Mekong River Commission
For Sustainable Development

RESPONSE TO BID CLARIFICATION
No. 01

Requst for Propoal: Consultancy service for implementing the ODA Japan Project Phase 3 under Development Component 1 (DC#1)
RFP26-001

With reference to the above RFP, MRC Secretariat would like to respond to the below queries from bidders as follows:

Technical questions

Point of attention	Clarification to be requested from MRC	MRC clarifications
Section 4.2 – Deliverables 3, 4, 5 (Acceptance Criteria)	The acceptance criteria refer to "demonstrated improvement in forecasting accuracy." Could you clarify whether a formal baseline accuracy has been established, or whether this baseline is expected to be defined jointly between MRC and the Consultant during implementation?	The baseline accuracy will be established during the implementation phase by the Consultant. As part of Assignment 1 (Output A.1), the Consultant is required to "undertake a baseline assessment of the systems and tools developed under Japan Phase 2". This assessment includes reviewing the current forecasting and monitoring systems to report on their architecture, data sources, modeling approaches, operational procedures, and limitations. For short-term term riverine flood forecasting, there are forecasting benchmark for further consideration. However, this benchmarks needs to be revisited as the basin has been significantly changed. This revisit may be required during the implementation of the project.

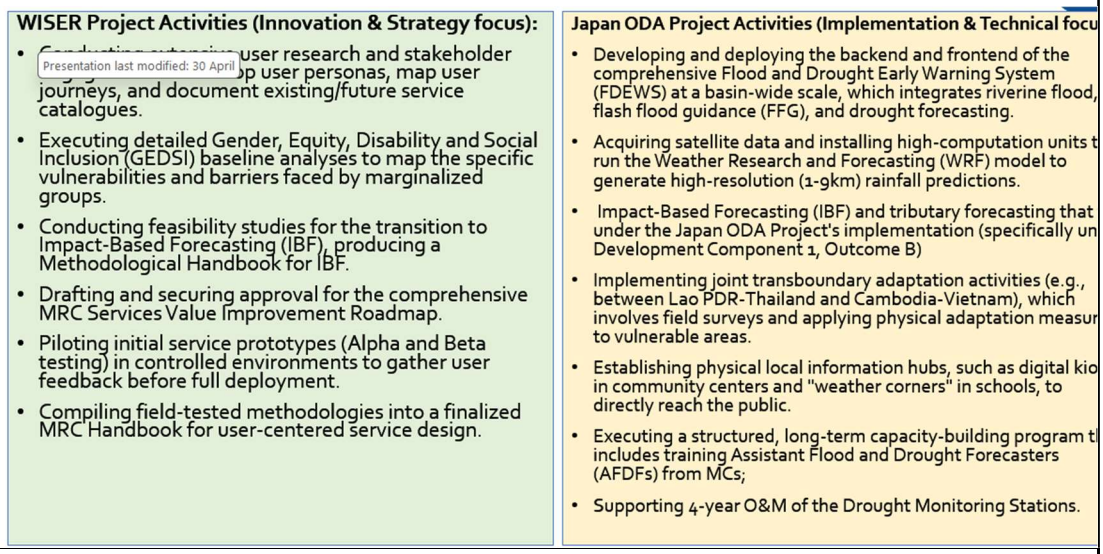
Appendix I – Assignment 3	The RFP indicates "Contribute to briefing, technical reports, notes, and advisory bulletins related to hydrometeorology." Could you clarify the expected type, frequency, and audience of these briefings? Additionally, are these tasks limited to the project implementation period, or expected to extend beyond it?	The tasks are expected to be carried out during the maximum 700 working days over the approximately three-year project implementation period (June 2026 – October 2029). The frequency and types of reports include monthly technical progress meetings/reports, contributions to mid-year and annual progress reports, regular coordination meetings, and other meetings/reports upon request. The audience includes the MRCS (RFDMC, TD, AD, OCEO), MCs, regional consultancies, and international partners. The advisory bulletin is on weekly basis.
Appendix I – Assignment 4.A (Tributaries' forecasting system)	The assignment refers to the use of "climate projections." Could you clarify whether this refers to numerical weather prediction outputs or longer-term climate projections? Additionally, what forecast lead time ranges are expected in this context?	The assignment incorporates multiple forecasting lead times, specifically requiring the incorporation of risk information for "short-term, medium and long range or outlook" forecasting. The project relies heavily on numerical weather prediction (NWP), including running the WRF model for rainfall forecasts and acquiring datasets such as IFS and ensembles from ECMWF and GFS. The project will integrate local data and these projections to customize the modeling system. The numerical weather prediction based on WRF developed under this assignment will be short-term scale, not climate projections.
Appendix I – Assignment 4 (Impact-Based Forecasting – IBF)	The RFP mentions "establish a pilot alert system that triggers sound when conditions surpass predefined thresholds." Could you clarify the expected scope and functionality of this system? For example, is this intended as a simple alert feature (e.g. email notification), or a physical alert system?	The system is expected to feature integrated automated alerts, including a reporting module for automatic bulletin generation and e-mail dissemination within the platform. In addition, the pilot alert system is expected to trigger a physical sound (audio alert) when conditions surpass predefined thresholds.

Legal questions

Point of attention	Clarification to be requested from MRC	MRC clarifications
Arbitration rules should be mentioned in SCC but no SCC apply	*Question:* Clause 10.2 refers to arbitration in accordance with rules to be specified in the Special Conditions of Contract (SCC). As no SCC appear to be included in the RFP documentation, could the Employer please clarify: i. which arbitration rules will apply (e.g. UNCITRAL, ICC, etc.), and ii. the intended seat/place of arbitration?	The provided draft contract states under Section 4 "Special Conditions" that "No special conditions shall apply". The General Conditions of Contract (GCC) note that arbitration proceedings will be conducted in accordance with rules specified in the SCC, but the specific rules (e.g., UNCITRAL, ICC) and seat of arbitration are not detailed further in the provided RFP documents.
LIABILITY AND INSURANCE		
(ii) Indemnities		
Standard IP indemnity obligating us to cover third-party IP claims (incl. legal costs); key risk is potential uncapped exposure if not clearly covered by the liability cap.	*Question:* Could the Employer please clarify whether the aggregate liability cap (Contract Price) is intended to apply to all liabilities under the Contract, including indemnification obligations?	According to the General Conditions of Contract (GCC Clause 29.1), the aggregate liability of the Supplier to the Purchaser (whether under the Contract, in tort, or otherwise) shall not exceed the total Contract Price. However, the contract explicitly states that this liability limitation does **not** apply to the obligation of the Supplier to indemnify the Purchaser with respect to patent infringement. Furthermore, under GCC Clause 28.1 (Patent Indemnity), the Supplier is obligated to indemnify and hold harmless the Purchaser against any suits, claims, damages, and costs (including attorney's fees) resulting from any alleged infringement of any patent, copyright, trademark, or other intellectual property right. Therefore, the indemnification obligations covering third-party IP claims are uncapped and do not fall under the aggregate liability cap of the Contract Price.
(iii) Limitation of Liability		
Liability is capped at 100% of the Contract Price. However clause	*Question:* Could the Employer please clarify whether the aggregate liability cap (Contract Price) is intended to apply to all liabilities	The aggregate liability of the Supplier to the Purchaser (whether in contract, tort, or otherwise) is capped and shall

28.1 'Patent Indemnity is excluded from the liability cap (see clause 28.1 GCC above)	under the Contract, including indemnification obligations?	not exceed the total Contract Price. However, the RFP explicitly states that this liability limitation does **not** apply to the cost of repairing/replacing defective equipment, nor does it apply to the Supplier's obligation to indemnify the Purchaser with respect to patent infringement.
INTELLECTUAL PROPERTY		
• All codes and scripts develop and use in developing the Mobile App will become MRCS property; • No exclusion of Pre-existing software; • No clause that stipulates that the use of the Delft-FEWS software shall solely be governed by the applicable user license; • Consultant may not reuse/ share the project generated IPR	*Question:* Clause 8 of the TOR appears to allocate ownership of all intellectual property to the Employer without distinction between pre-existing intellectual property and project-specific deliverables. Could the Employer please clarify that: i. all intellectual property, including software, models, methods, tools and other know-how developed or owned by the Consultant prior to the Contract, shall remain the property of the Consultant; ii. to the extent such pre-existing intellectual property is used in the performance of the Services, the Employer shall receive a right to use the results solely for the purposes of the project; and iii. the use of the Consultant's software (including any modifications thereof) shall remain subject to the Consultant's standard licence terms, to be agreed separately where applicable. *For the avoidance of doubt, general know-how, experience and skills gained during the performance of the Services shall remain with the Consultant.*	Under the General Conditions (GCC Clause 18.1), copyright in drawings, documents, and other materials containing data/information furnished to the Purchaser by the Supplier or a third party remains vested in the Supplier or that third party. However, the specific Intellectual Property Rights section of the TOR overrides or supplements this, stipulating that all codes and scripts developed and used in developing the Mobile App, databases, and knowledge resources issued by and for the MRCS will become MRCS property. Furthermore, the Consultant may not share or use these for personal gain in any way.

The Contract <u>does not</u> appear to distinguish clearly between the implementation phase and the start of operational use of the system following completion of acceptance testing (UAT).	*Question:* The TOR describes a User Acceptance Testing (UAT) phase followed by feedback and refinement, but does not define a formal moment of acceptance or completion of the implementation phase. Could the Employer please clarify whether successful completion of UAT (including incorporation of agreed feedback) constitutes formal acceptance of the deliverables? In addition, could the Employer confirm whether such acceptance also triggers the relevant payment milestone(s) and marks the transition to operational use, with responsibility for operational use transferring to the Employer? In this context, it is further understood that the use of any software provided by the Consultant shall remain subject to applicable licence terms, where relevant.	Successful completion of the 3-month UAT phase and the subsequent "Feedback and Refinement" step does not immediately constitute formal acceptance. After UAT feedback is incorporated, the deliverables must undergo a "Review through MRC Mechanisms," which includes the Expert Group on Data, Modelling and Forecasting (EGDMF) and consultation workshops. Only after this review will MRCS issue a "Final Acceptance" (formal written acceptance) upon satisfactory completion of all requirements. This formal written acceptance is explicitly required to serve as the basis for triggering the payment milestones
Other related questions from bidders	**MRC clarifications**	
Please explain what is meant by 'dedicated full-time focal point at RFDMC to ensure effective coordination and delivery of the assignment'. Does this mean a team member from the supplier or from MRCS being located at RFDMC full-time during the project or something else?	The requirement states that the "consulting firm shall designate a dedicated full-time focal point at RFDMC". This indicates that a team member from your firm (the supplier) must be physically stationed full-time at the Regional Flood and Drought Management Centre (RFDMC) in Phnom Penh for the duration of the assignment to ensure effective coordination and delivery of the project.	
Please may you provide the report from the Met summarise the main outputs, conclusions and recommendations?Office project during this proposal phase, and/or	The Met Office project has just started so no report is produced. A joint Rapid Assessment was conducted by the RFDMC and the UK Met Office in April 2025, which identified three main barriers: limited service dissemination and co-production, forecast accuracy issues, and a lack of impact-based forecasting (IBF). The WISER (Met Office) project aims to address these barriers with four main outputs: + Developing a roadmap for improving MRC services via user-centered approaches.	

	+ Improving forecast accuracy using cost-effective, enhanced meteorological data and processes. + Making MRC services more valuable through improved relevance, accessibility, gender equity and social inclusion (GESI), and the introduction of IBF. + Trialing and documenting these new tools and methodologies in an MRC Handbook. Potentially, the IBF in this project will partly link to that under the Japan project. Here are the key points:  **WISER Project Activities (Innovation & Strategy focus):** • Conducting extensive user research and stakeholder [Presentation last modified: 30 April] user personas, map user journeys, and document existing/future service catalogues. • Executing detailed Gender, Equity, Disability and Social Inclusion (GEDSI) baseline analyses to map the specific vulnerabilities and barriers faced by marginalized groups. • Conducting feasibility studies for the transition to Impact-Based Forecasting (IBF), producing a Methodological Handbook for IBF. • Drafting and securing approval for the comprehensive MRC Services Value Improvement Roadmap. • Piloting initial service prototypes (Alpha and Beta testing) in controlled environments to gather user feedback before full deployment. • Compiling field-tested methodologies into a finalized MRC Handbook for user-centered service design. **Japan ODA Project Activities (Implementation & Technical focu** • Developing and deploying the backend and frontend of the comprehensive Flood and Drought Early Warning System (FDEWS) at a basin-wide scale, which integrates riverine flood, flash flood guidance (FFG), and drought forecasting. • Acquiring satellite data and installing high-computation units t run the Weather Research and Forecasting (WRF) model to generate high-resolution (1-9km) rainfall predictions. • Impact-Based Forecasting (IBF) and tributary forecasting that under the Japan ODA Project's implementation (specifically un Development Component 1, Outcome B) • Implementing joint transboundary adaptation activities (e.g., between Lao PDR-Thailand and Cambodia-Vietnam), which involves field surveys and applying physical adaptation measur to vulnerable areas. • Establishing physical local information hubs, such as digital kio in community centers and "weather corners" in schools, to directly reach the public. • Executing a structured, long-term capacity-building program t includes training Assistant Flood and Drought Forecasters (AFDFs) from MCs; • Supporting 4-year O&M of the Drought Monitoring Stations.
Please may you expand on the requirement for model calibration. We understand the requirement to test, calibrate, validate, and operate the WRF model. But what about the river flood forecasting models? How many locations require predictions/forecasts ? What type of models would you like to be developed (type and software requirements)? Are you able to provide	+ Existing models: The RFDMC currently operates the River Flood Forecasting and Flow Monitoring (FEWS), the Flash Flood Guidance System (SEAFFGS), the Drought Forecasting and Early Warning System (DFEWS), and the Medium- and Long-range Flood and Drought forecasting System. Please explore our data and modeling tools products: • FEWS: https://ffw.mrcmekong.org/bulletin.php • Medium- and Long-range Flood and Drought forecasting System: https://fdoutlooks.mrcmekong.org/main • Drought: http://droughtforecast.mrcmekong.org/maps • SeAFFGS: http://ffp.mrcmekong.org:8000/bulletin/ • 22 locations for predictions: https://ffw.mrcmekong.org/index.php + New developments & calibration requirements: You are required to "develop and deploy customized modeling system... for the entire LMB basin, integrating local data and climate projections" and to "calibrate and validate the forecasting

more details on the existing models?	models for better accuracies and performances". While specific software is not rigidly defined, the new models and tributary forecasting modules must be seamlessly integrated with existing backend tools and Hydropower Plant (HPP) modules into one unified platform. The forecasting model is completed based on the existing modeling tools under upgraded DSF with further revision including re-calibration of the model in both mainstream stations (all 22 stations) and all available tributary's stations. The forecasting system are not based on only mainstream anymore, but also the tributaries as well. Anyhow, the current modeling tools in upgraded DSF as baseline modeling system are MIKE-NAM, MIKEHydrobasin, & MIKE+. Moreover, other necessary module may require to fullfill the objectives, e.g. tools (physical model/tool & machine learning, etc) that can handle hydropower operations.
Please may reports from previous ODA Japan Project phases be made available during this proposal phase?	The RFP does not specify if Phase 2 reports will be published prior to the bid deadline. However, Phase 2 (2020-2024) focused on developing forecasting tools and strengthening early warning systems. As part of Assignment 1, the winning consulting firm will be provided access to "undertake a baseline assessment of the systems and tools developed under Japan Phase 2" to review system architectures, modeling approaches, and limitations. The key product of this project is the Medium- and Long-range Flood and Drought forecasting System and Flood Mapping tools which needs improvement in term of accuracy: https://fdoutlooks.mrcmekong.org/main
What is the intention regards integration of the existing Flash Flood Guidance (FFG) System with the new Flood and Drought Early Warning System (FDEWS)?	The intention is to enhance the existing SEAFFGS and MRC FFG portal in an integrated manner by utilizing a unified system and dataset, working in incorporation with the Hydrologic Research Center (HRC, USA) and ADPC. The FFG system will be deployed on the MRC server as a standalone solution. Ultimately, the FFG monitoring must be visualized on "one unified dashboard for all forecasting work," alongside riverine flood and drought products. The current product output can be viewed at: http://ffp.mrcmekong.org:8000/bulletin/
WRF questions. What will be the uses of the WRF forecasting outputs if not underpinning the flood forecasting and flash flood guidance? Do MRCS staff have technical expertise and experience to oversee WRF model runs, both in terms of systems administrators, technical modelling expertise to troubleshoot when errors occur, and to postprocess the outputs?	+ Uses: The WRF model will generate high-resolution rainfall forecasts to serve as direct inputs for early warning systems addressing localized heavy rainfall and riverine flood and flash floods, particularly for small river basins and tributaries. + Spatial & temporal scale: The WRF system will refine spatial resolution down to 1–9 km. The model domain will encompass the upper and lower Mekong River Basin, the Tibetan Plateau, and the broader Southeast Asian region (approx. 7°N–34°N latitude and 93°E–124°E longitude). Both system operation and data transmission are required to be fully automated. + Operation expectations: The consultant must install the computation units, develop the Numerical Weather Prediction (NWP) workflow, and "test, calibrate, validate, and operate the WRF model" to ensure it provides reliable data for our

What spatial and temporal scale are envisioned for the forecasts, the required model run frequency, forecast length, any post processing of outputs that would be envisioned? Please may you clarify what is meant by “operate the WRF model”? Would the consultant be expected to fill the role of overseeing the operational model runs in an ongoing capacity?	routines. The consultant will operate it through the 3-month User Acceptance Testing (UAT) and deployment phases. MRCS expertise: To ensure MRCS staff can oversee the operational runs in an ongoing capacity after the project ends, the consultant is explicitly required to "Lead training programs for MRC RFDMC to enhance technical capacity in WRF modeling and meteorological forecasting". Technical manuals and installation codes must also be handed over.