THE AUSTRALIAN WATER PARTNERSHIP

CALL FOR PROPOSALS

Secondment of Senior Technical Adviser to the MRC's Regional Flood and Drought Management Centre

The Australian Water Partnership (AWP) is seeking a Senior (Flood and Drought) Technical Adviser (STA) to provide both technical and institutional advice to the Mekong River Commission (MRC) Regional Flood and Drought Management Centre (RFDMC).

Activity Background

This is to kick start the implementation and monitor the progress of a four-year (2020-2024) MRC Project for Flood and Drought Management in the Mekong River Basin (funded by Japan). The overall project aims to:

- Extend and broaden the products and services of the RFDMC;
- Develop new tools for both flood and drought forecasting and early warning;
- Enhance collaboration with dialogue partners and coordination among Member Countries;
- Reduce negative impacts of flood and drought in the LMB;
- Disseminate information on extreme weather and climate variability;
- Upgrade the RFDMC's forecasting and early warning operation room to be a Centre of Excellence to support Member Countries; and
- Implement the Drought Management Strategy 2020-2025 for the first four years.

Activity Description

The Australian Partner selected as the STA will provide support in reviewing the existing structure and operations of the RFDMC with recommendations for improvement of operational tools, systems and institutional capacity while aligning with the broader Flood and Drought Management project. There will also be guidance on the development of a standard guideline/forecasting manual/operation procedure with clear roles, responsibilities and procedures for the forecasters in their overall operations. The STA will also work with the MRC Secretariat and the RFDMC to put in place agreements with identified specialised agencies for development and improvement of operational tools and systems.

Full Terms of Reference are provided at Annex A.

Activity Objectives
The aims and objectives of the activity are to reinforce the MRC's flood and drought management capabilities by:

- Providing both technical and institutional advice to the RFDMC and MRCS;
- Supporting the initial implementation and monitoring of flood and drought management project, including development of new operational tools for flood and drought forecasting and monitoring; and
- Supporting the analysis of extreme weather events and climate variability in the LMB

Application Procedure
Interested Partner/s should submit a proposal via the following online form by **5.30pm (AEST), Wednesday 29 July 2020** (late applications will not be accepted): https://www.cognitoforms.com/AustralianWaterPartnership/awpsubmissionform

Note, please **do not** use the AWP Tender Submission Template provided on the online form. Instead, this proposal should use the AMWF Proposal template, and should include a description of the relevant experience of the Partner/s, as well as proposed daily remuneration rates based on the AWP Partners Remuneration Framework. Proposals should be a maximum of ten pages, plus annexes for Curriculum Vitae (CV).

Selection Criteria
Proposals will be assessed by AWP and its Expert Review Panel against the following selection criteria:

- Meeting expertise and experience requirements outlined in the Terms of Reference at Annex A;
- Inclusion of effective approaches for sharing of knowledge and tools;
- Robust methods for achieving the objectives and tasks outlined in the Terms of Reference;
- Clear strategy for capacity development of individuals, organisations and governments;
- Demonstrated Value for Money; and
- Incorporation of Gender Equality and Social Inclusion approaches and outcomes.

Contact
For any questions, please contact Ingrid Carlier, AWP Senior Program Officer (ingrid.carlier@waterpartnership.org.au) by 12.00pm (AEST) on Monday 20 July 2020. All questions received will be compiled and presented with answers on the Partner Portal at https://waterpartnership.org.au/partner-portal/programs-activities.

Note that AWP reserves the right to not proceed with the outlined activity and is not liable for any costs incurred by partners in preparing proposal.

Annex A: Terms of Reference

Activity Title	Secondment of Senior Technical Adviser to the MRC's Regional Flood and Drought Management Centre
Activity summary	Following a request from the Mekong River Commission Secretariat (MRCS), the AWP is seeking to mobilise a Senior (Flood and Drought) Technical Adviser (STA) to provide both technical and institutional advice to the MRC Regional Flood and Drought Management Centre (RFDMC). This is to kick start the implementation and monitor the progress of a four-year (2020-2024) MRC Project for Flood and Drought Management in the Mekong River Basin (funded by Japan). This project will develop new operational tools for flood and drought forecasting and monitoring, and analysis of extreme weather events and climate variability in the Lower Mekong Basin (LMB). The Australian Partner selected as the STA will provide support in reviewing the existing structure and operations of the RFDMC with recommendations for improvement of operational tools, systems and institutional capacity while aligning with the broader Flood and Drought Management project. There will also be guidance on the development of a standard guideline/forecasting manual/operation procedure with clear roles, responsibilities and procedures for the forecasters in their overall operations. The STA will also work with the MRCS and the RFDMC to put in place agreements with identified specialised agencies for development and improvement of operational tools and systems.
International partners	Mekong River Commission (MRC)
In-country partners	MRC Member Countries (Cambodia, Lao PDR, Thailand, Vietnam)
Background and context	***MRC Project for Flood and Drought Management in the Mekong River Basin*** Daily operations of both flood and drought forecasting and early warning activities have been financially supported by the Japan-ASEAN Integration Fund (JAIF) since 2015 through two projects (one on flood forecasting and monitoring; and the other on drought management) which will end in August 2020. To continue supporting the operation of both flood and drought activities beyond these projects, Japan has endorsed and mobilised US$3.9M of funding (from the Official Development Assistance under the Ministry of Foreign Affairs) for a four-year (2020-2024) MRC Project for Flood and Drought Management in the LMB with the aim of transforming the RFDMC into a centre of excellence in providing faster and more accurate flood and drought forecasting and early warning to MRC Member Countries. The overall project aims to (1) Extend and broaden the products and services of the RFDMC; (2) Develop new tools for both flood and drought forecasting and early warning; (3) Enhance collaboration with dialogue partners and coordination among Member Countries; (4) Reduce negative impacts of flood and drought in the LMB; (5) Disseminate information on extreme weather and

	climate variability; (6) Upgrade the RFDMC's forecasting and early warning operation room to be a Centre of Excellence to support Member Countries; and (7) Implement the Drought Management Strategy 2020-2025 for the first four years. The project has planned to partner with specialised agencies working on flood and drought to upgrade and develop new tools and systems for the Centre. Collaboration partners that have been identified by RFDMC include the Australian Bureau of Meteorology (BoM), Murray Darling Basin Authority (MDBA), the Japan Meteorological Agency (JMA), the European Commission, and the US National Drought Monitor Centre under the University of Nebraska. This activity will contribute to the MRC Project for Flood and Drought Management in the Mekong River Basin by seconding an Australian Partner/s as technical advisors to the RFDMC. It will also contribute to the ongoing collaborative relationship between Australia and Japan. For further information on the Regional Flood and Drought Management Centre refer to Annex B.
Expected start & end dates	August 2020 until January 2022 (18 months)
Objectives/aims of the Activity	The aims and objectives of the activity are to reinforce the MRC's flood and drought management capabilities by: • Providing both technical and institutional advice to RFDMC and MRCS; • Supporting the initial implementation and monitoring of flood and drought management project, including development of new operational tools for flood and drought forecasting and monitoring; and • Supporting the analysis of extreme weather events and climate variability in the LMB.
Main tasks	The main tasks of this activity are for the Australian Partner/s to: a. Work with the RFDMC team to draw up an implementation plan and detailed working arrangements (between the STA and RFDMC) to kick start the implementation of the flood and drought management project, ensuring the integration and cost effectiveness and efficiency of the synergetic implementation of the project for flood and drought components; b. Assist the RFDMC team to develop a long-term operational plan through annual work planning and budgeting to implement the flood and drought management project between 2020 to 2024, in collaboration with the MRCS CEO Office; c. Assist the RFDMC to develop a tracking system to monitor, evaluate and report on the implementation progress of the workplan, in collaboration with the MRCS CEO Office;

	d. Review the existing structure and operations of the RFDMC to provide recommendations for improvements which align with the defined outputs of the flood and drought management project funded by Japan-ODA; e. Provide institutional advice for the development of a new organisational structure of the RFDMC to enhance its institutional capacity to manage and operate new tools and systems, in collaboration with the MRCS CEO Office; f. As part of the process of becoming a Centre of Excellence, assist the RFDMC to develop a standard guideline/forecasting manual/operation procedure with clear roles and responsibilities for forecasters including structure, communication, information and data management and sharing; g. Provide technical advice to improve the set-up of the forecasting room for both floods and droughts that complies with international good practice; h. Review the existing forecasting systems and procedures for both floods and drought, and provide technical advice on improvement of these systems for better accuracy and longer lead-time which aligns with the flood and drought management project; i. Support the RFDMC team to technically oversee and supervise the process of development of new operational tools and systems including upgrading of current systems; j. Assist the RFDMC by providing technical input and advice in drafting concept notes, Terms of Reference, and Memorandum of Understanding with the identified specialised agencies for improvement of existing and development of new operational tools and systems; and k. Based on joint identification and with mutual agreement, assist the RFDMC to carry out the identified priorities and other related tasks.
Outputs	The following outputs will be produced by the STA in collaboration with MRCS and the RFDMC: • Detailed working arrangement, operational plan and annual work plan to kick start the implementation of the flood and drought management project, ensuring the integration and cost effectiveness and efficiency of the synergetic implementation of the project for flood and drought components; • Report on the review of the existing structure and operations of the RFDMC with recommendations for improvement of operational tools, systems and institutional capacity aligned with the flood and drought management project;

	• A standard guideline/forecasting manual/operation procedure with clear roles, responsibilities and procedures to guide the forecasters in their overall operations; • Various concept notes, papers, Terms of Reference (ToR), and Memorandum of Understanding (MoU) to be created with identified specialised agencies for development and improvement of operational tools and systems. In addition, the STA will submit quarterly progress reports to AWP and DFAT.
Resources & expertise required	**One Senior Flood and Drought Technical Adviser** with the following expertise and experience: • Masters degree or higher in water resources management or a relevant field; • At least 15-years working experience as the leader or as senior management in leading and managing a national/regional forecasting centre; • Long-term and demonstrable operational experience in development and operations of river flood and drought forecasting tools and systems which include climate change variability; • Demonstrable working experience as an adviser in providing technical advice and input to operational planning and the development and upgrading process of tools and systems of a forecasting centre; • Theoretical and practical knowledge and experience in forecasting models, their set up, calibration and the use of hydrological and hydro-dynamic models for simulating flood behaviour; • Practical experience and knowledge in working with international river basin organisations in the field of flood and drought risk assessment and management in one or more Mekong Countries is an advantage; and • It would be beneficial if the STA possesses experience and skills in dealing with transboundary flood risk management issues.
Budget	Up to $400,000 (excl. GST) including remuneration and expenses for travel to Cambodia.
Activity location	Home-based remote support and missions to Phnom Penh, with: • Remote support from Australia/ home-base (up to 5 days per month). • 5 missions to the RFDMC in Phnom Penh Cambodia, when COVID-19 travel restrictions are lifted. ○ A one-month mission in each quarter dependent on travel restrictions (February, May, August, and October 2021). The initial work can be started remotely with a first mission to RFDMC once the COVID-19 travel restrictions are lifted. Detailed practical working arrangements will be developed with the RFDMC.

Implementation arrangements	The selected Partner will be contracted by AWP and report to AWP Management and work collaboratively with the head of the RFDMC. The STA will work closely with the RFDMC at the RFMDC in Phnom Penh physically and virtually and under the overall supervision of the Director of Technical Support Division The STA is required to work closely with the technical staff of the RFDMC and other concerned staff of other technical Divisions at the MRCS, if required.
Peer-review process	The outputs will be reviewed by the AWP Expert Review Panel (ERP), AWP, DFAT, and RFDMC.
Method of engagement	Open tender.
Australian partner(s) capability requirements	The selected Partner should have demonstrated experience in: • development and operations of river flood and drought forecasting tools and systems which include climate change variability; • operational planning and the development and upgrading process of tools and systems of a forecasting centre; • forecasting models, their set up, calibration and the use of hydrological and hydro-dynamic models for simulating flood behaviour; • working with international river basin organisations in the field of flood and drought risk assessment and management; and • dealing with transboundary flood risk management issues (desired). • Previous Mekong experience is desirable.

Annex B: About the Regional Flood and Drought Management Centre

MRC's RFDMC is the successor to the Regional Flood Management and Mitigation Centre (RFMMC) established in 2005, with the decision made by the MRC Joint Committee in 2019 to integrate both flood and drought management functions into the work of the Centre. The objective of the centre is to minimise and mitigate negative flood-drought related impacts while preserving the benefits of flooding. As requested by the Member Countries, the MRC Secretariat is reviewing the structure of the RFDMC, with a view for it to become a Centre of Excellence in the future.

The RFDMC helps state agencies in the four riparian countries (Cambodia, Laos, Thailand, Vietnam) manage flooding and drought through data and tools that make timely flood-forecasting and drought prediction (seasonal forecasting) and impact-mitigation possible. These tools include the Mekong River Flood Forecasting System (MRC-RFF System); Mekong Flash Flood Guidance System (MRC-FFG System); and the Mekong Drought Forecasting and Early Warning System (MRC-DFEWS).

The RFDMC needs further support for updating and fine-tuning the systems (MRC-RFF System, MRC-FFG System, and MRC-DFEW System). Data sharing is another area that needs improvement especially in the upper part of the Lower Mekong Basin in Lao PDR in order to improve flood forecasting accuracies. Other areas that need support include flood mapping, user friendly web-based tools, medium to long term forecasts (1 month and 3-6 months), seasonal outlooks, and support on drought monitoring. This support can start once the support from Japan to RFDMC moves forwards.