Mekong River Commission

P.O. Box 6101, 184 Fa Ngoum Road, Unit 18,
Ban Sithane Neua, Sikhottabong District, Vientiane 01000, Lao PDR
Telephone: (856-21) 263 263. Facsimile: (856-21) 263 264

TERM OF REFERENCE

1. **Consultancy Summary:**

- **Title:** Riparian Consultant on Upgrading and deploying MRC Drought Early Warning Website
- **Consultancy type:** SSA
- **Division:** Technical Support Division
- **Duration:** 01 September – 30 November 2018
- **Duty station:** MRC Secretariat in Vientiane and home office
- **Reporting to:** **R**egional Drought Management Consultant
- **Total number of days /months for this consultancy:** 50 working days
- **Required deliverables for this consultancy**: Upgraded MRC Drought Early Warning Website

2. **Background**

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. In accordance with this Agreement, the Mission of MRC is: "To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being by implementing strategic programmes and activities and providing scientific information and policy advice."

MRC received financial support from the Japan-ASEAN Integration Fund (JAIF) in 2015 to implement a three-year (2015-2017) Drought Management Programme's Core Functions project with four main outputs covering (1) Drought vulnerability assessment; (2) Capacity building and development; (3) Land use and water resources analysis; and (4) A regional strategy for drought management and mitigation.

Web developper consultant is tasked to assist the Regional Drought Management Expert, Information System and Database specialist and Water and Climate Monitoring Specialist in upgrading MRC drought early warning website based on the current existing website on a temporary one.

3. **Objective of the Consultancy:**

The Consultant will work to transfer all the contents of the current drought early warning website to the MRC server cooperating with Information System and Database specialist to use MRC Portal for data storage as necessary. The task will include interactive maps with data and documents uploaded for users/viewers to access.

4. **Responsibilities and tasks:**

Under direct supervision of the Regional Drought Management Expert of the Mekong River Committee Secretariat, the Riparian Consultant will provide the following services:

<u>Main tasks</u>

a. Review the current website of the drought early warning system of MRC
b. Review other international drought forecasting or early warning website
c. Consult with the Regional Drought Management Expert, Information System and Data Management Specialist, the M&E Specialist, the IT team, Mapping and GIS assistants, Web and Graphic Design, Chief Hydrologist, and consult with other related Chiefs and Specialists to have consistent data syncing to MRC Central Data system on how the new website under MRC looks like
d. Consult with the Regional Drought Management Expert, Mapping and GIS assistants, and Chief Hydrologist on interactive functions to review all the mapping results in the new website under MRC server

e. Work with the Web and Graphic Design Assistant, IT Officer, and Communication Officers to develop a new website under MRC server based on the current website with call contents and new agreed template
f. Work with the Information System and Data Management Specialist, the M&E Specialist, Water and Climate Monitoring Specialist and the IT team to create data storage under the website and upload all documents and data
g. Address the comments and suggestions by users after one-month and two-month periods of public view.

Detailed schedule and timeline:

Task	**Duration**	**Timeline**
1. Review the current website of the drought early warning system of MRC	2 days	Sept 04
2. Review other international drought forecasting or early warning website	2 days	Sept 07
3. Consult with the Regional Drought Management Expert on how the new website under MRC looks like	3 days	Sept 12
4. Consult with the Regional Drought Management Expert on interactive functions to review all the mapping results in the new website under MRC server	3 days	Sept 17
5. Upgrade a Draft monitoring drought forecasting website based on agreed template with discussions with the drought management consultant, Information System and Database Specialist and Water and Climate Monitoring Specialist from time to time	25 days	Oct 28
6. Create data storage under the website and upload all documents and data	10 days	Nov 15
7. Address the comments and suggestions by users after one-month and two-month periods of public view.	5 days	Nov 30

1. **Working Arrangement:**
   a. Supervision: Regional Drought Management Expert
   b. Reporting line: Chief Hydrologist and Regional Drought Management Expert
   c. Work station: MRC Secretariat in Vientiane and Home base

2. **Qualifications and Requirements:**
   - BA(s) in Information Technology, data management system, or related relevant discipline with at least 10 years work experience;

- Solid understanding of various database technologies including MySQL, MS SQL, PostgreSQL (PostGIS);
- Solid understanding of various spatial technologies such as Geoserver;
- Knowledge of ArcGIS is an advantage;
- Being familiar with containerization, such as VMware and cloud deployments, is an advantage;
- A minimum of 10 years experience in Visual Basic programming and Java programming, PHP, Java Script, JQuery, Grails, CMS, HTML / XML, MS SQL and Mysql is a need;
- Solid knowledge of GIS, image handling, map handling, database management, Linux and Windows operating systems, network, and communication protocols is an asset;
- Knowledge of hydrology, meteorology, modelling, or knowledge Management is an advantage; and
- Fluency in English, both written and spoken, is required.

3. **Condition of payment (select below and provide justification for the selection)**
   - Payment after completion of the assignment with satisfactory results assessed by the Regional Drought Management Expert

Recommended:
- 20% advance
- 40 % after the website is developed and tested
- 40% after addressing the comments and revising the website.

4. **Intellectual property rights:**
   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 levels of authority' permission is considered illegal and will be charged by relevant local and international legal procedures.
5. **English competency:** TOEIC score of 600-700 (or equivalent)
6. **Other requirements:** daily timesheet, monthly workplans, monthly deliverables reporting, daily standup meeting if working at MRC Secretariat, finger print scanning if working at the MRC Secretariat office

7. **Signature Block**

TD Director	**Consultant**
Name:.....	Name:.....
Date:.....	Date:.....