Mekong River Commission

Mekong Integrated Water Resources Management Project
(M-IWRMP)

Final Project Proposal
Transboundary cooperation between
Cambodia and Viet Nam:
Integrated Water Resources Management in the
Mekong Delta

MRC Secretariat at Vientiane, Lao PDR
24 May 2014
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1 Introduction

During 2000-2008, the MRC implemented the Water Utilization Programme (WUP) that developed basin models, procedures and technical guidelines to implement the 1995 Mekong Agreement. The WUP was considered successful but incomplete, as highlighted in its Evaluation and the Mid-term Review of the MRC Strategic Plan 2006-2010. To ensure a follow-up and sustainability - especially regarding the implementation of pending procedures and finalization of technical guidelines - the Mekong IWRM Project (M-IWRMP) was formulated and is under implementation since 2010.

The M-IWRMP aims to institutionalize IWRM approaches and principles in the LMB region via the MRC framework and its countries. The Project addresses IWRM challenges in the LMB through a three-tier approach, combining interlinked basin, national and transboundary initiatives. Therefore, the project consists of three respective components: regional, national and transboundary. The regional component sits at the project’s apex, and provides the overall framework of principles, procedures and guidelines for IWRM. The transboundary component is framed and closely linked to both the regional and national M-IWRM components. The transboundary component foresees the implementation of several bilateral projects that practically enable applied IWRM implementation between the countries in order to contribute to future regional collaboration. In general, the Project components complement each other in improving the functioning of the institutional framework, in building knowledge and improving decision-making processes for the sustainable development of water and related resources. Respective tasks and activities are performed in close cooperation with all LMB countries and the MRC Programmes to make best use of existing expertise and to fulfil the Project’s integrative role.

2 Project Preparation

The project document has gone through a broad participatory process from its conceptualisation, to formulation and preparation. This process help to collect, consolidate, and balance the interests, concerns and needs of the key stakeholders in the selected river basins and subsequent commitments to the Project implementation. Table 1 summarises key events in the proposal preparation.

<table>
<thead>
<tr>
<th>Event</th>
<th>Key discussions and decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14 July 2011 M-IWRMP Transboundary workshop, (Siem Reap, Cambodia)</td>
<td>A concept note was discussed as the basis for the development of the draft project proposal. The participating representatives of the two countries of Cambodia and Viet Nam agreed on the basic principles and content of the concept note.</td>
</tr>
<tr>
<td>1st draft PD and PIP</td>
<td>The draft proposal was submitted to the M-IWRMP on 2 September 2011 for their consideration.</td>
</tr>
<tr>
<td>National Consultation</td>
<td>This draft project proposal was circulated to Cambodia and Viet Nam to enable national consolidation. Comments was integrated and</td>
</tr>
</tbody>
</table>
3 Rationale

The LMB Countries are planning to increase irrigated agriculture, improve navigation, reduce flood damage, and improve the public water supply. Agriculture is the most dominant water related sector. However, expansion of the present levels of irrigation is limited by unavailability of dry season flows. Navigation is an important sector but largely undeveloped in the sense that it follows informal patterns and so far, is not an integrated part of the transport sector.

A range of factors is driving this development. The drivers include a complex mix of: energy demand, energy prices, and quests for national energy security; food security concerns exacerbated by the recent spike in food prices; flows of private capital; and trends towards large infrastructure investment. In addition, concern over climate change is a major justification for renewable hydro electricity. At the basin level, the financial attractiveness of the hydropower development on the mainstream in the LMB is enhanced by the large storage dams that are being developed in the Upper Mekong Basin. At the national level, the Governments increasingly recognise that developing some of the economic potential of the water resources in the Mekong Basin for hydropower, navigation, irrigation, and flood management can contribute to increasing economic growth, alleviating poverty, improving livelihoods, and meeting the Millennium Development Goals.

Accelerating water resources development in the Mekong Basin needs to be complemented by effective as well as integrated management of water and related resources to ensure that development of the water resources (i) is sensitive to the maintenance of vital as well as functioning ecosystems and productivity of capture fisheries, on which most of the poor depend for their livelihoods and (ii) becomes a negotiated integration process, which synthesises the differing positions and conflicting interests of the various countries, sectors and populations. This will require an improvement in the application of IWRM principles and practices at basin-wide level and cross boundaries.

Basically all of these planned initiatives calls for increased transboundary dialog to ensure future sustainable use of the joint water resources, to the benefit of all the Mekong countries.

4 Background

The Mekong Delta, which is subject of this project proposal, is located in the Southwest of the Mekong River Basin in two countries, Cambodia in the upper and Viet Nam in the lower. This Mekong Delta located largely in Southern Viet Nam and discharges via its Delta arms into the

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-IWRMP PSC 5th meeting</td>
<td>On 6th November 2013 the 5th M-IWRMP PSC approved the proposal.</td>
</tr>
<tr>
<td>11-12 September 2013 M-IWRMP Transboundary workshop (Siem Reap, Cambodia)</td>
<td>The countries (Viet Nam and Cambodia, and M-IWRMP PMCU discussed the proposal and prepared the first draft Joint PD and JS-PIP.</td>
</tr>
<tr>
<td>10-11 February 2014 Ho Chi Minh City</td>
<td>The countries, Viet Nam and Cambodia, and M-IWRMP PMCU discussed and agreed on the final Joint PD and JS-PIP.</td>
</tr>
</tbody>
</table>
East Sea of Viet Nam (see Figure 1). The Delta takes a significant role in the LMB regarding many social, economic, cultural and environmental factors in both countries.

Agriculture and aquaculture play a key role for livelihoods and the Mekong Delta is one of the best rice growing regions of the world as well as the biggest rice growing area of Viet Nam. Further, the biological and abiotic variety – including biodiversity, geographical, topographical and climate patterns – is very high and can be considered of basin-wide importance for the Mekong region as well as globally unique. Integrated Water Resources Management (IWRM) plays an important role to assess possible human impacts on the environment and to ensure regional sustainability.

**Catchment area**

The Delta begins at Phnom Penh where the Mekong River splits into two main distributary channels: the Mekong and Bassac rivers (see Figure 2), which further downstream split into nine smaller channels that discharge into the East Sea of Viet Nam. The Delta plain can be divided into two regions: the inner delta plain located upstream and dominated by fluvial (river) processes, and the outer delta plain located nearer the sea and subject to marine processes such as the influence of tides, waves and ocean currents. The outer delta is of slightly higher elevation than the inner delta due to the formation of sand dunes and ridges near the coast.

Taking into account various citations and documented figures, it seems difficult to define a strict area of the Mekong Delta due to its topographical characteristics and its changing hydrological borders during the dry and wet seasons.

According to MRC (2011) the Mekong Delta plain covers an area of 62,520 km² versus the whole Mekong river basin of 795,000 km² (See Figure 3). Out of the Delta plain area of 62,520 km², the Cambodian Delta covers 23,346 Km² and Viet Nam Delta covers 35,158 km² (MRC 2011). Both estimates are shown in Table 2

<table>
<thead>
<tr>
<th>Viet Nam</th>
<th>Cambodia</th>
<th>Total Mekong Delta Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area in km²</td>
<td>Area in %</td>
<td>Area in km²</td>
</tr>
<tr>
<td>35,158</td>
<td>56 %</td>
<td>23,346</td>
</tr>
</tbody>
</table>

The coastline of the Mekong Delta extends to around 650 km, of which about 350 km flank the East Sea of Viet Nam, and 300 km the Gulf of Thailand (UNEP, 2006).
Figure 1: Map of the Mekong Delta
Figure 2: Cambodia part of Mekong Delta with planning zones
Figure 3 Mekong River Basin and Mekong Delta (VNMC 2005)
**Discharge**

The total annual discharge from the Mekong is about 450 billion cubic metres with an average annual discharge of 13,700 m$^3$/s (Phuong, 2007; KOICA, 2000). 4.5% of the total annual discharge is generated within the Mekong Delta.

The discharge differs a lot between dry and wet seasons. During the wet season, the average discharge can peak up to 25,400 m$^3$/s causing substantial flood areas and extending the size of the Mekong Delta significantly in comparison to the dry season. Every year 1 to 1.2 million hectares are submerged for 5,940,106 due to the flooding with a flood depth of 2 to 3 m.

During the dry season the situation is different and the tidal influence of the sea extends throughout most of the Mekong Delta. This means, that seawater enters the arms of the Delta and intrudes into a range of 40-60 km upstream (Wolanski et al, 1998) impacting the physico-chemical character of the water resources as well as livelihoods to a certain degree.

**Population**

Regarding the population of the Mekong Delta, it can be said that it is the most densely populated area of the Mekong River Basin. Almost 22% (17 million people) of Viet Nam’s overall population and about 2.4 million Cambodians live in the Mekong Delta (Berg et. al, 2006). The population growth rate is indicated with 2.5%.

The inhabitants of the Mekong Delta region are largely people of Cambodia and Viet Nam and in each country are ethnic people include Viet, and Khmer minority populations living primarily in the Trà Vinh, Sóc Trăng, and Muslim Chăm in Tan Chau, by An Giang provinces.

**Provinces**

A large number of the Viet Namese provinces and city is located in the Mekong Delta (Long An, Tien Giang, Dong Thap, Ben Tre, Ca Mau, Trà Vinh, Soc Trang, Bac Lieu, Hau Giang, An Giang, Kien Giang, Vinh Long provinces and Can Tho City) and hence makes it a very important region not only due to socio-economic factors.

Cambodia provinces in the Mekong Delta: Takeo, Prey Veng, Svay Rieng, Kandal, Kampong Speur, Kampong Cham, Phnom Penh and Kratie

As indicated by the cooperating countries and taking the transboundary dimension of the Mekong Delta into account, this project intends to specifically address four provinces of Viet Nam and four Cambodian provinces (see Table 3).

<table>
<thead>
<tr>
<th>4 Viet Nam Provinces of Transboundary Importance</th>
<th>4 Cambodian Provinces of Transboundary Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Giang</td>
<td>Takeo</td>
</tr>
<tr>
<td>Kien Giang</td>
<td>Prey Veng</td>
</tr>
<tr>
<td>Dong Thap</td>
<td>Svay Rieng</td>
</tr>
<tr>
<td>Long An</td>
<td>Kandal</td>
</tr>
</tbody>
</table>

**Integrated Water Resources Management issues and future transboundary cooperation**

Transboundary and integrated water resources management in the Mekong Delta faces several issues and challenges including environmental pollution, eutrophication, continuing deforestation, soil erosion, over-cultivation regarding agriculture and aquaculture all causing environmental impacts. In addition, existing infrastructure and future developments regarding
flood control, droughts, navigation, land use, aquaculture and agriculture but also other issues represent key water management issues especially in relation to possible negative impacts on the environment and livelihoods. Such impacts may include alterations of the rivers’ flow regimes, sediment and nutrient transport, river ecology, fisheries and livelihoods.

Viet Nam and Cambodia share the Mekong Delta. In both countries the delta is a significant area with huge socio-economic importance, and the transboundary dimension and respective management issues are highly relevant. In general, strengthened and joint approaches are needed to establish as well as implement suitable and sustainable mechanisms for transboundary water resources management and decision making taking into account water resources management issues in particular relevant for the Mekong Delta.

The transboundary approach between Cambodia and Viet Nam - as part of this project - aims to enhance dialogue and collaboration towards harmonized water resource management and future investment in the Mekong Delta. Therefore, this project proposal focuses on the identification of Transboundary Significant Water Management Issues (SWMI) in the Mekong Delta in order to strengthen effective cooperation between Cambodia and Viet Nam. The established transboundary dialogue, the knowledge and common understanding on significant joint management issues will form the basis for the future development of a joint, transboundary river basin monitoring (RBM) plan.

5 Project Objective

5.1 Overall objective

The overall aim of the transboundary projects under the Mekong IWMR (M-IWRMP) project is to enhance dialogue between the LMB countries. The Overall Objective of this transboundary project is formulated as:

*The IWRM-based transboundary cooperation and dialogue between Cambodia and Viet Nam in the Mekong Delta, focusing at provincial and basin level, is improved*

The cooperation and dialog shall take into account aspects of effective data and information processing and sharing as well as the implementation of the 1995 Mekong Agreement and MRC Procedures and IWRM principles in order to develop a joint Mekong Delta Monitoring Plan in the future.

5.2 Specific objectives

(i) Transboundary Significant Water Management Issues in the Mekong Delta between Cambodia and Viet Nam is identified.

(ii) An effective transboundary data and information processing and sharing mechanism between Cambodia and Viet Nam is established.

(iii) An effective IWRM-based transboundary dialogue between Cambodia and Viet Nam for a future transboundary river basin monitoring plan in the Mekong Delta is established.

6 Scope

This project document outlines the objective, outcomes, outputs, activities and cooperation framework of the M-IWRMP transboundary project between Cambodia and Viet Nam entitled “Transboundary cooperation between Cambodia and Viet Nam: Integrated Water Resources Management in the Mekong Delta”. A rough outline of this transboundary project is part of the M-IWRMP Inception Report as well as the World Bank Project Appraisal Document.
The overall aim of the project is to strengthen the transboundary dialog in the Mekong Delta on Water Resources Management issues. Dialog already exists to some degree, and the project will build on those experiences and mechanisms. The project will focus on identifying Significant Water Management Issues (SWMI) in the Mekong Delta that affect both countries. Specifically it is envisaged that the project will develop a joint monitoring programme based on the identified SWMIs.

The implementation and coordination mechanisms for the project are part of the dialogue between the countries, and will be developed during the life of the project. The final arrangements for dialogue will be part of the future dialogue processes. The project can be seen as a model for strengthening the dialogue between two countries on IWRM issues, and should be the basis for future dialogue on other IWRM issues.

This transboundary project will be implemented under the M-IWRMP World Bank grant that has been approved by the WB Board in the beginning of 2012.

7 Project Outcomes, Outputs and Key Activities

7.1 Project outcomes

Three outcomes will contribute to the achievement of the overall project objective:

Outcome 1: Transboundary Significant Water Management Issues identified and agreed.
The agreement is based on analysis and review of existing national, transboundary and international IWRM issues, principles, approaches, strategies as well as the up-to-date implementation of the 1995 Mekong Agreement and MRC Procedures for the Mekong Delta.

Outcome 2: Effective mechanism for knowledge and data and information processing and sharing functioning
Knowledge and data and information processing and sharing between Cambodia and Viet Nam on agreed Transboundary Significant Water Management Issues. The sharing mechanism covers Hydrometeorological data with possible extent to water quality, sediment, river health, etc. enables future transboundary cooperation between Cambodia and Viet Nam towards a joint Mekong Delta monitoring plan.

Outcome 3: Effective dialogue between Cambodia and Viet Nam on the Mekong Delta is taking place
A consolidated and effective transboundary dialogue mechanism between Cambodia and Viet Nam is in place towards a future Mekong Delta monitoring plan.

The three project outcomes consist of several outputs and activities, which are foreseen to be implemented and developed in parallel. However, the inter-linkage between the activities and outputs will be crucial to ensure the project’s objective is achieved. Therefore, potential synergies between them need to be exploited to the highest possible extent.

In addition, the use of already existing or current studies and information should be applied to prevent duplication of work as well as the cooperation with other M-IWRMP transboundary projects shall be aimed for during the implementation of this proposed project. Synergies shall be exploited to the highest possible extent.
This is highly relevant in relation to the transboundary project “Transboundary Cooperation between Cambodia and Viet Nam: IWRM in the Sesan and Srepok Sub-Basin”, which has been approved for implementation under the M-IWRMP as of October 2011. The project shows the same set-up and design of outcomes and outputs. The added value of parallel implementation of these two transboundary projects and learning from each other is seen as beneficial for both projects. In addition, the synergy oriented set-up of these two projects aims to ensure high effectiveness in the application and use of management approaches as well as capacities.

Further details regarding outcomes, outputs and activities can be found in Annex 1 (Project Logical Framework), Annex 2 (Key Project Activities) and Annex 3 (Project Implementation Plan).

### 7.2 Project outputs and activities

**Output 1.1: All relevant transboundary information for the Mekong Delta is reviewed, compiled and analysed as well as knowledge gaps are identified**

*Key Activities:*

1.1.1 Collect and compile information on water resource management and IWRM principles applied in the Mekong Delta including implementation activities under the MRC framework (e.g. 1995 Mekong Agreement and MRC Procedures implementation);

1.1.2 Analyse and review the collected material to extract relevant information on existing and potential transboundary IWRM issues, activities, tools, MRC Procedure implementation, approaches and strategies in the Mekong Delta between Cambodia and Viet Nam;

1.1.3 Identify knowledge/information gaps on baseline information including Hydromet;

1.1.4 Capacity Needs Assessment in relation to the Transboundary SWMIs

**Output 1.2: A risk assessment to identify and agree on transboundary Significant Water Management Issues (SWMI)**

*Key Activities:*

1.2.1 Perform a risk assessment to identify existing key pressures and impacts on the environment and livelihoods in Mekong Delta, as well as key future infrastructure development that may cause impacts and evaluate their transboundary relevance;

1.2.2 Based on the above, identify and agree on key transboundary Significant Water Management Issues (SWMI) for future management (e.g. flood, drought, sediment, water quality, irrigation, agriculture, fisheries, navigation and infrastructure and other related land use planning) and as basis of a joint Mekong Delta monitoring plan;

1.2.3 Analyse the transboundary SWMIs regarding 1995 Mekong Agreement and MRC Procedures and link these to the Procedures in relation to future management;
Outcome 2: Effective mechanism for knowledge and data and information processing and sharing functioning

Knowledge and data and information processing and sharing between Cambodia and Viet Nam on agreed Transboundary Significant Water Management Issues. The sharing mechanism covers Hydrometeorological data with possible extent to water quality, sediment, river health, etc. enables future transboundary cooperation between Cambodia and Viet Nam towards a joint Mekong Delta monitoring plan.

Output 2.1: Existing knowledge, data and information processing and sharing mechanisms are reviewed and respective needs for future transboundary cooperation defined

Key Activities:
2.1.1 Review existing mechanisms for knowledge, data and information processing and sharing.
   This shall including Hydrometeorological data with possible extent to water quality, sediment, river health, etc. (e.g. developed in the frame of the, MRC BDP, MRC Toolbox)
   This shall identify their relevance for future transboundary cooperation in order to make use of them to the highest possible extent and in the most cost effective way before developing new mechanisms;

2.1.2 Define the needs of Cambodia and Viet Nam regarding joint knowledge and data and information processing and sharing mechanism in relation to the agreed transboundary SWMIs

2.1.3 Identify possible improvement of relevant existing knowledge and data and information processing and sharing mechanisms.

Output 2.2: A knowledge and data and information processing and sharing mechanism for transboundary cooperation between Cambodia and Viet Nam in the Mekong Delta

Key Activities:
2.2.1 Identify the structure and mechanism for effective transboundary knowledge and data and information processing and sharing.
   This shall be analysed in relation to the agreed Transboundary SWMI including Hydrometeorological data with possible extent to water quality, sediment, river health, etc. in the Mekong Delta;

2.2.2 Develop a respective financial plan to implement the knowledge/data and information processing and sharing mechanism on the transboundary level;

2.2.3 Set-up and implement the knowledge and data and information processing and sharing mechanism.
   This shall be done in close cooperation with World Bank’s Activities on the regional Hydromet data and information processing and sharing;
Outcome 3: Effective dialogue between Cambodia and Viet Nam on the Mekong Delta is taking place

A consolidated and effective transboundary dialogue mechanism between Cambodia and Viet Nam is in place towards a future Mekong Delta Monitoring Plan

**Output 3.1: A consolidated and effective transboundary dialogue mechanism**

Key Activities:

3.1.1 Review current mechanism for transboundary dialogue;

3.1.2 Design the institutional and organisational arrangements of the joint transboundary dialogue in the Mekong Delta.

This shall be done in consultation with all stakeholders at relevant level, and shall define the types of meetings needed; formal and informal meetings; political, technical and community meetings etc.

3.1.3 Discuss and agree the mechanism of the joint transboundary dialogue.

For the different types of meetings (see 3.1.2) define their formats (frequencies of meeting, Chairmanship of meetings, number of participants, key agenda item)

**Output 3.2: An approach to develop the future transboundary Mekong Delta Monitoring Plan**

3.2.1 Propose, discuss and agree the content/structure for the Mekong Delta Monitoring Plan based on the agreed transboundary SWMIs.

3.2.2 Discuss and agree on the first river basin monitoring plan including a 3 year implementation plan;

8 Monitoring and Evaluation

The project implementation will be monitored through the workplan and the progress reports. The performance of the project implementation will be evaluated by indicators relevant to project objectives, outcomes and outputs, together with sources of data as given in the Design and Monitoring Framework (Annex 1). This framework is designed to be consistent with the MRCS M-IWRMP Performance Monitoring and Evaluation Framework – Final Handbook designed for all relevant MRCS Programmes implementation.

The Spreadsheet Database System for the Project Monitoring & Evaluating and Reporting will be developed during the project cycles through a participatory process involving stakeholders. Training in operating the M&E system will be given by the M-IWRMP/PCMU to the countries relevant stakeholders. The Monitoring and Evaluation system will be used for monitoring progress according to the periodic implementation plans and evaluate to what extent the project has achieved the objectives for the Mekong Delta in both countries.

9 Reporting

Reporting will follow the Performance Monitoring and Evaluation Framework – Final Handbook Chapter 3.

All management and progress reports shall be prepared jointly by the two participating countries. The two National Transboundary Consultants of both concerned countries will
coordinate the consolidation of the joint periodic reports. The lead editor responsibility of progress reports will rotate between the two concerned countries.

**Progress Reports:** The Framework requires progress reports as follows:

- Quarterly Activities Reports (QAR);
- Six monthly Outputs Reports (SOR) and Annual Outputs Report;
- Annual Outcomes Report (AOR);

Reporting will be against the joint set of Outcomes, Outputs, Activities and Indicators-Milestones.

The following project management reports will be produced:

**Inception Report:** Outlining the confirmed framework, Project Implementation Plan (PIP), implementation mechanisms, procedures, and agreed approach, and updated Design, Monitoring and Evaluation Framework. The agreed Project Document, Joint Single Project Implement Plan and first year detailed tasks and budget planning will constitute the Inception Report.

**Final report:** To consolidate the progress and achievements of the project and document the lessons learned from implementation of the transboundary projects.

### 10 Gender mainstreaming

MRC is committed to gender mainstreaming in all its activities. It is the aim of the MRC to ensure equal opportunities to women and men to be able to fully benefit from water related resources development and the equal participation of women and men in development activities is an important principle for all components.

The project will adhere to these goals and follow the M-IWRMP/MRCS Handbook on Gender Mainstreaming and Poverty Reduction Strategies

### 11 Timeline and budget

This transboundary project will be implemented over three years from 2014 to 2016. It will be financed through the M-IWRMP World Bank grant. The total budget will be US$ 354,000. As the nature of this project is such that both countries could justify spending more resources on the implementation it has been agreed, that the available funding will be shared equally between the two participating countries. The budget is distributed across the four outcomes as follows:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Budget (US$)</th>
<th>Key areas of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1: Transboundary Significant Water Management Issues identified and agreed.</td>
<td>141,500</td>
<td>Provide an overview on existing IWRM state-of-the-play and identify Significant Water Management Issues of transboundary relevance in the</td>
</tr>
</tbody>
</table>

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1. In draft, the final workshop to endorse this document is scheduled for March 2014
2. As there is a delay in starting the project, the duration of actual project implementation would extend beyond 2016 to 2017.
3. The budget figures will be detailed and adapted during the project’s inception phase.
and international IWRM issues, principles, approaches, strategies as well as the up-to-date implementation of the 1995 Mekong Agreement and MRC Procedures for the Mekong Delta.

**Outcome 2: Effective mechanism for knowledge and data and information processing and sharing functioning**

Knowledge and data and information processing and sharing between Cambodia and Viet Nam on agreed Transboundary Significant Water Management Issues. The sharing mechanism covers Hydrometeorological data with possible extent to water quality, sediment, river health, etc. enables future transboundary cooperation between Cambodia and Viet Nam towards a joint Mekong Delta monitoring plan.

**Outcome 3: Effective dialogue between Cambodia and Viet Nam on the Mekong Delta is taking place**

A consolidated and effective transboundary dialogue mechanism between Cambodia and Viet Nam is in place towards a future Mekong Delta Monitoring Plan.

**Program Management**

Management activities

### 12 Project implementation arrangements

The implementation of the transboundary project will be characterised by the three following key issues:

(i) The project implementation will be under the leadership of the two countries of Cambodia and Viet Nam. As stated above, the M-IWRMP PCMU and other relevant MRC Programmes will provide facilitating support whenever needed. This approach may as well be seen as an example for the MRC decentralization process when the MRC countries take a proactive implementation lead of IWRM activities while the MRCS facilitates and provides needed support.

(ii) The countries and the PCMU will ensure that the transboundary project will be implemented in line with the overall M-IWRM Project aims, objectives and activities. This includes that the relevant MRC Procedures and Technical Guidelines will be fully taken into account when needed and relevant to improve their implementation within the MRC framework on both the national and regional level. The implementation of the TB projects will be by the two countries with support from the NMC’s.

(iii) The transboundary project will be aligned with the national M-IWRMP activities under WB funding. Therefore, this project will exclusively focus on joint, bilateral and

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4 Defined in the Mekong IWRM Project Inception Report, September 2010
transboundary implementation of water resource management issues and will not duplicate any activities that are already implemented under the national component. However, synergies will be exploited to the highest possible extent.

The transboundary projects are implemented as part of the Mekong IWRM Project, and the management arrangements are aligned with the M-IWRMP procedures.

- **Inception Stage**: In close collaboration with the respective countries, the PCMU will support and facilitate the formulation of transboundary project proposals. The PCMU will play a leading formulation role in coordination with respective MRC Programme(s).

- **Approval**: The 5th PSC meeting of the M-IWRMP on 6th November 2013 approved the transboundary project. This final agreed revised PD and JS-PIP will be sent to the WB for comments and advice.

- **Implementation**: The M-IWRMP will, in coordination with both countries, organise a project launching and immediately thereafter the implementation of the project will start. The overall fiduciary management responsibilities remain in the MRCS as an executing agency and with the national implementing agency. While technical responsibilities is with the national implementing agency.

The project will be implemented at the national level by the two countries, Cambodia and Viet Nam. The involved organizations are outlined below.

Due to the transboundary character of this project both countries will have to ensure sufficient bilateral exchange to achieve the project objectives in a joint cooperation manner. The designated National M-IWRM Projects Coordinators (e.g. key representatives from participating NMCs, line agencies, other agencies) need to coordinate and implement activities jointly and ensure effective information as well as expertise exchange. This will be enabled through a transboundary coordination group and through regular working group meetings.

Progress, outcomes and implementation constraints will be reported to the M-IWRMP. The M-IWRMP Project Steering Committee will provide steering and guidance as needed.

The progress of the project will be assessed through the M-IWRMP but as well its own Monitoring and Evaluation System (see Annex 1).

### 12.1 National project coordination and implementation

**Involved institutions for Cambodia**

*National Project oversight*
Cambodia National Mekong Committee (CNMC)

*National project implementing agency:*
Leading agency: Ministry of Water Resource and Meteorology

Involved line agencies:
Ministry of Agriculture, Forestry and Fisheries
Ministry of Environment
Ministry of Industry, Mines and Energy
Other local agencies if needed

**Involved institutions Viet Nam**

*National Project Oversight:*
Viet Nam National Mekong Committee (VNMC)
National project implementing agency:
VNMC and Ministry of Natural Resources and Environment (MONRE)

Involved line agencies:
Ministry of Agriculture and Rural Development
Other central and local agencies if needed

Role of NMCs
The responsibilities of the NMCs are to facilitate, coordinate and/or lead the implementation of the project with relevant national NMC programmes, line agencies and M-IWRMP in their respective country. Financial management is the responsibility of the NMCs, under the MRC financial and procurement procedures and World Bank fiduciary procedures.

Role of the line agencies
The responsibilities of the line agencies are to assist the NMCs in the implementation of the project in accordance with approved work plans and budgets. This shall be done under coordination of the NMCs, and supported by the National Transboundary Project Consultant.

National Transboundary Consultant
According to the approved ToR of the National Transboundary Consultant.

12.2 The role of the M-IWRMP / MRCS
The M-IWRMP/MRCS will facilitate, coordinate to provide financial and technical supports for the transboundary project implementation.

Technical support, by ensuring linkages to other MRCS activities including inviting other MRCS programmes and/or countries to participate in certain workshops and other events

Transboundary coordination and cooperation is a crosscutting issue for all the MRC programmes, and many of them have specific activities in relation to this. The M-IWRMP will ensure technical and financial support and coordination from such initiatives.

Examples of such activities are
- The FMMP program regional component is discussing a Open Risk Modelling System
- The BDP programme is planning activities in Viet Nam under the title of: Development of suitable mechanisms for cooperation with Cambodia to successful implement the IWRM based Basin Development Strategy

12.3 Other M-IWRMP components
The National Component of the M-IWRMP for Viet Nam is particular important and the two projects shall be closely coordinated through the VNMC and the MRCS. This component has activities on River Basin Organisation and Monitoring Programs. There will be an opportunity to create synergy between the Transboundary Project and the National Project for mutual benefits.
12.4 Transboundary Coordination M-IWRMP

This Transboundary Project aims at enhancing the dialogue between the participating countries. It is therefore imperative that strong emphasis is put on transboundary coordination, both between the respective countries about this transboundary project, but also between this project and other relevant activities in the region.

At a strategic management level the M-IWRMP Steering Committee and Project Management and Coordination Unit will provide the coordination to other transboundary projects and other MRC programmes. At the implementation level the following transboundary arrangements will be utilised to ensure coordination and exchange of practical experiences.

Transboundary Coordination Group (TCG)

The purpose of this group is to manage this transboundary project. More specifically it is to ensure synergy and experience exchange between the two countries involved in this project; and to facilitate coordination with other projects at the guidance of the M-IWRMP PSC and PCMU. The TCG shall discuss issues arising from the implementation and agree on joint solutions to joint problems.

This group will meet every 6 months, on the invitation of the M-IWRMP/PMCU. Participation in the group will be M-IWRMP/PMC, NMC and National Tb Consultants and other relevant stakeholders directly involved in the implementation of the project.

The Group will discuss progress and update the rolling one-year action plan. Including six monthly detailed tasks and budget plan, and indicative annual detailed tasks and budget plan.

The TCG will prepare the Joint Progress Report. The Joint Progress Report will be drafted by the National Tb Consultant for each country, and consolidated into one joint report before submission to the M-IWRMP. One country will take lead in consolidating the joint progress report on a rotational basis. Figure 4 shows the institutional arrangement for project implementation.
13 Linkages with Regional Context

Annual Regional Reflection Workshops

These annual regional reflection workshops will be organised once a year by the M-IWRMP, and include representatives from all the transboundary projects, and other similar initiatives from other MRC programmes.

The purpose of the workshop is exchange/share the experience and lessons learnt from the project implementation. These lessons learnt will be used for planning next years project implementation.

The meetings will be focussed on a relevant theme relating to transboundary IWRM dialogue and Lake management dialogue and they will include participation from the practical implementation level from relevant stakeholders even outside the Mekong.

This regional activity will be financed outside the TB projects budgets.
14 Financial arrangements

Management of finances and logistics for the Project will be undertaken by the CNMC and VNMC. One imprest account each will be opened by CNMC and VNMC for disbursement of project funds.

The bank account (a current account) shall be established at an MRC approved bank. The bank account should be named “MRC – (project) – (location)”.

M-IWRMP PCMU of the MRCS will transfer based on the approved JS-PIP. The maximum amount that can be held in the imprest account (ceiling) is 2.5 x the average monthly budget in the JS-PIP year one.

The first transfer will be maximum the ceiling amount. Following transfers will be on the basis of expenditure statement from the NMC and will replenish the imprest account to the maximum ceiling. Monthly imprest accounts report including expenses and possible income for the previous month should be forwarded to the MRCS for replenishment no later than the 5th of every month.

The account and the funds shall be managed according to the MRC Finance Manual, particularly Chapter 5 Accounts, Part 1 Imprest Account page 34 to 43.

Only expenses directly related to the approved work plans and the imprest account budget can be charged to the imprest account.
## Annex 1) Project Logical Framework

<table>
<thead>
<tr>
<th>Objective, Outcomes and Outputs</th>
<th>Indicators</th>
<th>Source of Data</th>
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</thead>
<tbody>
<tr>
<td><strong>Project Overall Objective:</strong> The IWRM-based transboundary cooperation and dialogue between Cambodia and Viet Nam in the Mekong Delta, focussing at provincial and basin level is improved.</td>
<td>Extent (%) of cumulative achievement of outcomes and outputs monitored and evaluated below. Enhanced transboundary dialog between Cambodia and Viet Nam</td>
<td>TB project progress reports of national agencies. M-IWRMP M&amp;E and progress reports.</td>
</tr>
<tr>
<td><strong>Outcome 1:</strong> Transboundary Significant Water Management Issues identified and agreed.</td>
<td><strong>OI 1.1</strong> Number of information products compiled (possibly by category) and reviewed in each country and compilation in to one overview report completed. <strong>OI 1.2</strong> Significant Water Management Issues are agreed by the cooperating countries of Cambodia and Viet Nam to be part of a future Mekong Delta Monitoring Plan.</td>
<td>TB project progress reports of national agencies. M-IWRMP M&amp;E and progress reports.</td>
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<tr>
<td><strong>Outcome 2:</strong> Effective mechanism for knowledge and data and information processing and sharing functioning.</td>
<td><strong>OI 2.2</strong> Number (#) by category (%), of established databases that are shared between the cooperating countries of Cambodia and Viet Nam (e.g. SWMIs).</td>
<td>TB project progress reports of national agencies. M-IWRMP M&amp;E and progress reports.</td>
</tr>
<tr>
<td><strong>Outcome 3:</strong> Effective dialogue between Cambodia and Viet Nam on the Mekong Delta is taking place.</td>
<td><strong>OI 3.1</strong> Number (#) and quality (%) of local/national and transboundary dialogue events, which address sustainable transboundary water resource management and development in the Mekong Delta.</td>
<td>M-IWRMP M&amp;E and progress reports TB project progress reports of national agencies</td>
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</table>

### Outputs

**Outputs leading to Outcome 1**

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Indicators</th>
<th>Source of Data</th>
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<tbody>
<tr>
<td><strong>Output 1.1:</strong> All relevant transboundary information for the Mekong Delta is reviewed, compiled and analysed as well as knowledge gaps are identified</td>
<td><strong>I 1.1.1</strong> Number of information products compiled (possibly by category such as transboundary issues in the sub-basin, existing cooperation, international river basin management etc.), reviewed in each country and relevant transboundary for the Mekong Delta is compiled in one transboundary overview report.</td>
<td>National progress reports M-IWRM information; monitoring and progress reports</td>
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<tr>
<td><strong>I 1.1.2</strong> Number of gaps identified for each category</td>
<td>National progress reports M-IWRM information; monitoring and progress reports</td>
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5 This logical framework should be detailed and further developed during the inception phase of this transboundary project.
6 In order to making use of these indicators for M&E purposes, for each indicator a baseline value and several (possibly annual) target values will have to be established.
<table>
<thead>
<tr>
<th>Output 1.2: <strong>A risk assessment to identify and agree on transboundary Significant Water Management Issues (SWMI)</strong></th>
<th><strong>I 1.2.1</strong> Risk assessment on existing and future pressures/impacts in the Mekong Delta completed – overview on factual transboundary issues in place.</th>
<th>National progress reports M-IWRM information; monitoring and progress reports</th>
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</thead>
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<tr>
<td></td>
<td><strong>I 1.2.2</strong> Transboundary Significant Water Management Issues (SWMI) for joint future management agreed between Cambodia and Viet Nam.</td>
<td>National progress reports M-IWRM information; monitoring and progress reports</td>
</tr>
</tbody>
</table>

**Outputs leading to Outcome 2**

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<tr>
<th>Output 2.1: <strong>Existing knowledge and data and information processing and sharing mechanisms are reviewed and respective needs for future transboundary cooperation defined</strong></th>
<th><strong>I 2.1.1</strong> Overview on existing knowledge and data and information processing and sharing mechanism (yes/no)</th>
<th>National progress reports M-IWRM information; monitoring and progress reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>I 2.1.2</strong> Needs for future transboundary knowledge and data and information processing and sharing/management mechanism identified (yes/no)</td>
<td>National progress reports M-IWRM information; monitoring and progress reports</td>
</tr>
</tbody>
</table>
| Output 2.2: **A knowledge and data and information processing and sharing mechanism for transboundary cooperation between Cambodia and Viet Nam in the Mekong Delta.** | **I 2.2.1** Existence of a transboundary knowledge and data and information processing and sharing/management mechanism (yes/no) | National progress reports  
M-IWRM information; monitoring and progress reports |
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<td></td>
<td><strong>I 2.2.2</strong> Transboundary knowledge and data and information processing and sharing/management mechanism test implemented (yes/no)</td>
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<td><strong>Outputs leading to Outcome 3</strong></td>
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</table>
| **Output 3.1: A consolidated and effective transboundary dialogue mechanism** | **I 3.1.1** Existence of transboundary dialogue on management issues (yes/no) | National progress reports  
M-IWRM information; monitoring and progress reports |
| | **I 3.1.2** Existence of transboundary cooperation mechanism including institutional/organizational structures (yes/no) | National progress reports  
M-IWRM information; monitoring and progress reports |
| **Output 3.2 An approach to develop the future transboundary Mekong Delta Monitoring Plan** | **I 3.2.1** Existence of objectives, a table of contents (based on the identified SWMIs) and a financial plan for a future transboundary Mekong Delta Monitoring Plan between Cambodia and Viet Nam (yes/no) | National progress reports  
M-IWRM information; monitoring and progress reports |
| | **I 3.2.2** Agreement on the development a future transboundary river basin monitoring plan between Cambodia and Viet Nam outlining timeline, objectives and next steps (yes/no) | National progress reports  
M-IWRM information; monitoring and progress reports |
### Key Project Activities

<table>
<thead>
<tr>
<th>Activities/ Outputs/Outcomes</th>
<th>Staff responsible</th>
<th>Milestones</th>
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</thead>
<tbody>
<tr>
<td><strong>Outcome 1: Transboundary Significant Water Management Issues identified and agreed.</strong></td>
<td></td>
<td><strong>Key Product</strong></td>
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<tr>
<td>Output 1.1: All relevant transboundary information for the Mekong Delta is reviewed, compiled and analysed as well as knowledge gaps are identified</td>
<td></td>
<td><strong>Completion date</strong></td>
</tr>
<tr>
<td>Activity 1.1.1: Collect and compile information on water resource management and IWRM principles applied in the Mekong Delta including implementation activities under the MRC framework (e.g. 1995 Mekong Agreement and MRC Procedures implementation)</td>
<td></td>
<td><strong>Report/Working Paper</strong></td>
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<tr>
<td>Activity 1.1.2: Analyse and review the collected material to extract relevant information on existing and potential transboundary IWRM issues, activities, tools, MRC Procedure implementation, approaches and strategies in the Mekong Delta between Cambodia and Viet Nam</td>
<td></td>
<td><strong>Compiled report/review</strong></td>
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<tr>
<td>Activity 1.1.3: Identify knowledge/information gaps on baseline information including Hydromet</td>
<td></td>
<td><strong>Analyses/Report on existing and potential transboundary IWRM issues</strong></td>
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<tr>
<td>Activity 1.1.4 Capacity Needs Assessment in relation to the Transboundary SWMIIs</td>
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<td><strong>Report on gaps</strong></td>
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<tr>
<td>Output 1.2: A risk assessment to identify and agree on transboundary Significant Water Management Issues (SWMI)</td>
<td></td>
<td><strong>Technical Report</strong></td>
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<tr>
<td>Activity 1.2.1: Perform a risk</td>
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<td><strong>Risk assessment report</strong></td>
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</table>

**Key Product:**
- Report/Working Paper
- Working Paper
- Compiled report/review
- Analyses/Report
- Technical Report
- Risk assessment report

**Completion date:**
- 07/2014-03/2015
- 9/2014
- 7/2014
- 7/2014
- 7/2014
- 09-10/2014
- 1/2015
- 8/2014
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<tr>
<td></td>
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<tr>
<td>assessment to identify existing key pressures and impacts on the environment and livelihoods in Mekong Delta as well as key future infrastructure development that may cause impacts and evaluate their transboundary relevance</td>
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<tr>
<td>Activity 1.2.2: Based on the above, identify and agree on key transboundary Significant Water Management Issues (SWMIs) for future management (e.g. flood, drought, sediment, water quality, irrigation, agriculture, fisheries, navigation, and infrastructure and other related land use planning) and as basis of a joint Mekong Delta monitoring plan.</td>
<td></td>
<td>Scoping Report Identified/ agreed SWMIs</td>
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<tr>
<td>Activity 1.2.3: Analyse the transboundary SWMIs regarding 1995 Mekong Agreement and MRC Procedures and link these to the Procedures in relation to future management</td>
<td></td>
<td>Consensus</td>
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<tr>
<td>Outcome 2: Effective mechanism for knowledge and data and information processing and sharing functioning</td>
<td></td>
<td>Mechanism Reviewed and Updated</td>
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<tr>
<td>Output 2.1: Existing knowledge and data and information processing and sharing mechanisms are reviewed and respective needs for future transboundary cooperation defined</td>
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<tr>
<td>Activity 2.1.1 Review existing mechanisms for knowledge and data and information processing and sharing.</td>
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<td>Overview report</td>
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<tr>
<td>Activity 2.1.2 Define the needs of Cambodia and Viet Nam</td>
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<td>Report on data needs</td>
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<tr>
<td>Activities/ Outputs/Outcomes</td>
<td>Staff responsible</td>
<td>Milestones</td>
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<tr>
<td>regarding joint knowledge and data and information processing and sharing mechanism in relation to the agreed transboundary SWMIs.</td>
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<td>and improvement</td>
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<tr>
<td>Activity 2.1.3: Identify Possible improvement of relevant existing knowledge and data and information processing and sharing mechanisms</td>
<td></td>
<td>Report on data needs and improvement</td>
</tr>
<tr>
<td>Output 2.2: A knowledge and data and information processing and sharing mechanism for transboundary cooperation between Cambodia and Viet Nam in the Mekong.</td>
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<tr>
<td>Activity 2.2.1 Identify the structure and mechanism for effective transboundary knowledge and data and information processing and sharing</td>
<td></td>
<td>Workshops/agreed structure</td>
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<tr>
<td>Activity 2.2.2: Develop a respective financial plan to implement the knowledge/data and information processing and sharing mechanism on the transboundary level.</td>
<td></td>
<td>Financial plan</td>
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<tr>
<td>Activity 2.2.3 Set-up and implement the knowledge and data and information processing and sharing mechanism</td>
<td></td>
<td>Implementation process</td>
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<tr>
<td><strong>Outcome 3: Effective dialogue between Cambodia and Viet Nam on the Mekong Delta is taking place</strong></td>
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<tr>
<td>Output 3.1: A consolidated and effective transboundary dialogue mechanism</td>
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<td>Process/Approach</td>
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<tr>
<td>Activity 3.1.1 Review current mechanism for transboundary dialogue</td>
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<td>Scoping Report/</td>
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<td>Activities/ Outputs/Outcomes</td>
<td>Staff responsible</td>
<td>Milestones</td>
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<td>Key Product</td>
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<tr>
<td>Activity 3.1.2: Design the institutional and organisational arrangements of the joint transboundary dialogue in the Mekong Delta.</td>
<td>Consensus on arrangements</td>
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<tr>
<td>Activity 3.1.3: Discuss and agree the mechanism of the joint transboundary dialogue.</td>
<td>Meetings/ workshops</td>
<td>end 03/2016</td>
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<tr>
<td>Output 3.2: An approach to develop the future transboundary Mekong Delta Monitoring plan</td>
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<tr>
<td>Activity 3.2.1: Propose, discuss and agree the content/structure of the future transboundary Mekong Delta Monitoring Plan based on the agreed transboundary SWMIs.</td>
<td>Draft Table of Contents RBM Plan Meeting/ Workshops</td>
<td>end 12/2015</td>
</tr>
<tr>
<td>Activity 3.2.2 Discuss and agree on the first river basin monitoring plan including a 3 year implementation plan</td>
<td>Final Table of Contents RBM Plan and RBMP PIP/next steps</td>
<td>end 06/2016</td>
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</table>
Annex 3) Project Implementation Plan

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<td>Activity 1.1.2: Analyse and review the collected material to extract relevant information on existing and potential transboundary WRM issues, activities, tools, MRC Procedure implementation, approaches and strategies in the Mekong Delta between Cambodia and Viet Nam</td>
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<td>Activity 1.1.3: Identify knowledge/information gaps on baseline information including Floods</td>
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<td>Activity 1.1.4: Capacity Needs Assessment in relation to transboundary SWMs</td>
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<td>Activity 1.2.1: Perform a risk assessment to identify existing key pressures and impacts on the environment and livelihoods in Mekong Delta as well as key future infrastructure development that may cause (impacts and evaluate their transboundary relevance)</td>
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<td>Activity 1.2.2: Based on above, identify and agree on key transboundary Significant Water Management Issues (SWMI) for future management (e.g. flood, drought, sediment, water quality, irrigation, agriculture, fisheries, navigation and infrastructure and other related land use planning) and as basis of a joint Mekong Delta planning plan</td>
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<td>Activity 1.2.3: Analyse the boundary SWM issues regarding 1995 Mekong Agreement and MRC Procedures and link these to the procedures in relation to future management</td>
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<tr>
<td>Outcome 2: Effective mechanisms for knowledge and data and information processing and sharing functioning</td>
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<td>Activity 2.1.1: Review existing mechanisms for knowledge, data and information processing and sharing</td>
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<tr>
<td>Activity 2.1.2: Define the needs of Cambodia and Viet Nam regarding joint knowledge and data and information processing and sharing mechanism in relation to the agreed transboundary SWM</td>
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<td>Activity 2.1.3: Identify possible improvement of relevant existing knowledge and data and information processing and sharing mechanisms</td>
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<tr>
<td>Activity 2.2: A knowledge and data and information processing and sharing mechanism for transboundary cooperation between Cambodia and Viet Nam in the Mekong Delta</td>
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<tr>
<td>Activity 2.2.1: Identify the structure and mechanism for effective transboundary knowledge and data and information processing and sharing</td>
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<td>Activity 2.2.2: Develop a respective financial plan to implement the knowledge/data and information processing and sharing mechanism at the transboundary level</td>
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<td>Activity 2.2.3: Set-up and implement the knowledge and data and information processing and sharing mechanism</td>
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<tr>
<td>Outcome 3: Effective dialogue between Cambodia and Vietnam on the Mekong Delta is taking place</td>
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<td>Activity 3.1: A coordinated and effective transboundary dialogue mechanism</td>
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<td>Activity 3.1.1: Review current mechanisms for transboundary dialogue</td>
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<td>Activity 3.1.2: Design the structural and operational arrangements of the joint transboundary dialogue in the Mekong Delta</td>
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<td>Activity 3.1.3: Discuss and agree the mechanism of the joint transboundary dialogue</td>
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<td>Activity 3.2: An approach to develop future transboundary Mekong Delta Monitoring plan</td>
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<td>Activity 3.2.1: Propose, discuss and agree the content/structure for the Mekong Delta Monitoring Plan based on the agreed transboundary SWMs</td>
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<td>Activity 3.2.2: Discuss and agree on the first river basin monitoring plan including a 3-year implementation plan</td>
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Annex 4) Detailed activities and budget for the first year of implementation