: water level, water discharge, water quality, sediment transport and meteorological data. The Protocol defined standards for water quality assessment equipment, data collection methods and reporting formats for OKACOM and its member states. Lessons learned included the ease of sharing hydrological data among member states through email correspondence. OKACOM undertook regular joint surveys and data collection exercises. It was noted that there were capacity challenges across the member states in terms of hydro-met equipment on the ground. It was also noted that there were challenges in the regular sharing of data outside the water sector. It was found to be useful to conduct joint training and capacity-building programmes.

3.4.2 Synthesis of discussion points

Options

- It is important to clarify the purposes and aims of any information and data-sharing mechanisms, which might include:
  - Compliance, e.g. with commitments made with regard to implementing certain activities;
  - Water allocation;
  - Basin planning, such as the environmental functions included in the Nile CFA;
  - Monitoring of the state of the basin/ecosystems;
  - Monitoring impacts of certain development projects.
- It is useful to distinguish between 'primary' and 'secondary' data. This implies a focus on priority data (i.e. primary data), rather than attempting to include all possible data at an early stage;

- Decision Support Systems (DSSs) play a critical role as they allow the sharing of data in a standardised manner; the sharing of meta-data; the use of scenarios; etc. – which generally assist in effective communication. DSSs require support and involve substantial costs – development costs, training, maintenance, data input, etc. to ensure sustainability;
- Simpler technical data-sharing solutions or information system may be preferable (at least initially) to complex, high-end systems requiring significant investment and maintenance:
  - It was noted that a high proportion (80 percent was mentioned by one participant) of information systems fail, because they are too ambitious and there may not be full buy-in by the riparian States, since real maintenance costs have not been allowed for;
  - Decision-makers don't necessary always use decision-support systems although such a system is available; etc.
- The sustainability of data-collection and data-sharing arrangements should be considered. They are often established in the course of projects of limited duration – and require subsequent national funding.
- Data regarded as sensitive should be respected, and shared only on a "needs" basis.
- Data may be accessed through other means, e.g. e-mail requests, etc.
- External support is often required regarding equipment, training, etc.

Drivers

- Regarding the institutional architecture, data-collection and data-sharing arrangements should ideally be managed by a regional or basin-level body – to provide support and ensure quality control, uniformity and standardisation:

- Centrally controlled (Nile);
- Member states, but RBO ensures/promotes accessibility (ORASECOM)
- Data-collection and data sharing should be the responsibility of States, but coordinated by RBOs, which will require appropriate and regular resources.
- Inter-sector/ organisational data-sharing should be formalised – to avoid fragmentation.
- A regional platform should be established for the validation of water-related data;
- Personal relationships between officials are very important, as these practitioners form an 'epistemic community'. Data-sharing is as much a social/inter-personal challenge as a technical challenge.
- For effective data-sharing, it is helpful if the process is supported by procedures or protocols approved by senior political decision-makers.
- The availability of adequate financial, technical and human resources.
- The responsible people should be clearly designated and tasks clearly allocated.
- The level of cooperation largely depends on whether requests are routinely received.

3.5 Thematic policy area #5: Development and implementation of transboundary management plans

3.5.1 RBO experiences

The following transboundary water policy cases were presented:

Case #	Title of Presentation	Transboundary Organisation
Case 14	Okavango Transboundary Diagnostic Assessment (TDA) & Strategic Action Plan (SAP)	OKACOM
Case 15	Development and Implementation of Transboundary Management Plans - Case of the Orange Senqu River Basin IWRM Plan	ORASECOM
Case 16	CICOS Management Plan(s)	CICOS
Case 17	Water quality standards and lake level management procedures for Lake Victoria	LVBC/EAC

OKACOM presented (Case 14) on the development of the Okavango Transboundary Diagnostic Assessment (TDA) and the Strategic Action Programme (SAP). A fully participatory approach was applied for the development of the TDA and the SAP. A number of multi-disciplinary teams in each country were established. An integration/coordination team ensured buy-in and coordination by all country teams. OKACOM coordinated the overall process and maintained close links with other ongoing initiatives. Ecological, socio-economic and macro-economic impacts were assessed at different flow modifications. Scenario planning aimed at defining the acceptable development space, providing a tool for managing trade-offs. Core topic areas addressed by the TDA included hydrological flows, sediment dynamics, water quality, changes in biota, land use, poverty and climate change. The TDA proposed a series of hotspots for primary attention. The TDA was followed by formulation of the SAP with the objective of promoting and strengthening integrated and sustainable management, use and development of the Cubango-Okavango basin at national and transboundary levels. The SAP was a negotiated policy document, which was endorsed at the highest level in all three member states. The SAP contains four thematic areas: livelihoods and socio-economic development, water resources management, land management, and environment and biodiversity. Subsequently, national action programmes were formulated in each of the member states in order to adapt the SAP to the national context and to ensure implementation.

ORASECOM presented (Case 15) on the development and implementation of transboundary management plans by providing the example of the Orange-Senqu River Basin IWRM Plan. The Orange-Senqu River is a highly developed basin, characterised by a large inter-basin transfer to supply Gauteng Province in South Africa with domestic water supply, and with water for the productive sectors: agriculture, mining, energy production and for other demands of urban areas and industry. The IWRM plan was developed through a participatory process implemented over a period of six years. The key lessons learned suggest that it is important to align demand forecasts/future projections (including time frames) through joint modelling and planning by all riparian states, which promotes transparency and fosters cooperation. Economic valuation and analysis is an important component that provides an avenue to communicate the strategic contribution of transboundary water resources to regional economic integration. Furthermore, in a system such as the Orange-Senqu Basin, where options for new infrastructure are limited, water efficiency, pollution control, optimising infrastructure operation and monitoring become priorities. Stakeholder participation in the Orange-Senqu Basin remains a challenge due to asymmetries in capacity among the riparian countries due to differences in their respective level of socio-economic development.

CICOS presented (Case 16) on the process of developing its management plan(s). The CICOS Agreement calls for the development of a master plan for the development and management of water resources. The master plan developed in 2010 included 15 sector studies and a portfolio of 72 projects with a total value of 15,000,000,000 USD. The master plan comprised a large number of documents with a 'traditional' focus on data collection, inventory of water resources, monitoring of uses, and pollution control. In 2015, CICOS embarked on another planning exercise to formulate the Development and Management Plan (DMP), which focused more on CICOS as an organisation, and on the areas of governance, management and development. An important decision resolved that the total financial value should be based on the actual capacities of the CICOS member states, at about 25,000,000 USD. The DMP takes the state of the basin as the point of departure which, together with a shared vision, leads to development of a programme of infrastructure measures. The DMP established a thorough consultation mechanism that includes the CICOS organs along with regional and national consultation platforms, with the aim of informing and consulting with stakeholders and making informed decisions.

LVBC/EAC presented (Case 17) on the water quality standards and lake level management procedures for Lake Victoria. The Lake Victoria Basin faces a number of challenges but also provides ample opportunities, including the provision of water for key sectors (i.e. domestic, industrial and irrigated agriculture), rich fish resources with income earnings amounting to US \$ 350-400 million per year, hydropower potential, and rich biodiversity and wildlife. Environmental stress factors include over-fishing, oil spills, untreated liquid wastes, water hyacinth, pollution from industries, agriculture and construction activities, population growth and fluctuating inflow from the catchment resulting in low water levels. The catchment as a whole faces substantial land degradation and deforestation issues, which have a direct impact on the inflow and sedimentation loads of the Lake. The LVBC has facilitated the development of common pollution standards, which are adopted by the EAC Council in order to be incorporated (harmonised) into national legislation. Specific plans have been made in the fields of sustainable land management, catchment management and water hyacinth control. In order to control the water level in the lake, the volume of water for hydropower generation is based on an agreed rule curve. Challenges remain with regard to the effective implementation of agreed policies and strategies, the political will of key stakeholders, the setting-up of effective monitoring systems, enforcement and adequate capacities for implementation.

### 3.5.2 Synthesis of discussion points

#### Options

- Joint basin planning, e.g. TDA (e.g. OKACOM, ORASECOM) or IWRM planning (e.g. ORASECOM), conducted by multi-disciplinary teams and comprising assessment of ecological, social and economic parameters), identifying key baseline data (including gaps in the data) and key characteristics of the basin;
- Planning processes driven by population dynamics, land-use change, poverty, climate change, etc. and requiring structured inter-State communication, involving:
  - Alignment of demand forecasts and projections;
  - Economic valuation of water resource uses (including identification of opportunities for economic integration);
  - Water efficiency and optimisation;
  - Broad stakeholder participation; and
  - Continuing capacity-building.
- Development of a strategic action programme based on international best practice and endorsed at the highest level of government in each member state (cabinet-level), which requires a shared vision based on intense engagement with basin state ministers;
- Joint infrastructure planning, development and operation might be included under a basin plan;
- It is important to focus on the common interests of the basin states – thus highlighting concrete benefits to be derived from a cooperative enabling environment (e.g. ensuring flood prevention or optimising power generation). This might involve increasing the basket of development options or increasing the potential water yield. Where appropriate, it is useful to prioritise key projects in order to ensure public support;
- The planning process should be connected to other areas / sectors, e.g. power generation, trade, food / agriculture, extractive sector, manufacturing industry, etc.;
- IFIs tend to promote basin plans which include an Investment Plan, with realistic objectives and expectations regarding infrastructure investments;
- Several effective African models exist, e.g. CICOS, ORASECOM, OKACOM, etc. Each of these processes demonstrates the key role of decision support systems and critical diagnostic tools.

#### Drivers

- Complex, lengthy and expensive planning processes usually requiring the support of development partners;
- The presence of internationally accepted (and flexible) frameworks can positively guide the basin planning process, e.g. IWRM planning process;
- The availability of high quality data and information will increase the likelihood of concluding a successful basin planning process. This obviously requires a sound platform for cooperation among the riparian States;
- In conducting a technical review of available options, it is important to take account of political circumstances;
- The private sector should be involved in the basin planning process;
- Stakeholder consultation and participation are critical, but may require capacity building.

### 3.6 Identified key points of RBO experiences in implementing transboundary water policy frameworks

Based on the synthesis of the discussion points presented above, key points for each of the thematic policy areas as 'elements for implementation' have been extracted into 'options' and 'factors'. These key points will further be incorporated into the implementation framework, presented in the following section<sup>1</sup>.

<sup>1</sup> It should be noted that the key words below are those distilled by the facilitating team, based on what was captured during presentations and discussions at the workshop. The key points have not been scrutinised and validated neither by the participants nor their organisations. Such assessment and validation should be undertaken at a later stage when the overall framework has been accepted.

#1: Notification / Consultation Mechanisms	
<b>Options</b> <ul style="list-style-type: none"> <li>■ Early cooperative engagement</li> <li>■ Open process: options for modification considered to review designs</li> <li>■ Multi-step approach</li> <li>■ Common interests</li> <li>■ Balanced development</li> <li>■ Scope of notification correspond to ESIA scope</li> <li>■ Strategic planning process</li> <li>■ Environmental protection</li> </ul>	<b>Drivers</b> <ul style="list-style-type: none"> <li>■ One state responsible for notification</li> <li>■ Involvement of senior RBO official</li> <li>■ IFI involvement</li> <li>■ Link process to existing legal obligations</li> <li>■ Shared state interests in project</li> </ul>
#2: Standards for Environmental and Social Protection	
<b>Options</b> <ul style="list-style-type: none"> <li>■ Existing national / IFI standards</li> <li>■ Procedural standards most important</li> <li>■ Benchmarking</li> <li>■ Standards</li> <li>■ Environmental Action Plans &amp; Resettlement Action Plans</li> <li>■ Environmental Flows</li> <li>■ Social equity</li> <li>■ Clear RBO mandate</li> </ul>	<b>Drivers</b> <ul style="list-style-type: none"> <li>■ Bona fide stakeholders</li> <li>■ National or regional stakeholder platforms</li> </ul>
#3: Harmonisation of TWM Aspects	
<b>Options</b> <ul style="list-style-type: none"> <li>■ Informal Harmonisation</li> <li>■ Regional Framework Agreements</li> <li>■ National Water Policy</li> <li>■ Joint Basin Surveys</li> <li>■ REC Regional Water Policy</li> <li>■ Coherence between REC and National Water Policy</li> <li>■ Clarify Aims &amp; Extent – Subsidiarity</li> <li>■ General Approaches – IWRM</li> </ul>	<b>Drivers</b> <ul style="list-style-type: none"> <li>■ Diverse Motivations</li> <li>■ Epistemic Community</li> <li>■ Political Will</li> <li>■ Other Harmonised Sectors – Trade / Energy</li> <li>■ Continental Bodies, e.g. AMCOW/ANBO</li> </ul>
#4: Information and Data sharing mechanisms	
<b>Options</b> <ul style="list-style-type: none"> <li>■ Clarify Purpose(s)</li> <li>■ Primary / Secondary Data</li> <li>■ Decision Support Systems</li> <li>■ Simpler Data-Sharing Solutions – Sustainability</li> <li>■ Sensitive Information</li> <li>■ e-mail dissemination</li> <li>■ External Support</li> </ul>	<b>Drivers</b> <ul style="list-style-type: none"> <li>■ Regional Body / RBO Coordination</li> <li>■ Inter-sector/organisational Data-Sharing (Regional) Validation Platform</li> <li>■ Epistemic Community</li> <li>■ Procedures / Protocols</li> <li>■ Adequate Resources</li> <li>■ Designated People/Tasks</li> <li>■ Regular routines</li> </ul>
#5: Development and Implementation of Transboundary Management Plans	
<b>Options</b> <ul style="list-style-type: none"> <li>■ Joint basin planning</li> <li>■ Understand Process Drivers</li> <li>■ Structured Inter-State Communication</li> <li>■ Strategic Action Programme</li> <li>■ Joint Infrastructure Planning Development and Operation</li> <li>■ Common Interests</li> <li>■ Link to Other Sectors</li> <li>■ Realistic Investment Plan</li> <li>■ Decision Support Systems</li> <li>■ Existing African Models</li> </ul>	<b>Drivers</b> <ul style="list-style-type: none"> <li>■ Complex, lengthy and expensive planning processes</li> <li>■ IWRM Planning Process</li> <li>■ High Quality Data</li> <li>■ Political Circumstances</li> <li>■ Private Sector</li> <li>■ Stakeholder Participation</li> </ul>

## 4. Conclusions and Recommendations

### 4.1 Conclusions

#### RBO Implementation Framework

The main outcome of this paper – which is itself based on the workshop held in Entebbe, Uganda – is a proposed RBO implementation framework for water law and policy. The framework compiles the collective key experience gained by RBOs in implementing their respective policy frameworks and agreements, and focuses primarily on infrastructure development. The development of the framework should be considered as an ongoing process to be updated regularly when new relevant experience and best practice are identified.

The objective of the RBO implementation framework is to provide overall guidance and inspiration to different river basin organisations in their efforts to develop and implement their respective agreements. The framework provides a range of options that can be applied in implementing the five thematic policy areas, and also speculates on a range of different drivers that can facilitate and help roll-out of the policy processes. As explained above in the discussion of international water law, the practice of States plays a significant role in establishing the applicable rules, and thus it is preferable that RBOs should get things right from the very beginning by carefully developing their respective institutional frameworks based on best practice so as to ensure smooth implementation.

The framework can also provide important guidance to riparian states in implementing water policies e.g. harmonising their national water policies and legislation with other basin States (refer to the Case 7 from Kenya). Similarly, a regional organisation can also utilise the framework to guide development of regional water policies and strategies (refer to Case 8 from IGAD).

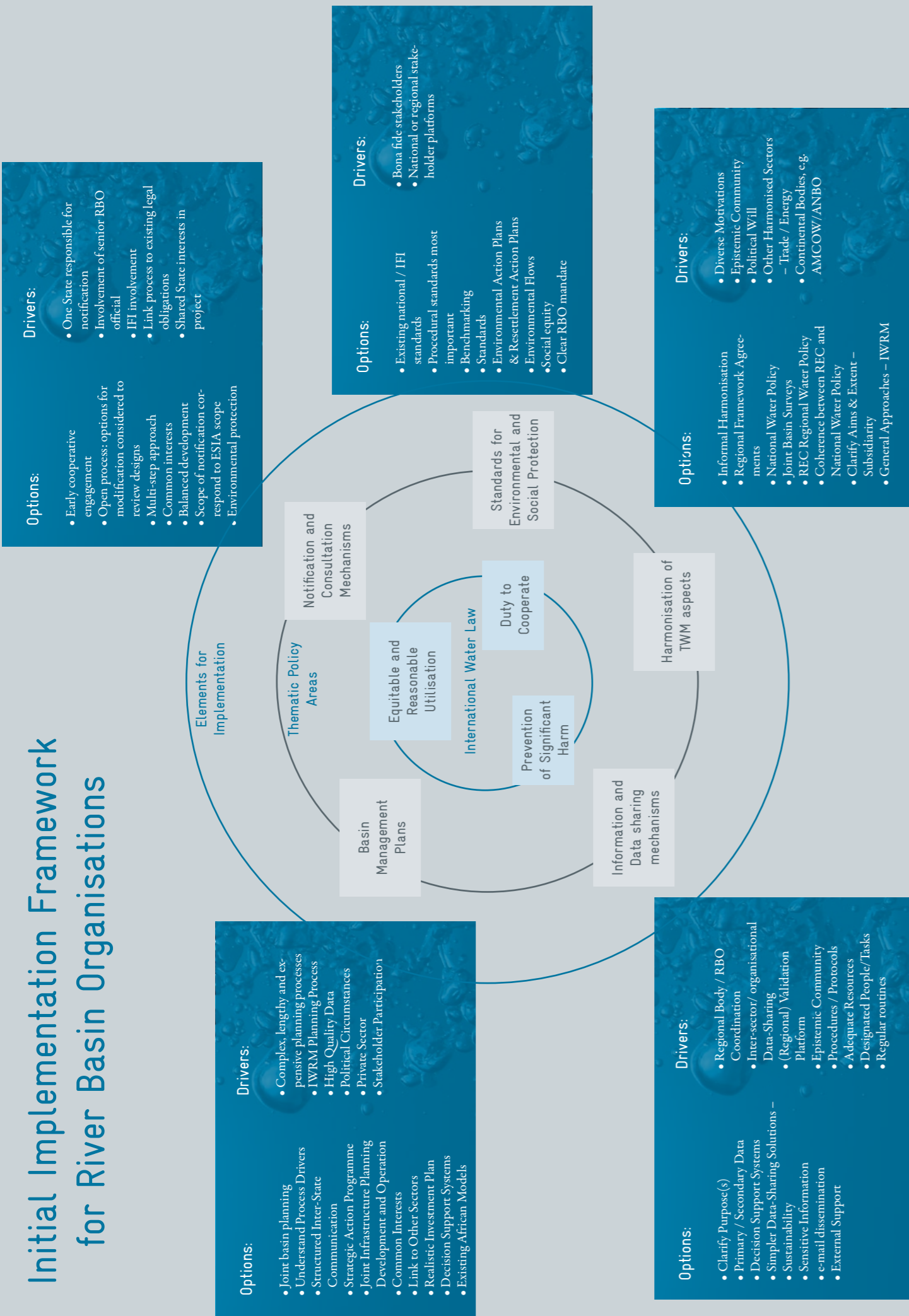
Obviously, this is merely an initial version of the RBO implementation framework. The next steps would involve the workshop participants and their organisations providing comments and validating the findings that have been set out herein. It will be important for its future development to identify and document more relevant case studies.

One important issue, which was not discussed in detail at the workshop, is the question of financing. As inter-governmental organisations, RBOs rely on financing by the parties, or by international cooperating partners to cover the main operational costs of the RBO itself and costs for studies and activities outlined in their agreements and work programmes. Financing issues should be incorporated in later versions of the RBO implementation framework, since there could be important considerations for implementing the thematic policy areas and e.g. stakeholder engagement, technical challenges, etc.

#### International Water Law

- It is important to understand international water law as functioning to facilitate a ‘culture of communication’ amongst co-basin States and as providing a common language and a starting-point for the discussion, adoption and further elaboration of normative frameworks for transboundary water resources management by relevant parties;
- Any examination of the key global, regional and basin-level water resources conventions suggests strongly that international water law has converged around a common set of core principles comprising a comprehensive collection of interrelated substantive and procedural rules;
- Considerable uncertainty persists among water resources management practitioners about the legal

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character and content, normative implications and practical implementation of key rules of international water law. This concerns, in particular, the Principle of Equitable and Reasonable Utilisation – universally accepted as the overarching rule of international water law. It shows that water management practitioners require a certain understanding of international water law in order to successfully develop and implement legal and policy provisions for water resources development.

- Intergovernmental institutions involved in the joint management of African transboundary water resources, notably African RBOs, are leading the way in identifying international best practice in the implementation of key requirements arising from international water law.

## Transboundary Water Policy Development

- The five selected thematic policy areas were rated highly relevant for implementing transboundary water management. It was clearly seen that the policy areas are closely interlinked;
- This study includes 17 concrete transboundary water policy case studies, which to a large extent represent key challenges and experiences for RBOs in their efforts to implement transboundary water agreements. Most case studies covers several of the five thematic policy areas;
- In terms of the relevance of the thematic policy areas, RBOs have significant experiences within the areas of information and data sharing, and development of basin-wide plans;
- There has furthermore been substantial work undertaken by RBOs on integrating environmental and ecosystem concerns. It is still to which extent social issues have been integrated into the work of RBOs, since this issue is addressed at a national level rather than the transboundary level;
- The high priority placed on infrastructure development demands clear and robust procedures for notification and clarity regarding the respective roles of basin state authorities. For water related infrastructure, an RBO can play a central role in facilitating and coordinating the notification process, as it has the overview of the basin context and stakeholders. Appropriate notification and consultation mechanisms for planned infrastructure projects are widely accepted and put into place, in particular when applying for external IFI funding. Procedural guidelines on notification, however, are only defined at higher regional levels (e.g. UN Convention, UNECE, SADC, etc.). All participating RBOs in the workshop have acknowledged the importance of having clear notification procedures in place. Majority of participating RBOs in the workshop

are currently in the process of developing their own notifications procedures.

- In connection with the development of notification procedures, RECs could play an important role in streamlining notification procedures (e.g. Revised SADC Protocol on Shared Watercourses) covering several RBOs, rather than each RBO develops their own procedures. If each RBO develop their procedures, there could be some confusion by riparian states that are party to more than one RBO, as they may have to apply different procedures for infrastructure projects, depending on which basin it is located in. This should be kept in mind when new notification procedures are developed;
- Although there are several examples of harmonisation of transboundary policies and strategies at the national level, this area requires further development.

## 4.2 Recommendations

In light of this study, the following general recommendations to further develop and implement transboundary water policies are made as follows:

- Support to be increased to cooperation among RECs, basin States and African RBOs, in the development of detailed technical guidance documents, based on the findings of this Framework exercise, in order to assist the timely, consensual and collaborative implementation of the key requirements of international water law. This could for example be in the form of RBO workshops (as implemented in SADC), RBO networks (where groups of RBOs collaborate), or establishment of transboundary water policy ‘think tanks’ (as suggested by some of the workshop participants);
- Horizontal cooperation/learning between RBOs could be promoted in developing specific transboundary water policy document or guidelines, e.g. on notification procedures, since many RBOs are currently in developing such. A concrete example could be that ORASECOM or NBI could assist other RBOs in developing their respective notification procedures. Horizontal cooperation and learning could be conducted for all the workshop’s the;
- Consider gathering evidence and critical assessment of best practice in relation to benefit-sharing arrangements among co-basin States, having particular regard to the potential role of RBOs. Such exercise could enhance the practical understanding of implementing the IWL principle of Equitable and Reasonable Utilisation by RBOs;

- Identify and enhance leading-edge methodologies for effective ecosystems protection, notably including methodologies for the maintenance of and payment for ecosystem services and for identifying appropriate minimum environmental flows;
- Continue the conceptual development of the draft RBO implementation framework. As the RBO implementation framework is fundamentally based on lessons learned and best practice from RBOs, it is suggested to apply a structured approach for identifying and formulating additional relevant case studies within

the five thematic water policy areas. Such development will also identify further evidence of implementing the three core IWL rules, i.e. Equitable and Reasonable Utilisation, the Duty to Prevent Significant Transboundary Harm (including environmental and ecological harm), and the Duty to Cooperate;

- As suggested by a number of participants, the workshop should be conducted again in one year from now to include more RBOs and other relevant organisations involved in TWM with a view to further developing the RBO Implementation Framework.

### Annex 1: Case Studies presented at the Workshop

Case	Thematic Policy Areas/ Title of Cases	Organisation
	<b>Notification and consultation mechanisms</b>	
1	PRIOR NOTIFICATION regarding the Regional Rusumo Falls Hydropower Project (Burundi, Rwanda and Tanzania)	NELSAP (NBI)
2	CICOS guidelines on Prior notification	CICOS
3	Notification procedures in the SADC Protocol on Shared Watercourses (verbal)	ORASECOM
	<b>Standards of environmental and social protection</b>	
4	National Stakeholder Platforms (NASC)	ZAMCOM
5	NBI Policy and Guidelines on Environmental and Social Safeguards	ENTRO/NBI
6	ORASECOM Transboundary Environmental Assessment Guidelines	ORASECOM
	<b>Harmonisation of transboundary water agreements</b>	
7	Kenyan National Transboundary Water Policy	
8	IGAD Regional Water Policy	IGAD
9	Harmonization of Laws, Policies and Regulations – Case for Transboundary Natural Resources Management in Lake Victoria Basin	LVBC/EAC
	<b>Information and data sharing mechanisms</b>	
10	Monitoring of environment and security in Africa	CICOS
11	Nile Decision-Support System	NBI
12	NBI Interim Procedures on Data and Information Sharing and Exchange	NBI
13	OKACOM Protocol on Hydrological Data Sharing for the Okavango River Basin	OKACOM
	<b>Development and implementation of transboundary management plans</b>	
14	Okavango Transboundary Diagnostic Assessment (TDA) & Strategic Action Plan (SAP)	OKACOM
15	Development and Implementation of Transboundary Management Plans - Case of the Orange Senqu River Basin IWRM Plan	ORASECOM
16	CICOS Management Plan(s)	CICOS
17	Water quality standards and lake level management procedures for Lake Victoria	LVBC/EAC

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