



Mekong River Commission

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TERM OF REFERENCE

1. Consultancy Summary:

Consultancy Title:	International Consultant for Updating Protocol of the MRC Fish Larvae Drift Monitoring (FLDM) Programme
Consultancy type: ¹	Special Service Agreement (SSA); Type (a): One-time assignment
Duration:	23 working days from April to December 2020
Division:	Environmental Management Division
Working station:	Home-based with possible travel to MRC Secretariat and MRC Member Countries (MCs)
Total budget:	

2. General background²:

2.1. Background and objectives of the consultancy:

The Mekong River Commission (MRC) was established by the 1995 Agreement on Co-operation for the Sustainable Development of the Mekong River Basin, between the governments of Cambodia, Lao PDR, Thailand and Viet Nam. The role of the MRC is to coordinate and promote cooperation in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin.

The MRC Secretariat (MRCS) is the operational arm of the MRC. It provides technical and administrative services to the Joint Committee and the Council to achieve the MRC's mission.

The Environmental Management Division (ED) is responsible for environment monitoring, assessment, planning and management to support basin planning management and development for sustainable development of the Mekong River.

Under MRC River Basin Management Core Functions, there are a number of routine monitoring activities, of which Fisheries Monitoring is coordinated by MRC ED. MRC Secretariat has been supporting these fisheries monitoring activities since mid-1990s. Moreover, there are three types of the monitoring under fisheries monitoring namely (i) Fish Abundance and Diversity Monitoring (FADM) in the LMB of four Member Countries, (ii) Fish Larvae Drift Monitoring (FLDM) in Cambodia, Lao PDR and Viet Nam, and (iii) Dai Fishery Monitoring in the Tonle Sap River of Cambodia.

The current methodology of FLDM has been used so far based mainly on that of a PhD research which was done by Chea Tharith, Lek Sophat and Thach Phanara in 2002. Since then the methodology has never been reviewed and modified in order to address a rapid change in the

¹ **Special Service Agreement** - home based, daily rate: type (a) One-time assignment, 1 TOR, number of consultancy days within 12 calendar months; or type (b) Framework contract (number of consultancy days within 1 to 2 calendar years, multiple assignments with each assignment having 1 specific TOR). **Service Contract** - full time working with 21.75 days/month, MRCS based: One-time assignment (number of months within 1 calendar year).

² Be brief and to the point with maximum of **300-500 words**.

river condition due to development projects in the Mekong river. Most importantly, the standard protocol or procedure for FLDM Programme has never been updated, including field sampling, handling, preserving, transporting, laboratory analysis and taxonomic identification, sample storage and management, data analysis, interpretation and reporting.

Moreover, since these monitoring activities will be decentralized to Member Countries (MCs), capacity of national teams to conduct and manage the above field, laboratory and reporting work needs to be strengthened for the sustainability of the Programme.

To update the protocol of the FLDM Programme, the MRCS ED is looking for a competent international consultant who have extensive knowledge and experiences in large river fish ecology and fish larvae monitoring, particularly the Mekong River to undertake the following tasks to obtain the following expected outputs and achieve the specific objectives.

The main objectives of this assignment are to:

- To update the protocol of the MRC FLDM Programme; and
- To strengthen capacity of national teams in the implementation of the updated FLDM Programme.

2.2. Expected final products:

- The MRC standardized protocol for FLDM Programme updated for further application and implementation; and
- The capacity of national monitoring teams of the four MCs strengthened to implement the updated protocol for FLDM Programme, including field sampling, handling, preserving, transporting, laboratory analysis and taxonomic identification, sample storage and management, data analysis, interpretation and reporting.

3. Required deliverables, timelines and responsibilities

3.1. Deliverables and concrete timelines:

A tentative schedule of key deliverables is provided below. The exact schedule will depend on the timing of the contracting with the successful consultant, but it is anticipated that the assignment will commence on 1 April to 31 December 2020.

<i>Tasks</i>	<i>Deliverables</i>	<i>Estimated Time (days)</i>	<i>Deadline</i>
1. Review relevant literature, the national FLDM reports of the four MCs, the current FLDM Programme and the FLDM under the Joint Environmental Monitoring Programme (JEM Programme)	Key recommendations for updating the MRC FLDM Programme	2	1 April 2020
2. Work with the riparian consultant to review and	The fish larvae photo catalogue/book finalised	5	31 May 2020

<i>Tasks</i>	<i>Deliverables</i>	<i>Estimated Time (days)</i>	<i>Deadline</i>
finalise the fish larvae photo catalogue/book			
3. Prepare the first draft of the updated protocol for FLDM Programme	The first draft of the updated protocol for FLDM Programme, including field sampling, handling, preserving, transporting, laboratory analysis and taxonomic identification, sample storage and management, data analysis, interpretation and reporting	7	30 Jun 2020
4. Participate in the EMEG Meeting on the first draft of the updated FLDM Programme	Meeting materials and ppt presentation prepared	2	30 Aug 2020
5. Finalise the updated FLDM Programme	The updated FLDM Programme	1	19 Sept 2020
6. Provide regional trainings on the updated protocol for FLDM Programme	Training materials and pp presentations	6	31 Dec 2020
Total		23	March to December 2020

3.2. Required tasks and responsibilities³:

- Review relevant literature, the national FLDM reports of the four MCs, the current FLDM Programme and the FLDM under the Joint Environmental Monitoring Programme (JEM Programme);
- Work with the riparian consultant to review and finalise the fish larvae photo catalogue/book;
- Prepare the first draft of the updated protocol for FLDM Programme;
- Participate in the EMEG Meeting on the first draft of the updated protocol for FLDM Programme;
- Finalise the updated protocol for FLDM Programme;

³ When possible, please include activities such as report revision; *capacity building, knowledge and skills transfer (K&S) to MRCS and MCs; gender mainstreaming/reporting/data; handover of data and assets to MRC when contract complete*. You can reach out to the Gender Focal point of the MRCS for support to gender related requirements, and to HR for capacity building and K&S requirements if need be.

- Provide regional trainings on the updated protocol for FLDM Programme.

4. Working Arrangement:

4.1. Director supervisor:

The consultant will be working under the overall supervision of the Director of the Environmental Management Division.

4.2. Communication line:

The consultant will be working under the direct supervision of the Chief Environment Management Officer as well as in close consultation with a Fisheries and Aquatic Ecology Officer.

5. Payment mode⁴:

Since there will be several milestones to be completed and to avoid many administrative works, payment by instalment will be selected for this assignment and it is shown below.

- The 1st payment upon signing of the Contract (20% of the total budget);
- The 2nd payment upon submission and acceptance by MRCS ED on the key deliverables number 1, 2, and 3 under this given period (40% of the total budget); and
- The final payment upon submission and acceptance by MRCS ED on the key deliverables number 4, 5 and 6 (40% of the total budget).

6. Qualifications and Requirements:

- Master or Ph.D. Degree in river fish biology-ecology, with significant knowledge in large river fisheries;
- Has a strong knowledge and seven-year experience in designing and applying fish larvae monitoring in large tropical rivers, including the Mekong River;
- Has a strong knowledge and seven-year experience in river fish taxonomy, particularly fish larval identification;
- Has general statistical knowledge, multivariable analysis, and diversity index (including update-to-date or advanced programmes);
- Experience in undertaking fisheries or biological assessment and scientifically reporting;
- Excellent verbal communication ability, including ability to make positive and insightful contributions to the training-workshop and inspire learning motivation of trainees; and
- Fluency in written and spoken English.

7. Intellectual property rights⁵:

Intellectual property rights - IPR: Information, data, database, knowledge resources in the forms of briefings, reports, proceedings, articles, essays, etc. issued by and for the MRCS will be the MRCS property. Any utility, announcement and disclosure that are without MRCS highest

⁴ Please consider choosing the payment mode/s i.e. lump sum, installment, per day, per hours, per products or per milestones.

⁵ Please indicate if *any product/s* that the consultant produces or any MRC data that the consultants are/will be going to use will belong to MRC and will be under MRC *intellectual property rights* (IPR). This part also includes the requirement for the consultant to transfer to MRCS the ownership of data, IPR and materials generated during the work with the MRC.

levels of authority' permission is considered illegal and will be charged by relevant local and international legal procedures.

8. **Signature Block**⁶

MRC Officer

Consultant

Name: _____

Name: _____

Date: _____

Date: _____

⁶ This *signature block should include* names of MRCS staff who oversees the consultancy. The consultant who has to sign the TOR when signing the service contract with MRC.