



# Understanding the **1995 Mekong Agreement** and the Five **MRC Procedures**

May 2020

Meeting the needs. Keeping the balance.

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**Mekong River Commission**

**Understanding the 1995**

**Mekong Agreement**

**and the five MRC Procedures: A handbook**

WORKING DOCUMENT



## FOREWORD

The 1995 Mekong Agreement allows for recruitment of technical staff from the Member Countries to support the Secretariat's operations. The staff must serve no more than two terms of three years each, unless otherwise decided by the Joint Committee.

Over the years this provision has ensured that staff members recruited by the Secretariat are able to work with their peers from the other Member Countries, learning and sharing experiences and perspectives. The regular rotation of staff means that experts go back to their home countries with a deeper understanding of the 1995 Mekong Agreement and the way the Commission functions; some staff members have remained in the water sector. Their experience is not lost to the Commission, and over the years this has established a corps of technical experts with MRC experience in each of the Member Countries. This staff rotation has also helped strengthen the Mekong Spirit, which has underpinned cooperation between the countries for over 60 years.

But this has come at a price – institutional memory within the Secretariat is limited. While there is some transfer of skills and knowledge from outgoing to incoming staff, this has not been formalised. Many of the outgoing staff have moved on to other careers. Similarly, many senior staff in the Member Countries who have been involved with the MRC for many years are now reaching retirement and the Commission is challenged by the loss of their wealth of experience and knowledge. Member Countries have also recruited new staff to their National Mekong Committees.

The Secretariat has therefore prepared this Handbook on the 1995 Mekong Agreement and the Five MRC Procedures to help induct new staff members in the Secretariat and the NMCs, as well as to provide a basis for Training-of-Trainer workshops. Ongoing and regular training through this process will help entrench the institutional memory in the MRC and the NMCs. It is hoped that the Handbook will also help staff in the Governments of each of the Member Countries, NGO's and International Cooperating Partners, and other interested stakeholders better understand the basis for Mekong diplomacy.

The handbook is not intended to be a detailed legal analysis of the Agreement and Procedures, but rather an outline of how the MRC does things. It provides a perspective on how the 1995 Mekong Agreement and the 5 Procedures can be used to actively seek more sustainable outcomes to development and realise the positive benefits of cooperation. It is my hope that the Handbook will capture part of the Commission's institutional memory and help bring incoming staff up to speed quickly, which will serve to strengthen cooperation between the Member Countries as the Commission moves forward.

**An Pich Hatda**  
Chief Executive Officer  
Mekong River Commission Secretariat



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## 1. INTRODUCTION

### 1.1. A long history of cooperation

Cambodia, Lao PDR, Thailand and Viet Nam share a long history of cooperation on the development of the Mekong River Basin. As early as 1951, the UN's Economic Commission for Asia and the Far East's (ECAFE's) Bureau for Flood Control recognised that the development and joint management of storage on the Mekong mainstream held significant potential for flood control in the Mekong Delta. Subsequent studies in 1955 by the US Bureau of Reclamation expanded the scope to include other aspects of development recognising the potential to expand irrigation by 4.4 million hectares and to install 24,000 Megawatts of hydropower. Then in October 1955, a report on the Development of Water Resources in the Lower Mekong Basin recommended the establishment of an institutional mechanism for further studies of the shared waters.



*Opening of Mekong Committee office in Bangkok by Dag Hammarskjold(left), Secretary-General of the United Nations, 1959*

This led to the establishment of the *Committee for Coordination of the Investigation of the Lower Mekong Basin (CCILMB)* under the auspices of the United Nations, initiating the first international cooperating mechanism for the Mekong. Over the years, this Committee, supported by a Mekong Secretariat, undertook many investigations and studies, which built a deeper understanding of the Mekong Basin and how the use of waters of the shared system could support growth and development. During this time, the Member Countries established a unique spirit of cooperation and mutual assistance, which became known as the "Mekong Spirit". This spirit of cooperation and respect for one another's rights is still the foundation for water diplomacy in the Lower Mekong Basin.

#### PLENIPOTENTIARIES

A plenipotentiary is a person invested with the full power of independent action on behalf of their government.

A decade of cooperation through the Mekong Committee led to agreement on the first ever "Indicative Basin Plan" in 1970. At this time, the Office of the Mekong Secretariat prepared a draft Charter establishing the principles for cooperation on the Lower Mekong Basin (the 1970 Draft Mekong Charter). This proposed

the establishment of the ‘*Mekong Committee*’ made up of plenipotentiaries from each of the Basin States. The Member Countries then started working towards an international framework to support implementation of this plan, and in January 1975 they signed the “**Joint Declaration of Principles for Utilisation of the Waters of the Lower Mekong Basin**”. This declaration established principles for the development of the lower Mekong Basin.<sup>1</sup>

Although the Mekong Charter and the Joint Declaration were not ratified by the Mekong Committee at that time, they established many of the principles and identified many challenges that are still relevant today. The Mekong Charter proposed the establishment of a Basin Development System to coordinate the construction and operation of mainstream dams and to ensure they are designed to uniform criteria and standards. They are now known as the Preliminary Design Guidance of 2009, and its subsequent updates. Both documents required Member Countries to propose new projects and outline them in “*Project Agreements*”, which detailed the proposed use of water and outlined the rights and obligations of the countries proposing the project. These Project Agreements had to be consistent with the agreed principles. However, they also afforded the countries a “veto” right by requiring the Mekong Committee to reach consensus on the Project Agreements. Specifically, Article X indicated:

*“Mainstream waters are a resource of common interest not subject to major unilateral appropriation by any riparian State without **prior approval** by the other Basin States through the Committee.”*

The Mekong Charter did, however, note that a Member Country could not withhold its consent if it could not demonstrate it would suffer some harm.

Due to civil war in the Indochina region and deactivation of membership by Cambodia in 1975, the 1975 Joint Declaration was never fully implemented by the 4 Member Countries and its provisions were not rigorously tested in practice.

## 1.2. Towards the 1995 Mekong Agreement

Once peace returned to the region, efforts were made to revive the Mekong Committee with the support of the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), and in 1978 the three remaining Member Countries; Lao PDR, Thailand, and the Socialist Republic of Viet Nam decided to reactivate the Mekong Committee as the “*Interim Mekong Committee*”. This Committee made progress towards cooperation with the 1987 report on Perspectives for Mekong Development, a revised Indicative Basin Plan, and in 1994 the Mekong Mainstream Run-of-River Hydropower study.

*The signing of the 1995 Mekong Agreement represented an important milestone in the journey towards developing the Mekong River Commission’s approaches towards water diplomacy. In many respects, this journey is still incomplete.*

<sup>1</sup> A more complete account of the history of the Mekong Committee is available in: “*The Mekong Committee. A Historical Account (1957-89)*.” – Secretariat of the Interim Committee for Investigations of the Lower Mekong Basin (1989) – available from the MRCS library.

In 1991, after the signing of the Paris Peace Agreement, Cambodia requested the reactivation of its membership of the Mekong Committee. At this time, the four Countries started working towards the future direction for cooperation around the development of the Mekong River Basin. After two consultation meetings held in Hong Kong and Kuala Lumpur in 1992, the countries agreed to set up a Working Group to negotiate a new framework for Mekong cooperation. From 1993 to 1995, this Working Group met five times, while a Technical Drafting Task Force met on several other occasions to draft a new Agreement.

As a result of these efforts, on 5 April 1995, Mekong cooperation moved into a new era when Cambodia, Lao PDR, Thailand, and Viet Nam signed the **Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin** at Chiang Rai, Thailand. The “*1995 Mekong Agreement*” shifted the approach to the sustainable development of the basin’s water resources, while adopting much of the thinking underpinning the 1970 Mekong Charter and 1975 Joint Declaration. However, there were also important deviations from the principles established in these documents, which are highlighted further on in this Handbook.

## 1.3. From 1995 to the Present

The MRC Secretariat has been restructured a number of times since 1995. Initially, it was structured around cooperating partner-funded sector projects, which resulted in a somewhat fragmented work programme. However, since 1999, MRC has made a major move from a project-by-project approach to a flexible but strategic programme approach. In 2000, the Water Utilisation Programme (WUP) was established to support the development of MRC Procedures. This brought the Procedures together under one roof, and required inputs from various functional areas of expertise. This became possible because the MRC Secretariat had subsequently restructured around expert areas. These included the Environment Programme (EP); Basin Development Plan Programme (BDP); Navigation Programme (NP); Flood Management and Mitigation Programme (FMMP); Drought Management Programme (DMP); Agriculture and Irrigation Programme (AIP); Fisheries Programme (FP); Mekong-Integrated Water Resource Management (M-IWRM); Initiative Sustainable Hydropower (ISH); Climate Change and Adaptation Initiative (CCAI); Information and Knowledge Management Programme (IKMP); International Cooperation and Communication Section (ICCS); Finance and Administration Section (FAS); and the Human Resource Section (HRS).

Once the WUP was dissolved when its funding stream ended in 2007, the task of developing the Procedures were separated among the relevant programmes, namely the Procedures for the Maintenance of Flow on the Mainstream (PMFM) under the BDP; the Procedures for Water Quality (PWQ) under EP; the Procedures for Notification, Prior Consultation and Agreement (PNPCA) under M-IWRMP and ICCS; and the Procedures for Data and Information Exchange and Sharing (PDIES) as well as the Procedures for water Use Monitoring (PWUM) under IKMP. While these programmes spread across the MRC Secretariat co-hosted between Phnom Penh and Vientiane, it separated the ongoing development and implementation of the Procedures and Technical Guidelines between technical programmes.

In early 2010, when the M-IWRM Programme became operational, funding for work on the Procedures was coordinated through the programme. However, the work was still driven by the various programmes and technical working groups. The programmes largely drove this process along technical lines and their respective technical working groups, namely; the Technical Assistance and Coordination Team (TACT) for PDIES and PWUM; the PNPCA Joint Committee Working Group (JCWG) for PNPCA; the Technical Body for Water Quality (TBWQ) for PWQ; and the Technical Review Group (TRG) for PMFM, all sought technical solutions to what were actually water diplomacy challenges.

In 2013, the Joint Committee approved the establishment of an MRC Joint Platform to once again bring all the Procedures under one roof to discuss a range of disciplines related to the 1995 Mekong Agreement and the MRC Procedures. The M-IWRMP and ICCS led the overall coordination of this Joint Platform with support from a number of MRCS Programmes such as EP (for PWQ), IKMP (for PDIES, and PWUM), and BDP (for PMFM), and engagement of each respective technical working group.

In 2016, the MRC Secretariat underwent a comprehensive restructuring and optimisation to reduce costs and streamline its functions by moving from programme-based to Core River Basin Management Function (CRBMF) to be in line with the roadmap for self-finance by the Member Countries by 2030. This split the programmes into four Divisions, namely; the Planning Division (PD); Environment Division (ED); Technical Support Division (TD); and Administration Division (AD), and resulted in the abolishment of the previous technical working groups. The responsibility of the ongoing work on the Procedures fell mostly to the PD, with support from the EP for the PWQ, and TD for PDIES, PMFM, and PWUM. The Joint Platform remains very relevant in discussing issues related to the 1995 Mekong Agreement and MRC Procedures implementation, and is coordinated and supported by PD, with support of the four Expert Groups newly established in April 2017, namely; 1) Basin Planning; 2) Environmental Management; 3) Data, Modelling and Forecasting, and; 4) Strategy and Partnership, and the existing PNPCA JCWG.

#### 1.4. An 'Agreement to Agree'

Most international treaties take many years to negotiate, particularly where these include substantive commitments to procedures and / or specific sharing arrangements. The 3-year period to negotiate and finalise the 1995 Mekong Agreement was therefore a remarkably short time. This was largely possible because of the preceding 40 years of cooperation and the foundation established by the Mekong Charter and Joint Declaration. However, this was also possible because the substantive commitments for notifying and discussing planned water uses, and for maintaining flows in the mainstream, were deferred to later negotiations. These substantive commitments were to be included in the "Rules for Water Utilization and Inter-Basin Diversion", which the Joint Committee would develop for approval by the Council.

The 1995 Mekong Agreement, therefore, adopts many of the features of the Charter and Joint Declaration, notably the separation between mainstream and tributaries, intra- and inter-basin uses, and provisions for maintaining minimum monthly flows on the mainstream in the dry season. However, the 1995 Agreement is primarily an "Agreement to Agree" on the substantive commitments through "Rules". These "Rules" are now the 5 MRC Procedures, which took a further 20 years to finalise.

While there has been some progress towards implementing these substantive commitments through the 5 Procedures over the last 10 years, the MRC Joint Committee has consistently called for improving their implementation. However, the final Technical Guidelines for the Procedures for the Maintenance of Flows on the Mainstream (PMFM) have only been agreed as a working draft, and Technical Guidelines for the Procedures for Water Quality (PWQ) were only finalised in 2017. The Procedures for Water Use Monitoring (PWUM) are not being routinely applied.

#### 1.5. Mekong Water Diplomacy

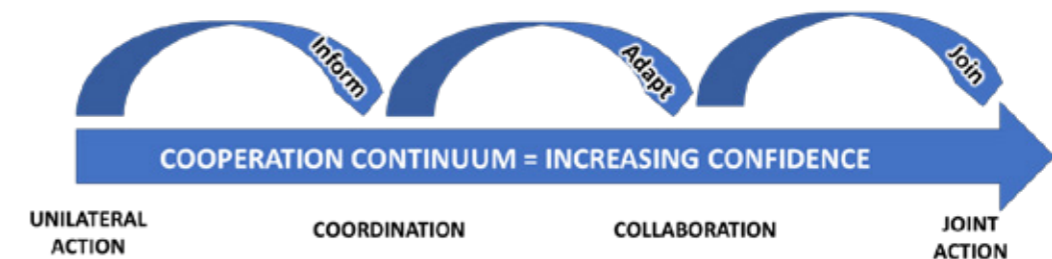
"Water Diplomacy"<sup>2</sup> has been defined as:

*"An approach that diagnoses water problems, identifies intervention points, and proposes sustainable solutions that are sensitive to diverse viewpoints and values, ambiguity and uncertainty as well as changing and competing needs."*

(See <https://waterdiplomacy.org/>).

In the MRC, water diplomacy focuses on understanding the potential impacts of development on the Lower Mekong Basin, monitoring of the state of the basin, monitoring water use in the basin, outlining the long-term plans for development in the basin, and sharing that information and data in an open and transparent manner. It is about respecting the rights of all the MRC Member Countries to use the Mekong River System to meet the needs of their people, while recognising the concerns that Member Countries have regarding the impacts of that development. It is about notifying the other Member Countries of water-use developments that may impact on their use of the Mekong River System, and where these uses occur on the mainstream, to discuss these with a view to avoiding, minimising or mitigating any potential impacts.

Water diplomacy is also the process of giving all riparian countries the assurance that their rights outlined in the 1995 Mekong Agreement to use the shared watercourse, as well as to having their existing uses protected, are being recognised, monitored and accommodated in the ongoing development of the basin. Increasing confidence comes progressively through sharing data, adapting proposed developments to accommodate the other riparian countries' concerns, sharing basin plans, and ultimately developing a joint basin plan as illustrated below.



(From Sadoff and Grey, 2002)

In this context, the framework for Mekong water diplomacy is provided by the 1995 Mekong Agreement, the 5 Procedures, as well as their supporting Technical Guidelines and other agreed guidelines, such as the Preliminary Design Guidance, the Sustainable Hydropower Initiative outputs, and the Basin Development Plan. Most importantly, water diplomacy is about how these are applied in the MRC and in accordance with the Mekong Spirit.

However, over the years the challenges facing the MRC have shifted. There is now a much greater understanding of the impacts of development on the shared watercourse. While concerns in the formative years of cooperation on the Lower Mekong Basin centred on sharing water fairly, the potential impacts of development on sediment transport, fish migration and

<sup>2</sup> There are different definitions or concepts of water diplomacy from different institutions or academia. The term "water diplomacy" is quite new and it should be clearly defined in the MRC context.

fisheries are now also key concerns. This Handbook will outline how the current framework of legislation and guidelines supports Mekong water diplomacy in this new context.

## 1.6. What is in this Handbook?

The core components of the 1995 Mekong Agreement, and the supporting Procedures and Guidelines can be broken down into the following main sections:

- The introductory sections of the 1995 Mekong Agreement including the definition of terms;
- The objectives and principles of cooperation, where the parties agree to develop the basin subject to agreed ideals and approaches;
- The establishment of the Mekong River Commission and its bodies (roles and functions);
- Final provisions;
- The 5 MRC Procedures and their linked use; and
- The current challenges.

*This Handbook aims to help new staff in the Secretariat and NMCs better understand what the provisions of the Agreement mean, and how they collectively provide the framework for Mekong Water Diplomacy.*

This Handbook outlines how the 1995 Mekong Agreement, the 5 MRC Procedures, and the supporting Technical Guidelines provide the framework for Mekong water diplomacy.

The Handbook is not a detailed article-by-article legal analysis of the Agreement, but rather intends to help new Secretariat staff, and staff from the NMCs, the Governments of the Member Countries, and interested stakeholders to build a common and better understanding on what some of the provisions in the 1995 Mekong Agreement and Procedures mean, and how the MRC does things. It does not replace the need for staff to familiarise themselves with the 1995 Mekong Agreement or Procedures, but it should be read together with them.



## 2. INTRODUCTORY SECTIONS OF THE MEKONG AGREEMENT

### 2.1. The scope of cooperation, definitions and terms

This section highlights some of the overarching concepts in the 1995 Mekong Agreement, and defines some of the terms used in the Handbook.

*The desire to limit the involvement of the MRC in sovereign decisions is evident in several clauses of the Agreement and is central to Mekong Water Diplomacy.*

The four Member Countries signed an “Agreement on the Cooperation for the **Sustainable Development** of the Mekong River Basin”. This recognises the desire of all four Member Countries to further develop and use the water resources of the basin, but that development should be sustainable.

The need to cooperate also recognises that development of the basin may have transboundary impacts and should therefore be subject to agreed objectives, principles, and procedures. As one reads further into the Agreement and the Procedures it becomes clear that the Member Countries did not want the MRC to get involved in every decision regarding development of the basin, and that they wanted to limit the involvement of the MRC in sovereign decisions. This concept underlies many of the current challenges in implementing the 1995 Mekong Agreement, and in finalising and implementing the Procedures.

This emphasis of the principle of sovereignty is seen in the separation of tributaries and mainstream, and the separation of wet and dry seasons. These recognise that firstly, if the integrity of the mainstream was managed, only tributary developments would require notification; and secondly, because there was so much water in the wet season, it was unlikely that the impacts of water abstractions would rise to the level where they would need to be subject to prior consultation.

The Member Countries’ desire for the Commission to focus its attention on water uses that **may have a significant impact** on mainstream flows is also found in the definition of a proposed use in Chapter II of the Agreement, and the definitions of a water use in the Procedures for Water Use Monitoring (PWUM), and the Procedures for Notification, Prior Consultation and Agreement (PNPCA), which require a proposed use to have a significant impact on the mainstream before notification is required or consultation is needed.

Importantly, the PNPCA and the PWUM definitions drop the reference to ‘mainstream flows’, defining a water use more broadly as something that would have a “significant impact on the mainstream”. This recognises that some developments may have small impacts on the monthly flow regime of the mainstream, but may impact on other elements of concern to the Member Countries. Discussions in the Mekong Committee and the development of the Indicative Basin Plan in 1970 also raised the possibility that water could be diverted out of the Basin. It was accepted that transfers from the mainstream out of the basin in the dry season should be subject to prior agreement by all the Member Countries, and this provision has been retained.

The wording “**Mekong River Basin**” and “**Mekong River System**” also recognise the importance of territorial integrity and sovereignty. The wording “Mekong River Basin” refers to the catchment area and articles that refer to the “Basin” refer to activities on land or in the shared watercourse. Articles using this term refer to the principles of development in their territories that the Member Countries agreed to. The wording “**Mekong River System**” (following the definition in the UN Convention on the Non-navigational use of Shared Watercourses), refers to the interconnected system of surface and ground waters that link the Member Countries. Articles using this



terminology therefore refer to the transboundary impact of the use of the shared waters of the system.

Cooperation on the sustainable development of the Mekong River Basin therefore includes the **general commitments** to cooperate by sharing data and information, and to develop the Basin subject to agreed principles in each country, as well as **substantive commitments** towards the other Member Countries. While the previous agreements are repealed by the 1995 Mekong Agreement, these general and substantive commitments have evolved from these earlier discussions and are explored in more detail in the following Chapter.

The desire to limit the level of involvement by the MRC based on the likelihood and magnitude of impacts<sup>3</sup> on the mainstream is central to how the Member Countries foresaw cooperation on sustainable development, and on water diplomacy in the Lower Mekong Basin.

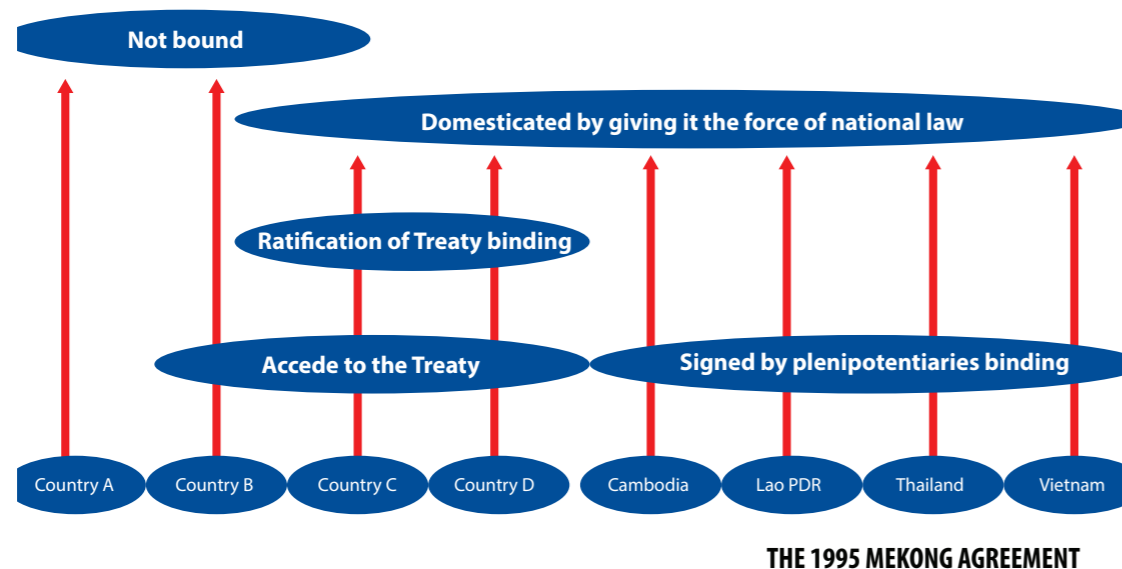
## 2.2. An Agreement signed by plenipotentiaries

International treaties typically go through several steps before they become binding. Firstly, countries agree to the text of the treaty (accede). Secondly, they agree to be bound by the treaty (ratification), and finally they domesticate the provisions (give them force in national law). Countries may accede to a treaty at an international convention, whereas ratification usually involves a parliamentary process.

Often, when there are many parties to a treaty, it may only come into force once a certain number of parties have ratified the treaty (parties are given a certain period of time in which to ratify).

**TREATIES, AGREEMENTS AND CONVENTIONS**

The 1969 Vienna Law of Treaties outlines the general commitments countries make by entering into agreements, conventions or treaties, and refers to these collectively as “treaties”.



<sup>3</sup> Subjective terminology like “significant impact”, and “substantial damage” is common in international water treaties and some guidance on interpreting this in the context of the 1995 Mekong Agreement is provided in the following Chapter.

The 1995 Mekong Agreement is different. The first section of the Agreement includes the text:

*“[the Member Countries] ...have resolved to conclude this Agreement setting forth the framework for cooperation acceptable to all parties hereto to accomplish these ends, and for that purpose have appointed as their respective plenipotentiaries...”*

Similar text is found in the final provisions, where the signatories recognise their respective powers as plenipotentiaries. As such, the Member Countries agreed to be bound by the Agreement when they signed it.

In this case, it is accepted that each of the Parties has followed the appropriate processes to ratify the Agreement’s provisions.

**THE UN WATERCOURSES CONVENTION**

The 1977 UN Convention on the Law of the Non-Navigational Uses of International Watercourses only came into force in August 2014 when Viet Nam became the 35<sup>th</sup> Country to ratify it.

When ratifying any international treaty countries may also issue a ‘reservation’. This allows the country to decline to accept a portion of the treaty, or to indicate that they may apply different measures for a certain part of the treaty. For example, when ratifying the 1977 UN Convention in August 2014, Viet Nam reserved the right to choose the appropriate means of dispute settlement notwithstanding the decision of the other party to the concerned dispute (Article 33 of the UN Convention).

However, international law cannot be used to enforce provisions on a national basis. The Member Countries must therefore “domesticate” the Agreement by giving it the force of its national laws. For example, national laws often require governments to process an EIA within a given timeframe. This is to protect developers from having to wait too long for a decision.

However, the prior consultation process potentially allows for an indefinite delay to a decision on planned developments. This was an issue with the prior consultation processes for the Xayaburi and Don Sahong Hydropower Projects, where the Lao PDR parliament agreed that these projects could proceed, whereas there was no clear endpoint to the prior consultation processes. The provisions of Article 5.5.2 of the PNPCA will therefore be very difficult to domesticate.

## 2.3. Summary

In April 1995, the Member Countries signed an Agreement on the Sustainable Development of the Mekong River Basin. This recognizes the intention of the Member Countries to further develop the Mekong River Basin, but also that this development could result in harmful effects, which may be transboundary in nature.

The Member Countries therefore agreed on the objective to develop the basin, with a preference for joint or mutually beneficial projects, but also to general principles or codes of behavior when developing the **Mekong River Basin**, and substantive commitments towards each other with respect to the **Mekong River System** or shared watercourse.

Because the 1995 Mekong Agreement was signed by the plenipotentiaries, it came into force on the date of signing, but with no retrospective action. However, the extent to which the provisions of the Agreement have been domesticated has not yet been thoroughly investigated.

### 3. OBJECTIVES AND PRINCIPLES OF COOPERATION IN THE MEKONG AGREEMENT

#### 3.1. Background

Chapter III of the 1995 Mekong Agreement outlines the objectives and principles of cooperation. During the negotiation process, the Member Countries considered separating these into two Chapters; one on the objectives and one on the principles, but recognised that many of the articles included both objectives and principles and decided on one Chapter. However, for the purposes of understanding the Agreement, this Handbook refers to the *substantive commitments* and the *general commitments* made by the Member Countries.

The Chapter starts with the words; “*The parties agree*”, and it therefore presents the commitments made by the Member Countries to cooperate when developing the Basin (Article 1), with a preference for joint- or basin-wide projects (Article 2), and to adhere to certain principles and substantive actions in this process (Articles 3-10).

These commitments apply irrespective of whether the proposed development will involve any action by the Mekong River Commission, or where it occurs in the basin. This means, the general commitments to:

- Protect the ecological balance (Article 3);
- Respect territorial integrity and sovereign equality (Article 4); and
- Avoid, minimize, and mitigate harmful effects (Article 7).

... apply throughout the basin to all developments in the **Mekong River Basin**.

However, in Articles 5, 6, 7, 8, 9 and 10, the Member Countries also make substantive commitments towards one another, which are achieved through cooperation through the Mekong River Commission and directly with one another. Through these articles the Member Countries agree to:

- Notification, prior consultation, or prior agreement, depending on geographical (mainstream or tributaries), and temporal (wet or dry seasons) conditions (Article 5);
- Maintain flow in the mainstream (Article 6);
- Cease and then discuss activities that have been proven to cause substantial damage (Articles 7 and 8);
- Maintain freedom of navigation (Article 9); and
- Notify emergency situations that may affect the other Member Countries in a timely manner (Article 10).

These articles apply to the **Mekong River System**, i.e. the shared watercourse.

This Chapter outlines how the provisions of Chapter III provide the foundation for Mekong water diplomacy under the following headings:

- The reason for the 1995 Mekong Agreement;
- The general commitments;
- The substantive commitments;
- Reasonable and Equitable Use;
- State responsibility for substantial damage;
- Guidance for interpreting subjective terms;
- Freedom of navigation; and
- Emergency Situations.

#### 3.2. The reason for the 1995 Mekong Agreement

Articles 1 and 2 outline the **reason** the Member Countries concluded the 1995 Mekong Agreement; i.e. to cooperate in all fields of the utilisation of the water *and related resources* of the Mekong River Basin. This includes, but is not limited to; irrigation, hydro-power, navigation, flood control, fisheries, timber floating, recreation, and tourism. The Member Countries’ intention was to optimise benefits, particularly mutual benefits, that can accrue from the use of the waters of the Mekong River Basin, while avoiding or limiting any harmful effects of that development.

Through Article 2, the Member Countries therefore agree to a proactive approach to identifying projects through **promoting**,

*The Member Countries agreed to cooperate on the sustainable development of the Mekong River Basin. This recognised and promoted the need to develop, but also noted that this could adversely impact the shared ecosystem and may result in harmful transboundary effects.*

*The need to cooperate to ensure that the development is reasonable and equitable, and that every effort is made to avoid, minimise and mitigate potential harmful effects, is the primary reason for the 1995 Mekong Agreement.*

supporting, cooperating and coordinating in the development of the *full* potential of *sustainable* benefits to the Member Countries and the prevention of wasteful use of Mekong River Basin waters, with an emphasis and preference on joint- and/ or basin-wide development projects. This was to be achieved through a Basin Development Plan. These objectives derive

from the Charter and Joint Declaration. This means there was not only a continued expectation that further development and use of the water and related resources would occur, but that these projects should be **actively pursued, especially where they result in optimal and shared benefits**.

To date, the Basin Development Strategies<sup>4</sup> have focussed on the *reactive* determination of the possible impacts from each country’s individual plans on the basin, rather than on proactively identifying potential mutually beneficial projects. Nonetheless, the prior consultation processes to date have been on hydropower projects that will export power. Cheaper and more reliable

<sup>4</sup> Because the Basin Development Plan was thought to be binding with respect to the proposed projects identified in the plan, the Council rather decided to approve a Basin Development Strategy, with the codicil that all projects identified would still be subject to notification, and/or prior consultation. Nonetheless, even if a ‘Plan’ was approved, it would not supersede any of the provisions of the Agreement.

regional energy has not been identified as a shared benefit of the development of the basin. Furthermore, by the time a project is notified for prior consultation the concession and power purchase agreements are already in place. This means there is little opportunity to deepen joint ownership of the project, perhaps by including some of the

*Cheaper and more assured regional power, and the development opportunities that follow have not been expressly identified as a shared benefit.*

*However, discussions around this aspect in the basin planning process may allow for environmental externalities of hydropower development to be included in the Power Purchase and Concession Agreements, and hence to more equitably share the benefits and potential risks of these developments.*

environmental externalities in the price of the power to maintain the project's financial viability while minimising potential impacts. There is therefore a need to define what 'mutual benefits' means, and to look for projects that realise this through the Basin Development Plan.

There was also a recognition by the Member Countries that development of the basin may cause some harm to the Mekong River System, and that this harm should be limited. Similarly, development of the basin should be reasonable and equitable. A clear view of sustainable development is not defined in the 1995 Mekong Agreement. However, some guidance may be found in the Bruntland Report of 1987, which defines sustainable development as:

*"... meeting the needs of the current generation, without compromising the ability of future generations to meet their needs."*

Sustainable development in this context is a public interest notion. It recognises that, in a developing Country, meeting the needs of the current generation is important and necessary to provide the foundation for meeting the needs of future generations<sup>5</sup>. As such, some harmful effects may be considered to be in the interests of the nation as a whole, i.e. in the public interest. But also, that all reasonable efforts must be made to avoid, minimise or mitigate any potential harmful effects.

**"Meeting the needs, Keeping the Balance"**  
*is a public interest notion with two elements; some harm to meet the needs of the current generation may be in the interests of the nation, but that any harm must be avoided, minimised or mitigated as much as possible.*

This notion can work on a sovereign basis, but less easily in a transboundary sense, where the benefits accrue to one country, but other riparian Countries may feel the harmful effects. Here, the public interest is much more difficult to argue. However, the benefits of regional growth through increased trade, reduced cross border migration, and improved regional security and resilience perhaps need to be highlighted as in the regional public interest.

*This is more difficult to argue on a transboundary basis and must be set against regional benefits and the concept of reasonable and equitable use.*

The MRC's slogan "Meeting the Needs, Keeping the Balance" follows a similar line. The objective to cooperate on the sustainable development of the Mekong River Basin therefore inherently recognises that:

- The Member Countries expect to further develop and use the water and related

resources of the Mekong River Basin to meet their needs;

- There may be some harmful effects associated with this development, and that these effects should be avoided, minimised and mitigated;
- There should be limits set to the harmful effects to ensure that development is reasonable and equitable, so as not to compromise the needs of future generations or other Member Countries;
- The Member Countries should **actively** identify joint projects that hold multiple and mutual benefits through a Basin Development Plan; and
- All the Member Countries have an equal right to develop to meet their present needs, but also an equal right not to have the needs of their future generations compromised.

### 3.3. The general commitments

Articles 3, 4, and 7 of the Agreement outline the **general commitments** Member Countries have agreed to with respect to the principles they will apply when developing the Mekong River Basin. They therefore represent **the values** the Member Countries **will hold themselves** to when developing the Basin. These articles refer to; protecting the ecological balance, respecting sovereign equality and territorial integrity, and avoiding, minimising or mitigating harmful effects. These principles apply irrespective of where the project occurs in the basin, or whether the proposed use is subject to prior consultation or agreement.

These principles represent a *Duty of Conduct*. A Duty of Conduct is assessed on the extent to which the Member Countries are applying the principles, or the efforts they are expending to apply the principles. This was a key focus of the prior consultation process for the Pak Beng Hydropower Project, and this was extended into a post prior consultation phase through a Statement calling on the Government of the Lao PDR to continue its efforts by implementing specific measures identified during prior consultation. The Preliminary Design Guidance of 2009 and 2018, and the Sustainable Hydropower Initiative provide guidance against which this Duty of Conduct can be assessed, and this has been a focus of all four prior consultation processes to date.

A Duty of Conduct is often preceded by the wording "to make every effort to...". It is therefore useful to explore what this means. "Making every effort" must extend beyond just listening to the concerns of the other riparian countries, and where feasible should include making changes to the design and operations of the planned project. Making every effort means that the Member Countries must actively seek measures that address the concerns of the others – whether these are expressed in a prior consultation process or not.

*The general commitments in Articles 3, 4 and 7 are a Duty of Conduct, whereby the Member Countries must make every effort to hold themselves to the principles they contain. This means they should **actively seek to implement measures** that protect the environment and ecological balance, respect sovereignty and avoid, minimise and mitigate impacts. This applies irrespective of whether the water use will be subject to prior consultation and should include efforts to implement the PDG and Sustainable Hydropower Development Strategy.*

These efforts should extend to the use of the Preliminary Design Guidance, or other guidelines, or where the specific characteristics of the project make this impractical or unnecessary, that the reasoning for any deviation is explained.

The MRC has not yet fully explored whether this could include adjustments to the concession or

<sup>5</sup> This is also inherent in the nexus nature of the Sustainable Development Goals, which recognise that sustainable development requires actions on a wide range of issues, including economic development.

power purchase agreements. This may, for example, include adjusting the Internal Rate of Return (a measure of how long it takes the project to become profitable) of hydropower projects to accommodate the water used for additional sediment flushing or fish passage concerns, which do not generate power, or increasing the cost of power to include these external environmental costs. This will most likely require further domestication of the provisions of the 1995 Mekong Agreement, the Procedures and the supporting materials as outlined in Section 2.2.

### 3.4. The substantive commitments

Articles 5, 6, 8, 9 and 10 present the **substantive commitments** the Member Countries made with respect to inter-country engagements. This includes the commitments to:

- Utilise the waters of the basin in a reasonable and equitable way (Article 5);
- Make proposed uses subject to notification, prior consultation or agreement depending on where and when it occurs (Article 5);
- Cooperate to maintain minimum monthly flows in the mainstream, and provide for an acceptable return flow into the Tonle Sap (Article 6);
- Prevent daily peak flows greater than would naturally occur in the wet season (Article 6);
- Take responsibility for substantial damage caused to the other Member Countries (Article 8);
- Maintain the freedom of navigation on the mainstream (Article 9); and
- Notify and consult with the other Member Countries with respect to water quality and quantity emergency situations (Article 10).

These substantive commitments are *Duties of Result*, i.e. these must be a direct outcome of country-to-country engagements. The details of how to achieve these substantive commitments have been captured in the 5 MRC Procedures, which are dealt with in more detail in the following chapter. The following sections provide some guidance on interpreting these substantive commitments.

*Articles 5, 6, 8, 9 and 10 outline Duties of Result. These must be a direct outcome of country-to-country interaction through the Mekong River Commission and the 5 MRC Procedures. The Duty of Result commitment to take responsibility for substantial damage is done through direct country-to-country engagements based on international norms.*

### 3.5. Reasonable and Equitable Use

Reasonable and equitable use is a long-standing principle of international water law. The 1956 Dubrovnik Resolution indicates that states must weigh the benefits of water use to one state against the injury done to another, guided by:

- The right to a reasonable use of the water;
- The extent of the dependence of each state upon the waters;
- The comparative social and economic gains accruing to each and to the entire river community;
- Pre-existent agreements among the states concerned; and
- Pre-existent appropriation of water by one state.

The principle is expanded in the 1966 Helsinki Rules, which indicate that reasonable and equitable use should be based on all relevant factors and provide a non-exhaustive list of 11 factors that can guide decisions. These factors were ultimately codified as 7 factors (by combining some of them) in the UN Convention on the Non-navigational use of International Watercourses (the UN Watercourses Convention).

These 11 factors are included in both the 1970 Mekong Charter and 1975 Joint Declaration, but the latter adds the cost-benefit ratios of the proposed project. However, the Member Countries chose not to include this or a similar listing in the 1995 Mekong Agreement, agreeing a more generic

*The requirement for reasonable and equitable use is a long-standing principle of international water law and is included in the 1995 Mekong Agreement. However, it has not been actively pursued in the prior consultation processes to date.*

*“...utilise the waters of the Mekong River system in a reasonable and equitable manner in their respective territories, pursuant to all relevant factors and circumstances, the Rules for Water Utilization and Inter-Basin Diversion, and [notification, prior consultation and agreement]”*,

The conditions under which proposed water uses would be subject to notification, prior consultation or agreement were then defined. As outlined in the first Chapter of this Handbook, deferring the discussions on the details of “the Rules”, was necessary due to the very short time the Member Countries had to finalise the Agreement.

The inclusion of the requirements for notification, prior consultation and agreement in Article 5 signals the intention that the PNPCA should give effect to reasonable and equitable use. But, the PNPCA and its Technical Guidelines also do not elaborate the factors to be considered. However, reasonable and equitable use is a nuanced concept, and has mostly evolved around

#### REASONABLE AND EQUITABLE USE

The International Court of Justice has suggested that the UN Watercourses convention could be considered international customary law in this respect.

sharing water whereas the transboundary concerns in the LMB now include fish migration and sediment transport. None of the prior consultation processes to date have placed much emphasis on the substantive commitment to reasonable and equitable use and have rather focused on Article 7’s general commitment to avoid, minimise and mitigate harmful effects.

This emphasis allowed the production of a Statement at the end of the prior consultation process for the Pak Beng Hydropower Project which was a substantial step forward. Nonetheless, this focus does not detract from the need to ensure reasonable and equitable use, and the MRC will need to engage the concept moving forward.

An understanding of the factors that may be relevant in the Mekong context is therefore important to frame the prior consultation process. The factors underpinning reasonable and equitable use outlined in contemporary international water law can be summarised as follows:

- Physical or natural elements of the basin;
  - The **length of the river** lying in or on the border with the Member Country;
  - The **area of the basin** lying within the territory of the Member Country; and
  - The **contributions made to the runoff** by the Member Country.
- Social or human needs and economic dependency;
  - **Water demands** exerted by the economy;
  - **Population dependent** on the shared waters;
  - **Extent and History** of that dependency;
  - **Vital human needs**, the water required for basic human needs like drinking and sanitation; and
  - **Environmental needs**, the water required to maintain key ecological functions.

In the current Mekong context, it may be argued that each of the Member Countries is entitled to a reasonable and equitable share of the ‘development space’ or the level of development that would be considered sustainable. This may, for example, be a reasonable use of sediment or total fisheries potential, whether this is a direct or indirect use. ‘Use’ in this framework would include inter alia:

- The reduction in sediment transport or fisheries potential behind storage or hydropower dams;
- The abstraction of sediment through sand mining;
- Geomorphological functions, like bank stabilisation; and
- Loss of fisheries potential through pollution, overfishing or any other action.

An assessment of reasonable and equitable use in this context would need to weigh up the economic and social benefits of this ‘use’, versus the lost economic and social benefits of the use in the other Member Countries. In the Pak Beng prior consultation process, the emphasis on Article 7 promoted the principle that any proposed uses should use as little of this development space as possible.

*The principle of reasonable and equitable use is central to water diplomacy but is a nuanced concept that has not been fully explored in the MRC. As a first step, this may include exploring the way the factors outlined in contemporary international water law could be adapted to the Mekong context, and how this could help frame the prior consultation process.*

Most international water law practitioners suggest that the principle of reasonable and equitable use should take precedence over the principle of prevention of significant transboundary harm. Some basis for this in the 1995 Mekong Agreement may exist in the interpretation of Articles 7 and 8 below. However, the extent to which this applies in the Mekong context will have to be discussed in the context of the implementation of all the Procedures as outlined in the following chapter.

### 3.6. State responsibility for substantial damage

In Article 7, the Member Countries agreed to make every effort to avoid, minimize, and mitigate *harmful effects* that **may** occur to the environment, water quantity and quality, or ecosystem, from the development and use of the Mekong River Basin. The emphasis on Article 7 in the Pak Beng prior consultation process allowed for the development of the Statement, which in turn provided the basis for ongoing engagement through the ongoing design, construction and operation of the hydropower project.

However, the Member Countries also agreed that where they are notified with proper and valid evidence that they are causing *substantial damage* to one or more of the other Member Countries they will cease immediately the alleged cause of harm until the cause of harm is determined. Articles 7 and 8 therefore introduce the wording ‘substantial damage’ and the commitment of all the Member Countries to assume responsibility for substantial damage.

Article 7 outlines that:

- Member Countries agreed to make every effort not to cause harmful effects with their ‘use’ of the Mekong River Basin (i.e. either within their own territories or in the transboundary sense), irrespective of whether the use is subject to prior consultation or not;
- But when these harmful effects rise to the level of *substantial damage* the Member Countries must stop the use<sup>6</sup>;
- This refers to an ongoing use of the waters of the Mekong River Basin, which may be resulting in ongoing pollution, impacts on aquatic ecosystems, or changes in flows; and
- The ‘harmed’ countries must provide proper and valid evidence of *substantial damage*<sup>7</sup>, and must be able to clearly attribute the damage suffered to the use (as a single project or group of projects).

Because Article 7 applies to both tributaries and mainstream water uses, the Member Countries should make every effort to avoid, minimise and mitigate potential impacts on the tributaries in the design and construction of tributary dams.

*The Member Countries agreed to make every effort to avoid, minimise and mitigate harmful effects. But when they are informed with valid evidence that these harmful effects rise to the level of substantial damage, they would cease the use and would enter into discussions with the affected country.*

*However, it is likely to prove very difficult to implement these provisions as it will be difficult to assign the damage to one particular source, and/or to agree the subjective terms.*

Article 8 outlines the processes the Member Countries agreed to follow when substantial damage due to an ongoing use of the waters of the Mekong River Basin has been identified with proper and valid evidence. This includes cooperating to identify the cause, extent and responsibility for damage using the principles of international law relating to state responsibility for damage.

<sup>6</sup> This may imply that some transboundary harmful effects may occur, but they must not rise to the level of substantial damage.

<sup>7</sup> For this reason, the documentation provided by the notifying country under prior consultation cannot be expected to indicate that transboundary substantial damage has occurred, as this is a duty of the notified countries.

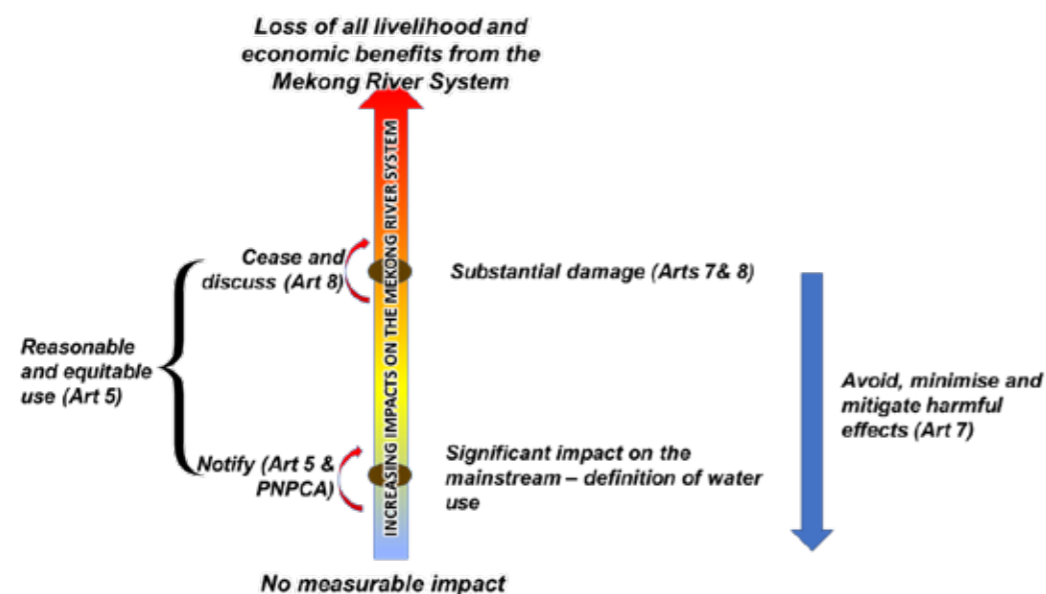
There are several challenges to implementing this aspect of the 1995 Mekong Agreement:

- The subjective terms such as ‘significant harm’, and ‘substantial damage’ are open to interpretation (the following section provides some guidance in this respect);
- Given the complexity of multiple impacts on the shared ecosystem, it may be very difficult to assign the damage to any source or Member Country; and
- Substantial damage is more likely to result from cumulative impacts rather than from one source.

What is evident from the Council Study, is that the cumulative impacts of all the planned development will push the basin closer to the point where substantial damage occurs. The Member Countries must, therefore, apply increasing efforts with each successive development if they are to remain consistent with their commitments in Chapter III of the Agreement.

### 3.7. Guidance on the use of subjective terms

Subjective terms like ‘significant harm’ and ‘substantial damage’ are common in international water law and reflect both the difficulty in assigning a number to these concepts in the negotiation process, as well as the flexibility needed to examine each case on its own merits. However, some guidance on interpreting these terms, and their relationship with the rest of Chapter III is given in this diagram.



Assuming a conceptual continuum of increasing impacts on the Mekong River System from no measurable impact to the loss of all livelihood and economic benefits from the use of the Mekong River System:

1. Because the Member Countries did not wish the MRC to become involved in every decision on water use in their territories, smaller water uses not having a significant impact on the mainstream are identified as a water use and are hence not subject to notification or prior consultation (from the definition of a proposed use). The Procedures for Notification, Prior Consultation and Agreement (PNPCA) and Procedures for Water Use Monitoring (PWUM)

provide further clarity, defining ‘water use’ as:

“... any use of water which may have a significant impact to the water quality or flows regime of the mainstream of the Mekong River System by any member State.”

Proposed water uses not meeting this criterion are not subject to the provision of Article 5, or the PNPCA and PWUM. They are therefore not subject to notification irrespective of where they occur.

2. This highlights that the mainstream is seen as the connector between the Member Countries, and is similar to the definition in the UN Watercourses Convention where a planned measure is defined as one that may have a significant impact on another watercourse state. This, however, does not clarify the subjective nature of “significant impact”. Here the inclusion of “*may*” is important. This means that even if there is **just a possibility** of the proposed use having an impact that may concern the other Member Countries, there should be notification. This could be important when considering cumulative impacts, where individually small users may have trivial or effectively unmeasurable impacts, but cumulatively they may have an impact.
3. The **Mekong Spirit** should therefore underpin the interpretation of “significant impact on the mainstream”, with the measure of notification being; *could this use possibly be a concern for the other Member Countries?*
4. Once a proposed use meets this criterion, it becomes subject to the PNPCA and PWUM. However, there must be a conceptual gap in the continuum of increasing impacts, between “significant impact on the mainstream”, and “substantial damage”, because a Member Country cannot be liable to cease the use just on receiving notification.
5. The use of Article 5 to secure reasonable and equitable use therefore focuses on the gap between significant impact on the mainstream and substantial damage in the diagram above.
6. Once a water use rises to the level of substantial damage, the Member Country responsible for that use must cease and discuss the use with the affected countries. However, the responsibility for proving the damage shifts to the affected country.



Given that substantial damage may be a result of cumulative impacts across the whole Mekong River Basin, including from water use of the country reporting substantial damage, the use of Articles 7 and 8 to prevent substantial damage may be impractical<sup>8</sup>. In the absence of guidance to evaluate reasonable and equitable use, the Duty of Conduct in Article 7 to make every effort to avoid, minimise and mitigate harmful effects therefore becomes even more important to achieving the principles of the 1995 Mekong Agreement. This must therefore apply to all water uses irrespective of whether they are subject to the PNPCA or not.

<sup>8</sup> This does not mean they are not necessary to frame the principle of avoiding significant transboundary damage.

### 3.8. Freedom of navigation

Article 9 provides for the freedom of navigation on the mainstream based on the equality of right. This means that all the countries have an equal right to use the mainstream for navigation, without regard to territorial boundaries. Article 9 also refers to the use of navigation to promote cooperation and regional growth, which lends further weight to the objectives of the Agreement.

The wording:

*“shall be kept free from obstructions, measures, conduct and actions that might directly or indirectly impair navigability, interfere with this right or permanently make it more difficult”;*

... means that the Member Countries must ensure that any actions or infrastructure that may interfere with this right are avoided. This would apply to bridges, power lines, dams or other actions that make navigation more difficult. However, infrastructure like bridges or power lines over the Mekong mainstream would generally not be considered a water use, and hence not subject to notification. The intention in Article 9 is that these should not interfere with navigation even at the highest navigable levels in the mainstream. Nonetheless, the Member Countries may wish to inform the Commission when this infrastructure is planned, and that the standard navigation freeboard heights and navigable water levels have been considered in the design.

*The freedom of navigation does not take preference over other mainstream uses, which implies that the Member Countries expect mainstream dams to be built.*

*However, it does mean the navigation locking systems need to ensure that passage is easy, quick and safe to use.*

However, there is a codicil to this in the following:

*“Navigational uses are not assured any priority over other uses but will be incorporated into any mainstream project.”*

This suggests that there was an anticipation that mainstream dams would be built, but that navigation locks must be included in these dams, rather than the right to unimpeded navigation should prevent the development of these dams.

Through Article 9, the Member Countries therefore also agree to make the use of navigational locking systems in these dams easy, quick and safe to use.

### 3.9. Emergency Situations.

In Article 10, the Member Countries agree to notify the other Member Countries **as soon as they become aware** of a water quality or quantity emergency that may result in transboundary harm. These emergencies may refer to chemical spills, the failure of mining slime dams, as well as the failure of storage and / or hydropower dams. Because of the urgency of the need to warn the other Member Countries, this notification is made directly to the potentially affected countries, and then to the MRC (i.e. to the Joint Committee).

During the discussions to finalise the Technical Guidelines for the Procedures for Water Quality, there was some discussion around the geographical scope of these emergency procedures. However, it would be logical to accept a similar definition as that for a water use, in that water

quantity or quality emergency would be any event that **may** have a significant impact on the mainstream irrespective of where it occurs. This means that if there is just a possibility of an impact on the mainstream from an emergency situation (such as a dam failure or chemical spill) that **may be a cause of concern** to another Member Country, it should be notified immediately. However, transboundary emergencies may also occur on the transboundary tributaries in the 3S Basin, which do not affect the mainstream.

It is clearly to the benefit of the Member Countries to notify such emergencies in a timely manner as, should substantial damage result to another Member Country, the liabilities under international law would be reduced if the notified countries had sufficient time to avoid or mitigate the harm. It is therefore important to develop transboundary emergency notification procedures which allow for direct communication between the disaster management agencies in each of the Member Countries. This has been done in respect of water quality emergencies in the PWQ, and the basin-wide flood warning procedures do provide warnings of floods in the mainstream, and flash floods in the tributaries. However, it is recommended that dam failure warning procedures are developed.

*As soon as a Member Country becomes aware of an emergency water quality or quantity situation arising anywhere on the Mekong River System they must immediately inform the other Member Countries that **may** be affected, and then the MRC.*

*It is to the Member Country's advantage to do this as it may limit claims where substantial damage occurs.*

The inclusion of dam safety and the associated dam break analyses and warning procedures in the prior consultation processes means that this aspect is given adequate attention for mainstream dams. However, due diligence would require that these aspects are addressed with the design and construction of tributary dams, and the application of MRC's Preliminary Design Guidance may provide a basis for this.

### 3.10. Summary

This chapter of the Handbook makes a conceptual distinction between the general commitments and the substantial commitments made by the Member Countries in Chapter III of the 1995 Mekong Agreement. The general commitments are Duties of Conduct to develop the Basin in *their* territories according to the stated values and norms, irrespective of where that use occurs or whether it will be subject to the PNPCA. The substantive commitments are Duties of Result made in respect of discussions, consultations, and agreements with the other Member Countries.

The journey towards giving effect to these objectives and principles is unfinished. While Articles 1 to 10 of the 1995 Mekong Agreement were agreed more than 23 years ago, the details of how they would be achieved were deferred to agreement on the 5 MRC Procedures and their supporting Technical Guidelines. The Technical Guidelines for the PWQ were only agreed in 2017, while the Technical Guidelines for PMFM are a working version only. The Member Countries will learn from the implementation of these Procedures; building these lessons into the way the Procedures are implemented will help achieve the objectives and principles.

This has certainly been the case in the implementation of the prior consultation process, where progress has been made by regarding it as a Duty of Conduct to make every effort to avoid, minimise, and mitigate harmful effects, as outlined in Article 7. However, progress towards

better understanding of how the PNPCCA can contribute to the Duty of Result with respect to the reasonable and equitable use of the Mekong River System will help further entrench this principle. Using the Basin Development Plan to actively seek and promote joint projects and shared benefits as outlined in Articles 1 and 2 would be another step forward.

Driving the Procedures towards a Duty of Result may be a goal worth aiming for. However, for this to be effective, the “Result” would have to be SMART:

- *Specific* – i.e. to target the harmful effects of concern to the Member Countries;
- *Measurable* – i.e. to quantify these potential harmful effects;
- *Assignable* – i.e. to be able to assign impacts to a source;
- *Realistic* – i.e. to set realistic targets for transboundary harmful effects that are reasonable and equitable, in the context provided by the 1995 Mekong Agreement; and
- *Time-related* – i.e. to foresee the potential future harmful effects that may result from current development and establish acceptable risks in this regard.

It is likely to take some time to achieve this goal. In the interim, achieving these objectives and principles will help realise the commitments the Member Countries made. This may include developing considerations for reasonable and equitable use to frame a Duty of Conduct.

## 4. THE MEKONG RIVER COMMISSION AND ITS BODIES

### 4.1. Establishment of the MRC as an international body

The signing of the 1995 Mekong Agreement established the Mekong River Commission (MRC) as an inter-governmental body. The MRC, being made up by delegations and staff from the Member Countries, can act independently from the Member Countries and can enter into agreements and obligations with the international community.

The delegations to the Council and Joint Committee, therefore, represent their Member Countries in discussions. However, the outcomes of these meetings are products of the Commission, decided by consensus, and not joint products from the Member Countries. This is important to Articles 34 and 35, whereby the Commission, after having made every effort to resolve disputes and differences (Article 34), may elevate the matter to the Member Countries for resolution through the normal diplomatic channels (Article 35).

This separation therefore recognises that the interests of the Member Countries extend beyond the mandate of the MRC, and that they can make decisions outside of the Commission, which may also differ from the decisions of the Commission. This is important, as it allows, for example, the Member Countries to enter into power purchase agreements independently of discussions in the Commission. However, these agreements must be compatible with their commitments in Chapter III. This distinction underscores the importance of domesticating the provisions of the Agreement.

*The MRC is an international body empowered to act independently of its Member Countries.*

*The Member Countries’ delegations to the Council and Joint Committee represent their country’s interests, but the consensus decisions of those bodies are an output of the Commission, not the Member Countries.*

### 4.2. Powers and functions of the MRC Bodies

The Member Countries established the Commission with three permanent bodies;

- Council
- Joint Committee
- Secretariat



They then conferred powers and functions on these bodies. These powers and functions are summarised in the following sections. The limitations to these powers and functions are important to the MRC’s role in water diplomacy.



Importantly, the MRC **can only do** what it is empowered to do by the Member Countries. In this sense, the Commission is not empowered to:

- Enforce compliance to the objectives and principles;
- Instruct any of the Member Countries;
- Undertake any action in the Member Countries, like monitoring or implementing any programme, without the consent of the Member Country; and
- Operate any of the infrastructure in the basin (apart from the Secretariat buildings).

*The Member Countries established the permanent bodies of the MRC, and conferred powers and functions on these bodies.*

*The Commission can only function within these powers and functions. These do not extend to conferring the power to police or enforce implementation of the Agreement.*

However, as an international body, the MRC can call on the Member Countries to implement certain measures or monitoring which will help them realise the objectives and principles, or implement the Procedures as outlined in the preceding two Chapters.

### 4.3. The Council

*The MRC Council is empowered to make policies and approve the procedures and the Basin Development Plan that give effect to the objectives and principles. Because the delegations are Vice-Ministerial level at least, it can ensure that the Commission's functions and outcomes are consistent with the intention of the Agreement.*

The MRC Council is empowered to make policies and approve the Procedures and Basin Development Plan that are necessary to successfully implement the 1995 Mekong Agreement. Because it is made up of delegations at a cabinet (at least Vice-Ministerial) level, it can ensure that the Commission's functions and outcomes are consistent with what the Member Countries agreed, and with current policies in the Member Countries. As such, the Council has approved the Procedures, signalling that they are consistent with the intentions of the Member Countries when they signed the Agreement, and that they are consistent with the current policies.

The Council meets once a year or may meet at a special session when required or when asked by any Member Country.

More specifically, the Council is empowered to address any disputes and differences<sup>9</sup> referred to it by any Council member, the Joint Committee, or any Member Country.

### 4.4. The Joint Committee

The Joint Committee is the technical body of the MRC and is primarily responsible for monitoring and directing implementation of the Agreement and Procedures by the MRC. It must ensure the proper functioning of the Commission. The Joint Committee has oversight over the Secretariat and has a fiduciary duty towards the Member Countries and Council.

*The MRC Joint Committee is responsible for directing implementation of the Agreement and Procedures in so far as the Commission is empowered to do so.*

The Joint Committee meets twice a year but may meet in an extraordinary session as required. It has been empowered to:

- Implement the policies and decisions of the Council;
- Develop the Basin Development Plan for approval by the Council;
- Collate the data necessary to implement the Agreement – i.e. it may request data from the Member Countries;
- Develop the Procedures for approval by the Council;
- Undertake studies to support implementation of the Agreement;
- Address any differences;
- Assign tasks to, and supervise the Secretariat;
- Review studies and training programmes for the Secretariat; and
- Make recommendations on the structure and functioning of the Secretariat to the Council.

### 4.5. The Secretariat

The Secretariat provides administrative and technical services to the Commission. It serves the Council and Joint Committee and develops the strategy and work plan for the Commission. It helps the Joint Committee implement strategy and work plan including studies and assessments, etc. It makes preparations for meetings of the Council and the Joint Committee. The Secretariat provides financial services to the MRC, with oversight from the Joint Committee.

### 4.6. Disputes and Differences

It is useful to make a distinction between *disputes*, which are resolved at a Council level, and *differences*, which are resolved at the Joint Committee level.

A “**difference**” refers to a different technical interpretation – for example, whether the proposed operation and design of a proposed use does indeed make every effort to avoid, minimise and mitigate harmful effects, or whether additional measures should be proposed. Similarly, a difference may refer to whether the approach to determining minimum monthly flows or the concentration of a substance for the PWQ is acceptable. These differences can be resolved at Joint Committee level, and if necessary external expert input can be sought.

A “**dispute**” refers to the interpretation of the intention of the agreement or policy – for example, whether transboundary harmful effects can be considered as a reasonable and equitable use. This must be resolved at Council level. If the Council cannot resolve these disputes, they may elevate them to the Member Countries for resolution through the normal diplomatic channels.

<sup>9</sup> The difference between a dispute and difference is outlined below.

## 5. FINAL PROVISIONS OF THE MEKONG AGREEMENT

### 5.1. Entry into force

As outlined in the introductory section, the 1995 Mekong Agreement entered into force on the 5 April 1995 because it was signed by the plenipotentiaries. Importantly, the Agreement was not retroactive on any water uses already in place at the time of signing.

The 1995 Agreement also replaced all existing agreements, declarations and rules of procedure established under the Mekong Committee and the Interim Mekong Committee. However, it did not replace any *other* existing agreements or treaties entered into by any of the Member Countries. Where there are potential conflicts with other treaties, the Member Countries are requested to resolve these differences.

### 5.2. Amendments to the Agreement

The 1995 Mekong Agreement includes provisions to amend the treaty. The Agreement can, therefore, be terminated, amended or replaced if all the Member Countries agree. This means that the Agreement can be adjusted to accommodate the growing understanding of the Mekong River System, and the factors that may result in transboundary harm, or the reasonable and equitable use of the development space.

However, even though the Member Countries may accept that changes may be necessary, there may be more to be lost than gained by entering into discussions to amend the Agreement. Any changes to the Agreement will also require ratification and will therefore be subject to parliamentary processes. However, the Council has already been given the powers to approve the Procedures and may therefore approve any amendments to the Procedures proposed by the Joint Committee. Similarly, the Joint Committee may direct the Joint Platform to propose changes to the Technical Guidelines, so that they better reflect the current situation and understanding of how the Procedures are linked.

Amendments to, firstly the Technical Guidelines, and secondly to the Procedures could therefore be contemplated if they do not conflict with the Agreement. For example, because the basis for the PNPCA and PMFM are established in the Agreement, the agreement to make proposed water uses subject to notification, prior consultation or agreement, or to maintain flows in the mainstream, could not be changed without amending the Agreement. However, these Procedures and their Technical Guidelines could be amended so that they better reflect both the original intention of the Member Countries under the current conditions.

### 5.3. Including other riparian countries

The 1995 Mekong Agreement makes provision for the inclusion of China and / or Myanmar, if they accept the rights and obligations of Member Countries under the Agreement. However, these other riparian countries may agree to become party to the Agreement if certain amendments are made. In this case, the existing Member Countries would first have to unanimously agree to these amendments before these other riparian countries could be admitted.

### 5.4. Scope of the Agreement

The scope of the 1995 Mekong Agreement includes the Preamble and all provisions thereafter and amendments thereto, the Annexes (which is the Protocol establishing the Mekong River Commission), and all other agreements entered into by the Member Countries under this Agreement. It is not clear whether the Member Countries intended this to include the Procedures, which are agreed by the *Commission* (i.e. the Council), albeit under the powers and functions conferred by the Member Countries.

This is important as it may affect the extent to which the Member Countries perceive themselves to be bound by the Procedures, which did not undergo a parliamentary process. However, this article does mean that the Declarations of the MRC Summits (held every 4 years), which are made by the Member Countries, are to be implemented as part of the 1995 Mekong Agreement.

The 1995 Mekong Agreement allows the Member Countries to enter into bilateral or multilateral special agreements to help implement the main Agreement if these are not in conflict with the main Agreement.

### 5.5. Suspension and withdrawal

The 1995 Mekong Agreement allows any of the Member Countries to withdraw from the Agreement by notifying the Council. However, because some internal arrangements and budgetary provisions will have to be made, this withdrawal only comes into effect one year after the notice is received by the current Chair of the Council.

## 6. DEVELOPMENT OF THE FIVE MRC PROCEDURES

### 6.1. Introduction

Article 5 of the 1995 Mekong Agreement indicates that the “*Rules for Water Utilization and Inter-Basin Diversion*” must support the reasonable and equitable use of water in the Mekong River System, subject to the agreed conditions for notification, prior consultation and agreement. Article 6 also indicates that these Rules should form the basis for maintaining flows in the mainstream. In Article 26, the Member Countries confer the powers to develop these “Rules” to the Joint Committee, for approval by the Council. The Council, by approving the Rules therefore verifies that they are consistent with principles agreed by the Member Countries, while the Joint Committee agrees the details of how the Procedure can be implemented.

While there were some notifications for proposed uses soon after the Agreement was signed, it was not until 2000 that work on developing these “Rules” began in earnest. It was soon agreed that “Rules” was too prescriptive and not consistent with the Mekong Spirit, and the Rules changed into the 5 MRC Procedures as follows:

- Procedures for Data and Information Exchange and Sharing (PDIES);
- Procedures for Water Use Monitoring (PWUM);
- Procedures for Notification, Prior Consultation and Agreement (PNPCA);
- Procedures for the Maintenance of Flows on the Mainstream (PMFM); and
- Procedures for Water Quality (PWQ).

The evolution from the Agreement, to the Procedures and then to the Technical Guidelines, therefore outlines increasing detail on how the substantive commitments made by the Member Countries in Chapter III of the Agreement should be implemented. These details took some time to be developed, as is illustrated in the following sections.

The 1995 Mekong Agreement was therefore largely an agreement to agree on the details of the Member Countries’ substantive commitments towards each other. One of the consequences of this 23-year development path is that some of the original purposes of the Rules, and the intention for a single set of Procedural Rules, have been lost in a drive to find a technical solution to a water diplomacy problem.

For example, the commitment to either notification or prior consultation on the mainstream depending on whether it is a dry season or wet season use is less about a conclusive definition of the start and end of the wet and dry seasons, but rather more about the *possibility* of transboundary harmful effects. Larger water uses at the start of the “wet season” may have greater impacts than smaller water uses in the middle of the “dry season”. Ultimately, the decision on whether it should be subject to prior consultation or notification depends more on its potential impact than its timing.

Because these nuances have sometimes been lost through staff turnover, newcomers are not always made aware of the original intentions of the Member Countries or made fully conversant with how the Procedures were developed. More importantly, because much of the development of the Procedures was driven by separate programmes under the old structure of the Secretariat, the way they need to be linked to support Mekong water diplomacy has been diluted.

The following sections outline in more detail the development and intention of the 5 MRC Procedures.

### 6.2. The Procedures in the 1995 Mekong Agreement

The Procedures emerge out of Chapter III of the 1995 Mekong Agreement, in which the Member Countries agree to the objectives and principles of Cooperation and aim to give effect to *some* of the substantive commitments as outlined in the previous chapter. More specifically, the Procedures have their origins in Article 5 in which the Member Countries agree to:

*“Utilize the waters of the Mekong River system in a reasonable and equitable manner in their respective territories, pursuant to all relevant factors and circumstances, the Rules for Water Utilization and Inter-basin Diversion provided for under Article 26 and the provisions of... [notification, prior consultation and agreement].”*

, and Article 6 in which the Member Countries agree to:

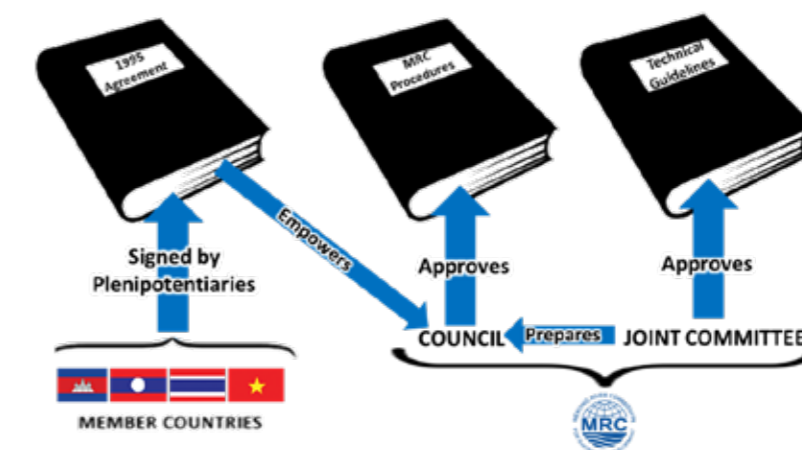
*“Cooperate in the maintenance of the flows on the mainstream from diversions, storage releases, or other actions of a permanent nature; except in the cases of historically severe droughts and/or floods....”*

*The Joint Committee shall adopt guidelines for the locations and levels of the flows and monitor and take action necessary for their maintenance as provided in Article 26.”*

In Article 26, the Member Countries empower the Joint Committee to prepare the “Rules” for approval by the Council, pursuant to Articles 5 and 6.

Through the Procedures, the Council ensures that the intentions of the Member Countries in Chapter III of the Agreement are realised. In their supporting *Technical Guidelines*, the Joint Committee spells out how the Procedures will be implemented.

*The 5 MRC Procedures have their origins in the substantive commitments outlined in Chapter III of the Agreement, as well as Articles 26 and 24.*



Articles 5 and 6 explicitly make provision for the Procedures for Notification, Prior Consultation and Agreement, and the Procedures for the Maintenance of Flows on the Mainstream. However, in Article 24C & E the Joint Committee is empowered to:

*“Regularly obtain, update and exchange information and data necessary to implement this Agreement.”*

, and to “maintain the databases necessary for the Council and the Joint Committee to perform their functions”. This therefore provides the basis for the Procedures for Data and Information Exchange and Sharing, the Procedures for Water Use Monitoring, and the Procedures for Water Quality.

Four of the five MRC Procedures therefore emerge directly out of the provisions of the 1995 Mekong Agreement, while Procedures for Water Quality were added by the Council later to bring the set of Procedures in line with global best practice.

### 6.3. Development of the Procedures

While the first notification of a proposed water use was made as early as November 1995, it was only after 2000 that work on developing the ‘Rules’ began in earnest. On 18 October 1999, the Council requested the Joint Committee to develop ‘Procedures’ for:

- Data and Information Exchange (which became the PDIES);
- Monitoring Existing Water Uses (PWUM);
- Notification and Consultation (which became the PNPCHA); and

... **Rules** for the:

- Maintenance of Flows on the Mainstream (PMFM); and
- Water Quality (PWQ).

They requested that this should be done within a very tight five-year timeframe.

This request from the Council introduced several important concepts:

- The intention for the PWUM to monitor *existing* water uses;
- The change in thinking from “Rules” to “Procedures”; and
- The need to include water quality rules.

Ultimately, the Council approved 5 Procedures, dropping the use of ‘rules’. Marking the change from a prescriptive ‘rules-based’ approach to a more procedural ‘water diplomacy-based’ approach, and this still underpins the way the Procedures are implemented. Nonetheless, the nominal separation of Procedural Rules (PDIES, PWUM and PNPCHA), and Physical Rules (PMFM and PWQ) persisted for some time as a useful concept. The former refers to *processes* the Member Countries need to go through, and the latter commit the Member Countries to specific flows or concentrations for key water quality parameters. Eventually, both the PMFM and PWQ are now also more consistent with a process of monitoring than a requirement to achieve a specific target.

Initially, the development of the Procedures fell to the Water Utilization Program (WUP) of the Secretariat, which was established in 2000. By June 2006, 4 of the Procedures were approved by the MRC Council, within the initial 5-year timeframe<sup>10</sup>. The Procedures for Water Quality were handed over to the Secretariat’s Environment Program and were approved by the Council in January 2011.

<sup>10</sup> Considering that Council meets only once a year.

However, the Technical Guidelines, particularly for the *Physical Rules*, took somewhat more time to finalise. Approval of the Technical Guidelines PNPCHA followed approval of the Procedures by between 1 and 3 years. However, it took 6 years to finalise the Technical Guidelines for the PWQ, mostly due to delays in agreeing the process for reporting Emergency Situations. The Technical Guidelines for PMFM are still only approved as a working version, as outlined below.

Procedure	Approved by Council	Technical Guidelines
PDIES	November 2001	July 2002, August 2005 ( <b>1-4 years</b> )
PWUM	November 2003	April 2006 ( <b>&lt; 3 years</b> )
PNPCHA	November 2003	August 2005 ( <b>&lt; 2 years</b> )
PMFM	June 2006	Agreed as a working version in 2017 ( <b>11 years</b> )
PWQ	January 2011	November 2017 ( <b>6 years</b> )

The time it took to agree the Technical Guidelines reflects the difficulty the Member Countries have in binding themselves to a specific flow or water quality condition, particularly as these can be influenced by many different drivers. The difficulties in agreeing a quantum (or number) to any substantive commitment is also common in developing international treaties. As it is, the PWQ and PMFM are now agreed as monitoring and reporting tools rather than a commitment to achieve a specific flow or quality.

After the closure of the WUP in 2006, the ongoing development of the Technical Guidelines and monitoring of their implementation fell across 4 different programs in the Secretariat. The Information and Knowledge Management Program in Phnom Penh worked with the Technical Guidelines for PDIES and PWUM, while in Vientiane the PWQ fell under the Environment Program, PMFM fell under the Basin Development Program, and the PNPCHA fell under both the Mekong IWRM Program and the International Cooperation and Communication Section.

During this time, the approaches to the Technical Guidelines diverged and sought largely to find technical solutions to the original water diplomacy commitments made by the Member Countries. This development of the Technical Guidelines in silos persisted until 2012, when after several meetings of the Joint Committee indicated that the implementation of the Procedures should be improved, the Joint Platform was established. The Joint Platform once again brought the implementation of the Procedures under one roof. The Joint Platform was established by the Joint Committee, which approved its Terms of Reference via written communication in December 2013. The Platform is ‘Joint’ in that it includes expertise from all the Member Countries, and initially from all the MRCS Programs and teams developing the Technical Guidelines, as well as the fact that it addresses all the Procedures.

Since adoption of the new structure of the MRC Secretariat in 2016, the ongoing work on coordination of implementation of all the Procedures falls to the Planning Division, with the support and development from the Environment Management Division for the PWQ and the Technical Support Division for PDIES, PWUM, and PMFM.

## 6.4. Summary

It has taken more than 23 years since the signing of the 1995 Mekong Agreement to finalise the 5 MRC Procedures and their supporting Technical Guidelines. This process is still ongoing with the Technical Guidelines for the PMFM, which have only been agreed as a “*Working Version*”. However, this is typical for treaties like this, where finalising commitments to specific flows or water quality concentrations typically takes many years.

This is because these ‘numbers’ are perceived to be a *Duty of Result* for the Member Countries. However, implementing the Procedures as a *Duty of Conduct* may, at least initially, enable the Member Countries to ‘get comfortable’ with the Procedures before they are seen to be too binding. This concept is also borne out in the way each Procedure is currently being implemented.

The separation of the ongoing implementation of the Procedures and the Technical Guidelines in the programmes under the old Secretariat structure, and separated between Phnom Penh and Vientiane, has contributed to them been driven as a technical solution to a water diplomacy problem. Staff turnover and limited institutional memory have also allowed the Procedures to drift away from their original intention. This Handbook can help address this by capturing some of the history and highlighting the way linking the procedures in an IWRM framework supports water diplomacy.

## 7. PURPOSE OF THE MRC PROCEDURES

### 7.1. Background

As outlined earlier, the purpose of the Procedures is to give effect to *some* of the substantive commitments made by the Member Countries. These include the Member Countries’ agreement to:

1. The reasonable and equitable use of the waters of the Mekong River System – PNPCHA;
2. Notification, prior consultation and agreement on proposed water uses, subject to certain geographical, and temporal specifications - PNPCHA;
3. Maintain minimum monthly flows in the mainstream - PMFM;
4. Share data and information – PWQ, PDIES and PWUM;
5. Warn potentially affected Member Countries of emergency situations - PWQ;

Collectively, the Procedures should give all the Member Countries confidence that their concerns are being considered and potential harmful effects are being limited or eliminated and monitored. Together, the Procedures provide the data, tools and information the Member Countries can use to plan their development of the basin while considering pre-existing uses.

*Collectively, the Procedures aim to give effect to some of the substantive commitments the Member Countries made in Chapter III of the 1995 Mekong Agreement.*

This can only be achieved by linking the Procedures in an IWRM framework. This chapter outlines how this can be done using an analogy of apportioning the flow in the Mekong mainstream, as outlined below. The purpose of each or the Procedures is then outlined in the context of this analogy, and the way it is linked to the other Procedures is highlighted.

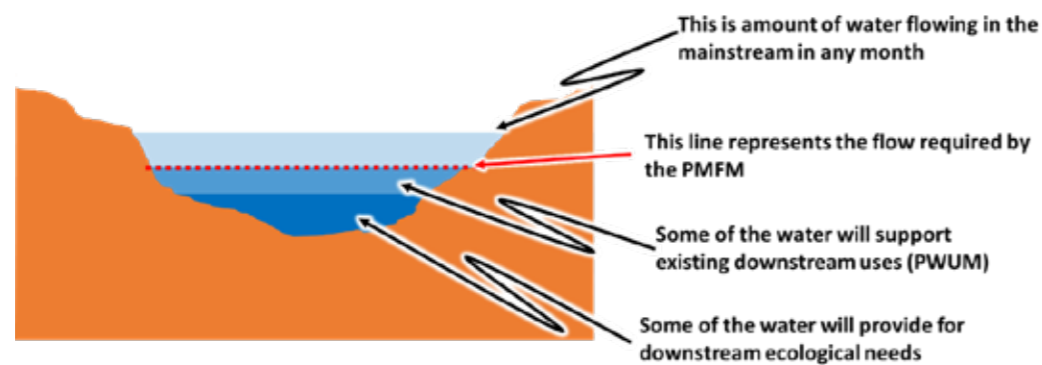
Finally, this chapter presents examples of the linked use of the Procedures.

### 7.2. Apportioning and monitoring flows in the mainstream through the Procedures

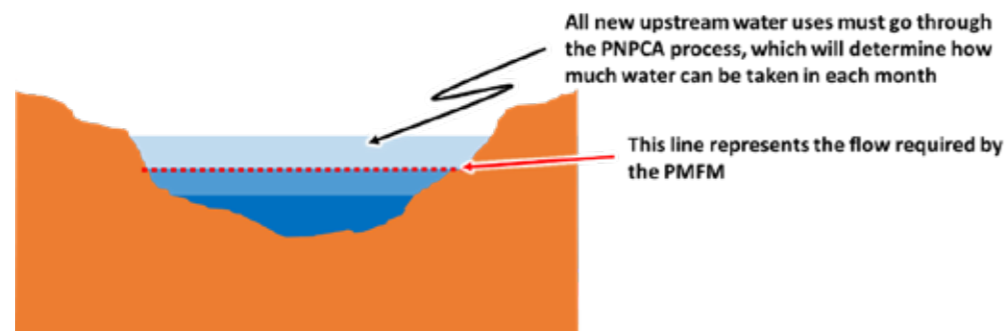
The 1995 Mekong Agreement was to some extent the product of the previous 40 years of cooperation in the Mekong Committee. At that time, the primary concern was that increasing upstream diversion of water, particularly in the dry season, would compromise existing water users further downstream, and restrict the potential for further diversion of water by the downstream countries to meet their development needs.

This is reflected in the separation between the wet and dry seasons, with the implication being that there was so much water in the wet season that diversions would be unlikely to have significant impacts – hence only dry season use on the mainstream or inter-basin diversions in the wet season will be subject to prior consultation. The focus on water quantity is also found in the definition of a proposed use in the 1995 Mekong Agreement; as a use that has a significant impact on mainstream **flows**.

The PMFM, PNPCHA, and PWUM still reflect this focus on water quantity, and the following description helps understand their roles in supporting Mekong water diplomacy.

**In this context:****1. In any one month:**

In the diagram above, of all the water flowing in the mainstream, some water is needed for downstream users, and some for downstream ecological processes (like the reverse flow into the Tonle Sap). This water is secured by the PMFM, which specifies a minimum monthly flow (or water level) required at 11 points on the mainstream. These flows have been based on a statistical analysis of historical flow, and aim to ensure sufficient water is left in the mainstream for downstream uses.

**2. If any new user wants to take water**

Only water levels above the PMFM minimum requirement is available for proposed new water uses. This may include water use on upstream tributaries that significantly affects mainstream flows. These new water uses must go through the PNPCA. However, because the PNPCA and PWUM share the same definition for a water use, once a use has gone through notification or prior consultation it must be captured as a use in PWUM. PWUM has two components, the pre-1995 water use, and the use that has gone through the PNPCA. The PWUM therefore captures all the 'approved' water uses, and any new water uses must take this existing use into consideration.

- The PMFM therefore gives confidence to downstream users and Member Countries that some water will be left in the mainstream for their use, and to protect certain ecological functions.
- The PNPCA gives confidence that large water uses that may have an impact on the mainstream are being notified, and when these occur on the mainstream in the dry season, that they will first be discussed with all the Member Countries.
- The PWUM "protects" the existing water users and notified uses, and give confidence to the Member Countries that the existing uses are not expanding and that any

agreed operating rules are being implemented by providing annual water use data.

- The PDIES serves to share data and information on the Mekong River Basin, as well as the agreed tools that should be used to evaluate the potential impacts of proposed new water uses, and which should form the basis for any PNPCA process.
- The PWQ serves to monitor whether the water quality in the Mekong River System remains fit for human use and for aquatic ecosystems.

This linking is further elaborated in the example cases, while the details of each Procedure are further elaborated in the following sections.

**7.3. The Procedures for Data, Information Exchange and Sharing**

The sharing of data is often considered the foundation for cooperation on shared watercourses, and unsurprisingly this was the first of the 5 Procedures to be finalised. Over the years, the MRC has built a comprehensive database of data and tools that form the MRC Information System. The data and tools in this Information System not only reflect the state of the basin, but also the decision support tools that can be used to assess the potential impacts of proposed water uses. These data and tools cover water quantity and quality, fisheries, sediment, ecological functioning as well as socio-economic factors.

*The purpose of the **Procedures for Data, Information Exchange and Sharing** is to establish a repository of data on the Mekong River Basin, as well as the tools that can be used to assess any potential impacts of developments in the Basin.*

Once the data are shared by any of the Member Countries, they are subject to Quality Assessment processes by the MRC, and hence these data reflect the agreed state of the basin. Similarly, data, information and tools emerging from the MRC studies – like the Council Study – have been jointly developed and agreed. The PDIES therefore makes these data and tools available on a common platform for the Member Countries to use when planning their proposed water uses.

However, neither the PDIES nor any of the other Procedures prescribe that these data and tools **must** be used by the Member Countries and developers when assessing the impacts of proposed projects, and in fact that power was not conferred on the MRC by the Member Countries. The developers' use of the MRC data and tools to evaluate potential impacts has been highlighted as a concern in the prior consultation processes to date. It is therefore important that the use of the Procedures is domesticated into national laws.

The ongoing update of the PDIES with new data differs from the data shared by the PWUM, PMFM and PWQ, in that it satisfies the general commitment to cooperate, whereas the latter 3 aim to share data on the substantive commitments made in Chapter III of the 1995 Mekong Agreement.

**7.4. The Procedures for Water Use Monitoring**

The Council's directive of 18 October 1999 requests the Joint Committee to develop procedures for monitoring *existing* water uses. During the development of this Procedure, the Member Countries also agreed that they did not wish to "lose or reduce any existing uses of the river, whether in-stream, on-stream or off-stream". These pre-1995 water uses must therefore be

captured as the baseline against which the impacts of new water use could be measured, and this is usually seen as one of the factors to consider when evaluating reasonable and equitable use.

However, once a water use has been subject to the PNPCA, the notifying country has a reasonable expectation that that use would also be considered when planning any further diversion from the Mekong River System. For example, if a water diversion from the mainstream has been through the PNPCA, then any new proposed uses on the tributaries and mainstream further upstream should consider this use as a pre-existing use in its PNPCA process.

Similarly, any downstream mainstream proposed use subject to the PNPCA must consider all the upstream pre-1995, any upstream uses that have gone through the PNPCA as a pre-existing use, as well as the requirements of the PMFM when assessing their viability. For example, a new mainstream hydropower project must consider all the existing upstream developments when assessing its viability, whereas that project can in turn expect that its requirements for flow will be considered when new upstream water uses are proposed.

The PWUM therefore gives a measure of confidence to the Member Countries that their water uses prior to 1995, as well as those they have subsequently notified will be accommodated in the future development of the basin. There is, however, a potential for a “rush to the bottom” where new water uses are rapidly proposed further upstream, thus limiting the potential for new uses downstream. This must be taken up in the discussion on reasonable and equitable use in the Basin Development Plan.

However, the potential impacts of upstream water use result from both the design of any infrastructure, as well as its operating rules. These operating rules may be notified (if on the tributaries) or may emerge from the prior consultation or agreement process. The implementation of these operating rules must therefore also form part of the PWUM as a record of the use once it has commenced.

Similarly, the PWUM must also include any design parameters and operational rules that have been put in place to avoid, minimize and mitigate any impacts. This will form part of the record of the water use. These requirements emerge from Article 5.4.3 of the PNPCA where the Joint Committee may arrive at an agreement on the proposed use through the prior consultation process. However, it stands to reason that this information will also be important for all notified uses including those on the tributaries. This means notified uses should also provide a list of design and operational measures that have been put in place to avoid, minimise and mitigate any impacts even though they are not subject to prior consultation.

To date, the PWUM have not been rigorously pursued as a tool to record pre-1995 water use, or to capture the design and operating rules of any subsequent water uses that went through the PNPCA. However, these uses have been captured in the Decision Support Framework (DSF) used by the MRC, which are used in the basin planning process. The Council Study has added to these tools, especially with respect to the impacts of development on sediment, fish migration, and fisheries potential. The Xayaburi and Pak Beng prior consultation processes have also led to proposals for design and operational changes, and in the Xayaburi case, some of

*The purpose of the **Procedures for Water Use Monitoring** is to establish that use against which future uses, and reasonable and equitable use can be evaluated. It must serve as a record of the use, and a record of the use once commenced.*

*The PWUM must therefore follow the PNPCA and must include identification and monitoring of the measures put in place to avoid, minimise and mitigate impacts.*

the design changes have already been implemented. The PWUM are therefore implicitly being implemented through the DSF and PNPCA. However, this is not an explicit monitoring of the implementation of any measures put in place to avoid, minimise and mitigate potential impacts.

An additional challenge for the PWUM as outlined here is that the scope of water use is not fully defined. The wording “the Member Countries agreed that they did not wish to lose or reduce any existing uses of the river, whether in-stream, on-stream or off-stream”, implies that water use was seen to be more than just abstractive use, but should include the “use” of the water to generate hydropower, as well as to transport sediment, and maintain fish migration and fisheries potential.

#### THE PWUM vs THE JEM

The PWUM monitors and reports on whether any measures that have emerged from the PNPCA process are being implemented, whereas the Joint Environmental Monitoring monitors the efficacy of those measures.

#### 7.5. The Procedures for Notification, Prior Consultation and Agreement

In Article 5 of the 1995 Mekong Agreement, the Member Countries agree to notification, prior consultation and agreement based on geographical (tributary and mainstream, and intra and inter-basin) and temporal (wet and dry seasons) criteria. This underpinned the intention of the Member Countries to base the desired level of involvement of the MRC and inter-country consultation on the potential for transboundary impacts.

In the 1995 Mekong Agreement this is seen as any use that may have a significant impact on mainstream flows. This was expanded in the definition of a water use in the PNPCA and PWUM to include uses that may have a significant impact on the water quality of the mainstream. While the Joint Committee may revise this definition, it is functional under the current conditions.

##### Notification

Notification is required for uses on the tributaries, including the Tonle Sap, as well as for intra-basin use on the mainstream in the wet season, where these may have a significant impact on the mainstream. If the PMFM guarantees the water required by downstream uses, then from a water quantity perspective, the notification process need only indicate how the proposed water use would be operated to comply with the PMFM.

However, because the understanding of the potential impacts of development on the mainstream has expanded to include fish passage, fisheries and sediment transport, it stands to reason that the documents submitted for notification should also indicate what measures have been put in place to avoid, minimise and mitigate any potential impacts of any proposed tributary use. In order to give the notified Member Countries the confidence that these measures are being implemented, they should be included in the PWUM.

*The purpose of the **Procedures for Notification, Prior Consultation and Agreement** is both to establish a record of water uses that may have an impact on the mainstream and which were initiated after 1995, as well as to provide a basis for discussions of proposed uses that could have greater impacts, with a view to the reasonable and equitable use of the Mekong River System.*

If a mainstream use is restricted to the wet season, and does not include any in-channel storage, then it is unlikely to have a substantial impact on sediment transport or fish migration, and hence notification only would be appropriate. However, there has been considerable debate on the definition of the wet and dry seasons with respect to the potential impacts on mainstream flows. In this context, the intention of the Member Countries to limit the involvement of the MRC to situations where transboundary impacts may occur becomes more relevant. As outlined earlier, a rigid definition of wet and dry seasons is therefore less important than the potential for impacts.

#### Prior consultation

Prior consultation is required for intra-basin uses on the mainstream in the dry season, and inter-basin uses in the wet season. This also reflects the need for discussions when the potential for impacts is higher. Where a dam is being built on the mainstream, the use occurs both in the wet and dry seasons, and it is hence subject to prior consultation. However, in the case of the Don Sahong Hydropower Project (DSHPP), the hydropower plant was planned on the Hou Sahong channel, a tributary of the Mekong, and initially it was only proposed for notification. However, the Council recommended that it should be proposed for prior consultation because most of the dry season flow and fish migration was through that channel, and the proximity of the DSHPP to the Cambodian border raised the concern for transboundary impacts. This established the principle that the potential for impacts should underpin the decision to propose a mainstream use for prior consultation.

While Article 5 suggests that prior consultation should be aimed at ensuring that the proposed use is reasonable and equitable, the definition of prior consultation as neither a veto right, nor a unilateral right to proceed without taking the concerns of the other Member Countries into account, makes a 'yes' or 'no' decision in this regard difficult. Moreover, the Member Countries are yet to agree on a set of factors that should be considered when evaluating reasonable and equitable use.

For this reason, the Pak Beng prior consultation process concentrated on the Duty of Conduct outlined in Article 7, and hence on whether additional measures should be included to further avoid, minimise and mitigate harmful effects.

Article 5.4.3 of the PNPCA indicates that:

*The MRC JC shall aim to arriving at an agreement on the proposed use and issue a decision that contains the agreed upon conditions. That decision shall become part of the record of the proposed use and of the record of the use of the waters when commenced.*

This is an explicit recognition that the final outcomes of cooperation to avoid, minimise and mitigate harmful effects (which may come several years after the 6-month prior process is completed), must be captured in a record of the proposed use, and the record of the proposed use once commenced. As outlined above this would form part of PWUM.

#### Agreement

Prior agreement is needed for inter-basin diversions in the dry season. This recognises that these uses could have substantial impacts on flows in the mainstream, and hence requires that all the Member Countries agree to this use. To date, no inter-basin uses have been proposed, and the Basin Development Plan does not include plans for such a diversion.

#### General

While the issue of the boundaries of the wet and dry seasons has yet to be resolved, the principle that the need for prior consultation based on the extent of the potential impacts has been established by the Council in the Don Sahong case. Furthermore, dams built across the Mekong mainstream are a year-round use and are therefore subject to prior consultation. The separation of wet and dry seasons is therefore largely moot.

However, the need for notification processes to also reflect the current understanding of potential transboundary impacts, and hence to outline measures put in place to avoid, minimise and mitigate potential impacts, needs to be explored.

The prior consultation processes for the Xayaburi and Don Sahong cases did not end in agreement on whether the process was complete after its initial 6-month period, and similarly it was not possible for the Member Countries to agree on an extension to the process. In practice, however, the process of consultation around measures to avoid, minimise or mitigate potential impacts in Xayaburi continued with an assessment of the extent to which the developer was responsive to the recommendations of the Technical Review Report, some 6 years after the end of the initial 6-month prior consultation process. This is an important step in finalising the prior consultation process as outlined in Article 5.4.3 of the PNPCA and for PWUM.

In the Pak Beng case, the Joint Committee issued a Statement at the end of the initial six-month prior consultation process, calling on the Government of Lao PDR to make every effort to implement the measures identified in the Technical Review Report, and requested the Secretariat to develop a Joint Action Plan to track implementation of the plan through the ongoing design, construction and operations phases. Efforts to avoid, minimise and mitigate potential impacts therefore continue after the prior consultation process is concluded.

### 7.6. The Procedures for the Maintenance of Flows on the Mainstream

The purpose of the PMFM is to ensure that there is sufficient water in the mainstream to maintain existing and potentially new downstream uses. They emerge from Article 6 of the Agreement and aim to ensure a minimum monthly flow at selected points in the mainstream in the dry season, to ensure an acceptable natural reverse flow into the Tonle Sap in the wet season, and to prevent daily peak flows in the flood season greater than would have naturally occurred.

Article 6 therefore describes PMFM as a tool to **actively**<sup>11</sup> manage the flows in the mainstream above certain minimum monthly flows in the dry season and to prevent flood peaks higher than would have occurred through controlled releases from storage, except in severe droughts or floods.

The initial work on the Technical Guidelines for the PMFM was based on an Integrated Basin Flow Management approach which attempted to quantify the downstream water demands from abstraction as well as aquatic ecosystems (environmental flows)

*The purpose of the Procedures for the Maintenance of Flows on the Mainstream is to ensure that there is sufficient water in the mainstream to support pre-existing and previously notified (for prior consultation) downstream water use, as well as the reverse flow into the Tonle Sap, by the active management of storage.*

*Similarly, active management of storage is required to ensure that flood disasters are not exacerbated.*

<sup>11</sup> Maintenance implies an action, in this case by managing from diversions, storage releases, or other actions of a permanent nature.



and provide for those needs through the PMFM. However, it was ultimately decided to specify the minimum flow based on a statistical analysis of the historical flows from 1986 to 2000.

The PMFM Technical Guidelines propose two forms for assessing compliance: for planning purposes and for monitoring Purposes. Under the PMFM specifications for planning purposes, the proposed use is tested against the specified flow minima using the MRC DSF tools. If a proposed use causes the flows to fall below the determined flow minima, then its operating rules may have to be adjusted to ensure compliance. These operating rules should then, therefore, be reflected in the PNPCA, and ultimately the PWUM.

The PMFM for monitoring purposes identifies 4 Zones which reflect an increasing risk of not meeting minimum downstream flow needs. These are specified as:

- **Zone 1:** Where the daily updated actual flow is higher than the 1:5 ARI<sup>12</sup> for that month. Here no mitigation actions are considered necessary;
- **Zone 2:** Where the daily updated actual flow is between the 1:5 and 1:10 ARI. Here the flow is considered stable but there is a need for caution;
- **Zone 3:** Where the daily updated actual flow is between the 1:10 and 1:20 ARI. Here an investigation should be launched into the causes of the low flows, and mitigation measures considered;
- **Zone 4:** Where the daily updated actual flow is lower than the 1:20 ARI (i.e. less than 5% of the flows recorded between 1986 and 2000 were lower than this). Here mitigation measures should be implemented.

The total volume of the return flow into Tonle Sap is specified in a similar way as a statistical analysis of the flow volumes upstream of Phnom Penh and specifies 4 Zones. However, the Guidelines do not specify what actions should be taken when the flows fall into any of these Zones.

Increased dry season flows because of the operation of Hydropower Dams in China have reduced the need for active management of mainstream flows. Nonetheless, the potential for increased water abstraction still makes the PMFM relevant, and the Member Countries may wish to explore potential flow mitigation measures should the flows fall below the 1:20 ARI for an extended period. Releases from storage can be made from any upstream impoundments and could be proportional to the additional storage built by each Member Country after 1995, and hence included in PWUM.

However, the Technical Guidelines for the PMFM are only proposed as a working version, and the Procedure is therefore currently used primarily for monitoring and assessing their viability as an active flow management tool.

## 7.7. The Procedures for Water Quality

The decision to include Procedures for Water Quality was also made by the Council in October 1999. However, these Procedures took longer to develop, and they were ultimately approved by the Council in 2011. The Technical Guidelines for the PWQ were approved in 2017.

The PWQ Technical Guidelines present water quality criteria for human use and the aquatic ecosystem and are based on the lowest criteria proposed in the domestic legislation in each of the Member Countries. The PWQ can therefore only include criteria that are either the same or more lenient than those that would apply domestically. It is therefore assumed that domestic legislation would also provide the means for managing the water quality within these parameters. The PWQ are therefore primarily a reporting mechanism for water quality, specifying the parameters, analytical methods, sampling points and sampling frequencies for transmission to the MRC and the other Member Countries. However, the sampling sites and frequency have not been included in the Technical Guidelines. This makes it difficult to report on the implementation of the PWQ, and it is recommended that some attention be given to establishing a minimum set of sampling sites and minimum frequency, based on an assessment of the sites and variables of transboundary concern.

*The purpose of the **Procedures for Water Quality** is to monitor and report on the water quality status of the Mekong River System against agreed criteria for human use and aquatic ecosystems.*

*The Procedures also outline the protocols for reporting emergency situations.*

The PWQ also give effect to the substantive commitments in Article 10 with respect to the timely notification of emergency situations.

## 8. EXAMPLES OF THE LINKED USE OF MRC PROCEDURES

### 8.1. Introduction

This Chapter presents three examples of the use of the Procedures in a linked way to illustrate the discussion in the previous chapter. These show that collectively the Procedures can support Mekong water diplomacy, and the objectives and principles of Chapter III of the Agreement if they are proactively implemented in a linked way. These examples are entirely fictitious and based on the following possible future:

<sup>12</sup> ARI = Annual Return Interval. 1:5 means for about 20% of the time the flow in that month is naturally lower, 1:10 means 10% of the flows are naturally lower, and 1:20 means 5% of the flows are naturally lower.

As a result of a trade war between the USA and China, the Chinese government imposes heavy import duties on soya bean imports from the US. Chinese soya bean processors start looking for alternative cheaper sources of soya. The MRC Member Countries are well placed to provide the product and transport it to China. Two of the Member Countries exploit this opportunity in slightly different ways.

The growth stimulus provided through taking advantage of this led to increased regional energy demands. The Basin Development Strategy has highlighted that a dam shared between two of the Member Countries offers the best power output to impact ratios. The two Member Countries therefore decide to form a joint development agency, the Mekong Power Development Agency. The intention is to sell power into the regional grid so the whole region gains from cheaper power.

## 8.2. Notification on the mainstream

### Background

In this scenario, one of the Member Countries wants to expand its irrigation scheme out of an existing tributary dam, but as the yield of the dam and flows in the tributary cannot reliably support extensive new irrigation, they decide to raise the wall of the dam, but to supplement the water supply from the Mekong mainstream in the 'wet' season. The diversion of the water from the mainstream would take place between PMFM Points 2 and 3 in the diagram below.

Because the proposed use will take some time to come to fruition, the Member Country first proposes the new use under the Basin Development Strategy. They use the MRC Decision Support Framework to determine the impact of the diversion on the PMFM **Technical Guidelines for planning purposes**. This process provides an indication of the months when water could be diverted without compromising the PMFM flows at Point 3.

### Notification

Financing is then secured, and the proposed irrigation project moves from the feasibility to the design stage. Recognising its general commitments to avoid, minimise and mitigate harmful effects the Member Country decides to improve the fish passage facilities on the tributary dam – based on the experiences gained from interaction through the MRC. However, as the dam existed before 1995, and because no additional sediment trapping is expected, no additional sediment flushing is proposed.

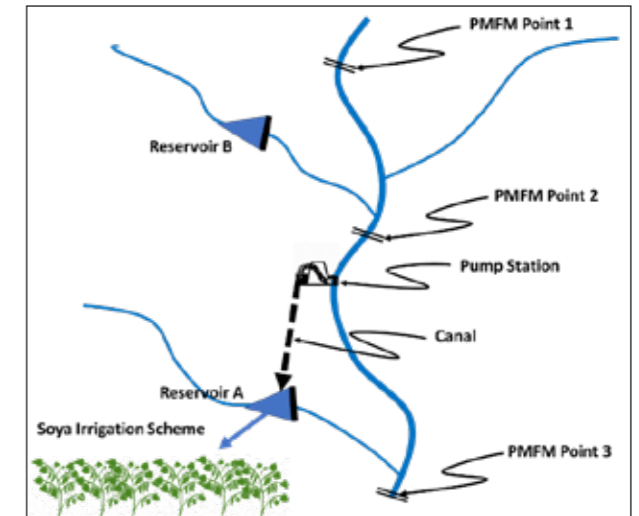
The proposed use is therefore duly notified under the PNPCA as a wet season use on the mainstream, along with the increased storage. The documentation submitted to notify the use includes information on the operating rules put in place to ensure that diversions from the mainstream only happen in the 'wet' season – based on the PMFM **for planning purposes**, the operations of the increased storage, the upgraded fish passage facilities, and provisions made for environmental flows out of / at Reservoir A. The modelling and data used to support the notification are derived from the PDIES, hence giving the notified countries confidence in the veracity of the outcomes.

The notification process also notes that none of the PWQ parameters are likely to change, and includes measures to notify the other countries in the event of a chemical spill at the mainstream offtake, and a dam break at Impoundment A, as provided for in the PWQ.

The notified Member Countries, fearing that increased basin-wide water abstraction and climate

change, and that the dry and wet seasons have not been conclusively defined, request the notifying country to include operating rules for diversion on the mainstream using the PMFM **for monitoring purposes**. The notifying country addresses these concerns through revised operating rules to allow for reduced abstraction if the PMFM flows are compromised. These are submitted to the Joint Committee.

These new operating rules propose that when the daily flows at PMFM Point 2 fall into Zone 3, the diversion of water will stop. Moreover, considering the potential impact on the Tonle Sap reverse flow, the operating rules also indicate that no more than 3% of the flow recorded at PMFM Point 1 will be abstracted at the height of the wet season.



### Updating PWUM

These operating rules and the use are included in the PWUM as a record of the use, while measures to monitor and report on the implementation of these operating rules are put in place in PWUM to serve as a record of the proposed use when commenced.

## 8.3. Notification on a tributary

### Background

In this scenario, another Member Country also wants to take advantage of the ready market for soya in China. However, as they do not have any suitable existing storage, they decide to construct both a reservoir and an irrigation scheme on a tributary. This tributary is a significant source of sediment for the Mekong mainstream.

Because the proposed use will take some time to come to fruition, the Member Country first proposes the new use under the Basin Development Strategy. They use the MRC Decision Support System to determine the impact of the storage in Reservoir C and diversion using the PMFM **Technical Guidelines for planning purposes**. This process suggests that the additional water diverted for the irrigation scheme will not compromise PMFM flows.

### Notification

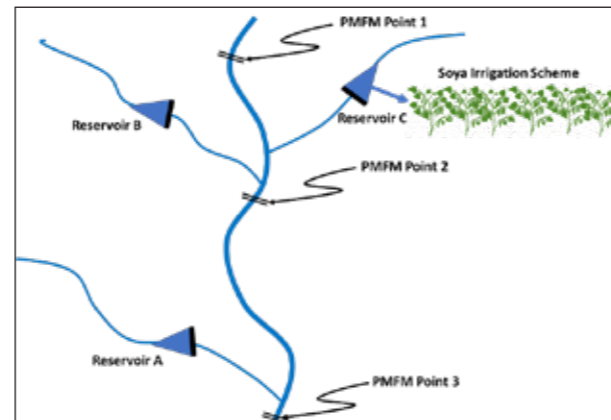
Financing is secured, and the proposed irrigation project moves from the feasibility to the design stage. Recognising its general commitments to avoid, minimise and mitigate harmful effects wherever they occur, the Member Country decides to include sediment flushing facilities in the design using the PDG. However, as there is very little fish migration at this point, no fish passage facilities are proposed.

The proposed use is duly notified under the PNPCA as a storage reservoir and a diversion from the tributary. The documentation submitted for notification includes information on the operating rules put in place to flush the sediment at the peak of the wet season, and to provide for releases

to be made if the PMFM **flows for monitoring purposes** at Point 1 fall into Zone 4. The modelling and data used to support the notification are derived from the PDIES, hence giving the notified countries confidence in the veracity of the outcomes.

The notification process also notes that none of the PWQ parameters are likely to change, and includes measures to notify the other countries in the event of a dam break, as provided for in the PWQ.

The notified Member Countries remark that the notifying Member Country has made significant efforts to avoid, minimise and mitigate impacts through sediment flushing operating rules, and for releases when flows in the mainstream drop below critical levels. It is noted with appreciation that this may compromise reservoir yields in a severe drought.



#### Updating PWUM

These operating rules and the use are included in the PWUM as a record of the use, while measures to monitor and report on the implementation of these operating rules are put in place in PWUM to serve as a record of the proposed use when commenced.

It is noted that in a severe drought a basin-wide response, including releases from all the storage, may help maintain the economic viability of the soya scheme.

### 8.4. Prior consultation on the mainstream

#### Background

The two Member Countries jointly notify the proposed hydropower dam on the mainstream for prior consultation. This dam replaces two entirely sovereign dams elsewhere on the mainstream because its output to impact ratios are much better.

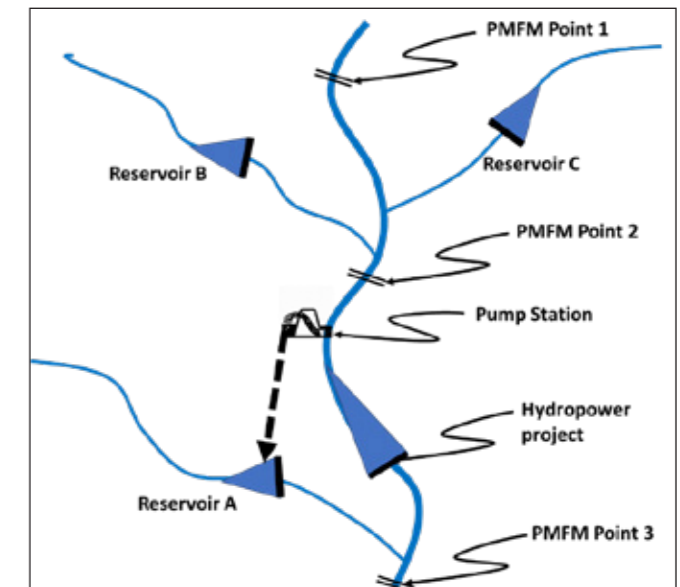
It is a run of river hydropower project that will not provide peaking power, and the more expensive peaking power supply will be provided by tributary hydropower projects in all the Member Countries. The provisions of the PMFM are therefore not considered relevant in this case. The other Member Countries also recognise that after considering the social and environmental costs of mainstream hydropower in their countries, it is in fact cheaper to import power.

The project's economic viability and operating rules are based on the tools and data available in the PDIES, thus building confidence in the veracity of the analyses. The project's economic viability is also contingent on the fact that operating rules put in place to maintain flows at PMFM Points 1 and 2, in support of the soya irrigation schemes, are in fact implemented. It is hence important for them to have access to the PWUM annual reports.

#### Prior consultation

The proposed use is notified for prior consultation under the PNPCA, and it follows a similar path as the previous prior consultation processes and ends with a Statement from the Joint Committee noting with appreciation the efforts with respect to Article 2 of the Agreement but calling on both Member Countries to implement additional measures to avoid, minimise and mitigate potential transboundary impacts.

In particular, these operating rules ensure that the pump station will not be flooded, and includes measures to limit the planned hydropower output at critical times to provide for additional sediment flushing and better fish passage. The reduced income from power sales is accommodated in the Power Purchase Agreements and the Concession Agreement because the Mekong Development Agency's founding agreement indicates that the two Member Countries may adjust the provisions of the agreement to ensure the joint project is consistent with the requirements of the 1995 Mekong Agreement. Indeed, the Development Agency's feasibility assessment includes this possibility in its financial viability studies, and power purchase and concession agreements.



#### Updating the PWUM

The Statement is followed up by a Joint Action Plan which provides for constant engagement throughout the design and construction phases, and into the operational phase. The outcomes of the Joint Action Plan provide for the record of the proposed use and record of the proposed use once commenced, and are included in the PWUM.

### 8.5. Key takeaways from the examples

These examples are deliberately idealistic and simplistic. The reality is somewhat more complicated with multiple existing uses, many of which do not include operating rules or are included in the PWUM as outlined in these examples.

Nonetheless, these examples provide an illustration of how proactive attention to implementing all the Procedures in the PNPCA processes supports Mekong water diplomacy. In the MRC's case, the diplomacy intervention points are provided by the Procedures. These examples show that the Procedures can provide solutions that are sensitive to all the Member Countries' needs. It is also possible to adjust the provisions of the Technical Guidelines to better enable this approach.

The following lessons can be taken from these examples:

- The need to cooperate is paramount, and wherever possible Member Countries must address the concerns of the other Member Countries irrespective of whether the use is subject to prior consultation or not;
- The notified Countries can request additional information or investigations for

**A reminder:**

“Water diplomacy is an approach that diagnoses water problems, identifies intervention points, and proposes sustainable solutions that are sensitive to diverse viewpoints and values, ambiguity and uncertainty as well as changing and competing needs.” In the MRC, this is done through the Procedures, which give confidence to all the Member Countries that their concerns are being monitored and acted on.

proposed uses not subject to prior consultation;

- There is nothing in the 1995 Mekong Agreement or any of the Procedures that would prevent a joint notification. Indeed, the Agreement promotes joint projects;
- The operating rules put in place at each successive PNPCA process must be based on those put in place for previous processes, and the developers of new proposed uses and all the Member Countries must have a reasonable assurance

that they are being implemented through the PWUM;

- The commitments to avoid, minimise and mitigate impacts and protect the environment apply to the whole basin;
- Using the Procedures together gives all the Member Countries the confidence that measures to avoid, minimise and mitigate impacts are being investigated and implemented as notified, or as per the outcomes of prior consultation; and
- Using the Procedures together supports water diplomacy.

There are some drawbacks to this approach in that it does not specifically address whether a proposed use is reasonable and equitable, relying rather on the measures put in place to make proposed uses **more** reasonable and equitable than they may otherwise have been. Similarly, the approach does not accommodate the cumulative impacts of successive developments, and that at some point these cumulative impacts will cause substantial damage.

## 9. ADDRESSING CURRENT CHALLENGES

### 9.1. Background

In Article 1 of the 1995 Mekong Agreement the Member Countries agree:

*“To cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin,*

*including, but not limited to irrigation, hydro-power, navigation, flood control, fisheries, timber floating, recreation and tourism, in a manner to optimize the multiple-use and mutual benefits of all riparians and to minimize the harmful effects that might result from natural occurrences and man-made activities.”*

However, the substantive provisions of the Agreement, from which the Procedures originate, suggest the agreement to reasonable and equitable use referred mostly to water quantity. However, during the development of the Procedures this perspective shifted, and the Water Utilisation Programme noted in 2004 that Member Countries did not wish to “lose or reduce any existing uses of the river, whether in-stream, on-stream or off-stream”. This recognised that “water use” should be more than just diversions out of the river, but that measures to maintain sediment transport, fish migration and fisheries could also be considered in the Procedures and their Technical Guidelines. Similarly, discussions around sediment transport featured in the initial discussions around the PWQ.

However, as yet none of the Procedures or Technical Guidelines explicitly include sediment transport and fish migration concerns. These are however addressed in the PDG and Sustainable Hydropower Guidelines. Similarly, the Member Countries chose not to elaborate the factors to be considered in the reasonable and equitable use of the water and related resources of the basin. The prior consultation processes to date have therefore focused on the Duty of Conduct with respect to avoiding, minimizing, and mitigating harmful effects, and to protect the environment and ecological balance. This chapter explores how this concept can be expanded to include consideration of the reasonable and equitable ‘use’ of sediment and fisheries. The chapter also outlines how the transboundary public interest may be considered.

### 9.2. Reasonable and equitable use

Reasonable and equitable use is a long-standing principle of international water law, and over some 40 years the UN’s International Law Commission developed a list of factors that could be considered when evaluating the reasonable and equitable use of water. These factors emerged from court judgements of water and existing transboundary water treaties. They are reflected in Article 6 of the UN Convention on the Non-navigational use of Shared Watercourses, as well as the Mekong Committee’s 1975 Joint Declaration. However, these factors still retain a focus on apportioning water.

Reasonable and equitable use therefore remains a nuanced concept, and in the Mekong context doubly so. Increased dry season flows as a result of upstream storage and hydropower development have taken the pressure off applying the PMFM as an active management tool, while the MRC’s DSF tools in the PDIES have indicated that water availability will not be a significant constraint to development in the immediate future. However, the outcomes of the Council Study have highlighted that the cumulative impacts of upstream development make the long-term decline in sediment transport and loss of fisheries potential a real and legitimate concern.

*The principle of reasonable and equitable use is central to water diplomacy but is a nuanced concept that has not been fully explored by the MRC. As a first step this may include exploring the way the factors outlined in contemporary international water law could be adapted to the Mekong context, and how these could help frame the prior consultation process.*

In the current Mekong context, it may be argued that each of the Member Countries is entitled to a reasonable and equitable share of the ‘development space’ or the amount of development

that would be considered sustainable. This may for example be a reasonable use of sediment or total fisheries potential, whether this is a direct or indirect use. ‘Use’ in this framework would include *inter alia*:

- The reduction in sediment transport or fisheries potential behind storage or hydropower dams;
- The abstraction of sediment through sand mining;
- Geomorphological and ecological functions of sediment, like bank stabilisation; and
- Loss of fisheries potential through pollution, impaired migration, overfishing or any other action.

An assessment of reasonable and equitable use in this context would need to weigh up the economic and social benefits of this ‘use’ versus the lost economic and social benefits of the use in the other Member Countries. Tools are available to start to understand this, and the Council Study made huge advances in this regard. But it seems unlikely that this concept can be applied in the assessment of reasonable and equitable use for the Mekong anytime soon. Nonetheless, there seems to be a growing recognition that at some point substantial damage as outlined in Article 7 is very likely to occur because of the cumulative impacts of all developments.

An alternative perspective on the reasonable and equitable use could therefore be to consider the fair apportionment of the water that should be set aside for sediment flushing and fish passage and which should not be diverted through turbines. As this is a non-consumptive use, setting some water aside each month – with a focus on the critical fish migration and sediment transport periods – for these purposes could be considered under revised PMFM **Technical Guidelines**.

### 9.3. Making every effort to avoid, minimise and mitigate harmful effects

In the absence of factors to consider in an assessment of reasonable and equitable use, the Pak Beng, and to a lesser extent Don Sahong, prior consultation processes focused on the Duty of Conduct to make every effort to avoid, minimise and mitigate harmful effects. The recent review of the Xayaburi design changes also focused on this aspect. However, in all three cases the extent of “**every effort**” was not fully explored. To minimise the potential impacts of hydropower developments, some water must be set aside for fish passage and sediment flushing, particularly at certain times of the year.

This may reduce the hydropower potential at these times if the capacity of the turbines is not exceeded at the same time. This in turn has implications for the economic viability of the hydropower project, and hence on the concession and power purchase agreements. The extent to which this can be considered as part of “**every effort**”, or whether the external environmental costs should be included in the price of power, has not been explored.

#### **“Meeting the needs, Keeping the Balance”**

*is a public interest notion with two elements; some harm to meet the needs of the current generation may be in the interests of the nation, but that any harm must be avoided, minimised or mitigated as much as possible.*

*This is more difficult to argue on a transboundary basis and must be set against regional benefits and the concept of reasonable and equitable use.*

Similarly, the availability of cheaper hydropower and its export / import between the MRC Member Countries and the region has not been seen as a “mutual benefit” (as per Article 1 of the Agreement), nor as an action to support development.

## 10. THE MEKONG AGREEMENT AND PROCEDURES IN A NUTSHELL

### 10.1. The 1995 Mekong Agreement

The 1995 Mekong Agreement can be summarised as follows:

The Member Countries signed an agreement to cooperate on the sustainable development of the Mekong River Basin (there was therefore an expectation that further development of the water resources would occur) that:

- Expresses a preference for joint projects with mutual benefits, and urges that these

- projects are actively promoted;
- Recognises that the development of the basin would have harmful effects, and as such includes general commitments to avoid, minimise and mitigate those harmful effects, and to protect the environment and ecological balance;
  - Includes substantive commitments towards the other Member Countries to be defined as Procedures to;
    - share data and information on the basin, and to capture water-use data the Member Countries need to plan their use of the Mekong River System;
    - ensure the reasonable and equitable use of the Mekong River System;
    - notification, prior consultation and agreement based on the likelihood and magnitude of significant impacts on the mainstream;
    - actively maintain flows on the mainstream to protect existing or notified uses and minimise flood damage;
    - cease activities that have been proven to have substantial damage and discuss measures to address that damage;
    - maintain freedom of navigation, but not at the expense of other mainstream uses; and
    - warn other Member Countries of emergency situations in a timely manner.

The 1995 Mekong Agreement establishes the Mekong River Commission and its permanent bodies, and confers the powers and functions on these bodies to facilitate the implementation of their substantive commitments. The MRC can only act within these conferred powers and functions. This does not include a policing role with respect to the commitments made by the Member Countries.

The MRC is therefore not a supra-national body which can direct the development of the Mekong River Basin, but rather a body that helps the Member Countries achieve the objective of the sustainable and fair development of the basin.

## 10.2. The Five MRC Procedures

The Procedures should collectively build confidence among the MRC Member Countries that:

- Their concerns regarding the individual and cumulative impacts of developments are being considered and acted on, particularly where there is a risk of transboundary impacts (PNPCA);
- The reasonable and equitable use of the water and related resources of the Mekong River Basin is being promoted through the adoption of measures that avoid, minimise or mitigate any harmful effects (PNPCA and PWUM);
- The PDG and any other similar tools that may be developed by the MRC are being used to guide developments, and where deviations are necessary, that these are

explained (PNPCA);

- Their pre-1995 and subsequently notified uses will not be compromised by new developments, by including operating and design measures that limit or prevent this (PNPCA);
- Any post-1995 water uses include such measures through the PNPCA process, and that the implementation of these measures is being monitored and reported (PWUM);
- Agreed data and DSF tools are being used to assess the potential impacts of the proposed uses, or where deviations are needed that these are justified (PDIES);
- The impacts of development on the state of the basin are being monitored, and set against standards (PWQ and JEM); and
- Emergency situations are being notified in as timely a manner as possible (PWQ).

This is only possible if the Procedures are implemented in a mutually supportive manner. The linking of the Procedures outlined in the Handbook could form the basis for this, while the Joint Platform could look to what is needed to make this happen.



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