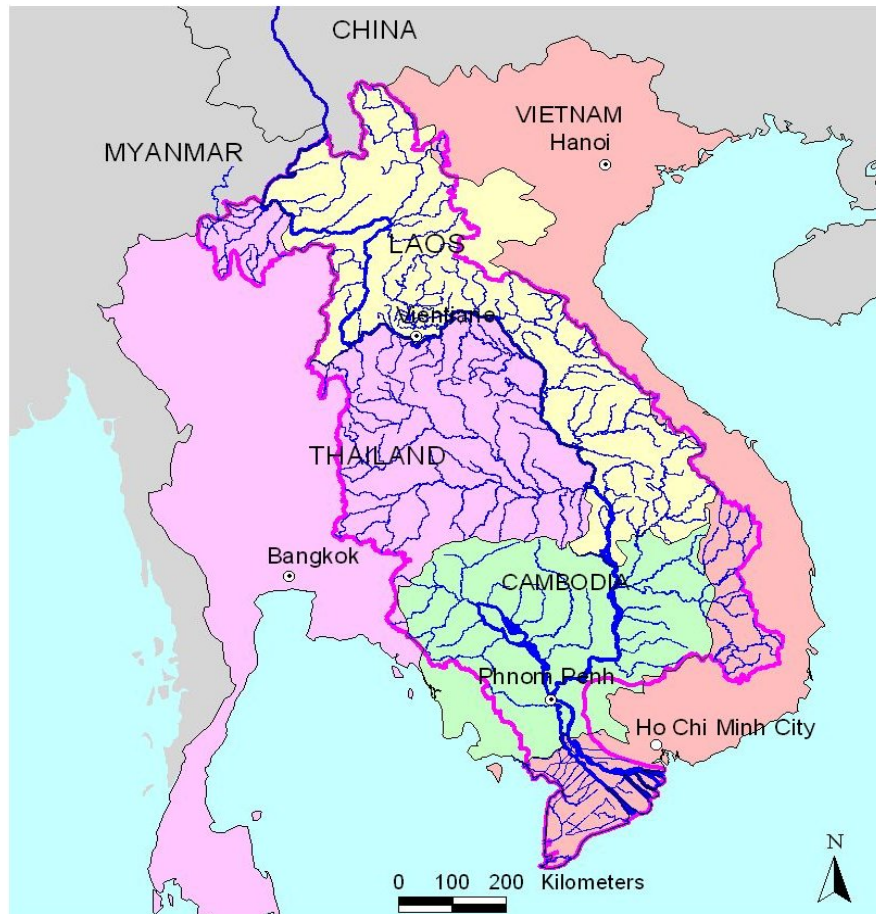




Mekong River Commission

Flood Management and Mitigation Programme (FMMP)



Component # 3: Enhancing Cooperation in Addressing Trans-boundary Flood Issues

November 2007 – Ver 3.3 Final

Mekong River Commission

Flood Management and Mitigation Programme

Component 3: Enhancing Cooperation in Addressing Transboundary Flood Issues

Summary of Document History:

- The first draft of the modified Component 3 Document was drafted based on the recommendation presented during the Regional Consultation Meeting, held in HCMC on 19.10.2006. The first draft was made after initial internal consultations, and was dated February 2007.
- The second draft version of the (modified) Component 3 Document was improved with assistance of ECO-Asia consultants. The introduction and background papers were modified; language and styling was improved. The second draft, dated April 2007, was used for MRCS clearance.
- The third draft version of the Component 3 Document, incorporated the recommendations from MRCS, regarding the details of the chapter “approach and methodology”, and “outputs and activities”, language and styling, was dated 20.08.2007. This version as used for national and regional consultations.
- The fourth draft of the Component 3 Document, dated 24.09.2007, incorporated the comments, suggestions and recommendations, presented during the regional consultation meeting in HCMC on 14.09.2007. This version was used for further informal reviewing by the NMCs.
- The draft final Revised Component 3 Document, version 3.2, dated 04.10.2007, incorporates the NMCs comments and is used for submission and endorsement.
- The final Revised Component 3 Document, version 3.3 was approved by the MRC Joint Committee on 13 November 2007

CONTENTS

ABBREVIATIONS AND ACRONYMS.....	5
I INTRODUCTION	6
II BACKGROUND	6
II.1 Regional Relevance.....	6
II.2 MRC Involvement in enhancing cooperation, conflict prevention and the Mandate for addressing differences.....	7
II.3 Justification for enhancement of MRC capacity in addressing differences and disputes for trans-boundary flood-related issues.....	9
II.4 Relationship to MRC FMM Strategy.....	11
III OBJECTIVE	11
IV SCOPE	12
V APPROACH AND METHODOLOGY.....	12
VI OUTLINE OF THE OUTPUTS AND ACTIVITIES.....	14
VI.1 OUTPUT 1: Information Generation.....	14
Activity 1.1: National Identification of the Trans-boundary Flood Issues.....	15
Activity 1.2: Regional Compilation of the Trans-boundary Flood Issues.....	15
Activity 1.3: Compilation of International “Best” Practices, Instruments and Case Studies relating to Inter-State differences and disputes over trans-boundary watercourses	15
Activity 1.4: Compilation of National and Regional “Best” Practices and Instruments to address Inter-State differences and disputes over natural resource management.....	16
Activity 1.5: Finalization and dissemination of the Compiled “Best” Practices and Instruments	17
VI.2 OUTPUT 2 Awareness Raising, Knowledge and Skills Building.....	17
Activity 2.1: Clarification of the MRC Mandate in addressing differences and disputes.....	17
Activity 2.2: Training on addressing differences and disputes	18
Activity 2.3: Exchange Study Visit	18
Activity 2.4: Implementation of Pilot Study	19
VI.3 OUTPUT 3 Toolbox Development.....	20
Activity 3.1: Establishing Administrative tools for Addressing Trans-boundary Differences and Disputes.....	21
Activity 3.2: Assessment of the needs and suitability of technical tools for facilitating the process of addressing transboundary flood issues, differences and disputes.....	22
Activity 3.3: Improvement of hydrodynamic model for the Lower Mekong River Basin.....	23

VII BUDGET	24
VIII INTERFACES	24
VIII.1 MRC Programme	25
VIII.2 External Programme and Institutions	26
ANNEX 1: FLOWCHART	28
ANNEX 2: WORK PLAN	29
ANNEX 3: LOGICAL FRAMEWORK MATRIX.....	30
ANNEX 4: SUMMARY OF OUTCOMES OF NMC CONSULTATIONS ON MEDIATION OF TRANS-BOUNDARY FLOOD ISSUES	32
ANNEX 5: RECORD OF FIRST REGIONAL MEETING ON OCT. 19 TH 2006	36
ANNEX 6: REFERENCES	40

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Centre
AHNIP	Appropriate Hydrologic Network Improvement Project
AIFP	Agriculture, Irrigation and Forestry Programme
AIT	Asian Institute of Technology
APCEL	Asia-Pacific Centre for Environmental Law
ARCBC	ASEAN Regional Centre for Biodiversity Conservation
ASEAN	Association of South East Asian Nations
BDP	Basin Development Plan (of MRC)
CSO	Civil Society Organization (formerly known as Non Government Organization)
CNMC	Cambodia National Mekong Committee
ESCAP	The Economic and Social Commission for Asia and the Pacific
EP	Environmental Program (of MRC)
EU	European Union
FMM	Flood Management and Mitigation
FMMP	Flood Management and Mitigation Program (of MRC)
FMMSIP	Flood Management and Mitigation Strategy Implementation Program
GMS	Greater Mekong Sub-region
IHP	International Hydrological Program (under UNESCO)
IUCN	International Union for Conservation of Nature and Natural Resources
LA	Line Agencies
LMB	Lower Mekong (River) Basin
LNMC	Laos National Mekong Committee
MOU	Memorandum of Understanding
MRC	Mekong River Commission
MRCS	Mekong River Commission Secretariat
NGO	Non-Government Organization (Civil Society Organization)
NMCs	National Mekong Committees
RBO	River Basin Organization
PDR	Peoples Democratic Republic
RFMMC	Regional Flood Management and Mitigation Centre
TNMC	Thailand National Mekong Committee
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VNMC	Vietnam National Mekong Committee
WUP	Water Utilization Programme (of MRC)

I INTRODUCTION

In 2001, the Mekong River Commission (MRC) Council adopted the Flood Management and Mitigation (FMM) Strategy. The following year in 2002, the MRC developed a FMM Strategy Implementation Plan (FMMSIP), which provides an overall framework for implementing various components of the MRC Flood Management and Mitigation Programme (FMMP), including Component 3 on the Mediation of Trans-boundary Flood Issues. In November 2004, the MRC prepared project documents for Component 3, which set out in more detail the background, justification and objectives of addressing trans-boundary flood issues in the Mekong River Basin, as well as details of its proposed framework, management and implementation. (See for a description of the FMMP components par. VIII.1).

To implement Component 3 and promote mediation as a key strategy for addressing trans-boundary flood issues, the MRCS intensively consulted with the MRC Member Countries (Cambodia, Lao PDR, Thailand, and Vietnam) about the Component 3 concept note and potential implementation arrangement. During national consultation meetings conducted in August and September 2006, and during a regional workshop in October 2006, the MRC Member Countries re-confirmed their interest and support of Component 3. In particular, MRC Member Countries viewed mediation as one of many important dispute resolution strategies that could be suitable for addressing differences related to trans-boundary flood issues. However, MRC Member Countries emphasized the need to equip the MRC with a variety of resolution tools (e.g., negotiation, conciliation, arbitration, etc.), for addressing trans-boundary differences and disputes. In addition, the Member Countries commented that some outputs in the original document are too ambitious and may not be suitable, and the heavy focus on dispute resolution has detracted from the primary objective of the 1995 Mekong Agreement to promote and enhance cooperation in developing and using the water and related resources of the Mekong River Basin. The Member Countries therefore suggested that the Component 3 document should be revised (See Annex 4 for Summary of Outcome of NMC Consultation on Mediation on Transboundary Flood Issues, and Annex 5 on Record for First Regional Meeting).

This document responds to MRC Member Countries suggestions made during the national and regional consultations. Accordingly, this revised Component 3 document focuses on enhancing MRC cooperation and capacity in facilitating and coordinating process of addressing differences on trans-boundary issues in general and trans-boundary flood issues in particular based on the needs of individual parties.

II BACKGROUND

II.1 Regional Relevance

Within the Mekong River Basin, six countries (Cambodia, Lao PDR, Myanmar, People's Republic of China, Thailand, and Vietnam) are riparian and are dependent on river flows for

economic and social development. Flooding of large tracts of agricultural land, human loss and infrastructure damage occur regularly and are principally related to flow volumes exceeding the landscapes' and river system's capacity to buffer, infiltrate and discharge. In addition to problems relating to flow volumes, inter-riparian changes in water availability (volumes and time) and quality are now receiving more attention due to increased resource competition at the national and regional levels during the dry and wet seasons.

One of the greatest challenges of flood and floodplain management in the Mekong River Basin is assessing the positive and negative effects of flooding, water flow fluctuations in time and quantity, sedimentation, nutrient re-distribution, etc., along the main tributaries and mainstream sections and delta branches of the Mekong River. Such positive and negative effects will be quantified in different magnitudes or scales, and addressed at both regional and national floodplain management processes. Solutions will be developed in cooperation with neighbouring countries if flood impacts are trans-boundary. Regional and international institutions like the MRC can facilitate such cooperation or affected countries can work on a bilateral basis. Regional cooperation and dialogue on flood issues provide a unique opportunity to minimize loss of life and damage to property across the basin, while maintaining environmental benefits.

The MRC has already identified dispute prevention and addressing potential differences arising from increasing pressure on resources in the basin as a key task. The MRC's four Member Countries have thus far devoted their efforts to internal flood emergency management, rather than addressing challenges in trans-boundary river and floodplain management. While all Member Countries have national disaster management committees in operation, no current institutions exist to coordinate floodplain management in an integrated cross-sector manner.

The border area between Cambodia and Vietnam includes diversified ecosystems with important flow regulation functions (e.g., Tonle Sap) and biodiversity values facing increasing pressure from agriculture intensification/expansion, infrastructure and economic development, urbanization, and enormous population growth. The zone between Cambodia and Vietnam border features both upland land management systems along the main tributaries as well as floodplain/wetland/delta management systems on the mainstream and branches section. The need for improved institutional capacity in trans-boundary coordination and mitigation is most acute in this border-zone area of the Lower Mekong Basin (LMB). Thus, a delineated interfacing fluvial zone between Cambodia and Vietnam is an important study area in trans-boundary flood management and mitigation within FMMP.

Ultimately, though, improved trans-boundary coordination of water management must include intensified and structured dialogues with the two present upstream non-Member Countries of the Mekong River Basin, Myanmar and People's Republic of China.

II.2 MRC Involvement in enhancing cooperation, conflict prevention and the Mandate for addressing differences

In recent years, the MRC has made significant progress in developing a number of mechanisms to promote cooperation and prevent conflict among its Member Countries that have the ultimate objective of assisting the Member Countries in achieving timely and amicable agreement on a range of trans-boundary issues. The cooperative promotion cum

conflict prevention mechanisms of MRC includes those of the programmes such as WUP, EP, FP and BDP (See for a description of these programmes par. VIII.1 and for a description of External Programmes and Institutions).

For example, the Water Utilisation Programme (WUP) has taken initiatives to establish technical drafting groups where cross-border teams of technical staff and legal experts draft compromises acceptable to all Member Countries, thereby preventing potentially contentious issues from becoming real contentious issues. To date, WUP has prepared five sets of procedures:

- Procedures for Information and Data Exchange and Sharing (PDIES - adopted 11/01);
- Procedures for Water Use Monitoring (PWUM – adopted 11/03);
- Procedures for Notification, Prior Consultation and Agreement (PNPCA – adopted 11/03);
- Procedures for the Maintenance of the Flows on the Mainstream (PMFM – adopted 12/05);
- Procedures for Water Quality (in final stages of adoption).

WUP has also developed a basin-wide computerized model to help analyzing the effect of existing and proposed interventions on Mekong river flow and environment called the Decision Support System (DSF)¹. Furthermore, the MRC's Environment Programme (EP) is currently preparing Guidelines on Environmental Assessment for the MRC's future adoption, which would complement the national Environmental Impact Assessment (EIA) procedures of each MRC Member State in relation to trans-boundary issues.

Taken together, the MRC's procedures provide a comprehensive set of agreed mechanisms for the generation and sharing of data on existing or proposed uses of the natural resources of the LMB, and for the identification of their actual or potential trans-boundary impacts. Such data is to be produced and presented in accordance with agreed standards and methodologies for the purpose of facilitating effective dialogue and timely agreement among the Member Countries concerned, should trans-boundary issues arise. The monitoring system, database and technical tools (e.g. DSF) developed, implemented and maintained by the MRC according to agreed standards provides essential information for the development of the LMB and constitutes an effective tool for conflict prevention, as well as addressing differences. In addition, the MRC's general practice of joint planning under the Basin Development Plan (BDP) acts as an important mechanism for trans-boundary conflict prevention by identifying potential issues and facilitating discussions among the Member Countries concerned.

Coupled with its conflict prevention obligation through cooperation and mitigation of adverse impacts, the MRC's founding document, the 1995 Mekong Agreement, establishes a clear legal obligation on MRC Member Countries to cooperate to resolve any disputes and differences that might arise. Specifically, under Articles 7 and 8 of the 1995 Mekong Agreement, States are required to engage actively in the peaceful settlement of any inter-State disputes that might arise relating to substantial damage caused to one or more riparian States by the use of and/or discharge to waters of the Mekong by any riparian State. Rule 22 of the

¹ Including model package, knowledge base and impact assessment tools

Rules of Procedure (ROPs) of the Joint Committee, which establishes ‘Procedures for Cessation of Harm and Determining Damage,’ expressly requires that:

“The State alleged of causing the harm shall cooperate with the parties concerned in carrying out fact-finding for determining the nature and the cause of the alleged harm and State responsibility for damages caused by that State if any”.

Articles 34 and 35 of the 1995 Mekong Agreement also expressly provide for the resolution of inter-State disputes and differences. Article 34 provides that the Commission “*shall first make every effort to resolve the issue*” in accordance with the MRC Council’s disputes and differences resolution function under Article 18C and MRC Joint Committee’s disputes and differences resolution role under Article 24F. Rule 18 of the Rules of Procedure of Council and Rule 23 of the Rules of Procedure of the Joint Committee provide further detail on the respective disputes and differences resolution functions of each MRC body. Article 35, which applies where the Commission is unable to resolve the dispute in a timely manner, provides that the Governments may seek resolution by negotiation through diplomatic channels; and may “*by mutual agreement, request the assistance of mediation through an entity or party mutually agreed upon, and thereafter to proceed according to the principles of international law*”. Therefore, a full range of legal tools and processes for addressing differences and disputes is available to the MRC and its Member Countries, and in case of more intractable disputes, the Agreement envisions recourse to some form of third party mediation. Further, under Articles 19 and 25 of the 1995 Mekong Agreement, the Council and Joint Committee may propose their own Rules of Procedure, including, as noted above in the ROPs of the Council and Joint Committee, rules of procedure setting out mechanisms for dispute resolution, form sub-committees or working groups and may seek technical advisory services.

To summarize, the 1995 Mekong Agreement provides not only a mandate to enhance and promote cooperation in the development and management of the water and related resources and protection of the environment of the Mekong River Basin, but also a mandate to address and resolve differences and disputes that might arise between members of the MRC as a result of operation of the Agreement, first by the Joint Committee and Council, and second, if that is not satisfactory or timely, by the respective governments of the concerned parties. The mandate to cooperate to avoid and mitigate contentious issues and adverse impacts through facilitation of negotiations and mitigation/conciliation is the primary responsibility of the Council and Joint Committee with technical and administrative support from the MRCS. Although the MRCS has no direct mandate in the addressing of differences and disputes, it has an important role in collection and analyses of data and information, basin and project planning, proper and shared implementation of programmes and activities, and timely responding to requests and directions of the Joint Committee. Diplomatic negotiations, mediation and ultimately litigation are reserved to the respective governments under Article 35 of the Agreement.

II.3 Justification for enhancement of MRC capacity in addressing differences and disputes for trans-boundary flood-related issues

In recent years, the LMB region has experienced rapid development. Moreover, burgeoning economic development, agriculture intensification/expansion, population growth, infrastructure investments, urbanization, and the potential impacts of climate change will continue to place an increasing demand on river resources in general and will contribute to

flooding of riparian countries of the Mekong River Basin. What is increasingly clear is that the development of one country affects flooding in another country.

Ample evidence in the global arena suggests that inter-riparian data and information sharing and communication are key strategies to conflict prevention and addressing and resolving disputes and differences. The magnitude of benefits derived may be increased and trans-boundary differences reduced through communication and an impartial, scientific analysis by a body operating with institutional continuity and impartiality.

Accordingly, the MRC is considered as the most suitable body to carry out the work for the four Member Countries of the LMB and in the dialogue with the two upper riparians of the Mekong River Basin. The MRC maintains sufficient trust from its Member Countries to act as an invited neutral facilitator to provide analytical services for confidence building and to maintain ongoing coordination among the riparian countries. With respect to addressing trans-boundary issues, the MRCS can provide neutral, technical expertise from within its own staff or from regional/international centres of excellence.

However, the MRC's 1995 Agreement does not include detailed instructions for the Commission to address trans-boundary disputes and differences. Currently, there is also a lack of adequate data and information and a continuity and technical expertise to assess aggregated cause-and-effect relationships at the regional level to provide the decision-making process with essential information for joint and timely actions.

Since 2001 with the formulation phase of the 2001 FMM Strategy (FMMS 2001), followed by recent consultations on the implementation of Component 3, Member Countries have expressed a clear interest in prioritizing and mitigating trans-boundary flood impact disputes through conflict management strategies. In particular, the members urge the MRC to enhance its trans-boundary information and differences resolution capacity so that it can effectively address increasing trans-boundary flood issues throughout the Basin.

The MRC Strategic Plan 2006 – 2010 clearly expresses the intention of the MRC Member Countries to continue enhancing the role, participation and capacity of the organization in trans-boundary dispute resolution and mitigation.

Under Goal 2 of the Strategic Plan, the MRC is working to enhance effective regional cooperation through the “development of dispute resolution and compromise mechanisms, such as co-management, public involvement and institution building.” In implementing Goal 2, MRC serves as “*the key mechanism for joint planning, cooperation, and resolution of trans-boundary water-related issues*”.

Objectives of Goal 2 include:

- Increasing the MRC's function as a transparent and effective cooperation mechanism among Member Countries and develop and demonstrating enhanced linkages, compatibility and complementarities of partnerships with other regional organizations and initiatives;
- Completing, adopting and making applicable mechanisms, procedures, and guidelines as required under the 1995 Mekong Agreement;

- Identifying potential trans-boundary issues for negotiation, mediation, and conflict prevention, and developing mediation and conflict management capacity; and
- Promoting and improving dialogue and collaboration with People's Republic of China and Myanmar.

II.4 Relationship to MRC FMM Strategy

The overall development objective of the MRC FMM Strategy is to prevent, minimize, or mitigate people's suffering and economic losses due to floods, while at the same time preserving the environmental benefits of floods.

The proposed Component 3 document on enhancing cooperation in addressing trans-boundary flood issues is entirely consistent with the development and immediate objectives of the MRC FMM Strategy. Improved regional institutional capacity to exchange information and make assessments as to flood factors and flood risk is essential in achieving reduced human and economic suffering and losses caused by floods, while maintaining environmental benefits. In addition, Component 3 is closely linked with the other four Components of the FMMP.

Component 3 will develop generic technical and administrative expertise in relation to the addressing and resolving differences and disputes in relation to trans-boundary issues to complement the existing capacity, information, tools and expertise available at the MRC Secretariat (MRCS). Therefore, it may assist other MRC Programmes in relation to the resolution of differences over trans-boundary issues. In implementing Component 3, the MRCS would develop clearly defined roles, mechanisms and tools for the preventing and resolving inter-State differences and disputes of trans-boundary flood issues. Component 3 will operate strictly within the terms of the 1995 Mekong Agreement.

III OBJECTIVE

The proposed Component 3 is an important step towards the broader FMM Strategy long-term goal, whereby the MRC and the related line agencies implement components of the FMMP in a well-coordinated approach, so that Mekong floods are well managed and mitigated.

Managing and mitigating floods, in turn, will assist the MRC in accomplishing its overall mission:

To promote and co-ordinate sustainable development and management of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programme and activities and providing scientific information and policy advice.

The immediate objective of Component 3 is:

Cooperation and Capacities of the MRC in addressing and resolving differences and differences in trans-boundary flood issues are strengthened.

See Annex 3 Logical Framework Matrix for more information.

IV SCOPE

According to the 2001 FMM Strategy, structural measures and land-use change are considered the two main interventions necessary for improved flood management and mitigation. Since structural measures and large-scale land-use change frequently cause impacts on the flood situation of the Mekong River system, both factors were included as priority action areas in the original Component 3 document. However, given that land-use change is generally regarded as a slowly developing and complex process, and given that understanding and knowledge of land-use change and its impacts presently available within MRCS/FMMP is considered insufficient, it is proposed that Component 3 should concentrate on structural measures and related operational schemes. Land-use change issues then can be addressed in a subsequent phase.

With regard to the information, administrative tools, awareness, knowledge and skills to be generated and built under the component, it is recognized that many of them will go beyond just flood issues related to the broader aspects of trans-boundary water issues and problems. Those applicable to flood issues are most likely equally applicable to other water and related resource and associated environmental issues and problems.

V APPROACH AND METHODOLOGY

To strengthen cooperation and enhance capacity of the MRC to address differences and disputes in trans-boundary flood issues, the Member Countries, during national and regional consultation meetings in August, September and October 2006, suggested that Component 3 ought to include three outputs:

1. Information Generation
2. Awareness Raising and Knowledge and Skills Building; and
3. Toolbox Development

Regarding implementation timeframe of the outputs, Output 1 will be conducted first to provide inputs for the Outputs 2 and 3. Since the Outputs 2 & 3 are inter-related and reciprocal, these will be implemented, as much as practically possible, in parallel (See for reference the Flowchart in Annex 1, the Work Plan in Annex 2 and the Logical Framework Matrix in Annex 3. The annexes also provide proper visualization of the comprehensiveness of outputs and activities).

The implementation process can be described as follows:

- Output 1 “Information Generation” will be implemented firstly with activities on identification of trans-boundary flood issues from national and regional perspectives. The common understanding and agreement on the regionally concerned transboundary flood issues in the Mekong River Basin provide background information and serve as fundamental requirements for all other activities of Component 3. A proper understanding of the trans-boundary flood issues will be facilitated by making available documentation, such as applicable “best” practices, instruments and case studies relating to all suitable options for addressing differences and disputes in transboundary issues and natural

resources management. The Information Generation will be documented and distributed to the Council and JC members, MRCS, the NMCs, relevant National Line Agencies and, where appropriate, to a wider audience, including resource managers, civil society organizations (CSOs), regional institutes and universities². The compiled reference material will form as a part of the toolbox to be used by the MRC in addressing differences and disputes. In addition, the compiled materials will also serve as input for the general awareness raising, knowledge and skills building activities under Output 2

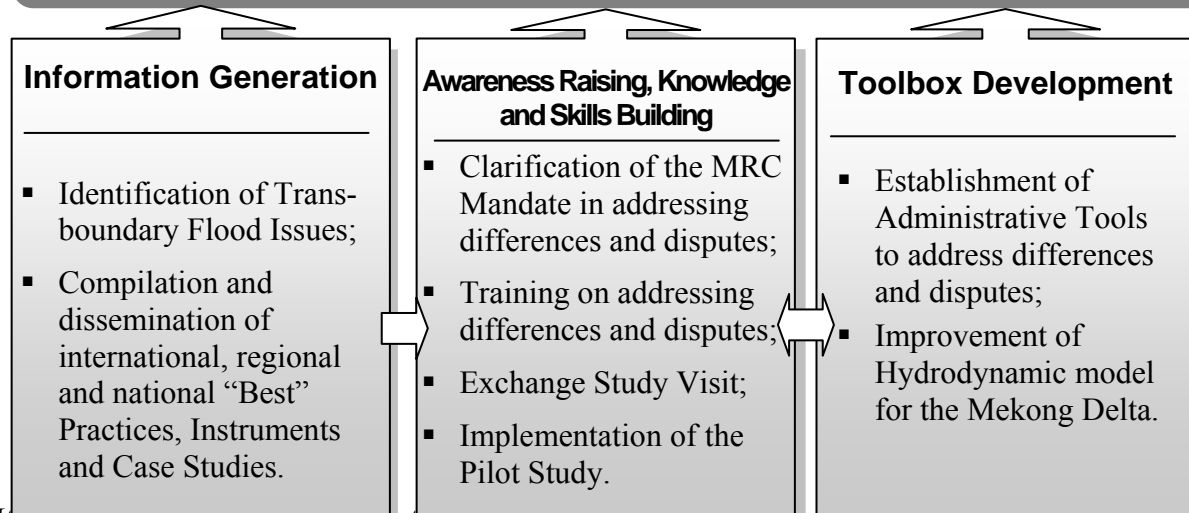
- Output 2 “Awareness Raising and Knowledge and Skills Building” will start with the clarification of the MRC mandate in transboundary flood issues in addressing differences and disputes. The common understanding on mandate and roles of MRC/MRCS will be the input for capacity building and administrative tools establishment activities. The materials developed under Output 1 will be complemented by more specific conflict management and resolution knowledge, tailored to the MRC environment. These will be used for development and implementation of the activities on general awareness raising, knowledge and skills building. Implementation of pilot studies will improve the result of general awareness raising, knowledge and skills building activities and build practical knowledge and skills as well as mutual trust for member countries and MRCS. The implementation of pilot studies activity will also be supported by the technical and administrative tools to be developed under Output 3.
- Output 3 “Toolbox Development” aims at the development of a set of tools (jointly called “a toolbox”) comprising technical and administrative tools. These will be developed based on the requirements set out by relevant activities in the Outputs 1 & 2. It is noted that the establishment of the administrative tools activity strongly interacts with the implementation of pilot studies activity. The preliminary outcome of the administrative tools activity will be used (as guidance) for pilot studies activity, and the lesson-learnt of the pilot studies activity will help improving the established administrative tools.

Implementation of these three outputs will lead to improved capacity of the MRC, as well as greater trust and confidence of Member Countries in addressing differences and disputes in trans-boundary flood issues.

Details of the three outputs are presented in the following figure:

² In line with the MRC information dissemination policy

Cooperation and Capacity of the MRC in addressing differences and disputes in trans-boundary flood issues are strengthened and enhanced



It is essential to emphasize that, in the field of transboundary cooperation and of conflict prevention and management, various MRC programme, like WUP, BDP and EP, have already made headway and have produced sets of information, have strengthened stakeholder capacities, and have developed procedures and tools, while new developments are ongoing. Particularly relevant presently is the USAID supported Joint Programme of Cooperation on MRC Trans-boundary Conflict Management Initiative through ECO-Asia, which will also involve all MRC programme. This initiative will provide orientation and guidance for the individual programme in dealing with transboundary issues like Component 3 of FMMP. It will also be instrumental in sharing information about past experiences and ongoing activities, so overlaps and duplication of efforts can be prevented or minimized and the experiences and lesson learnt can be taken into account to enhance the effectiveness of Component 3 implementation and avoid repetition of the similar mistakes/difficulties. The design of Component 3 for each of the underlying activities of the three outputs incorporates assessments of the materials and tools developed under other MRC programme, which will be identified and screened for applicability under this component, while products of FMMP will be shared with other programme. See refer for more specific information on the relation between this FMMP component and other MRC programme to par. VIII.1.

VI OUTLINE OF THE OUTPUTS AND ACTIVITIES

VI.1 OUTPUT 1: Information Generation

The Member Countries strongly suggested that Component 3 should commence with the information generation activities. This phase should involve gathering of information on trans-boundary flood issues, of know-how relating to dispute resolution, as well as an exploration of all options. This information should be compiled for the MRC to allow the

MRC (e.g. JC, MRCS, NMCs and line agencies) can refer to this databank of “best” practices, which can be considered it for guidance purposes.

The documents, materials, instruments and practices will go beyond just flood issues related to the broader aspects of trans-boundary water issues and problems as those applicable to flood issues are most likely equally applicable to other water and related resource and associated environmental issues and problems. Thus, other programme and activities of the MRC, such as BDP, EP, NP, etc. can equally benefit from and utilize these materials in order to prevent duplication of efforts within the MRC. Close cooperation, participation and assistance of other programme in MRCS and ECO-Asia are much appreciated to improve the output and application of the FMMP effort under Component 3.

Activity 1.1: National Identification of the Trans-boundary Flood Issues

As a threshold matter, MRC Member Countries will identify and prioritize key issues at the national level to enhance the MRC capacity in addressing trans-boundary flood issues. Each member country, with assistance of a national short-term consultant will prepare a national perspective report on identifying and addressing trans-boundary flood issues in the LMB. National Mekong Committees (NMCs) will guide and coordinate this activity with assistance of national trans-boundary flood issues experts made available by the FMMP.

Four national reports on national perspectives on trans-boundary flood issues of the Lower Mekong Basin and a formulation of an approach for addressing differences and disputes will be submitted to the MRCS for compilation and further discussion at the bilateral / regional level under activity 1.2

Activity 1.2: Regional Compilation of the Trans-boundary Flood Issues

Based on the results of activity 1.1 and findings of the other MRC programmes (e.g. BDP, WUP, and EP), a list of regionally concerned trans-boundary flood issues will be compiled to set out at a general level the key issues of focus for Component 3. This will be done through bilateral / regional discussions between the NMCs and concerned National Line Agencies. The FMMP, with assistance of a short-term international consultant, will support and facilitate the discussions.

A report on regionally concerned trans-boundary flood issues will be drafted, circulated and discussed amongst the NMCs and MRCS. This will serve as input for the other activities of Component 3 as well as activities of other MRC programme related to transboundary issues (e.g. EP, MRC Transboundary Conflict Management Initiative).

Activity 1.3: Compilation of International “Best” Practices, Instruments and Case Studies relating to Inter-State differences and disputes over trans-boundary watercourses

The MRCS will compile a set of primary materials and related academic literature, reports, articles, and commentaries relating to:

- International “best” practices demonstrating inter-State cooperation in developing and implementing measures for trans-boundary flood protection, prevention and mitigation, and other trans-boundary water and environmental issues and problems,
- International “best” practices demonstrating inter-State disputes settlement concerning shared freshwater/natural resources; and
- Case studies on international trans-boundary water and flood issues.

This inventory compilation will contain copies of the leading instruments, guidelines and/or codes of relevance, and/or adopted by the international community, as well as comprehensive listings of academic and professional literature, providing critical and up-to-date comments on the operational mechanisms and processes set out there under.

The FMMP, in collaboration with the ECO-Asia, and with assistance of a short-term international consultant will collect and compile the documents. It is envisaged that the examined documents should be appropriate, relevant and realistic for possible application in the MRC context. The package of compiled documents, together with the national / regional “best” practices and instruments to be compiled in activity 1.4, will be finalized and disseminated to relevant parties and organizations (activity 1.5) for reference and capacity building purposes.

Activity 1.4: Compilation of National and Regional “Best” Practices and Instruments to address Inter-State differences and disputes over natural resource management

Compilation of documents and materials reflecting the laws, regulations, agreements, and practices currently applied by the governments of the four MRC Member Countries as well as those practices of regional organizations other than the MRC such as ASEAN to address trans-boundary differences and disputes directly and indirectly related to natural resource management.

The national compilation will be primarily based on discussions and responses from key ministries and national and provincial/state agencies concerned with water and related resources, foreign affairs and judicial matters, to include possible ADR (alternative dispute resolution) organizations or experts.

The regional compilation will primarily be based on the identification of relevant regional organizations and their mandate and working documents, rulings and practices. This may include internet and library searches as well as visits to the head quarter or appropriate offices of such organizations. Due to the broader nature of this compilation, it will address general trans-boundary and inter-state water issues and problems beyond the flood issues, which may include trans-boundary inter-basin water transfers.

Four short-term national consultants will be recruited to review and collect the relevant national and regional documents. The FMMP will review, classify and compile the products submitted by four national consultants before disseminating them to the relevant parties and organizations. A short-term international consultant will be selected to assist the FMMP in the compilation exercise.

Activity 1.5: Finalization and dissemination of the Compiled “Best” Practices and Instruments

In order to strengthen the effectiveness of the FMMP Component 3, the MRCS will disseminate a compilation of “best” practices and instruments identified in Activities 1.3 and 1.4 to the Council and JC members, MRCS officials and project staff, the NMCs, relevant National Line Agencies and, where appropriate, to a wider audience, including resource managers, civil society organizations (CSOs), regional institutes and universities. Dissemination of the compilation of best practises, instruments and case studies to organizations other than MRC will be developed and discussed with the NMCs.

This package of information and reference materials will greatly facilitate MRC Member States in exploring, understanding and applying (where appropriate) a wide range of precedence in addressing trans-boundary water differences and disputes associated with flood and other related issues.

This reference material also will be made available at relevant training courses on conflict management and resolution knowledge and skills development.

VI.2 OUTPUT 2 Awareness Raising, Knowledge and Skills Building

Output 2 will focus on clarifying MRC’s mandate to address differences and disputes, as well as on providing training on the general knowledge in this matter. In addition, for purposes of practical skills and experiences as well as mutual trust and confidence building, one or two pilot studies on trans-boundary flood issues in the LMB will be selected and implemented by the participants from the Member Countries with assistance and facilitation of the FMMP. The activities under this output will be gradually taken up after completion of the Output 1.

Activity 2.1: Clarification of the MRC Mandate in addressing differences and disputes

MRC Member Countries agree that the legal mandate of MRC is primarily to enhance regional cooperation in the development and management of the water and related resources and protection of the environment of the Mekong River Basin. However in addition to this, there are in the 1995 Agreement specific articles to address differences and disputes, which may arise between members of the MRC as a result of operation of the Agreement.

With the aim to prepare the capacity building and development of administrative tools, the FMMP with assistance of a short-term international consultant will conduct a thorough analysis of the relevant provisions of the 1995 Mekong Agreement and of the history of inter-State cooperation in the LMB. This analysis will encompass the avoidance, mitigation and resolution of differences and disputes between the Member Countries, as well as review of key provisions of general international law and of practices adopted by the international community, which may apply to relations between the Member Countries as well as all riparian States, or which may facilitate and/or support the interpretation and application of the relevant provisions of the 1995 Mekong Agreement.

The draft working paper on the clarification of mandate will then be circulated to the NMCs for review and comments. A regional meeting will be organized to discuss and finalize the draft working paper.

Activity 2.2: Training on addressing differences and disputes

To enhance the knowledge and skills of the MRC and particularly the MRCS, NMCs and national line agencies staff in addressing differences and disputes, several tailor-made training courses will be developed and delivered to relevant groups, ranging from mid-level professionals to high-level professionals or decision makers. The training course may address important topics, including:

- Theory and practice of conflict prevention, management and resolution;
- Conflict management tools;
- Skills training in communication, participation, negotiation, and consensus building;
- Shared vision development; and
- International customary and treaty water law and the 1995 Mekong Agreement.
- Etc.

The information compiled in Activities 1.3 and 1.4 will be integrated as a part of the training material for the courses. In addition, as part of the training courses, some trans-boundary dispute cases in other international river basins will be selected for illustrative and practical purposes. A detailed proposal/design of the training courses will be developed in the implementation phase with an initiation of training need assessment.

The FMMP will collaborate with the ECO-Asia, EP and Human Resources Development Section to conduct training need assessment for NMCs, LAs and MRCS, and to develop a training curriculum and material and implement the training program.

Activity 2.3: Exchange Study Visit

To complement the training courses in Activity 2.2, a study tour/exchange with a relevant international river organization and/or dispute resolution centre will be designed for MRCS, NMCs and line agencies relevant staff..

The FMMP, in coordination with the Member Countries, will select a river basin, which has certain similarities with the Mekong River basin, which has documented experience in the field of trans-boundary issues. Participants will be selected in close cooperation between FMMP and the NMC's and within the available budget.

The objectives of the Study Tour include among others to:

- be informed about the status and process of cooperation, particularly regarding addressing differences and disputes in transboundary issues of another basin and its RBO
- exchange views with another RBO, regarding approach and methodologies developed or used for enhancing cooperation, addressing differences etc.
- assess the available administrative and technical tools of another RBO for enhancing cooperation between riparian states;

- identify fields for improvement of the implementation process and/or issues to be addressed under Component 3.

Activity 2.4: Implementation of Pilot Study

In addition to the general knowledge and awareness raising under activities 2.2 and 2.3, one or two pilot studies on trans-boundary flood issues in the LMB will be selected and implemented for purposes of skills, mutual trust and confidence building. In detail, the implementation of the pilot studies will help to:

- Assist in development of the toolbox by testing suitability of administrative measures and the effectiveness of certain techniques designed to promote resolution of trans-boundary flood differences;
- Identify specific needs for the toolbox to support the process of addressing differences and disputes;
- Examine the potential role and significance of existing MRC procedures and guidelines in the prevention and resolution of trans-boundary flood disputes;
- Enhance the familiarity, confidence and mutual trust among Member Countries in relation to the resolution process for trans-boundary flood issues under MRC cooperation; and
- Enhance the cooperation (mutual trust and confidence) and capacity (practical experiences and skills) of MRC in addressing differences and disputes over trans-boundary flood issues caused by structural measures.

Obviously, the pilot studies can be selected with regard to the following criteria:

- **Relevance** for the LMB of the type of flood management interventions (i.e., reservoir operation, flood protection and control structural measures potentially giving rise to trans-boundary flood impacts);
- **Practicality** of the pilot study (e.g., availability of technical data relating to the hydrodynamics of the trans-boundary flood impacts, availability of the physical, economic and social conditions of the areas affected, as well as accessibility to other key information about the relevant inter-State differences);
- **Feasibility and scale** of the pilot study depending on the time and resources available;
- **Sensitivity** (i.e., the political delicacy of the trans-boundary flood issue/differences in question); and
- **Degree** to which the proposed pilot study is representative of trans-boundary flood issues/differences in the LMB.

There are 2 types of trans-boundary flood issues occurring within the LMB, which may be selected as the pilot study: i) Hypothetical/potential trans-boundary issues and ii) Actual/existing trans-boundary issues. With the purposes of practicing and skills building, it is strongly recommended that the Hypothetical/potential issues should be selected for the pilot

studies. This option avoids political sensitivity and allows planned implementation. Besides, it is in line with the objectives of the component.

However, the selection of the pilot study will be conducted on a voluntary basis by the concerned Member Countries. The awareness, knowledge, skills, tools and experience would still be in their fledging stages. Given the available resources and time of Component 3, only one to two pilot studies will be selected by the concerned Member Countries for further implementation.

A Task Group, comprising officials from the concerned Member Countries should be established for implementation of each pilot study. When appropriate, the officials from the other Member Countries may be invited attend some events as observers for information exchange and knowledge sharing. The FMMP will draft terms of reference for the Task Group, discuss and agree it with the concerned Member Countries in the implementation phase. The FMMP will facilitate and provide technical and administrative assistance to the activity.

The Task Group, with the assistance of FMMP, will compile detailed reports on each pilot study, setting out, *inter alia*:

- A summary of the study, outlining the factual circumstances of the trans-boundary impact studied and the resulting inter-State difference, and the mechanisms, principles or procedures applied to the resolution of that difference;
- Lessons learned in the course of each pilot study;
- Recommendations for the elaboration of the framework;
- Recommendations for the elaboration of any associated guidelines and / or required technical tools; and
- Timing of pilot implementation.

VI.3 OUTPUT 3 Toolbox Development

To enhance the MRC capacity in addressing differences and disputes in trans-boundary flood and related issues, in addition to awareness raising and skills building, tools to support and facilitate the process of addressing differences and disputes are very important. Considered from a general perspective, the toolbox for facilitating and supporting the process of addressing differences and disputes would include a range of different types of tools from administrative (manual, guidelines, procedures,...) to technical (numeric and/or physical models, assessment framework/tools) and knowledge and information (e.g. “best” practices, cases studies, literatures and instruments,...). So far, a number of tools (e.g. Water utilization procedures, DSF, RAM, Tb-EIA, SEA, database,...) have been and/or are going to be developed, compiled and applied by differences MRC programme and projects which are equally important and applicable for the addressing differences and disputes process. Under Component 3, in consideration of the overall design and outputs of the MRC programme as well as available resources, it is suggested that only the tools, which are important for toolbox for facilitating and supporting the process of addressing differences and disputes, will be developed.

Analysis of the 1995 Mekong Agreement implies that the Agreement not only provides a mandate but also a general guidance to MRC for addressing differences and disputes that might arise between members of the MRC as a result of operation of the Agreement. A set of administrative tools is suggested to complete the modalities of the Agreement. The administrative tools offer the Member Countries, on a voluntary basis, a guidance process in addressing differences and disputes.

In addition to the administrative tools, a set of technical tools for exploring the cause-and-effect relationship between human interventions and flood conditions, the consequently the impacts on socio-economic and environmental conditions is essential for MRCS to support and facilitate any fact-finding processes. These are considered core tools for the process of addressing differences and disputes in trans-boundary flood issues under the MRC framework.

Furthermore, the international, regional and national “best” practices, instruments and case studies as well as training material compiled and disseminated in Output 1 are also formed as an important part of the toolbox.

Activity 3.1: Establishing Administrative tools for Addressing Trans-boundary Differences and Disputes

Obviously, the administrative tools for addressing trans-boundary differences and disputes would be applicable not only to trans-boundary flood issues but also to the broader aspects of trans-boundary water issues and problems. The cooperation and coordination between the other concerned MRC programmes in establishing the tools is essential for improvement of the output and to avoid the possible duplication of efforts.

As an initial step, a user’s needs assessment will be conducted to ensure compatibility and coordination of such administrative tools with the other existing procedures, mechanisms and guidelines developed by the MRC.

Notably, these administrative tools will not be an official and binding MRC procedural mechanism. Rather, it should remain a flexible and living set of documents to guide the MRC in addressing differences and disputes related to trans-boundary issues between the MRC Member Countries.

The key administrative tool will refer to a manual (explanatory note) to elaborate the practical application of framework for addressing trans-boundary issues, differences or disputes, set-out in Mekong Agreement and ROPs. The manual would include detailed guidance on paths and steps to be taken, based on choices available, the various processes to be followed, and what technical, training and financial needs would be necessary to insure the framework can function. The manual will support the choice of most other appropriate administrative tools of the toolbox.

In addition to the manual, the FMMP would compile relevant existing guidelines to provide support to the process of addressing inter-State differences and disputes over trans-boundary issues if there is an emerging need during the course of the development of the manual and implementation of the pilot studies. International and regional “best” practices and instruments will also assist in identifying and compiling the administrative tools and framework required.

To maximize efficiency for establishing the manual, the FMMP with assistance of an international short-term consultant will commence the work with a preliminary draft working document, setting out a general manual and a set of administrative tools to address differences and disputes. This preliminary working document will be based on the MRC mandate and practices and widely accepted international “best” practices and instruments and regional and international “best” practices and national experiences on the resolution of inter-State differences and disputes (Activities 1.3 and 1.4).

The manual will then be further developed and refined in a later phase based on lessons learned during the implementation of the pilot studies as well as the other relevant activities.

A number of regional discussion meetings will be organized to discuss and finalize the manual and the set of administrative tools.

Activity 3.2: Assessment of the needs and suitability of technical tools for facilitating the process of addressing transboundary flood issues, differences and disputes

Obviously, clear, accurate and common understanding on cause-effect relationship between human interventions and socio-economic and environmental conditions is the essential requirement for any process of addressing differences and disputes related to transboundary water issues.

It was identified by the member countries during the transboundary flood issues identification process that there is a lack of reliable information and understanding on structural development plans (including policies and standard design criteria), and that the cause-effect relationship is the main knowledge-related constraint. The requirements ask for a better access to and operation of appropriate methodologies and frameworks for assessing changes and impacts on environment, socio-economic conditions.

From a technical view point, such methodologies and frameworks will be based on a strong platform of hydrological, hydraulic, simulation and socio-economic and environmental models, as well as impact analysis tools which should be mutually accepted by the member countries as common tools.

The outcomes of the identification of transboundary flood issues show that there are four main groups of causes of transboundary flood impacts, namely: i) flood protection works and other infrastructures (roads, openings, weirs,...) in the Mekong Delta; ii) reservoir development and operation (mainly hydropower dams in upstream of Kratie); iii) river works (e.g. bank protection, port development) and in-stream activities (e.g. sand and gravel exploitation) along Mekong mainstream; and iv) deforestation in upper catchments.

The main causes ask for the regional hydrological, hydraulic and basin simulation models to assist the impact analysis exercise. Apart from the regional models, locally defined detailed models are also required for in-depth studies for specific issues, which would be developed on case by case basis.

Furthermore, impact assessment tools / frameworks are needed as well to translate the changes of flood conditions (provided by the above models) into socio-economic and environmental impact indicators.

In the MRC, a series of tools and methods have been developed and applied (e.g. DSF, SEA, SEA, RAM,...) or are to be developed (e.g. flood risk assessment tools, flood risk mapping, “best” practices IFRM guidelines,...) which to facilitate and support problem analysis.

FMMP Component 3, in close collaboration with FMMP Components 1, 2 and other MRC programmes (e.g. IKMP, EP, BDP) will conduct a needs and suitability assessment for those technical tools, which are important for addressing and resolving transboundary issues, differences and disputes.

In consideration of available resources of Component 3, as well as the responsibilities of other MRC programmes, these tools should be mainly further developed or improved by the IKMP, by other related MRC programmes and by FMMP components. The outcome of the needs and suitability assessment activity of Component 3 will be submitted to them for further consideration and action.

Activity 3.3: Improvement of hydrodynamic model for the Lower Mekong River Basin

The FMMP, considering the current status of the DSF models, the complexity as well as the severity of flood conditions in the LMB floodplain, and the requirements of Component 2 and 3, the FMMP recognized that the application of a hydrodynamic model for simulation and impact assessment in the LMB floodplain would be crucial. The hydrodynamic iSIS model³ was considered the most appropriate and most realistic option to apply for physical water-related simulation and impact assessment. However, the schematization of the iSIS model is rather rough, which leads to inaccurate modeling results. The inaccuracy is particularly caused by the inadequacy of a number of important cross sections in the Cambodian part of the floodplain. Although this weakness has been generally acknowledged, no improvements had been projected by IKMP on the short run. In view of the critical conditions for Component 2 and 3 implementation, explained above, FMMP requested an international modeling expert to assess the applicability of the iSIS hydrodynamic model for Component 2 and 3 purposes. The expert presented short and medium term options for improvement earlier this year. The need assessment and proposal for improvement report was discussed and agreed with the IKMP and modelling team, who are responsible for model application, development and enhancement. The coordination and budget contribution plan for model improvement between FMMP, IKMP and modelling has been discussed and agreed.

The two following main tasks will be conducted: i) to collect the existing required data collection and conduct the field survey if required and ii) to re-schematize and re-calibrate the model. A national short-term consultant will be recruited to collect data and carry out field survey while an international and a regional hydrodynamic experts will be hired to do the re-schematization and re-calibration.

Considering the fact that the iSIS model improvement activity is part of the DSF system improvement, the progress and result of this activity will be reported to the Technical Coordination Group (TCG) for consideration and approval. Once the results are approved by the TCG, the enhanced model can gain the status as an “accepted” MRC tool for impact assessment of structural measures on flood conditions.

³ The iSIS hydrodynamic model is a hydrodynamic model under the DSF. It is a model accepted by all member states. FMMP considers this model suitable to be applied for Components 2 and 3 implementation, however stresses that certain improvements are required.

VII BUDGET

Total remaining budget available for implementation of the modified Component 3 is 1,318,800 US dollars⁴. This budget is managed by the MRCS. The indicative breakdown of the budget as per financial management system of MRCS is as follows

• International Experts / Consultants	576,000.00
• International Staff (MRCS)	237,143.00
• Support Staff	64,000.00
• Official Travel	75,000.00
• Project Evaluation	30,000.00
• Riparian Experts / Consultants	72,000.00
• Riparian Professional Staff (MRCS)	108,000.00
• Training	120,000.00
• Expendable Equipments	9,000.00
• Non- Expendable Equipment	12,000.00
• Oper. Maint. of Equipment	2,500.00
• Reporting Costs	50,000.00
• Miscellaneous	50,000.00
• Contingency	42,800.00
Subtotal :	1,448,443.00
• Secretariat Support Costs	115,871.44
Total :	1,564,314.44

The activities of Component 3 will be highly participatory and cooperative, with required inputs from all national Mekong Committees, relevant national line agencies and related institutions. This proposal does not expect “cost sharing” though extensive cooperation and in-kind assistance will be required.

VIII INTERFACES

The FMMP will implement Component 3 in careful balance and coordination with the broader MRCS trans-boundary initiative and related MRC programme. Lessons learned in other MRC programme will be integrated in the FMMP approach. ECO-Asia’s linkage and support to MRCS for mainstreaming a trans-boundary approach is considered extremely relevant, providing a synergy for complementary inputs. Jointly achieved outputs will serve not only FMMP and ECO-Asia, but also MRC as a whole.

⁴ The budget allocation will be further specified during the implementation phase.

VIII.1 MRC Programme

MRCS and USAID Joint Programme of Cooperation on MRC Trans-boundary Conflict Management Initiative: The MRCS and USAID are cooperating on the MRC Trans-boundary Conflict Management Initiative, a multi-year effort to support implementation of Goal 2 of the Strategic Plan in the three focus areas identified by the NMCs and MRCS: (1) situational analysis; (2) institutional strengthening; and (3) capacity building. ECO-Asia will work across the full range of MRC programmes that are actively engaged or planning activities in conflict management, including International Cooperation and Communication Section (ICCS), EP, and FMMP.

FMMP: The FMMP comprises 5 components: i) Component 1 - Establishment of a Regional FMM Centre; ii) Component 2 – Structural Measures and Flood Proofing; iii) Component 3 – Enhancing cooperation in addressing transboundary flood issues; iv) Flood Emergency Management Strengthening and v) Component 5 - Land Management. The other FMMP components will deliver a number of outputs which will very much complement the objectives of Component 3. For instance, in Component 1 flood forecasting information will be improved; basin-wide flood risk assessment, risk analysis and mapping will be developed. In Component 2, a set of best practice IFRM guidelines and FMM project development and implementation will be made available. A flood related database also will be compiled and setup to provide flood, socio-economic and environment related information. The sustainable flood risk management capacity in the MRCS, NMCs and national line agencies will also be built. Component 4 develops a number of transboundary emergency preparedness tools for Cambodian and Vietnamese border provinces.

IKMP: The programme has three main objectives: i) Provision of fundamental data and information services; ii) Provision of integrated information and knowledge products and services; iii) Improvement of IKMP systems and tools. It is noted that the IKMP has a strong focus on the information generation, information sharing and modeling, impact assessment tools development and application. The information and tools to be developed and maintained by the IKMP are particularly valuable for the process of addressing differences and disputes in which fact-finding and problem analysis are most relevant areas for MRCS to be involve in.

BDP: The Trans-boundary Flood Management and Mediation Component is linked to the 1995 MRC Agreement on the launch of the BDP, *i.e.*, to act as a planning tool for the Joint Committee to identify and prioritize programme to be implemented at the basin level. It is proposed that this component will add complementary products and services to the Joint Committee in trans-boundary flood management and mediation capacity via the establishment of a permanent MCS. This component will support the BDP objective of establishing a drafted and agreed basin development plan by the riparian countries.

EP: The components of Environment Decision Support, Strategic Networking and Coordination, Capacity and Awareness Building, Capacity Building, and Awareness-Raising all have links to the Trans-boundary Flood Management and Mediation Component⁵ of FMMP. The 2002 MRC Work Program specifies that improved cross-boundary capacity building and exchange of technical products and services related to environmental issues will

⁵ This is the previous title of Component 3; the new title “Enhancing Cooperation in Addressing Trans-boundary Flood Issues” is to be approved.

be provided by the aforementioned components of the Environment Program. The Trans-boundary Flood Management and Mediation Component should be well coordinated with activities related to cross-border resource management capacity building within the EP.

FP: All Mekong fisheries are driven by the flood regime of the river and its tributaries. There is a well established relationship between fish productivity and the area inundated. Fish production is largely dependent on the availability of sufficient water and hydraulic head in order to inundate flood plains and lowlands within the Basin.

Fish ecologies react to changes water conditions of the floodplains in various ways depending on type, species and management systems. To describe those fisheries strategies is obviously beyond the scope of this report. However, the most important impact of structural changes is a substantial reduction of migration, which results in substantially reduced productivity.

Important linkages and complementarities exist to all FP components. Component 1 opens access to the FP network of partner organizations, and Component 2 – fisheries ecology, valuation and mitigation, develops mitigation and management strategies, which are potentially important elements for the development of drought management and mitigation strategies. Component 3 relates to the institutional arrangements of riparian fish line agencies and Component 4, looks into specific aspects related to aquaculture systems for species that are indigenous to the Mekong river system.

WUP: This component is linked to WUP activities, such as Environmental, Economic and Social Trans-boundary Analysis and Modelling, and Development of the “Procedures” for water utilization. The technical collaboration developed within WUP includes working with dialogue partners, Myanmar and China, and is of specific interest to this component.

Capacity Building Program: This component is also linked to the human resources and institutional development activities of the Capacity Building Program.

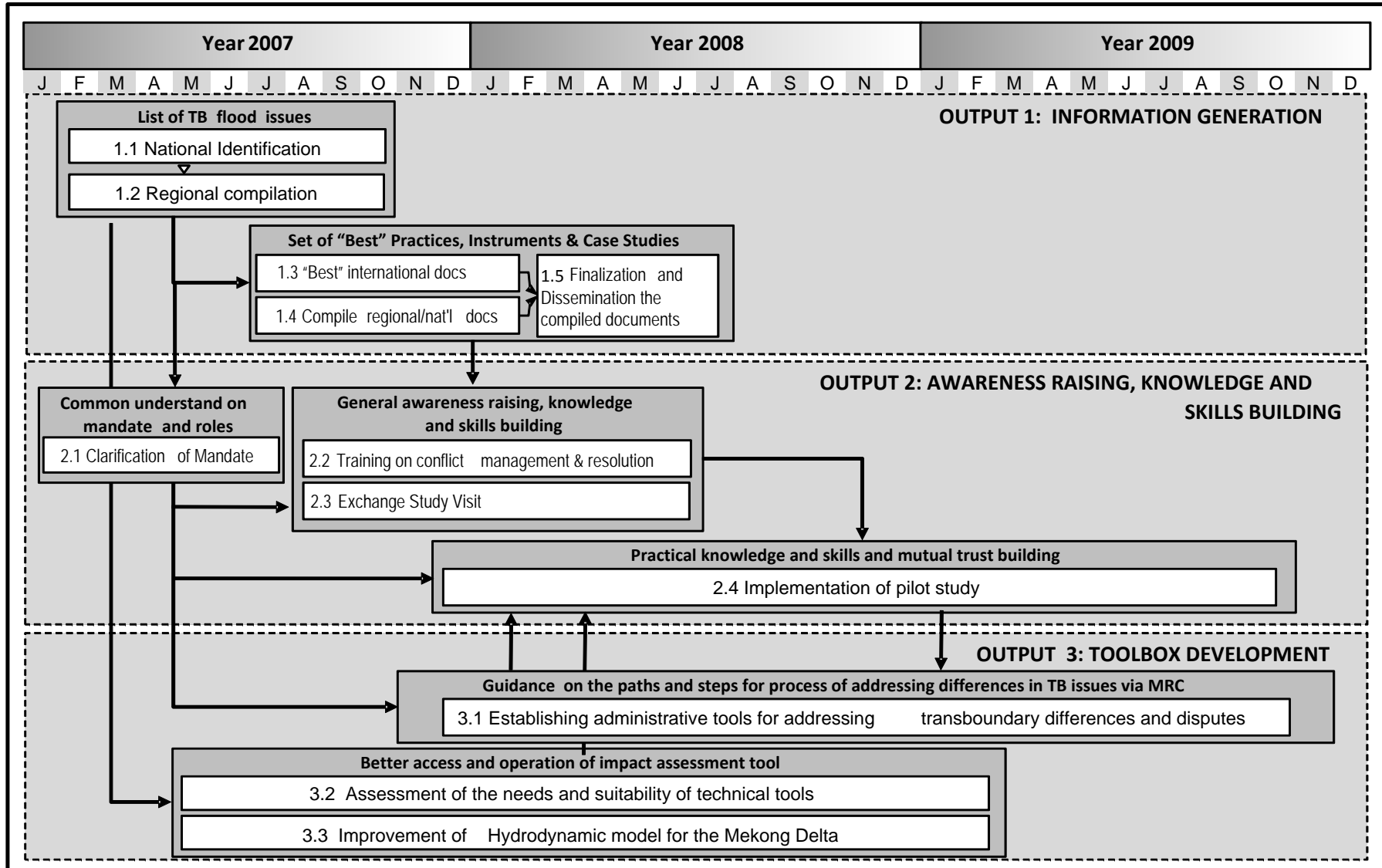
VIII.2 External Programme and Institutions

The complexity involved in addressing differences and resolving disputes calls for a structured coordination with regional and international institutions related to cross-border water resources management and conflict-resolution capacity. Some potentially important institutions/resources identified to date are listed below:

- [From Potential Conflict to Cooperation Potential](#) (PCCP): A project launched by UNESCO. While this effort is relevant to each of the challenges, it addresses most specifically the challenge of sharing water resources from the point of view of governments, and develops decision-making and conflict prevention tools for the future. The goal of PCCP, in accordance with the mandate of World Water Assessment Programme (WWAP), is to render services to UNESCO's Member Countries and to foster co-operation between nations. It is also guided by the Organization's paramount mandate: to nurture the idea of peace in human minds. PCCP aims to foster co-operation between stakeholders in the management of shared water resources, while helping to ensure that potential conflicts do not turn into real ones. The project focuses on the development of tools for the anticipation, prevention and resolution of water conflicts.

- [Trans-boundary Freshwater Dispute Database Project](#): (Oregon State University, USA). A web portal with a wealth of documentation regarding Treaties, Conventions, Agreements, etc., related to international water resource management.
- [UNECE Water Convention](#): A web portal presenting the history and present status of ratification of the Convention of the Protection and Use of Trans-boundary Watercourses and International Lakes. (Note: none of the Member Countries in the LMB has presently signed or ratified the UNECE Water Convention).
- [International Water Law Project](#): A web portal presenting case law studies and documents on Agreements on trans-boundary water resource management.
- [Greater Mekong Sub-Region](#) (GMS): A presentation of the Greater Mekong Sub-Region (including Myanmar, Cambodia, Yunnan Province of China, Laos and Vietnam) Program initiated by ADB in 1992. While the GMS Program has a strong focus on regional cooperation by funding projects to facilitate cross-border trade, transportation and movement of people, the Environment Projects have important and strong interfaces with the Trans-boundary Flood Management and Mediation Component of FMMP. The participation of Myanmar and Yunnan Province of China in the GMS Program may have important bearings for improved communication and decision-making on allocation of river resources between upstream and downstream countries in the Mekong River Basin.
- [Asia-Pacific Centre for Environmental Law](#) (APCEL): A regional resource centre in environmental law initiated by the Commission on Environmental Law, IUCN and UNEP. The web site provides on-line access to environmental legislation, regulations and related documents for ASEAN countries.
- [ASEAN](#): Of particular interest to this component are the Agreements and Action Plans signed by ASEAN Member Countries regarding Trans-boundary Haze Pollution (2002) and ASEAN Cooperation Plan on Trans-boundary Pollution (1995). A review of trans-boundary mediation and legislative processes involved in these signed Agreements and Action Plans may have relevant implications for this component.

ANNEX 1: FLOWCHART



ANNEX 2: WORK PLAN

No	Description of outputs and activities	2007												2008												2009											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1	Modification Component 3 document	[Actual implementation]												[Actual implementation]												[Actual implementation]											
2	Output 1: Information Generation	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 1.1: National identification of flood issues	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 1.2: Regional Compilation of the Trans-boundary Flood Issues	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 1.3: Compilation of international "best" practices instruments and case studies	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 1.4: Compilation of national and regional "best" practices and instruments.	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 1.5: Finalization and dissemination of Compiled "best" practices and instruments	[Actual implementation]												[Actual implementation]												[Actual implementation]											
3	Output 2: Awareness Raising and Knowledge and Skills Building	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 2.1: Clarification of mandate of the Mekong Agreement for addressing differences and disputes	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 2.2: Training on general Knowledge and Skills on Conflict Management and Resolution	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 2.3: Exchange Study Visit	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 2.3: Implementation of pilot study	[Actual implementation]												[Actual implementation]												[Actual implementation]											
4	Output 3: Toolbox Development	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 3.1: Establishing administrative tools for addressing differences in TB issues	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 3.2: Assessment of the needs and suitability of technical tools	[Actual implementation]												[Actual implementation]												[Actual implementation]											
	Activity 3.3: Improvement of hydrodynamic model for Mekong delta	[Actual implementation]												[Actual implementation]												[Actual implementation]											

Legend: [White box] Actual implementation [Black box] Following-up (M1) Milestone

ANNEX 3: LOGICAL FRAMEWORK MATRIX

Hierarchy of Objectives	(Objectively Verifiable) Indicators	Means of Verification	(Important) Assumptions
<p>Development objective</p> <p><i>People’s suffering and economic losses due to floods are prevented, minimized, or mitigated, while preserving the environmental benefits of floods</i></p>	<p>Accelerated cooperation on flood issues among Member Countries towards effective, integrated flood management, thereby contributing to sustainable development.</p>	<p>Reporting by MRC Joint Committee.</p>	<p>The riparian countries support FMMP. Donors confirm funding.</p>
<p>Immediate objective</p> <p><i>Cooperation and Capacity of the MRC in addressing differences and disputes on trans-boundary flood issues are strengthened and enhanced</i></p>	<p>Availability of Information and Knowledge on trans-boundary flood issues, “best” practices and instruments on addressing differences and disputes to the MRC;</p> <p>Success of training courses and pilot study implementation;</p> <p>Appropriateness and recognition of the Member Countries on the developed toolbox.</p>	<ul style="list-style-type: none"> - Reports on identified trans-boundary flood issues; - Databank (reports) on the “best” practices, instruments... - Documents of training material; - Training assessment reports. - Pilot study reports. - Minutes/records of workshops and meetings. 	<p>Member Countries accept complementary avenue to address contentious issues through MRC channel.</p>
<p>Outputs</p> <p>1 Output 1: Information Generation</p>	<p>The national and regional trans-boundary flood issues are identified and agreed by the Member Countries.</p> <p>International, regional and national “best” practices, instruments and case studies are compiled and disseminated to concerned stakeholders.</p>	<ul style="list-style-type: none"> - National and regional reports; - Minutes of national, bilateral and regional meeting. - Documents on “best” practices, instruments and case studies; - Number of copies and number of organization, which received the documents. 	<p>The Member Countries agree on the list of regionally concerned trans-boundary flood issues.</p> <p>The ECO-Asia fully is supporting and fully involved in implementation of knowledge generation and training.</p>

Hierarchy of Objectives	(Objectively Verifiable) Indicators	Means of Verification	(Important) Assumptions
<p>2 Output 2: Awareness raising, Knowledge and Skills building.</p>	<p>The Mandate of MRC for addressing differences and disputes elaborated and concurred by the Member Countries.</p> <p>Training courses on addressing differences and disputes conducted; Number of people which attended training; Percentage of trainees assessed training as useful at agreed rating scale.</p> <p>The pilot studies implemented within allocated timeframe and budget; Number of people involved in implementation of case studies; Practical skills and experiences, mutual trust and confidence of the Member Countries are developed and enhanced.</p>	<ul style="list-style-type: none"> - Working papers on the mandate elaboration; - Minutes of national/regional meetings. - Report on training need assessment; - Training material; - Reports on training courses. - Working papers and completion reports re pilot studies implementation; - Minutes/records of case study group meetings. 	<p>The Member Countries consent on the mandate of MRC for conflict resolution and addressing differences.</p> <p>Appropriate persons are selected and attended the training; Trainees can fully attend all training modules.</p> <p>Appropriate pilot studies are selected; Information and data on the pilot studies are available for the FMMP; Active support and backing from Member Countries, which were involved in the study.</p>
<p>3 Output 3: Toolbox Development</p>	<p>Administrative tools are developed and recognized by the Member Countries as tools to be used for addressing differences and disputes process.</p> <p>Needs and suitability of technical tools are assessed and agreed; The model is improved and results meet expectations.</p>	<ul style="list-style-type: none"> - Report of administrative tools; - Minutes meetings/workshops. - Report on needs and suitability assessment, proposal for model improvement; - Report of model improvement; - Improved hydrodynamic model. 	<p>The Member Countries are actively involved in the development of administrative tools.</p> <p>The relevant MRC programmes recognize the needs of FMMP Component 3 and take these into account.</p> <p>The IKMP and FMMP agree on the proposal for improvement of hydrodynamic model and cooperate effectively (plan and budget) in model improvement.</p>

ANNEX 4: SUMMARY OF OUTCOMES OF NMC CONSULTATIONS ON MEDIATION OF TRANS-BOUNDARY FLOOD ISSUES

	CNMC	LNMC	TNMC	VNMC
Key Elements:				
1. Scope	Applicable to ongoing activities as well as planned	Unclear whether new guidelines for flood management required and whether mediation restricted to disputes relating to such tools	Clarification required re adoption of guidelines or procedures for TB flood management and mitigation	<ul style="list-style-type: none"> ▪ Preference for conflict prevention, requiring detailed guidelines re TB flood issues ▪ Where such measures fail, mediation available ▪ Scope must be sufficiently broad to apply to any project giving rise to TB impacts
2. Voluntary Nature	<ul style="list-style-type: none"> ▪ Prior consent to participate on a case-by-case basis ▪ No right to withdraw 		Very important to emphasize voluntary nature of mediation	<ul style="list-style-type: none"> ▪ Necessary to consider strong legal framework and political commitment to cooperate under MRA'95 ▪ Important that States not entitled to frustrate process
3. Flexibility	States permitted to modify / amend process by agreement	States permitted to modify/amend process by agreement		States permitted to modify / amend process by agreement – maximum flexibility
4. Time Limits	Strict but reasonable time limits	Strict but reasonable time limits	Further clarity required re time-limits, especially re the mechanisms and the principles underlying their use	<ul style="list-style-type: none"> ▪ Carefully defined to ensure they are suitable/appropriate; should not disadvantage States lacking capacity
5. Non-determinative Process	No finding of fault; no finding re rights and duties	No finding of fault; no finding re rights and duties		No finding of fault; no finding re rights and duties

	CNMC	LNMC	TNMC	VNMC
6. Mediator(s)	<ul style="list-style-type: none"> ▪ Third-party nomination of mediator in case of non-agreement ▪ Appointment of 3 mediators in very serious disputes 			<ul style="list-style-type: none"> ▪ Senior MRCS officer should serve as mediator ▪ Mediator ought to be a scientist ▪ Third party mediator along with national mediators in serious dispute.
7. Confidentiality/ Transparency	Greatest possible degree of transparency	Greatest possible degree of transparency		
8. Mediation Procedure	<ul style="list-style-type: none"> ▪ Strong independent fact-finding element but much could be covered by existing MRC programmes and procedures ▪ Either State or mediator could make recommendations without prejudice 	<ul style="list-style-type: none"> ▪ Strong independent fact-finding element requiring full access to territory, facilities and officials ▪ Either State or mediator could make recommendations without prejudice ▪ Resolution agreement should be binding 	The form and nature of any resolution agreements should be the responsibility of the negotiating parties rather than MRC/MRCS	<ul style="list-style-type: none"> ▪ Independent fact-finding central ▪ Resolution agreement must be binding MOU
9. Costs	<ul style="list-style-type: none"> ▪ In principle, costs should be shared equally ▪ Assistance from MRC Water Management Trust Fund where necessary 	Cost requires careful consideration and consultation with Finance Ministry	In principle, costs should be shared equally but need for clarity as to who should bear costs of ‘MRCS facilitation’, associated ‘fact-finding,’ and ‘additional studies’	Costs should be shared reasonably and equitably

	CNMC	LNMC	TNMC	VNMC
Role of MRCS			<ul style="list-style-type: none"> ▪ Need for clarity as to mandate of MRCS for actions going beyond the provision of technical support to Joint Committee ▪ Need to enhance capacity and resources of MRC to conduct and coordinate mediation and to raise awareness of all MRC dispute prevention and resolution tools 	<ul style="list-style-type: none"> ▪ Need to enhance capacity and resources of MRC to conduct and coordinate mediation; establish legal unit at MRCS
Terminology	<ul style="list-style-type: none"> ▪ ‘Dispute’ over ‘conflict’ ▪ ‘Request for mediation’ over ‘complaint’ 	<ul style="list-style-type: none"> ▪ ‘Conflict’ commonly used in MRC terminology ▪ Preference for terms commonly used in international practice ▪ ‘Request for mediation’ over ‘complaint’ 	<ul style="list-style-type: none"> ▪ ‘Difference’ over ‘conflict’ or ‘dispute’; ‘framework’ or ‘technical guidelines’ for mediation ▪ Preference for terms commonly used in international practice, though some terms in MRA 95 may not be consistent ▪ Need to avoid terms giving rise to confusion with WUP procedures ▪ ‘Mediation’ as yet vague ▪ Generally, need for further discussion and consideration of key terms 	Preference for ‘difference’ or ‘disagreement’ over ‘conflict’ or ‘dispute’

	CNMC	LNMC	TNMC	VNMC
Suggestions for Pilot Projects (can you say Areas instead of Projects?)	Itaipu Dam case (Brazil and Paraguay); Ialy case		Useful to study MRC technical support in Ialy case and CEO ‘good offices’ in Nam Theun 2 case	<ul style="list-style-type: none"> ▪ Pilot projects must be initiated as soon as possible and conducted in parallel with development of mediation framework ▪ Might also involve non-structure measures ▪ Should study role of local/provincial authorities
Methodology for FMMP Component 3	<ul style="list-style-type: none"> ▪ Establishment of Technical Working Group to draft framework and avoid overlap of guidelines and procedures ▪ Use of pilot project approach 	Important to avoid proliferation and overlap of MRC guidelines or procedures	<ul style="list-style-type: none"> ▪ Generally supportive of development of ‘Rules of Procedure’ for mediation ▪ Very important to avoid overlap/duplication as flood issues cross-cutting ▪ Very important mediation process does not exceed MRC mandate – detailed studies will be necessary to review earlier reports/research ▪ Very important to ensure full participation of NMCs/national authorities in task groups and develop NMC competence ▪ Need to check re alternative regional dispute settlement forum 	<ul style="list-style-type: none"> ▪ Establish Working Group on Mediation, involving NMCs and line agency legal experts, to draft framework, conduct pilot projects, develop guidelines on conflict prevention ▪ Important to avoid overlap with WUP/EP procedures concerning TB issues, clarity required ▪ Need to study legal background to clarify mandate for mediation ▪ Useful to learn from mediation practices in other basins

ANNEX 5: RECORD OF FIRST REGIONAL MEETING ON OCT. 19TH 2006

1 Discussion during the Summary of Outcomes of National Consultations on Mediation of Trans-boundary Flood Issues Session.

Thailand National Mekong Committee (TNMC) highlighted the problems presented by a lack of clarity as to the causes of floods and as to the level of difference or dispute coming within the scope of any framework adopted. TNMC also pointed out that, while it may appear that Articles 34 and 35 do not provide any detailed legal or procedural mechanisms, cooperative mechanisms do exist that have by in large proved to be adequate for the resolution of inter-State differences. TNMC suggested that only technical guidelines, rather than legal procedures, are required to facilitate this cooperation. TNMC pointed out that there are many options for dispute resolution, including conciliation, consultation and negotiation, and facilitation, and questioned the focus of FMMP on the option of mediation. TNMC pointed out that, under Article 35, mediation is envisioned as a bilateral process. TNMC suggested that FMMP fully investigate ‘best practice’ solutions in dispute resolution for application in the Lower Mekong Basin, including mechanisms other than mediation. TNMC specifically suggested that the “good offices” process might be developed to assist the Joint Committee in its dispute resolution role.

Vietnam National Mekong Committee (VNMC) suggested that any framework for dispute resolution eventually adopted should focus on and be restricted to trans-boundary flood issues arising by virtue of structural measures, as the question of land-use is very complex. VNMC also suggested that it might be a useful exercise to identify a range of typical trans-boundary flood issues before preparing any legal procedure. VNMC also queried the meaning of “emergency measures” in the Component 3 documentation. VNMC acknowledged that MRCS could not act as a mediator as it operates at a lower level than the Joint Committee and there would exist a risk of political interference with its dispute settlement functions. However, VNMC stressed that MRCS could play a very effective role as technical facilitator, for example through the provision of “good offices,” and suggested that Component 3 could carefully examine the mandate for and prepare a procedure for “good offices.” VNMC emphasized the importance of establishing a cost-effective mechanism and suggested that this mechanism ought to employ the term “difference” rather than “conflict” and that this term should be clearly defined. VNMC pointed out that when the original FMM Strategy was formulated in 2001, the emphasis was on cooperation with very little discussion of conflict. VNMC was concerned that the Component 3 Concept Paper might be construed as being critical of the 1995 Mekong Agreement and suggested that the language be suitably amended. VNMC recommended that the case-study / pilot project phase should be implemented first, for the purposes of identifying the trans-boundary flood issues that are likely to arise, before preparing the procedural mechanism. VNMC suggested that if very significant trans-boundary issues arisen States may adopt dispute resolution procedures (including mediation) bilaterally, rather than adopting mechanisms that would apply as between the four Member Countries. VNMC suggested that a third party need only become involved where the issue cannot be resolved between the States concerned.

Laos National Mekong Committee (LNMC) expressed concern that trans-boundary flood issues might prove very difficult to understand and define since flooding is largely a natural

process. Therefore, LNMC suggested that the first step should be to identify and define the issues that would come within the scope of any dispute resolution framework adopted.

2 Discussion during the Summary of Terms of Reference for FMMP Component 3 Session

According to TNMC, Component 3 ought to include three main elements:

- Establishing a process to facilitate the generation of information on the issue in question and to provide a forum for discussion that would assist the Joint Commission in its dispute resolution role. Such a process would have procedural and technical elements.
- Developing a mechanism incorporating technical tools to generate information required to facilitate dispute resolution. Launching the pilot projects would assist in the development of such mechanisms/tools. TNMC strongly endorsed the need for this element.
- Improving the state of knowledge of the Member Countries and of MRC to resolve disputes. This element would involve capacity-building and the general development of human resources.

Therefore, TNMC recommended that the outputs for Component 3 should be modified as they are currently too ambitious. For example, Output 7 relating to the development of recommendations on the harmonization of national water and land-use legislation might be regarded as unrealistic, while Output 5 also should include other issues, such as flood insurance and awareness-raising. TNMC supported the existing three-track approach but felt strongly that the outputs should be modified along the following lines:

Component 3 should commence with the capacity-building and knowledge generation activities. This phase should involve the gathering and development of know-how relating to dispute resolution and an exploration of all options, including mediation, good offices, etc. TNMC also recommended that this phase should also review existing MRC processes to better understand how MRCS might support the Member Countries through the provision of “good offices.” This information should be compiled for the Joint Committee in order that the Joint Committee can refer to this databank of best practice and consider it for guidance purposes.

Component 3 should then proceed with the development of the framework for mediation. TNMC felt that FMMP was currently trying to progress too rapidly.

As to compiling information on dispute resolution strategies, TNMC cautioned against wholesale adoption of international “best” practices, suggesting that they must be examined in context to ensure that they can be implemented in an appropriate and realistic manner. TNMC also proposed including clear guidance in the Terms of Reference on how often regional and national consultations should occur and how consultants should submit information. Generally, TNMC stressed principles of consensus and a voluntary approach to dispute resolution, which would ensure the flexibility and sustainability of any mechanism adopted and enhance cooperation in addressing trans-boundary flood issues. As to terminology, TNMC preferred to refer to “addressing differences relating to trans-boundary flood issues,” though stressed the need to clarify “differences” and “trans-boundary flood issues.” TNMC also stressed the need to clarify what the pilot projects would test and

suggested that it might be most useful to start with a hypothetical case study or issue in order to begin development of the framework. TNMC recommended that the framework should focus on trans-boundary issues caused by ‘man-made’ construction and only refer generally to non-structural issues, and that it should outline all available dispute resolution options.

VNMC expressed the view that the Terms of Reference should seek to clarify the basic principles applying to dispute resolution, including the “Mekong Spirit” and the principle of mutual benefit, as well as the methodology for developing the framework. It should also examine how best to apply existing procedures. VNMC reminded participants that one of the key aims of the MRC’s Strategic Plan was to facilitate development. VNMC supported the three-track approach, but suggested that the Terms of Reference should refer to the framework for “resolution of differences” and that all corresponding terms should be amended. VNMC suggested that it would be more appropriate to begin with implementation of Tracks 2 and 3 before going on to implement Track 1. VNMC identified four key outputs:

Identify trans-boundary flood issues, concentrating on man-made structures, such as reservoirs, rather than land-use issues as they may be too ambitious.

- Focus on “impact management” during the pilot project phase. Once the impact has been identified, it may be resolved by means of bilateral arrangements with technical facilitation provided by MRC.
- Enhance capacity-building competence. This would involve developing a “hands-on” approach when identifying technical tools, guidelines and materials. Compiled materials should clearly articulate what is meant by mediation. VNMC felt that there is no need at this stage for the drafting of a procedural mechanism for mediation.
- Enhance regional cooperation on flooding, including, for example, support for joint studies by States involving local academics and research agencies. Such studies would enhance regional co-ordination and would provide support to MRC.

VNMC observed that certain outputs, such as Outputs 3 and 4, might be combined and also stressed the need to identify activities in relation to each output. VNMC pointed out that the Terms of Reference require institutional arrangements. For example, even if drafting is not to commence immediately on the drafting of a mediation procedure, there would remain a need for regional and bilateral pilot project task groups. VNMC noted that there would also be a need for a technical working group, focusing on technical issues, but stressed the need to avoid duplication in relation to institutional arrangements. VNMC thought it would be necessary to clarify the role of MRCS in relation to good offices or facilitation and to set out how and at what level it might make recommendations to governments or how it might communicate with operators. VNMC stressed that the priority must be the aim of ensuring that the national flood units work effectively and that any approach to implementation of Component 3 must start with identification of trans-boundary flood issues. VNMC cautioned that international “best” practices examined be appropriate, relevant and cost-effective and expressed a preference for a “hands-on” approach. VNMC suggested that the States could run the pilot projects themselves with the benefit of technical assistance from or facilitation by MRCS.

Cambodia National Mekong Committee (CNMC) expressed the view that bilateral arrangements would not be very effective and stated a preference for the resolution of

disputes under a mandated procedure developed under the auspices of MRC. As for terminology, CNMC preferred a "framework for resolution of differences," rather than "mediation."

LNMC agreed that implementation of Component 3 must start by identifying trans-boundary flood issues. LNMC expressed concern that it was not clear that the facility of good offices is really available at the moment or that it would be very effective. LNMC expressed a preference for the development of technical guidelines rather than a formal procedure. There was concern that the scope of any mediation framework adopted was not clear. As there is already a number of new WUP procedures on paper, their precise applications are not yet fully understood; thus, it is not clear that another new dispute resolution procedure would be required. LNMC suggested that Component 3 start with a pilot project(s) to identify real trans-boundary flood issues using a "hands-on" approach, but stressed that suitable pilot projects would be very difficult to identify and that they must identify real issues where adequate information is available.

3 Main Conclusion of the Workshop

- Modify the Component 3 document
- Maintain the 3-track approach in principle, however adjust timings and priorities
- Change the title *Mediation of TB Flood Issues* to *Enhancing Cooperation in Addressing TB flood issues*
- Use the term *Framework for Addressing Differences (differences to be clarified)*
- Clearly identify principles for Mekong Cooperation in relation to TB flood issues
- Clear define the scope (refer to original document)

Include the suggested Outputs for Modified Component 3 document:

- Output 1: Identification of TB flood issues
- Output 2: Elaboration of Framework for Addressing Differences
- Output 3: Identification and Implementation of Pilot Projects (explain pilot project carefully)
- Output 4: Enhancing Related Competence
- Output 5: Enhancing the Technical Tools in Addressing TB Flood Issues

ANNEX 6: REFERENCES

- 1 Adamson, Peter. 2001. *The Potential Impacts of Hydropower Developments in Yunnan on the Hydrology of the Lower Mekong*. Halcrow Water.
- 2 Beach, Heather L., Jesse Hammer, J. Joseph Hewitt, Edy Kaufman, Anja Kurki, Joe A. Oppenheimer, and Aaron T. Wolf. 2000. *Trans-boundary Freshwater Dispute Resolution: Theory, Practice, and Annotated References*. United Nations University, Tokyo.
- 3 Burton, Campell. 2002. *Environmental Conflicts in the Mekong River Basin – Prevention and Resolution*. Mekong River Commission, Phnom Penh.
- 4 CARE International. 2001. *Risk Mitigation and Disaster Management among Rural Communities in Cambodia*. CARE International, Bangkok.
- 5 Dinar and Loehman, eds. 1995. *Water Quantity Management and Conflict Resolution. Institutions, Processes, and Economic Analyses*. Praeger: Connecticut.
- 6 Ehrlich, Anne H., Peter Gleick, and Ken Conca. 2000. "Resources and Environmental Degradation as Sources of Conflict." 50th Pugwash Conference On Science and World Affairs: "Eliminating the Causes of War", 3-8 August 2000 Queens' College, Cambridge, UK.
- 7 Hamner, Jesse H. and Aaron T. Wolf. 1998. *Patterns in International Water Resource Treaties: The Trans-boundary Freshwater Dispute Database*. Colorado Journal of International Environmental Law and Policy.
- 8 International Commission for the Protection of the Rhine (ICPR). 1998. *Action Plan for Flood Defense. International Commission for the Protection of the Rhine (ICPR)*. ICPR Secretariat, Koblenz, Germany.
- 9 International Soil Reference and Information Center (ISRIC), 1997. *The Assessment of the Status of Human-induced Soil Degradation in South and Southeast Asia*. ISRIC, Amsterdam.
- 10 Le Huu, Ti. "Potential Water Conflicts and Sustainable Management of International Water Resources Systems." ESCAP, Bangkok, In *Water for Peace: International Disputes and Examples*. UNESCO, publication forthcoming.
- 11 Le Huu, Ti. 2002. *Potential Water Conflicts and Sustainable Management of International Water Resources Systems*. ESCAP, Bangkok.
- 12 MRC. 1995. *MRC Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin*. Mekong River Commission, Phnom Penh.
- 13 MRC. 1995. *Rules of Procedures of the Joint Committee of the Mekong River Commission*. Mekong River Commission, Phnom Penh.
- 14 MRC. 1999. *Public participation in the Context of the MRC*. Mekong River Commission, Phnom Penh.
- 15 MRC. 2001. *MRC Strategic Plan 2001 to 2005*. Mekong River Commission, Phnom Penh.
- 16 MRC. 2001. *MRC Strategy on Flood Management and Mitigation*. Mekong River Commission, Phnom Penh.
- 17 MRC. 2001. *MRC Work Program 2002*. Mekong River Commission, Phnom Penh.
- 18 MRC. 2001. *Working Paper Cambodia. Preliminary Planning Phase Formulation of the Mekong River Commission Flood Management and Mitigation Strategy*. Mekong River Commission, Phnom Penh.
- 19 MRC. 2001. *Working Paper Lao PDR. Preliminary Planning Phase Formulation of the Mekong River Commission Flood Management and Mitigation Strategy*. Mekong River Commission, Phnom Penh.

- 20 MRC. 2001. *Working Paper Thailand. Preliminary Planning Phase Formulation of the Mekong River Commission Flood Management and Mitigation Strategy*. Mekong River Commission, Phnom Penh.
- 21 MRC. 2001. *Working Paper Vietnam. Preliminary Planning Phase Formulation of the Mekong River Commission Flood Management and Mitigation Strategy*. Mekong River Commission, Phnom Penh.
- 22 MRC. 2002. *First Annual Mekong Flood Forum, Proceedings from 23-24 April, 2002*. Mekong River Commission, Phnom Penh.
- 23 MRC. 2002. *Training in Legal Aspects of International Cooperation for Water Resources, Human Resources Section*. Mekong River Commission, Phnom Penh.
- 24 MRC. 2002. *Consultation Workshop on Formulation of a Regional Strategy for Flood Management and Mitigation in the Mekong River Basin Phnom Penh*. Mekong River Commission, Phnom Penh.
- 25 MRC. 2001. *Draft Report on National Consultation Workshops*. Mekong River Commission, Phnom Penh.
- 26 MRC. 2001. *MRC Strategy for Flood Management and Mitigation. Proceedings from the Regional Workshop 10 – 11 October, 2001*. Mekong River Commission, Phnom Penh.
- 27 MRC. 2002. *International Expert Meeting on Early Warning for the Mekong river, 27 February- 1 March 2002*. Mekong River Commission, Phnom Penh.
- 28 MRC. 2002. *Proceedings of National Consultations Workshops in Cambodia, Lao, Thailand and Vietnam (August-September 2002) on the Formulation of FMMSIP*. Mekong River Commission, Phnom Penh.
- 29 MRC. 2002. *Proceedings of the Regional Workshop on the Formulation of the FMMP (21-22 October, Phnom Penh)*. Mekong River Commission, Phnom Penh.
- 30 MRC. 2006. *Proceeding of National Consultation Meetings on the Implementation of FMMP Component 3*. CNMC, Phnom Penh 18/8/2006; LNMC, Vientiane 21/8/2006, TNMC, Bangkok 23/8/2006 and VNMC, Ho Chi Minh City, 11/9/2006, Mekong River Commission, Vientiane.
- 31 MRC. 2006. *Proceeding of Regional Consultation Workshop on the Implementation of FMMP Component 3*. VNMC, Ho Chi Minh City, 19/10/2006, Mekong River Commission, Vientiane.
- 32 MRC. 2002. *Proceedings of the Regional Consultation Workshop on Public Participation in MRC*. Mekong River Commission, Phnom Penh.
- 33 MRC. 2002. *Basin Development Plan. Inception Report*. Mekong River Commission, Phnom Penh.
- 34 MRC. 2002. *MRC Core Programme Report, Program Work Plans. Environment Program, Annual Work Plan for January-December 2002*. Mekong River Commission, Phnom Penh.
- 35 National Committee for Disaster Management. 2001. *Report on the Capability and Capacity of NCDM; Five Year Institutional Development Strategy of NCDM, Two-Year Plan of Action for NCDM Development*. National Committee for Disaster Management, Phnom Penh.
- 36 ODI/Euroconsult. 2001. *Trans-boundary Water Management as an International Public Good*.
- 37 Penning de Vries, F.W.T., F. Agus and J. Kerr., eds. 1998. *Soil Erosion at Multiple Scales. Principles and Methods for Assessing Causes and Impacts*. CABI Publishing.
- 38 Ratner, Blake D. 2000. *Watershed Governance: Livelihoods and Resource Competition in the Mountains of Mainland Southeast Asia*. World Resources Institute, Washington D.C.
- 39 Ringler, Claudia. 2001. *Optimal Water Allocation in the Mekong River Basin*. ZEF – Discussion Papers on Development Policy No. 38., Center for Development Research, Bonn.
- 40 Swedish Ministry of Foreign Affairs. 2002. *Financing Trans-boundary Water Management*. Development Financing. Policy Brief Jan/02.

- 41 UNEP. 2002. *Impact Study: The Asian Brown Cloud: Climate and other Environmental Impacts*. UNEP, The Hague.
- 42 United Nations. 2000. *Principles and Practices of Water Allocation Among Water- Use Sectors*. Water Resources Series No. 80. United Nations: New York.
- 43 USAID. 2006. *The USAID Work Plan on Joint Programme of Cooperation: MRC Trans-boundary Conflict Management Initiative*. USAID, Bangkok.
- 44 Vietnam Ministry of Agriculture and Rural Development. 2001. *Second National Strategy and Action Plan for Disaster Mitigation and Management in Vietnam – 2001 to 2020*. Government of Vietnam, Ministry of Agriculture and Rural Development, Central Committee for Flood and Storm Control, Hanoi.
- 45 Webster, D. and Ti Le Huu. 2001. *Guidelines on Strategic Planning and Management of Water Resources*. ESCAP, Water and Mineral Resources Section, Environment and Natural Resources Development Division, Bangkok.
- 46 Wolf, Aaron T. 1998. *Conflict and Cooperation along International Waterways*. Water Policy, Vol. 1 (2), 1998. pp. 251-265.
- 47 Wolf, Aaron. 2000. *Indigenous Approaches to Water Conflict Negotiations and Implications for International Waters*. International Negotiation: A Journal of Theory and Practice. December 2000.
- 48 Wolf, Aaron T. 1999. *Criteria for Equitable Allocations: The Heart of International Water Conflict*. Natural Resources Forum. Vol. 23(1), February 1999. pp. 3-30.
- 49 World Resources Institute (WRI), 2002. *Trans-boundary Environmental Governance. Principles and Practices in Mainland Southeast Asia*. World Resources Institute (WRI), Washington D.C.
- 50 World Resources Institute (WRI), 2002. *Environmental Accountability Beyond the Nation-State: The Implications of the Aarhus Convention*. World Resources Institute (WRI), Washington D.C.
- 51 Yoffe, S. and G. Fiske. 2002. *Use of GIS for Analysis of Indicators of Conflict and Cooperation over International Freshwater Resources. Draft*. Water Policy.
- 52 Yoffe, Shira, Brian S. Ward, and Aaron T. Wolf. 2002. *The Trans-boundary Freshwater Dispute Database Project Tools and Data for Evaluating International Water Conflict*. http://www.trans-boundarywaters.orst.edu/publications/tools_data/
- 53 Yoffe, Shira and Brian Ward. 1999. *Water Resources and Indicators of Conflict: A Proposed Spatial Analysis*. Water International, Vol. 24(4).
- 54 MRC 2002, *Working Paper 1 On Preliminary Trans-boundary Analysis*, Mekong River Commission, Phnom Penh.
- 55 MRC 2002, *Working Paper 2 Reference Materials for National Consultation Meetings to be held by NMCs (Annexes to CEO's letter dated February 5, 2001)*, Mekong River Commission, Phnom Penh.
- 56 MRC 2002, *Working Paper 3 On Suggested Indicators for Trans-boundary Analysis and on Environmental Flows*, Mekong River Commission, Phnom Penh.
- 57 MRC 2002, *Working Paper 4 On the Nature of the Issues Identified by the National Consultation Meetings*, Mekong River Commission, Phnom Penh.
- 58 MRC 2002, *Working Paper 5 On Public / Stakeholder Participation*, Mekong River Commission, Phnom Penh.
- 59 MRC 2002, *Working Paper 6 On Modelling some Socio-economic impacts*, Mekong River Commission, Phnom Penh.
- 60 MRC 2002, *Working Paper 7 On Impact Indicators*, Mekong River Commission, Phnom Penh.