

**Meghalaya State Watershed & Wasteland
Development Agency.**

Climate Adaptative and Community-based Water Harvesting Project, Meghalaya

**REQUEST FOR QUOTATIONS –
NONCONSULTING SERVICES**

**SUPPLY AND IMPLEMENTATION OF END-TO-END
PROJECT
MONITORING & CONTROL SOLUTION.**

NCS-5 Project Management Information System including operational fees

October 2024

REQUEST FOR QUOTATION - SERVICES (RFQS)

Project Title : **CLIMATE ADAPTATIVE COMMUNITY BASED WATER HARVESTING PROJECT IN MEGHALAYA**

Source of Funding: Asian Development Bank

Contract Ref : NCS-5 (MSWWDA /ADB-14/41) Date of Issue of Request: 4th November,2024

To : _____

Sir/Madam:

1. The Meghalaya State Watershed and Wasteland Development Agency (MSWWDA) hereby requests you to submit price quotation/(s) for the performance of the services described in the **Scope of Services** attached as **Appendix A** in these documents. If you, however, have been associated with the preparation of this **Scope of Services** that is the subject of this request, you shall be disqualified.

To assist you in the preparation of your price quotation we enclose, in addition to the **Scope of Services**, the **Form of Quotation** and form of **Contract** are also attached.

2. If you/your firm, however, falls under any of the following conditions, your proposal shall not be considered:
 - (a) you/your firm are/is not a citizen/national of an ADB member country, or
 - (b) you/your firm have/has been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified, or
 - (c) you/your firm are/is owned by the Client, or
 - (d) you/your firm are/is currently sanctioned or temporarily suspended by the Asian Development Bank for a violation of its [Anticorruption Policy](#) (1998, as amended to date) or
 - (e) the contracting of services from your country or any payment to persons or entities in your country is prohibited in compliance with a decision of the United Nations Security Council under Chapter VII of the Charter of the United Nations.
3. To be qualified, you must have experience as a Service Provider of the services covered by this **Request for Quotation**. As evidence, you must attach a document of your experience as Service Provider of completed works as of a size and nature similar to the requirements of this contract as listed below:.

One completed IPMS software supply and implementation of not less than INR 100 lakhs.

Or

Two completed IPMS software supplies and implementations of not less than INR 80 lakhs.

Similar works are defined as the supply and implementation of a COTS-based IPMS solution, the *Electronic Document Management System (EDMS)*, capturing engineering progress without a manual update, procurement, construction deliverable monitoring, risk and issue management, and finance/cash flow monitoring.

4. Your quotation/(s) should be submitted in accordance with the following instructions, procedures, and the terms and conditions of the **Contract**.

Preparation of Quotations

- (a) Your price quotation/(s) shall be for all the items as described in the **Scope of Services**, and submitted only in the attached **Form of Quotation**. The currency of quoted prices and payment shall be **of Indian Currency**.
- (b) You shall submit only one set of quotations for the above items. Your quotation must be typed or written in indelible ink and shall be signed by you or your authorized representative. Without a signature in your **Form of Quotation**, your quotation will not be considered further.
- (c) You shall submit one original of the **Form of Quotation**, and clearly marked "Original". In addition, you shall also submit one copy marked as "COPY". In case of any discrepancy between the Original and Copy, the Original shall prevail. [*Note: Delete last sentence if submission is by electronic means.*]
- (d) Your quotation(s) should be valid for a period of 30 days from the deadline for submission of the quotation/(s) as indicated below. If you withdraw your quotation during the validity period and/or refuse to accept the award of a contract when and if awarded, then you will be excluded from the list of Service Providers for the project for two years.

Submission and Opening

- (e) Your **Form of Quotation** should be submitted by **13th December, 2024 before 2.00 PM** with the required documents that should be signed, sealed in an envelope and addressed to and delivered to the following address:

Client's Address : The Deputy Chief Executive Officer,
Meghalaya Sate Watershed & Wasteland Development Agency
(MSWWDA), Upper Nongrim Hills, Shillong, Meghalaya.
Telephone : 03643510017

- (f) Quotations shall be opened in public, in the presence of participating Service Providers' representatives who choose to attend, on **13th December, 2024 at 3.00 PM** and at the following address:

**The Deputy Chief Executive Officer
Meghalaya Sate Watershed & Wasteland Development Agency
Upper Nongrim Hills, Shillong, Meghalaya.**

Evaluation and Comparison

- (g) Quotations determined to be substantially responsive to this **Request for Quotation** will be evaluated by comparison of their offer prices. A quotation is not substantially responsive if it contains material deviations or reservations to the terms, conditions, and specifications in this **Request for Quotation**.
- (h) In evaluating the quotations, the Client will adjust for any arithmetical errors as follows:
 - (i) where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and

- (ii) where there is a discrepancy between the unit rate (where applicable) and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern; and

If you refuse to accept the correction/(s), your quotation will be rejected.

Award of Contract

- (i) The Client shall award the contract to the Service Provider whose quotation has been determined to be substantially responsive to this Request for Quotation and who has offered the lowest price quotation.
 - (j) The Service Provider whose quotation has been accepted will be notified by the Client within 15 days from the date of submission of quotation through the return of a copy of the **Form of Quotation** with **Acceptance** signed by the authorized representative of the Client.
 - (k) The successful Service Provider shall sign the **Contract** governed by the annexed **Contract Terms and Conditions**. . The service provider shall quote prevailing GST rate in the price schedule , however GST shall be payable at prevailing rates at the time of invoicing .
5. Further information can be obtained from:
- Name : Mr. Z.D. SHIRA, DEPUTY CEO
Address : Meghalaya State Watershed & Wasteland Development Agency (MSWWDA)
Upper Nongrim Hills, Shillong, Meghalaya.
Telephone : 0364 2224551
E-mail : megsoil49@gmail.com
6. The Client intends to apply funds from the **Asian Development Bank (ADB)** for eligible payments under the **Contract** resulting from this **Request for Quotation**.
7. Under **ADB's Anticorruption Policy** (1998, as amended to date) Service Providers shall observe the highest standard of ethics during the procurement and execution of such contracts. ADB may reject a proposal for award, and may impose sanctions or other remedial actions on parties involved, if it determines that the Service Provider recommended for award or any other party, directly or through an agent, has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for, or in executing, the Contract. At the time of submission of your quotation, you should not be in ADB's sanctions list. A firm/individual shall not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy, whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions.
8. You/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, are not, or have never been, temporarily suspended, debarred, declared ineligible, or blacklisted by the client's country, any international organization, and other donor agency.
9. If so debarred, declared ineligible, temporarily suspended, or blacklisted, please state details (as applicable to each joint venture partner, associate, parent company, affiliate, subsidiaries,

subcontractors, and/or suppliers):¹

- (a) Name of Institution: _____
- (b) Period of debarment, ineligibility, or blacklisting (start and end date): _____
- (c) Reason for the debarment, ineligibility, or blacklisting: _____

10. You/your firm's, joint venture partners', associates', parent company's affiliates or subsidiaries', including any subcontractors' or suppliers', key officers and directors have not been [charged or convicted] of any criminal offense (including felonies and misdemeanors) or infractions/violations of ordinance which carry the penalty of imprisonment.

If so charged or convicted, please state details:²

- (a) Nature of the offense/violation: _____
- (b) Court/Area of jurisdiction: _____
- (c) Resolution (i.e. dismissed; settled; convicted/duration of penalty): _____
- (d) Other relevant details:

11. You/your firm understands that it is your obligation to notify ADB should you/your firm, joint venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, be temporarily suspended, debarred or become ineligible to work with ADB or any other multilateral development banks, the client's country, international organizations, and other donor agencies, or any of your key officers and directors be charged or convicted of any criminal offense or infractions/violations of ordinance which carry the penalty of imprisonment.

12. Any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the quotation/bid or cancellation of the contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015 as amended from time to time).

13. A bidder shall not have a conflict of interest. All bidders found to have a conflict of interest shall be disqualified.

14. Please confirm by fax/e-mail the receipt of this request and whether or not you will submit the price quotation(s).

Sincerely,



(Client) CEO

¹ Any such disclosure shall be forwarded by the Client to ADB.

² Any such disclosure shall be forwarded by the Client to ADB.

**FORM OF QUOTATION
(Services)**

_____ [date]

To: _____ [Client's Name]

_____ [Client's Address]

We offer to execute the _____ [name and number of Contract] in accordance with the **Contract Terms and Conditions** and the **Scope of Services** accompanying this Quotation for the Contract Price not to exceed _____ [amount in words and numbers] (_____) [name of currency] _____ in accordance with **Price Schedule** annexed to the **Scope of Services**.

*Note: Attach a **Price Schedule form** to the **Scope of Services**.*

We propose to complete the performance of the services described in the **Contract** within the Completion Period indicated in the priced **Scope of Services**.

This Quotation and your written acceptance will constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Quotation you receive.

We hereby confirm that this Quotation complies with the Validity of the Offer condition imposed by the **Request for Quotation** document.

We: (a) are a national of an ADB member country; (b) have not been associated with the firm that prepared the terms of reference or engaged in the preparation of the Project for which the contract that is subject of this request for quotations was identified; (c) are not owned by the Client; (d) are not currently sanctioned or temporarily suspended by the Asian Development Bank; and (e) to the best of our knowledge, is not prohibited from being contracted in compliance with a decision of the United Nations Security Council.

Name of Service Provider: _____

Authorized Signature : _____

Name of Signatory : _____

Title of Signatory : _____

Address : _____

Telephone Number : _____

Fax Number, if any : _____

Email address (optional) : _____

ACCEPTANCE

The Client accepts the Service Provider's offer to provide the service.

Name of Client : Meghalaya State Watershed and Wasteland Development Agency, MSWWDA

Authorized Signature : _____

Name of Signatory : Dr. Joram Beda, IAS

Title of Signatory : Chief Executive Officer, MSWWDA

Date :

PRICE SCHEDULE

[For use under Option B Form of Quotation]

| Item no. | Item or Activity | Unit | Amount |
|----------|--|------|--------|
| 1 | Supply and implementation of COTS-based End-to-End Project Monitoring and Control Solution with 3 years of subscription to support the implementation of the Climate Adaptative and Community-based Water Harvesting Project (CACBWHP) under Meghalaya State Watershed & Wasteland Development Agency (MSWWDA). with one year warranty including Software Maintenance, | LS | |
| 3 | GST | | |
| 4 | Total contract price (in Figures) | | |
| 5 | Total contract price in (Words) | | |

Payment Schedule:

| S. No. | Project Deliverables | Payment |
|--------|---|---|
| | Product Fee & Implementation: | |
| 1 | Supply and installation. | 30% of total contract price |
| 2 | Go-live of Engineering Deliverable Management | 5% of total contract price |
| 3 | Go-live of Procurement Deliverable Management. | 5% of total contract price |
| 4 | Go-live of Construction Deliverable Management. | 5% of total contract price |
| 5 | Go-live of Cost Monitoring, safety, and issue Management. | 5% of total contract price |
| 6 | Go live of Integrated Dashboards. | 5% of total contract price |
| 7 | Subscription fees for 2 nd Year (50 users and Simultaneous 30 users) | 15% of total contract price in First month of the 2 nd year after Go live of Integrated Dashboards |
| 8 | Subscription fees for 3 rd Year (50 users and Simultaneous 30 users) | 15% of total contract price in First month of the 3 rd year after Go live of Integrated Dashboards |
| 9 | Completion of 3 years | 15% of total contract price |

CONTRACT

Name of Country: India

Project Name: Climate Adaptative Community Based Water Harvesting Project In Meghalaya

Name of Contract: Supply and Implementation of End-To-End Project Monitoring & Control Solution

Contract Number: _____

This Contract is entered into on _____[*date*]__ day of _[*month*],_ [year]____, between _____[*name of Client*]_____ (hereinafter called “the Client”) on the one part, and _____[*name of Service Provider*]_____ (hereinafter called “the Service Provider”) on the other part.

Whereas the Client has requested a quotation for _____ [*description of services*] to be performed by the Service Provider in accordance with the **Contract**, and has accepted the Quotation by the Service Provider in the amount of ___[*amount in words*]___ [*amount in figures*] hereinafter called “the Contract Price”.

The Client and the Service Provider agree as follows:

1. The following documents shall be deemed to form and be read and construed as part of this Contract, viz:
 - a) **Form of Quotation**, with **Scope of Services** and **Appendix** [*and Price Schedule under Option B form of quotation*]; and
 - b) **Contract Terms and Conditions**;
2. Taking into account payments to be made by the Client to the Service Provider as hereinafter mentioned, the Service Provider hereby enters into this Agreement with the Client to execute and complete the performance of services under the Contract.
3. The Client hereby agrees to pay, in consideration of the successful performance of the services, the **Contract Price** as indicated and accepted in the **Form of Quotation**, under payment terms stipulated in the **Contract Terms and Conditions**.

IN WITNESS whereof the parties hereto have executed the **Contract** under Applicable laws.

Signature and seal of the Client:

For and on behalf of

Name of Authorized Representative

Signature and seal of the Service Provider:

For and on behalf of

Name of Authorized Representative

CONTRACT TERMS AND CONDITIONS

Project Name: Climate Adaptative Community Based Water Harvesting Project In Meghalaya
Client: Meghalaya State Watershed and Wasteland Development Agency, MSWWDA

Contract No. _____

1. Definitions

- (a) “Contract” means the agreement entered into between the Client and the Service Provider, together with the Contract Documents referred to therein, including all attachments, appendixes, and all documents incorporated by reference therein.
- (b) “Contract Documents” means the documents listed in the Contract, including any amendments thereto.
- (c) “Contract Price” means the price payable to the Service Provider as specified in the Contract, subject to such additions and adjustments thereto pursuant to the Contract.
- (d) “Completion” means the fulfilment of the committed services by the Service Provider in accordance with the terms and conditions set forth in the Contract.
- (e) “Client” means the entity purchasing the Services.
- (f) “Services” means the services the Service Provider will perform as specified in the Scope of Services in Appendix A.
- (g) “Service Provider” means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Client and is named as such in the Contract.
- (h) “ADB” is the Asian Development Bank.

2. Applicable Law

The Contract shall be interpreted in accordance with the laws of the Client's country.

3. Language

All communications and documents related to the Contract shall be in English.

4. Assignment

Any assignment of this Contract or of any rights hereunder, in whole or in part without the prior written consent of the Client shall be void.

5. Fraud and Corruption

This Contract shall be covered by the provisions of [ADB's Anticorruption Policy](#) (1998, as amended to date) and [Integrity Principles and Guidelines](#) (2015, as amended from time to time) that requires Borrowers (including beneficiaries of ADB-financed activity), as well as Service Providers and Contractors under ADB-financed contracts, to observe the highest standard of ethics during the procurement and execution of such contracts.

6. Performance of the Services

The Service Provider shall carry out the Services with due diligence and efficiency and shall furnish to the Client such information related to the Services as the Client may from time to time reasonably request. The Service Provider shall at all times cooperate and coordinate with the Client with respect to the performance of the Services.

7. Required Performance Standards (with attachments as necessary to be prescribed by Client.)

- (a) General Description
- (b) Specific Standards
- (c) Performance Parameters

Service Provider confirms compliance with above standards and parameters.

8. Service Completion Schedule

The services should be completed as per schedule indicated in the **Scope of Services** but not exceeding **Six months** from the date of signing of contract.

9. Fixed Contract Price

The prices indicated in the **Form of Quotation** are firm and fixed and not subject to any adjustment during contract performance, subject to Clause 11 [Payment] below.

10. Taxes and Duties

The Service Provider shall be entirely responsible for all taxes, duties, license fees, etc., incurred until completion of the services to the Client.

11. Payment

Upon submission by Service Provider of claim and subsequent verification of the claim by Client, payment of the contract price shall be made in the following manner:

- (a) Advance payment of 10% within 14 days of signing the contract, upon evidence of mobilization of service Provider.
- (b) In accordance with the Price Schedule, the amount resulting from multiplying the claimed and verified quantity of the item or activity with the unit price indicated in the accepted Form of Quotation.

12. Resolution of Disputes

The Client and the Service Provider shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute between them under or in connection with the Contract. In the case of an unresolved dispute, the dispute shall be settled in accordance with the provisions of the arbitration law or rules of India.

13. Independent Service Provider

Nothing contained in this Contract shall be construed as establishing or creating the relationship of master and servant, employer and employee or principal and agent between the Client and the Service Provider, or his employees or agents or other persons engaged by the Service Provider to perform any of the services.

14. Intellectual Property Rights

Intellectual Property Rights: (a) The Service Provider shall indemnify the Client from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgments, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or asserted against, the Client during or in connection with the Services by reason of: (i) infringement or alleged infringement by the Service provider of any patent or other protected right, or (ii) plagiarism or alleged plagiarism by the Service provider.

15. Failure to Perform

The Client may terminate the Contract if the Service Provider fails to perform the services, in accordance with the above terms and conditions, in spite of a 14-day notice given by the Client, without incurring any liability to the Service Provider. In the event of such termination, the amount due under the Contract shall be subject to equitable adjustment.

16. Termination Due to Integrity Violation

The Client may terminate this Contract, in whole or in part, if the Service Provider, in the judgment of the Client has engaged in integrity violations in accordance with Clause 5 [Fraud and Corruption], in competing for or in executing this Contract.

17. Other Grounds for Termination

The Client may also terminate this Contract, in whole or in part, if the Service Provider becomes insolvent, bankrupt or gives the Client reasonable evidence of its inability to complete the Services as specified, or fails to correct any non-conformity in the Services or performs in bad faith by willfully not observing the terms and conditions of this Contract.

18. Force Majeure

The Service Provider shall not be liable for penalties or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- (a) For purposes of this Clause, "Force Majeure" means an events beyond the control of the Service Provider and not involving the Service Provider's fault or negligence and not foreseeable. Such events may include, but not restricted to, act of Client in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- (b) If a Force Majeure situation arises, the Service Provider shall promptly notify the Client in writing of such condition and the cause thereof. Unless otherwise directed by the Client in writing, the Service Provider shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by Force Majeure event.

19. Accounts and Records

- (a) The Service Provider shall keep accurate and systematic accounts and records in respect of the Services in such form and detail as are customary in its profession and are sufficient to establish accurately that the costs have been duly incurred.
- (b) Notwithstanding anything to the contrary stated herein, the Service Provider shall maintain accounts and records, including original receipts, invoices and other supporting documents evidencing payments made by the Service Provider under this Contract, for the period of the

Services and for a period no less than 3 years after the expiration or termination of this Contract.

- (c) The Service Provider shall permit ADB to inspect the accounts, records, and other documents relating to the submission of bids and contract performance of the Service Provider and to have them audited by auditors appointed by ADB.

20. Suspension of ADB Loan or Credit.

In the event that ADB suspends the Loan or Credit to the Client, from which part of the payments to the Service Provider are being made, the Client is obligated to notify the Service Provider, with copy to the Client's representative, of such suspension within 7 days of having received ADB's suspension notice.

21. Termination Notice Due to Non-payment

If the Service Provider has not received payments due within the 28 days as provided for in Clause 11 [Payment], the Service Provider may immediately issue a 14-day termination notice.

Appendix A

SCOPE OF SERVICES

1. Background

Government of Meghalaya through Government of India has applied for loan from the Asian Development Bank (ADB) for the Climate Adaptive and Community-based Water Harvesting Project (CACBWHP) in Meghalaya. The project intends to develop 532 Water Harvesting Systems (WHS). Meghalaya State Watershed & Wasteland Development Agency (MSWWDA), a Society formed under the aegis of the Soil & Water Conservation Department (SWCD) of the Government of Meghalaya would be the implementing agency (IA) for the CWHP.

The project is proposed to be implemented in all 12 districts of Meghalaya. The project aims to ensure water security of rural Meghalaya by developing and managing a robust network of integrated and multiple-use water conservation, harvesting and storage structures (Water Harvesting Systems (WHS)).

The scope of project is to develop around 532 water harvesting systems (WHS) costing tentatively \$62.5 million, for which \$50 million would be provided as a loan from ADB and \$12.5 million would be contributed by Government.

SWCD has prepared Batch-1 of the Detailed Project Reports (DPRs) consisting of 382 WHS. A summary design report has been prepared containing an overview of the technical details, and the individual DPRs are annexed to it. The DPRs of village level schemes contains details of individual schemes comprising water harvesting structures (WHS) (to be built by contractors) and upstream (namely, catchment area treatment, CAT interventions) and downstream (namely, command area development, CAD interventions) watershed and livelihood activities which are to be implemented by village employment council (VEC). The survey, designs and cost estimates are prepared by Divisional Offices of SWCD in consultation with the VEC. The schemes are then reviewed by the district councils under the chairmanship of Deputy Commissioners. The District Watershed Cell cum Data Center (DWDC) review the DPRs of the sub-watershed scheme (water supply, irrigation, agriculture, fisheries, ecotourism, livelihoods, etc.) along with the viability of the cost estimates, and opportunities for the convergence with existing government programs, work schedules and VEC agreement. The community procurement is proposed to be administered as per Mahatma Gandhi National Employment Guarantee Scheme.

The project's outcome is climate resilient water management for community livelihoods and wellbeing improved. The proposed outputs of the project are:

Output 1: Institutional capacity for climate resilient and sustainable management of water harvesting systems developed: This output will (i) develop a WHS master plan for future decision-making and incorporate parameters for gender equality and social inclusion (GESI), climate variability, and disaster risk management that include digital mapping of all WHS, (ii) support operationalization of the water policy and prepare village water security plans as required by the Meghalaya State Water Policy, (iii) build capacity of SWCD staff and other stakeholders, with a focus on improving operation and maintenance, (iv) provide technical support to prepare design and feasibility reports for subsequent phases, and (v) establish water user associations and/or watershed committees with participation of women in decision-making process.

Output 2: Climate resilient water harvesting systems developed. This output will (i) construct 532 climate resilient WHS in 12 districts with 5 years of operation and maintenance support, and

(ii) install automatic weather stations with information communication technology-based mobile application for climate resilience. WHS investments will generally comprise: (i) construction or rehabilitation of small multipurpose reservoirs similar to weir or check dams; (ii) catchment area treatment, such as contour trenches and afforestation; (iii) irrigation command area development interventions downstream of each reservoir, such as terracing, irrigation, and agricultural and horticultural development; and (iv) fencing to prevent animal nuisance. The WHS will increase water security for communities and underpin livelihood activities.

Output 3: Enhanced Livelihood for Communities demonstrated. This output will: foster communities' livelihood activities by benefitting from the WHS and their reliable water supplies. This will be achieved by: (i) piloting value addition interventions for selected commodities for agriculture, horticulture, and fishery value chains; (ii) training beneficiary communities on alternative livelihood practices; (iii) piloting renewable energy generation such as micro-hydro and solar for domestic use and lift irrigation; (iv) establishing pilot demonstrations of climate-smart agricultural practices, including micro-irrigation; and (v) applying the graduation approach method to promote economic opportunities and social inclusion among women, poor, and vulnerable peoples, providing financial sustainability and resilience.

The project will introduce high-level technologies such as remote sensing, geographic information systems, and decision support systems for effective governance, monitoring, and project management of scattered schemes from project inception.

2. Objective

The project aims to engage a Partner to implement a Commercial Off-The-Shelf (COTS) End to End Project Monitoring & Control Solution. The Service Provider will enhance project management, control, and collaboration capabilities by providing a fully integrated Project Monitoring & Control solution.

The terms 'Project Monitoring & Control Solution, COTS Product' used in this RFQ means a single COTS Product or a combination of COTS products preferably from a Single OEM that by default or through configuration works seamlessly with each other to cater to the FRS Requirements (which broadly include Project Controls-Planning & Scheduling, Project Monitoring, Cost control, and Project Management) of this RFQ. The COTS Product or Products is expected to cover 100% of the Detailed Scope of Work.

- The primary objective is to design, develop, deploy and maintain a full stack ICT based application platform which would house MIS modules for project progress performance monitoring and GIS based tools for Geospatial analysis. The integration of GIS applications for Geo-tagging of project activities (geospatial Meta data), geospatial analysis of data generated during the process, tracking progress will be one of the major activities.
- The MIS will be used to track implementation progress and other aspects of the project at select intervals with additional scope of comparative reporting and analysis for non-project areas (villages / blocks) as well as other state government and central government platforms for information sharing and scheme convergence and shall generate the necessary reports which will be used to facilitate informed decision making at all levels and by all stakeholders
- To keep provision of future updation, up gradation of the MIS architecture which might arise out of any changes in project components or implementation methodology in the near future
- To design and develop a system to monitor and manage Grievance Redressal Mechanism, which will be mobile / tablet based, to capture and feed data into the MIS.
- MIS helps control the organization to provide the latest information as well as historical data whenever required.

- MIS controls functions of management to provide quick and timely information to the management. The process is very effective to make decisions.

3. Implementation arrangements

The service provider will work closely with Client , Client representatives and Project Design Implementation Support Consultant (PDISC Consultant³).

4. Detailed Scope of Work

a) (Role of Service provider)

a) Planning and Scheduling Services:

- Prepare Master Implementation Plan (MIP) for all Programs / Projects in MSP/Primavera (P6), encompassing all CLIENT activities and Interfaces with Contractor's Engineering, Procurement, Construction, and Testing / Commissioning activities, identifying critical path, priority activities, and target dates for interim Milestone & Project completion.
- Revising MIPs for all Programs / Projects for all Contract Amendments / Variation Orders issued to Contractors.
- Uploading MIPs for all Programs / Projects with Cost Data in order to prepare a realistic yearly budget/expenditure forecast.
- Guiding and reviewing the Contractual Works Programme (CWP) of all Contractors in order to setup the correct Baseline Programme of Contractors as per Contract requirements.
- Guiding and reviewing the Progress Measurement System (PMS) of all Contractors in order to set up the correct Baseline Progress Measurement System of Contractors as per Contract requirements.
- Integration of GIS applications for Geo-tagging of project activities (geospatial Meta data), geospatial analysis of data generated during the process, tracking progress

b) Monitoring and Reporting Services

- Updating MIPs for all Programs / Projects and recommending mitigation strategies for critical slippages/delays in order for CLIENT to take corrective actions.
- Compiling, updating, and analyzing progress for all Programs / Projects
- Preparing management presentations for all CLIENT stakeholders including Ministries.
- Reviewing/commenting on Daily / Weekly / Monthly Progress Reports of all Contractors / Consultants in order to establish correct records for avoiding future claims.
- Reviewing/commenting on updated CWP of all Contractors in order to highlight contractor's slippages/delays.
- Attending progress review meetings with Contractors for all Programs / Projects.
- Reviewing/commenting on Minutes of Meetings (MoM) for all meetings with Contractors / Consultants for all Programs / Projects.
- GIS based tools for Geospatial analysis. The integration of GIS applications for Geo-tagging of project activities (geospatial Meta data), geospatial analysis of data generated during the process, tracking progress using GIS Tools

³. The PDISC is being hired under a different consulting assignment and will work with and assist SWCD and MSWWDA for project management, capacity building, construction supervision, quality assurance, environment and social safeguards and technology transfer to deliver the project outputs and outcome.

- Raising timely alerts for delays in achieving critical Milestones and recommending mitigation measures to control delays

c) Risk and Issue Management

- Prepare and implement Integrated Risk Management Procedure
- Conduct Quarterly workshops on Risk Management with all Stakeholders for all Programs / Projects
- Analyse Program / Project risk on the Qualitative Risk Matrix
- Propose Risk mitigation strategies to CLIENT for all Programs / Projects
- Prepare/maintain Integrated Risk Register
- Prepare and implement Issue Management and Escalation Procedure
- Prepare & maintain Issue Management Register

d) Training and Capacity Building Plan:

- Detailed training and capacity building for various users. The responsibility will lie with the agency for the same.
- Training plan: Develop training plan based on assessment of skill-gap analysis of project staff (during requirement gather stage) of MSWWDA. Requirement for training will be assessed with the focus on end-user services and responsiveness in consultation of project members within MSWWDA.
- Training modules: Develop curriculum and courseware for variety of training modes, both online and offline, like web-based video libraries, self-learning, instructor led training etc. agency should also list out the mode and associated infrastructure needs for successfully delivering the trainings for trainers, ICT staff, data entry agents or agencies, help desk and users,
- Manuals: Develop operations manuals including implementation and rollout plan, user manuals, training manuals and aids, etc. This will also include comprehensive process guidelines for rollout by third party implementers.

e) Handover:

The agency will train the operations team in MSWWDA on the MIS application functionalities, its various features and user functionalities. The agency will provide complete details of the technical specifications and detailed design documents and database along with relevant documents. MSWWDA will be the absolute owner of the data and will have all intellectual property and the agency shall not replicate or reproduce or use without the consent of the owner.

b) Brief Scope of Work (Role of PDISC Consultant)

The PDISC Consultant shall provide a counterpart staff team of experienced professionals with the required skills. The staff shall work closely with Service provider in order to automate various Project execution processes and integrate with existing applications of CLIENT to fetch actual data to generate various Dashboards and Reports for the effective monitoring of all its programs/projects. These Dashboards & Reports shall be shared with various stakeholders of CLIENT. The following scope shall be as minimum:

- Planning & Scheduling Using Primavera/MSP.
- Monitoring & Reporting

- Budgeting & Cost Estimation
- Contract Management including Change Management
- Claims Management
- Risk and Issue Management
- Invoice Certification and Management
- Delay Analysis / EOT Analysis

5. Dates, completion schedule, venues and other relevant details:

The Intended Completion Date for the whole of the Works shall be Six Months or 180 Days from the date of agreement. The successful contractor shall submit a tentative program for the entire work.

6. Detailed Functional features of proposed Solution

a) Project Information Capture:

- The system would capture all data related to a project such as Project details, Broad technical specification, Client details, Vendor details, Contact information and Project team details.
- Facility to handle multiple projects.
- Facility to define the systems and the vendor's details and resources assigned to each system.
- Facility to define the execution team which is the resource pool.
- Facility to define man hour rates, site details, transmittal series for internal and external releases specific to a project.
- Facility to define project specific revision series and other related data such as aging dates, percentage rejection etc.
- Facility to specify approval category codes and weightages specific to a customer or project.
- Facility to define the reference orders.
- Facility to define project specific Minutes of the meeting review boards.
- Facility to attach all related documents such as customer proposals, schedules, site plans etc.
- Facility to attach correspondences from MS outlook and Documents related to project.

b) Project and Task Monitoring (WBS) EVM:

- Registering and Scheduling deliverables:
- System to register the complete list of deliverables required to complete the project.
- System to register the estimated man-hours for each deliverable and automatically calculate the contribution to the project.
- System to provide planned dates for deliverables. Can be synchronized from the project plan in MS Project / Primavera.
- System to assign interim milestones with dates to each deliverable.
- System to assign deliverables to groups like a WBS- Work Breakdown Structure The groups (WBS) normally used are the Department/ Disciplines and document type. For Example: - Engineering ->Process-> P&ID etc.

- System to roll up/ aggregate, progress (planned) based on interim milestone/ deliverables weights.
- System to publish these deliverables for action to the respective team.
- System to provide a To-Do List to users based on the publishing and role of users in the team.
- System to get the planned progress on a weekly/ monthly basis for a deliverable, group of deliverables (WBS), and the project.
- Actual progress management of deliverables and re-forecasting
- System to link the deliverable file to the corresponding deliverable 'placeholder'.
- Automatic updating of actual dates on the interim milestone based on events/ stages like- files added, transmittal, approval code, internal review completion, etc.
- System to roll up/ aggregate, progress (actual) based on interim milestone/ deliverables weights.
- System to monitor the planned vs actual vs forecast on a deliverable, group of deliverables (WBS), and at the project level.
- System to populate the forecast dates for the deliverable and its interim milestones on a regular interval.
- System to set reminders/ escalation or notifications for deliverables/ group of deliverables (WBS)

c) Master Level Configuration:

- Facility to calculate Quantity based Progress Measurement, Rule of Credit
- Facility to define Rule of Credit based on Type of document
- Facility to define Rule of Credit based on Systems / Equipment
- Facility to monitor construction activities with respect to the completion against drawing
- Facility to configure reports
- Facility to create activity/task list for each equipment/package/department etc. under design and development plan by the respective department.
- Facility to export the work breakdown structure to MS Project / MS Excel/ Primavera. Any recognised project management software can be linked with WRENCH through MS Excel outputs for scheduling, planning, linking, assigning constraints and assigning resources.
- Facility to import the work breakdown structure from MS Project / MS Excel/Primavera.
- Facility to baseline the work breakdown structure.
- Facility to release the complete work breakdown structure or/and the individual department specific work breakdown structure by the respective departments that have created the work breakdown structure.
- Automatic notification to the resources assigned to the task in work breakdown structure by mail.
- Facility to link the task in work breakdown structure either to the creation of drawing/document or to activities.
- Automatic updating of actual start date and actual end date of work breakdown structure when the drawing/document is routed through the user defined workflow.
- Automatic updating of percentage of completion for a task as and when the stages in the workflow are completed.
- Revision of the work breakdown structure and its release with the automatic increment of issue level. The history to be maintained and facility to compare the revisions.
- Revision of individual department work breakdown structure and its release with revision

history and comparison facility.

- Facility to set escalation or notification based on a) completion of a task b) delay of a task c) no of days before scheduled completion date d) no of days before scheduled start date e) actual engineering time spent exceeding budgeted duration or reaching defined percentage of the budgeted time.
- Facility to set reminder in periodic intervals
- Facility to provide To-Do List to users for pending tasks.

d) Workflow Process Management:

- Facility to define user-defined workflow graphically and to define percentage weightage, approval methodology (one or all), and user defined checklist, multilevel escalation, notification and rights to user in that stage.
- Facility to create serial and parallel stages and to define approval methodology (one or all).
- Facility to assign default user for each stage.
- Facility to define email template during the routing between stages with user defined document properties and project properties.
- Facility to bypass the workflow stages and system to keep track of the same.
- Facility to reassign resource of a stage during routing.
- POPUP MAIL facility -To alert the user as soon as a drawing/document arrives in the workspace or any mail comes to the mailbox.
- Facility to send notification mails to POP3 external mailing system such as MS Exchange or Lotus notes.

e) Drawing and Document Management:

- Facility to define document categories and document type based on workflows and security.
- Facility to define standard ISO templates and distribution list for a document type.
- Facility to automatically generate drawing number based on user defined logic.
- Facility to define user defined title blocks for the Company and also flexibility required to specify for project/customer specific title blocks.
- Automatic updating of AutoCAD drawing Title blocks with the drawing properties from the database as drawing number, description, project, scale, revision number etc.
- Updating of Title block with electronic signatures when routed through workflow.
- Drawing/documents printed will be printed with watermark across sheet dynamically based on the status of the drawings /documents.
- Facility to put user defined seal on printed drawings.
- Facility to control editing of the drawing/document as they are routed through the workflow.
- Facility to check-in/checkout the drawing to prevent the same drawing being edited by multiple users.
- Facility to capture the actual time spent by the designer while editing.
- Facility to control access for view, print, edit, copy, move, send by email based on document category and type.
- Facility to handle and track vendor drawing.
- Facility to handle and track sub contracted drawings.
- Facility to view the drawing/document without the application software used to create them, by using adobe viewer or add-on multi format viewer.
- Facility to redline or comment on the drawing/document without the application software using adobe viewer or add-on multi-format viewer.

- Facility to attach external document as a comment file.
- Facility to attach action points with responsibility and scheduled dates.
- Facility to review drawings/documents simultaneously in a discussion forum using multi format viewer
- Facility to open drawing/document and tick the checklist simultaneously.

f) Transmittal and Submittals Management:

- Facility to release the drawing through a transmittal for different stages (Internal release, To Client, Client consultant, Released for Construction)
- Automatic generation of transmittal number as per user defined logic.
- Generation of transmittal format as followed in Company with customer/vendor/consultant name, address, drawing information and purpose.
- Facility to export the drawings/documents as attachment to external mail (MS Exchange).
- Automatic updating of revision number for different release categories.
- Automatic updating of Work breakdown structure during release of drawing/document attached to it.
- Report on released drawings prints taken by users.
- Facility to ensure manual archive along with electronic archive.
- Printing of transmittal as per Company format.

g) Revision or Change Management:

- Facility to raise change request for released parts drawings / documents.
- Facility to route the change request through user defined workflow for approval.
- Facility to check the affected related and associated drawings/documents and to include them to the change request.
- Facility to approve the change request online along with the related and associated drawings/documents.
- Facility to permit editing of the drawing under revision and mark the drawing as UNDER REVISION.
- Facility to automatically notify the users to which drawing/document was distributed.
- Facility to automatically notify users that have printed when change is approved and after change is released.
- Facility to maintain the revision history of a drawing/document.
- Ensure access to all users the latest revision and also to view the old revisions.
- Facility to handle changes to manual archiving of drawings/documents along with electronic archiving of drawings/documents.

h) Correspondence Management:

- System to Drag and Drop incoming emails, scanned letters, scanned faxes, etc. to store as correspondence related to the projects or tasks.
- System to send these incoming emails to one or many users for review as per predefined workflow.
- System to identify incoming emails that need to be replied to and to identify responsibility on who must reply.
- System to reply directly from Outlook.
- System to define a notification to one or more people if mail is not replied.

- System to prepare and send outgoing emails related to a project or task.
- System to specify the expected reply date for each mail.
- System to set automated notification and escalation emails.

i) Procurement Deliverables Monitoring:

- Capture Plan Vs Actual progress of Pre-order / Pre-Procurement and Post order / Post Procurement stages
- Establish a robust review process of procurement documents through workflows that Provide real time status of Material Delivery
- Provide updates on the delivery milestones and provide a forecast of the project outcome.

j) Construction Deliverable Management

- List the construction activities of the work package and define the weightage of each package.
- Integration with other project planning software like PRIMAVERA/MSP
- Import construction WBS with budgeted quantity and unit of measurement.
- Distribute budgeted quantity based on linear or beta distribution curve.
- Capture the actual quantity of work done from the site using mobile devices.
- Capture pictures of actual work done with Geo location as evidence
- Report variations in actual quantities and forecast quantities to complete work on schedule.
- Daily progress reports are captured from the site using the mobile app along with geolocation.
- Re-forecast the balance quantity of work for the remaining duration.
- Automate reports and dashboards for the construction progress.
- Maintain a master list of quality checklists for each type of item and definition of quality forms.
- Capture Request for Inspection (RFI's) and assign the inspection activity to a resource and schedule the inspection.
- Capture field quality observation with pictures using a mobile and assign it to the resources for taking necessary action.
- Capture before and after inspection reports, analyze actions implemented, and issue notifications to schedule re-inspections.
- Raise safety observations through smart devices from the site and share the information with relevant stakeholders in real-time.
- Auto-generate CAPA Reports based on the observations and NCRS raised and closed.
- Confirm appropriate corrective actions have been implemented, record preventive measures, and identify open observations.
- Different permits to work forms can be registered and published to relevant users for review and approval.
- List potential risks in the Risk Register of all project activities, at the project or deliverable level, and identify the mitigation plan for each.
- Generate a risk heat map for a project that displays based on the Risk probability and Risk occurrence score.
- Capture snags with pictures from the site using mobile devices with GPS location.

- Automate the generation of the snag list and facilitate its routing for corrective action.
- Define the corrective action for each snag, identify responsible resource or vendor and define schedule for closure.
- After corrective action is taken, capture photo evidence using mobiles and notify the concerned person for verification and snag closure.

k) Dashboard and Reports:

- Drawing release & approval status report
- Document Issue Vs Approval Report
- Pending Document in Workflow
- Correspondence Report
- Transmittal Wise report
- EDDR Report
- Engineering S-Curve.
- All revision Report
- Procurement tracker
- Procurement S-curve
- EPC S-curve
- Quality tracker
- Issue tracker
- cost report
- Portfolio & Project Dashboards.

Delivery and Payment Schedule:

| S. No. | Project Deliverables | Timeline from start of work | Payment |
|--------|---|-----------------------------|---|
| | Product Fee & Implementation: | | |
| 1 | Supply and installation. | 45 days | 30% of total contract price |
| 2 | Go-live of Engineering Deliverable Management | 75 days | 5% of total contract price |
| 3 | Go-live of Procurement Deliverable Management. | 100 days | 5% of total contract price |
| 4 | Go-live of Construction Deliverable Management. | 120 days | 5% of total contract price |
| 5 | Go-live of Cost Monitoring, safety, and issue Management. | 150 Days | 5% of total contract price |
| 6 | Go live of Integrated Dashboards. | 180 Days | 5% of total contract price |
| 7 | Subscription fees for 2 nd Year (50 users and Simultaneous 30 users) | | 15% of total contract price in First month of the 2 nd year after Go live of Integrated Dashboards |

| | | | |
|---|--|--|---|
| 8 | Subscription fees for 3 rd Year (50 users and Simultaneous 30 users) | | 15% of total contract price in First month of the 3 rd year after Go live of Integrated Dashboards |
| 9 | Completion of 3 years | | 15% of total contract price |
| <p>The service provider will provide warranty support for agreed duration of minimum 1 year which will include bug fixing and enhancements, if any. The agency shall provide required experts / support staff for work specified in in Detailed Scope of Work. The service provider will also define post implementation maintenance process for the MIS application and provide onsite/offsite support. This would include capacity building and handholding of local IT team.</p> <p>The service provider will prepare guidelines and procedures for setting up helpdesk support and mechanism also provide online help within the application.</p> | | | |