# ด่วนที่สุด



ที่ อา ๐๒๐๒.๔/า๒๔๙๙๔

ถึง หน่วยงานในสังกัด อว.

ด้วยสำนักงานทรัพยากรน้ำแห่งชาติ ในฐานะสำนักเลขาธิการคณะกรรมการแม่น้ำโขงแห่งชาติไทย มีหนังสือประชาสัมพันธ์การขยายระยะเวลาการเปิดรับสมัครบุคลากรเพื่อเข้าร่วมโครงการฝึกอบรม JRP's On-the-Job Training Project (OJTP) ของสำนักงานเลขาธิการคณะกรรมการแม่น้ำโขง (Mekong River Commission Secretariat: MRCS) ประจำปี พ.ศ. ๒๕๖๗ จำนวน ๒ ตำแหน่ง ได้แก่ (๑) Associate Modeller (AM) และ (๒) Associate Flood and Drought Forecaster (AFDF) โดยโครงการดังกล่าวมีรูปแบบการฝึกอบรมผ่านการฝึก ปฏิบัติงานจริง ระยะเวลารวม ๑๒ เดือน (ตั้งแต่เดือนมกราคม-ธันวาคม ๒๕๖๗) ซึ่งมีวัตถุประสงค์เพื่อเสริมสร้าง ศักยภาพบุคลากรของประเทศสมาชิกลุ่มน้ำโขงที่ปฏิบัติงานในตำแหน่งดังกล่าวที่เปิดรับสมัคร ทั้งนี้ MRCS จะรับผิดชอบค่าใช้จ่ายต่าง ๆ ให้กับผู้ที่ผ่านการคัดเลือกตำแหน่งละ ๑ คน ประกอบด้วย ค่าตอบแทนรายเดือน ค่าที่พัก ค่าประกันสุขภาพและอุบัติเหตุและค่าฝึกอบรมต่าง ๆ ที่เกี่ยวข้อง

ในการนี้ กระทรวงการอุดมศึกษา วิทยาศาสตร์ วิจัยและนวัตกรรม ขอประชาสัมพันธ์การขยาย ระยะเวลาประกาศรับสมัครบุคลากรเพื่อเข้าร่วมโครงการฝึกอบรมดังกล่าวในตำแหน่ง Associate Modeller (AM) และ Associate Flood and Drought Forecaster (AFDF) เนื่องจากยังไม่มีผู้สมัครที่มีคุณสมบัติ ตรงตามตำแหน่งข้างต้น จึงขอขยายรับสมัครฯ จากเดิมวันที่ ๒๕ ธันวาคม ๒๕๖๖ ถึงวันที่ ๓๐ มกราคม ๒๕๖๗ โดยผู้สนใจสามารถศึกษาข้อมูลเพิ่มเติมได้ที่เว็บไซต์ https://mhesi.e-office.cloud/d/f9eb754b หรือ QR code ตามที่ปรากฏด้านล่างนี้ และขอความกรุณาจัดส่งเอกสารการสมัครโดยตรงไปที่สำนักงานทรัพยากร น้ำแห่งชาติ ทางไปรษณีย์อิเล็กทรอนิกส์ fad.onwr@gmail.com ภายในระยะเวลาที่กำหนด

จึงแจ้งมาเพื่อโปรดทราบและประชาสัมพันธ์การขยายระยะเวลาเปิดรับสมัครบุคลากรเข้าร่วมโครงการ ฝึกอบรมดังกล่าวต่อไป

> สำนักงานปลัดกระพรวงการอุดมศึกษา วิทยาศาสตร์ วิจัยและนวัตกรรม อฟ ธันวาศมาจะสำราช

กองการต่างประเทศ
กลุ่มขับเคลื่อน อววน. ระหว่างประเทศ
โทร. ๐ ๒๖๑๐ ๕๓๙๘ (สราญพร/ธัญญณิช)
โทรสาร ๐ ๒๓๕๔ ๕๕๗๐



lครงการฝึกอบรม MRCS ประจำปี พ.ศ. ๒๕๖๗



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MRC I	PERSONNEL	HISTORY I	FORM		
Family Name:	Given Names:	Title: Dr./Mr./	Ms.	Gender: M □ F □	
Date of Birth: (dd/mm/yy)	Place of Birth:	Current Nation	nality(ies):	Country of Permanent Residence:	
Permanent Address: (registered address)		Current Addre (usual address regularly reside	where family is	E-mail: Telephone: Mobile:	
Telephone:		Telephone:			
Marital Status: ☐ Si			vorced   Widowed	□ N/A	
Family Members: (Spouse and legal child		Occupation/Position			
Full Name	Date of Birth	Nationality	Organisation or Company	Relationship	
telephone numbers. Full Name: Relationship: Telephone Number: Address:			Please provide compl		
	o □ below information:	es to your curre	nt or most recent emplo	oyer?	
• •	ractual, or others; or		ee of MRCS; or hired by ease indicate type of em		
Posit		Division/OC	Years/Months of	Completion Date	

Referees: Please give details of three peop	ple, who are familiar with your work	king experience, working
style, qualifications, attitude, and etc, and		
direct supervisors or co-workers:		
Full Name/Position/Relationship	Full Address	E-mail and Telephone Contacts
Availability: If you were selected for the po	osition applied, how soon will you be	e available to start works
after the notification?		
Yes □ No □		
Are you physically able and willing to trav	vel?	
By Car: Yes □ No □ By Air: Yes □ No □		
Leartify that the statements made by me in	n this application form are true com	unlata and carrect to the
I certify that the statements made by me in this application form are true, complete, and correct to the		
best of my knowledge and belief. Permission is given to the MRC to make such investigations as		
necessary on the information provided. I understand that any misrepresentation or material omission		
made herein or in any other document requested by the MRC can render a staff member liable to		
termination of service or dismissal.		
Signature	Da	ate
Remark: You will be requested to supply	/ documentation/evidence which su	upports your statements
above-mentioned if you are offered the position.		



## **TERMS OF REFERENCE**

## 1. CONSULTANCY SUMMARY

Title Associate Flood and Drought Forecaster

Consultancy/Staff Type Sp

Special Agreement (SA)

Division

Technical Support Division 12 months (Jan-Dec 2024)

Duration
Duty Station

Regional Flood and Drought Management Centre (RFDMC)

Technical Support Division Director and Head of RFDMC through

Reporting to the assigned co-supervisors

(1) Weekly and monthly drought monitoring and forecasting

products.

**Expected Deliverables** 

(2) Daily, weekly update technical bulletin and report on flood

and drought assessment; and

(3) Support daily routine work on flood and drought activities.

## 2. INTRODUCTION AND 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."

The Technical Support Division (TD) is in charge of managing the implementation of the various projects and provide technical supports to the MRC(S) on, Hydrological and River Modelling, Database Management and Information System, Modelling and assessment, GIS and Remote Sensing application, and Flood and Drought Monitoring and Forecasting including implementation of MRC procedures. The teams/specialists focus on specific sectors and address regional issues that are significant to the management of the entire Mekong River Basin. While the teams have a regional focus, they also complement and support initiatives at the national and trans-boundary levels.

The Regional Flood and Drought Management Centre (RFDMC) is the core part of TD which performs daily, weekly, and monthly flood and drought monitoring, forecasting, and provide information for early warning services including state emergencies to four Member Countries for flood and drought management and preparedness.

The Official Development Assistance (ODA) of the Government of Japan has been committed to support the MRC-RFDMC upgrading of the Operations Room and enhancement of dissemination of Flood and Drought monitoring and forecasting, warning and alerts in line with modern and international best practices, thereby facilitating integration of flood and drought management at MRC's Flood & Drought Management Centre in Phnom Penh, Cambodia.

Also, in the Multi-year Work Plan (MWP) for 2023-24 RFDMC will continue enhancing drought forecasting and early warning tools with more drought indicator indices to be analyzed and used for the basin, building capacity and enhancing capability for National Line Agencies to be able to monitor, analyze, and forecast drought conditions for their own national and sub-national levels. The objectives and outcomes are developed based on the approved Drought Management Strategy for 2020-2025 and Project Implementation Plan which addresses the needs of MRC Member States to manage and mitigating flood and drought vulnerability at national levels, building up adaptive capacity to adapt to flood and drought impacts, and enhancing on data sharing platform between Countries and the RFDMC in the future.

To enhance national capability on flood and drought forecasting work, the project has designed a task called "on-the-job training" for Associate Flood and Drought Forecaster (AFDF) to build capacity for junior riparian professionals. The AFDFs are to be recruited from MRC Member Countries starting from 2021 through 2025 align with MWP.

## 3. OBJECTIVES OF THE TASK

The Associate Flood and Drought Forecaster(s) is recruited to take part in the on-the-job training with flood and drought for a period of 12 months starting from January to December 2024. He/she will be assisted and supported with daily operation of both floods and drought monitoring, forecasting, and information services works. To gain further experiences on how to apply Flood and drought assessment with modelling and analysis tools activities, at both regional and national projects/activities.

## 4. EXPECTED RESULTS

- Update technical bulletin both of floods, Flash Flood and drought.
- Daily/Weekly short-term river flood forecasting and monitoring for 2024 based on FEWS (URBS-ISIS-Regression);
- Operation the MRC-FFGS and practice on daily on Flash Flood Guidance (FFG) for 2024 (analysis MRC-FFGS' products to make and to submit the FFG bulletin, make FFG Map by ArGIS); and
- Weekly and monthly drought assessment and forecast for 2024 using the Standardized Precipitation Index (SPI), the Standardized Runoff Index (SRI), the Soil moisture Anomaly (SMA)/the Soil Moisture Deficit Index (SMDI), and the Combined Drought Index (CDI).
- Support Implementation of National pilot project.
- Learn about the medium and long term of flood and drought forecasting bases on new developed tool.

## 5. DELIVERABLES AND CONCRETE TIMELINES

Number of Days	Deadline
	20001110
	Routine work: from Jan-Dec 2024
	Routine work: Daily from August - September 2024 Apr-May

Weekly and monthly drought assessment and forecast for 2024:  • SPI  • SRI  • SMA/SMDI		Routine work: weekly monthly from Mar-May, Sept-Dec 2024
CDI Technical bulletin and report on flood and drought assessment/Learn about the new developed tool for flood and drought  Technical bulletin and report on flood and drought developed tool for flood and drought		31 Dec 2024
forecasting system.  Support Implementation of National pilot project for flood and drought activities at national level.		31 Dec 2024
Total Number of Days	12 Months	Jan- Dec 2024

## 6. REQUIRED TASKS AND RESPONSIBILITIES

Under overall supervision of the TD and Regional Flood and Drought Management Center (RFDMC) of the MRCS and direct supervision of the Flood and Drought Experts/Specialists, the Associate Flood and Drought Forecaster will carry out the following tasks:

### Main tasks:

- a. Prepare daily and weekly rainfall data from HYMET and satellite data using GMP-BICO for river flood and monitoring precessing;
- b. Process weekly and monthly river flood monitoring and forecasting as per advices by co-supervisor;
- c. Prepare forecast data inputs including real-time precipiation and radar for flash flood processing;
- d. Process weekly flash flood forecasting as per advices by co-supervisor;
- e. Assist/prepare drought indicator indices including SPI, SRI, SMA/SMDI, and CDI;
- f. Prepare daily precipitation and soil moisture data as inputs for the models as per advices by co-supervisor;
- g. Peform weekly and monthly drought index calculations for monitoring and forecasting; and
- h. Assist and prepare technical bulletin and report on flood and drought assessment.
- i. Support for implementation of National pilot project for flood and drought activities at national level.
- j. Other tasks as assigned by RFDMC and TD.

## 7. PAYMENT MODALITY

The payment will be upon the submission of the timesheet and requests for monthly payment with acceptable reporting quality.

Note: Remuneration rate is defined by the MRCS policy and the level of services. MRC is a taxexempted agency for the work done for the MRC. Consultant, in case mission is required, will be covered with a return ticket to and from the assigned duty stations with a daily related subsistence allowance of 75% of the UN for the mission days.

## 8. 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.

## 9. WORKING ARRANGEMENT

9. WORKING ARRANGEME	
Reporting Line:	Technical Support Division Director
	<ul> <li>Head of the Regional Flood and Drought Management</li> </ul>
	Centre (RFDMC) is direct supervisor for technical and
	management issues
Communication Line: Workstation:	<ul> <li>The AFDFs will communicate with and report directly to</li> </ul>
	his/her co-supervisors/Head RFDMC for verification of the
	products and compliance with TOR.
	<ul> <li>Close guidance will be given by the TD Director, Head</li> </ul>
	RFDMC and Co-supervisors.

## 10. QUALIFICATIONS AND REQUIREMENTS (select as appropriate)

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- Bachelor's Degree or higher degree(s) in water resources engineering, hydrology, meteorology, environmental science, or relevant discipline.
- Preferably at least three (3) year of experience of working in river basin and water resources planning and management, hydrology, or related field.
- Extensive experience in water resources management, flood or drought assessment and forecasting is an advantage.
- Knowledge and experience with river monitoring, modelling, GIS and remote sensing is an asset.
- Experience and skill on using dashboard, infographic, excel spreadsheet and statistical analysis.
- Experience on develop web portal, information system and services.
- Previous experience in the Mekong River Basin, preferably working with or for the Mekong River Commission.
- Excellent computer skills are preferable; Good command of spoken and written English and good presentation and reporting skills; and
- Demonstrated ability to work in an international environment, communication skills and teamwork.

### 11. SIGNATURE BLOCK

MRCS: Name and Title:	Tran Minh Khoi Director of TD	Incumbent's Signature:
Date:	17.10.2023	Date:



## **DRAFT TERMS OF REFERENCE**

## 1. CONSULTANCY SUMMARY

Title

Associate Modeller (one from each MRC Member Country)

Consultancy/Staff Type

Special Agreement (SA)

Division

Technical Support Division (TD), Vientiane

Duration

1 year, from 1 January to 31 December 2024 with possibility for extension

**Duty Station** 

MRCS Office in Vientiane

Reporting to

The incumbent will be working under the overall supervision of the Director of the Technical Support Division (TD) and Chief Hydrologist and

under the direct supervision of the Modellers

## 2. INTRODUCTION AND BACKGROUND

The Mekong River Commission (MRC) was established by the 1995 Agreement on Cooperation 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, utilisation, 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. Modelling Team (MT) under the MRCS Technical Support Division (TD) is responsible for conducting modelling activities and providing technical assistance to other divisions in modelling, assessment and analysis. It also provides other information and support for sustainable development, when required. To do so, the Decision Support Framework (DSF) system was developed aiming for MRC to have a transparent modelling system that could be used by each and any of the member countries (MCs) to study and check proposals and strategies for water resources developments.

MRCS Modelling Team (MT) was established in 1998 within the Technical Support Division to provide modelling service to other MRCS units. Since the start of implementation of the World-Bank-funded project of Water Utilization Programme in 2000, the MT have been involved intensively in the development and application of the Basin Modelling and Knowledge Base, also known collectively as the DSF with a set of the simulated models (hydrology, and hydraulic/hydrodynamic) to support the studies within LMB related to water resources.

Under the approved Proactive Regional Planning (PRP), the current DSF will be upgraded. The upgraded DSF will be an integration of a contemporary web-based regional, multi-user DSF platform to support implementation of all river basin management functions, from short-term planning (real-time river monitoring and operational control) to long-term planning. New datasets will be added (including from satellite and other remote sensing sources) as well as models (for supporting operational flow management and sediment management) and tools for supporting visualisations, analysis and decision-making. The upgraded DSF will ensure the compatibility with national Decision Support Systems (DSS) in each basin country and with MRC's ongoing improvements of its knowledge base and flood and drought forecasting capabilities. Inter-operationality with national DSS's will dramatically improve data and

information sharing capabilities among the countries and create the opportunity for each country to verify regional modelling and assessment results and test new proposals for water resources development and management, all of which will increase trust and confidence among the countries.

The involvement of the MCs in all processes of above-mentioned activities with MT through the Associate Modeller Programme will ensure the acceptable quality of MRC products including the upgrade of the DSF and it will intensively maintain and enhance national modelling capacity and human resources at the national level.

Against this background, the MRC's Technical Support Division is seeking a competent associate modeler from each basin country to support the implementation of upgraded DSF under PRP and relevant MT activities.

#### **OBJECTIVES OF THE ASSIGNMENT** 3.

The associate modeller will get acquainted with the upgrading, and modernization of upgraded MRC DSF through self-study, training courses, on-the-job training and case study, and will help the modelling team to carry out tasks under modeling activities.

After this assignment with the MRCS, the associate modeller will have the capability to support water resources planning and management activities with the upgraded DSF (or with a national DSS) in their countries.

#### **DELIVERABLES** 4.

The associate modeller will prepare a short monthly progress report outlining the nature of activities undertaken, main findings, issues arising (if any), recommendations (if any), and a workplan for the next months.

In addition, the associate modeler will prepare technical notes and PPTs on their on-the-job activities and case studies in which they apply the knowledge and skills obtained in training courses and self-studies.

#### **SCOPE OF WORK** 5.

The associate modeler will conduct the following activities:

- Conduct technical review relevant documents as appropriate or requested, such as reports relevant to the PRP project, particularly for the upgraded DSF, and other reports relevants to the key modeling tools used in upgraded DSF platform such as MIKE modeling suites, HEC-RAS, Source (eWater), etc.;
- Participate in technical trainings in both in-house and out-campus training including training courses related to the upgrading and use of DSF components, models, databases, interfaces, tools and methods:
- Participate in on-the job-trainings and implement case studies to apply the knowledge and skills obtained in the technical trainings;
- Technically support ongoing activities of the modelling team related to the upgraded DSF (and help ensuring practical user functionality of the upgraded models and tools), the testing all elements of upgraded DSF, and the use of the upgraded DSF for proactive regional planning;
- Provide technical assistance to the ongoing data and information collections and compilation for the upgraded DSF including Hydro-meteorolocial, spatial dataset, and operational dataset, etc.;
- Build capacity in written and presentation skills related to progress reports and technical notes on on-the-job training and case studies;
- Technically support other tasks as assigned by MT and TD under either Director or Chief Hydrologist and other key staffs.

#### **ITINERARY** 6.

The assignment will be implemented at the MRCS Office in Vientiane and may require sporadic trips in the region.

## 7. WORKING ARRANGEMENTS

The associate modeller will be working under the overall supervision of the Director of TD and Chief Hydrologist and under the direct supervision of the Modellers.

### 8. PAYMENT MODALITY

The payment will be made on a monthly basis (with acceptable reporting quality).

## 9. INTELLECTUAL PROPERTY RIGHTS

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## 10. DECLARATION OF NON-FRAUDELENCE AND PROTECTION OF PERSONAL DATA

The associate modeler shall adhere to the MRC's relevant rules and regulations on personal data protection, business exclusion, fraud prevention and anti-corruption principles, and shall be under strict disciplinary measures should any violation occur.

## 11. QUALIFICATIONS AND REQUIREMENTS

- Bachelor's Degree or higher in the field of water resources modeling, hydrology and hydrodynamic modeling, water resources planning and management, or relevant engineering field;
- Preferably at least 5 years of professional experience in water resources modelling, hydrological analysis, GIS, impact assessment, remote sensing, programming skills (Python or R), web applications or another relevant area;
- Excellent computer skills and passionate to grow professionally in the development, use and management of DSS's;
- Demonstrated ability to work in an international environment with good communication and teamwork skills, and with a good command of spoken and written English;
- Knowledge of the MRC, including its DSF and knowledge base.

## 12. SIGNATURE BLOCK

MRCS:	. 1 .1 .	Associate Modeller:
Full Name:	Tran Hinh khoi	Full Name:
Title:	Director of TD	
	MD	Signature:
Signature: _		Date:
Date:	17.10.2023	