

Government of the People's Republic of Bangladesh
Office of the Executive Engineer
PWD E/M MIS Division-1
Purta Bhaban, Segunbagicha, Dhaka.
E-mail: ee_mis1@pwd.gov.bd, Web: www.pwd.gov.bd

Memo No: 25.36.0000.621.18.001.18-62

Dated: 7/5/2026

REQUEST FOR EXPRESSIONS OF INTEREST (REOI)

Ministry/Division/Agency	: Ministry of Housing and Public Works; Public Works Department; PWD E/M MIS Division-1, Purta Bhaban, Segunbagicha, Dhaka.
Expression of Interest for Selection	: Consulting Firm
Title of Service	: Selection of Consulting Firm for developing customized software.
EOI Ref. No.	: EROI/1/MIS1/2025-26
Invitation Date	: 7/05/2026
Procurement Sub-Method	: SBCQ
Budget and Source of Funds	: GOB(Revenue)
Assignment Name	: Procurement of Software Services for the Modification and Enhancement of the 'Digitalization of Estimate Software' of Public Works Department (PWD).
EOI Closing Date and Time	: 21/05/2026 and 02.00 PM
Brief Description of Assignment	: Procurement of Software Services for the Modification and Enhancement of the 'Digitalization of Estimate Software' of Public Works Department (PWD).

The firm must demonstrate the following minimum qualifications:

A. Requirements

- Valid Trade License / Incorporation Certificate, Valid BIN Registration Certificate, Up-to-date Income Tax Clearance Certificate with TIN, Up-to-date VAT Registration Certificate, Active and valid membership with the Bangladesh Association of Software and Information Services (BASIS).
- Well-equipped office facility in Dhaka with necessary development infrastructure.

B. Technical and Project Experience

- Minimum 05 (five) years of experience in Software Development Work /Business in Bangladesh.
- Demonstrated experience in designing, developing, and deploying web-based management or monitoring systems for the Government of Bangladesh — this must be evidenced with work completion certificates or work orders. The experience shall have to be of any Government / Semi Govt/Autonomous /Private Body of Bangladesh
- Minimum 02 (two) practical completion in the development and maintenance of large-scale web portals or enterprise-level systems within the last 5 years.
 - In case of the work done under any Govt/Semi Govt/ Autonomous /Private Body Other than PWD the certifying authority shall be an officer not below the rank of Executive Engineer and the same duly verified by the concerned Executive Engineer of PWD of that district/area within whose jurisdiction work has been done.
- Experience value (Single Contract): Must have completed at least 01 (one) full-scale web-based software or enterprise-level system with a minimum single contract value of BDT 30.00 Lakh (Thirty Lakh) within the last five (5) years.
- Experience value (Cumulative): Must demonstrate software development and service-delivery contracts with a cumulative value of at least BDT 70.00 Lakh (Seventy Lakh) executed within the last five (5) years.
- Proven, documented experience using the required technology stack (.NET Core, Angular, SQL Server). Evidence must be provided in the form of project summaries or deployment documentation.

C. Key Personnel Requirements: As Per TOR (Download from <https://ss.pwd.gov.bd/pwdtender/>)

D. Financial Capacity: As Per TOR (Download from <https://ss.pwd.gov.bd/pwdtender/>)

1. Letter of submission; 2. Age of the firm and legal establishment of the firm; 3. Availability of key professionals to carry out the assignment; 4. Organizational capacity including, availability of resources, support and logistic services of the firm, expertise etc. all sought by PE shown in the notice of this particular proposal.

Designation and Address of Official Inviting EOI: **Executive Engineer, PWD E/M MIS Division-1, Purta Bhaban, Segunbagicha, Dhaka.**

Contact Details of Official Inviting EOI : Phone: **02-47120536**
E-mail: **ee_mis1@pwd.gov.bd**

Interested Consulting Firms are requested to provide a complete profile along with mentioned experience, resources and delivery capacity information. Two (2) hard copies of EOI have to submit by 2:00 PM on or before 21/05/2026 in sealed envelope delivered to the above-mentioned Procuring Entity. The Assignment name shall be clearly marked on the envelope. Interested Consulting Firms are requested to collect TOR and relevant document from PWD E/M MIS Division-1, Dhaka.

* Consulting firm will be selected in accordance with the procedures set out in the PPA- 2006 & PPR-2025.

* The procuring entity reserves the right to accept any or reject all proposals without assigning any reason.

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7/05/26
Executive Engineer
PWD E/M MIS Division-1,
Purta Bhaban, Dhaka

Terms of Reference (TOR)

Name of Work – Procurement of Software Services for the Modification and Enhancement of the ‘Digitalization of Estimate Software’ of Public Works Department (PWD).

1. Background and General Description

The Public Works Department (PWD) serves as the lead agency for government infrastructure in Bangladesh. Its dual mandate encompasses the execution of multi-sectoral development projects across various ministries and the lifecycle maintenance of state-owned facilities. To ensure efficiency, transparency, and accountability in this massive operational scope, PWD has pioneered digital transformation initiatives, including the successful launch of the "Digitalization of Estimate Software".

While the current software has successfully centralized the Schedule of Rates (SoR), enabled collaborative multi-division inputs, and automated Bill of Quantities (BoQ) generation, several operational bottlenecks persist. The current system requires advanced capabilities, including a dedicated module for digital drawing take-offs, comprehensive rough estimate workflows, advanced document management, and automated diagnostic mechanisms to prevent calculation errors.

To address these limitations, PWD intends to engage a qualified Consulting Firm to upgrade existing features, introduce new advanced modules, and optimize the overall performance of the Digitalization of Estimate Software over a 4-month (120 days) development lifecycle.

2. Objectives of the Assignment

The primary objectives of this assignment are to:

- Integrate an advanced, multi-format digital take-off and drawing measurement system.
- Fully migrate and functionalize the Rough/Preliminary Estimate module with proper workflows.
- Enhance the Repair Estimate module with Revised Annual Procurement Plan (RAPP) capabilities and BIMH database API integration.
- Introduce automated algorithmic validation to flag logical and mathematical anomalies prior to estimate forwarding.
- Establish a robust Document Management System (DMS) and enhance security protocols via OTP authentication.



- Ensure all modifications are seamlessly developed and integrated using the existing **.NET Core** and **Angular** system architecture.

3. Scope of Services (Duties and Responsibilities)

The Consulting Firm shall design, develop, test, and deploy the following targeted modules:

- **Module 1: Repair Estimate:** Introduce functionality for the preparation, review, and approval of RAPPs. Digitally archive photographic evidence and implement checklist file uploads. Establish an API connection with the Building Information Modeling and Health (BIMH) database.
- **Module 2: Advanced Digital Take-Off & Drawing Measurement:** Enable synchronization of drawings from PPMS and direct uploads (PDF, DWG, images). Provide on-screen measurement tools for linear, area, and point-and-click counting, dynamically transferring data to the estimating grid with bi-directional linkage.
- **Module 3: Rough Estimate:** Migrate and fully integrate the rough/preliminary estimate module into the core architecture with robust user management, optimized UI/UX for civil works, and functional E/M data synchronization.
- **Module 4: Special Package Modules:** Integrate optional package modules (Boundary Wall, Sewage Treatment Plant, Rainwater Harvesting, and Articulated LPG System) pending PWD design standard formalizations.
- **Module 5: Multi-User Assignment:** Upgrade the system to allow a Project Engineer (PE) to assign multiple Sub-Divisional Engineers (SDEs) to a multi-disciplinary estimate.
- **Module 6: Estimate Prioritization:** Provide functionality to declare an estimate as centrally prepared or fully prepared by the Field Office.
- **Module 7: Document Management System (DMS):** Introduce automatic memo numbering, an Estimate Committee checklist, relevant drawing attachments, and single-click Archive/Zip downloads.
- **Module 8: Enhanced Security:** Integrate OTP verification for authorized officers during estimate forwarding and approval, alongside email/SMS notifications.
- **Module 9: Automated Validation & Diagnostic Mechanism:** Implement algorithmic validation to flag or block illogical inputs (e.g., negative values) and verify interrelated/basic items. Trigger proactive pre-forwarding diagnostic on-screen notifications.

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- **Module 10: SoR Database Update:** Implement revised SoR for Civil and E/M works reflecting the change of VAT rate from 7.5% to 10%.

4. Technology Stack & Architecture Requirements

The existing Digitalization of Estimate Software is built on a specific technological architecture. To ensure seamless interoperability, zero operational downtime, and optimal performance, the Consulting Firm **must** develop all new modules and modifications strictly using the following existing technology stack:

- **Frontend Framework:** Angular (Version 13.1.1)
- **Backend Framework:** .NET Core (Version 6.0+)
- **Database:** SQL Server (Version 2019+)
- **ORM:** Entity Framework Core (Version 6.0+)
- **Authentication:** OAuth 2.0 / OpenID Connect
- **Caching:** Redis (Latest)
- **UI Framework:** Bootstrap (Version 5.0.2)
- **API Documentation:** Swagger / OpenAPI (Version 3.0)

5. Project Life Cycle

The consulting firm shall undertake an end-to-end assignment encompassing all activities required to design, develop, deploy, and support the enhanced modules. Given the strict maximum timeline of **4 (four) months**, the firm must adopt a rapid, agile Software Development Life Cycle (SDLC).

5.1 Project Initiation and Inception Phase

- Mobilize the team and conduct a rapid preliminary assessment of PWD's current estimating workflows.
- Deliver an **Inception Report** featuring a detailed agile methodology, Work Breakdown Structure (WBS), and a 4-month delivery plan mapping the 10 targeted modules.

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5.2 Requirements Engineering and System Design

- Develop a **Business Requirements Document (BRD)** and a binding **System Requirements Specification (SRS)** explicitly detailing non-functional requirements and algorithmic logic for the diagnostic mechanisms.
- Validate the solution architecture to ensure seamless integration into the existing .NET Core/Angular environment.

5.3 Application Development and Configuration

- Develop modules using clean code principles based strictly on the existing framework.
- Implement secure APIs for PPMS synchronization and BIMH Database integration.

5.4 Data Migration and Integration

- Conduct an ETL (Extract, Transform, Load) process to seamlessly migrate legacy rough estimate data and repair data into the new structured formats without data loss.

5.5 Testing, Deployment & Go-Live

- Execute rigorous Unit, Integration, System, and Security Testing (including OTP validation).
- Perform User Acceptance Testing (UAT) with designated by PE (Procuring Entity).
- Deploy the upgraded system in the production environment without service interruption.

5.6 Training, Documentation & Knowledge Transfer

- Develop comprehensive User, Administrative, and technical documentation.
- Hand over full uncompiled source code to the division/officer designated by PE (Procuring Entity).

5.7 Post-Deployment Support and Maintenance

- The consulting firm must provide comprehensive Service Level Agreement (SLA)-backed maintenance, bug fixing, and technical support for a period of **12 (twelve) months following final deployment**.
- *Note: This 12-month post-deployment support shall be provided continuously with no additional payment beyond the original contract value.*

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6 .Deliverables with Timeline (4 Months Maximum) with Possible Payment Schedule

SI	Deliverables / Milestones	Expected Timeline	Payment Schedule
1	Inception & Core Updates: Submission of Inception Report, System Architecture Design, and successful deployment of Module 1 (Repair Estimate) and Module 10 (SoR Database Update).	End of Month 1/May 30 Whichever comes first	10% of Contract Price
2	Major Estimating Modules: Successful development and deployment of Module 2 (Advanced Digital Take-Off) and Module 3 (Rough Estimate Migration).	End of Month 2/June10 Whichever comes first	40% of Contract Price
3	Validation & Packages: Successful development and deployment of Module 9 (Automated Diagnostic Mechanism) and Module 4 (Special Package Modules).	End of Month 3/ June20 Whichever comes first	30% of Contract Price
4	Workflow Optimization & Handover: Successful deployment of Modules 5, 6, 7, and 8 (Multi-User, Prioritization, DMS, and OTP Security). Completion of System Testing, Security Validation, UAT, User Training, and Full Source Code and API Handover.	End of Month 4/ June30 Whichever comes first	20% of Contract Price

7. Team Composition and Resource Requirements The project team must comprise multidisciplinary professionals with proven expertise in enterprise software engineering using the specified technology stack (.NET/Angular). Key personnel must include a Project Manager, System Architect, Business Analyst/Database Administrator, Frontend/Backend Developers, and QA Engineers. All designated team members must remain fully available throughout the rapid 4-month project duration.

• Key Personnel Requirements

- Project Manager: Minimum 10 years of experience as Project Manager with an overall experience of 22 years; must have demonstrated Schedule of Rates (SoR) related software work experience; must be proficient in C++ and Java; graduates from a public university will be given preference.

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- System Analyst: Minimum 10 years of experience as System Analyst with an overall experience of 20 years and must have AWS SAA-C03 or equivalent certification.
- Senior Developer/Programmer: Full-time; minimum 05 (five) years of practical experience in designing and developing enterprise-grade software systems using the required technology stack.
- Database Specialist: Full-time; minimum 05 (five) years of practical experience in Database Design and Development, specifically with SQL Server.
- Experience in delivering software for Government Organizations will be given preference.
- Demonstrated experience with Schedule of Rates (SoR)-related software will be given preference.

L) The Firm must have submit technical proposal with following :

- I) Descriptions of the Approach, Methodology, and Work Plan for Performing the Assignment,
- II) Work Schedule,
- iii) Team Composition and Task Assignments,
- iv) Staffing Schedule and v) Curriculum Vitae (CV) for Proposed Professional Staff

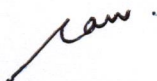
8. Requirement of the Software Development Firm To be considered eligible, the consulting firm must meet the following technical and financial criteria:

- **Financial Capacity (Single Contract):** Must have experience in developing and delivering at least 1 (one) full-scale web-based software application/enterprise-level system implemented as an ongoing complete solution in the last five (5) years with a minimum single contract value of **BDT 30.00 Lakh (Thirty Lakh)**.
- **Financial Capacity (Cumulative):** Must demonstrate software development and software service-delivery contracts with a cumulative value of at least **BDT 70.00 Lakh (Seventy Lakh)** executed within the last five (5) years.
- Minimum liquid asset / credit facility / working capital: BDT 35.00 Lakh (Thirty-Five Lakh).
- Annual average turnover: BDT 100.00 Lakh (One Hundred Lakh) over the last 3 (three) years.
- Last 3 (three) years audited financial statements must be submitted.
- Proof of income tax and VAT payment for the last three years must be submitted

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- **Public Sector Experience:** Demonstrated experience in designing, developing, and deploying web-based management or monitoring systems for the Government of Bangladesh.
- **Technology Expertise:** Proven, documented experience utilizing the required technology stack (.NET Core, Angular, SQL Server).
- **Memberships:** Active and valid membership with the Bangladesh Association of Software and Information Services (BASIS).

9. Selection Process The procurement of the Consulting Firm shall be conducted using the **SBCQ** method, in accordance with the Public Procurement Act (PPA) 2006 and the Public Procurement Rules (PPR) 2025 of the Government of Bangladesh. Standard Request for Proposal (SRFP) documents for lump-sum contracts shall be followed in the selection process.





GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

Standard Request For Expression of Interest (REOI)

(National)

For Selection of Consulting Firm

PWD E/M MIS Division-1, Purta Bhaban, Segunbagicha, Dhaka.

Bangladesh Public Procurement Authority (BPPA)

Implementation Monitoring and Evaluation Division

Ministry of Planning

April 2026

e-REOI

e-REOI Document

Section 1:

Short Terms of Reference (TOR)

Note: Consultant will response exactly based on TOR

Section 2:

1. Expression of Interest (EOI) Submission Form

The following questions should be answered with respect to a single organization expressing interest or as a combined response of a joint venture expressing interest.

1. Association Type *(please select one of the following)*
 - a) EOI as single party.....
 - b) EOI as joint venture.....

(if so please list the joint venture parties)

2. Firm Details
 - a) Name of the Firm.....
 - b) Date of Incorporation/ Registration of each of the firms (DD/MM/YYYY).....
 - c) Board of Directors, if any.....
 - d) Years in business.....
Auto come from system based on 'Date of Incorporation/ Registration.....
 - e) No. of permanent key staff:.....
 - f) Total Office Space (In sft.):.....
 - g) List of Certifications and awards (if any) such as CMMI or ISO etc.....

3. Brochures and related documents (Mandatory document upload): Will discuss regarding mandatory or not? (Needed to attached into the envelop)

4. Eligibility

Declaration

We do hereby declare that:

- (i) we have read the REOI, including the terms of reference (TOR), for this assignment.
- (ii) we have not been engaged to prepare such TOR as entity, association, or joint venture;
and
- (iii) no full-time or part-time or contracted expert employed by our entity, association, or joint venture has been engaged to prepare such TOR.
- (iv)

We further confirm that, if any of one or more of our experts is engaged to prepare TOR for any ensuing assignment as part of our work product under the assignment to which this advertisement relates, our firm and any such expert(s) will be disqualified from short-listing and/or participation in such follow-on assignment.

..... (Sign of the consulting firm)

2. Competencies Form

- **Management Competence**

I) Benefits of Association

If you are proposing a sub consultancy or a joint venture, outline the rationale for and benefits of the “association” Outline proposed management coordination of the “association” including the role of each firm.

Consultant Response (You may upload response as well formatted document)

ii) Policy, procedures and practices for Quality

Does your entity/association/joint venture have standard policies, procedures or practices in place that promote quality in: the workplace, your interaction with clients, and the outputs you produce? If yes, specify correctly

Consultant Response (You may upload response as well formatted document)

iii) Dedicated Unit for Quality Assurance

Does your entity/association/joint venture have a dedicated unit or staff solely responsible for quality assurance? If yes, specify correctly.

Consultant Response (You may upload response as well formatted document)

iv) Assurance of Quality of Performance of the firm or Association

How will you ensure the quality of your entity's/association's/join venture's performance over the life of this assignment?

Consultant Response (You may upload response as well formatted document)

v) Complaint handling policy of the performance of staff

How will your entity/association/joint venture deal with any complaints concerning the performance of your staff or the quality of the reports submitted for this assignment? What internal controls are in place to address and resolve complaints?

Consultant Response (You may upload response as well formatted document)

vi) Resources/Logistic Facilities of the firm/Association/Joint Venture

How will your entity/association/joint venture deal with Resources/Logistic Facilities like (whichever applicable for the assignment) Office Space, Technical and References, Computer Hardware and Peripheral Facilities , Software Facilities, Network Support Facilities, Training and Presentation Facilities, Hardware and Network Maintenance Facilities, Office Equipment, Engineering Survey Equipment, Testing Laboratory, and Transports etc.?

Consultant Response (You may upload response as well formatted document)

2.2 References - Experience of other than similar assignment

Experience of other than similar assignment

Assignment Name:	Value of the contract (Multiple Currency)	Assignment Location within country / outside country:	Duration of assignment (months):	Name of the Client, Mobile and Email:	No. of Professional Key Staff provided by your Organization:	Total Key Staff-Months	Start Date (DD/MM/YYYY)	Completion Date (DD/MM/YYYY)	Name of Joint Venture Consultants, if any: JV Role (If Applicable) Not Applicable Lead Secondary	No of Staff-Months of Professional Staff provided by Joint Venture Consultants:	Detailed Narrative Description of Assignment:	Detailed Description of Actual Services Provided by your Staff:
1	2	3	4	5	6	7	8	9	10	11	12	13

Will be mapped / uploaded by firm:

- Management Competence Document
- Technical Competence Document

3. Audited financial statement / balance sheet Form
(Mandatory Form)

SL. No.	Name of the Financial Year	Amount in BDT/Equivalent in BDT	Amount in Words

Note: Follow the Bangladesh Bank website for conversion rate of Equivalent in BDT on the date of publication of REOI.

4. Response on TOR Form
(Optional Form)

Sl. No.	Ref. no. of TOR	Response

..... (Sign of the consulting firm)