Terms of Reference (ToR)

Development of e-Procurement and Logistic Management System & Mobile and Web application for Complaint, Feedback and Response Management

Service Name	Development of e-Procurement and Logistic Management System & Web application for Complaint, Feedback and Response Management
Service Overall Objective	To enable the management of the supply chain processes such as sourcing, tendering, auctioning, bidding, purchase requisitioning, ordering, stock management, monitoring delivery and supplier performance, complaint and feedback management and more importantly, encompassing of secure payment settlement through integrated software tools.
Service Location	Cox's Bazar, Bangladesh
Project period	01 month after awarding
Application Deadline	10 May 2025; 2 PM

1. Background:

SHED operates in Cox's Bazar, Bangladesh, implementing humanitarian programs for both Rohingya refugees and host communities. Efficient logistics and procurement management are critical to ensuring the timely delivery of essential services and supplies, such as food, non-food items, medicine and medical equipment, livelihood items, and WASH items.

Currently, the organization relies on manual processes and fragmented systems, which often result in delays, errors, and challenges in tracking and reporting. To enhance operational efficiency, transparency, and accountability, SHED seeks to develop an integrated software solution for logistics and procurement management and mobile and web application for complaint feedback management.

2. Objective:

The objective of this assignment is to design, develop, and implement a user-friendly, scalable Logistics and Procurement Software and web & mobile application for Complaint, Feedback and Response Management that will streamline the organization's procurement and supply chain and CFRM processes, improve inventory control, and ensure compliance with donor regulations. The software should cater to the specific needs of operating in a humanitarian context and be adaptable to changing operational requirements.

3. Overview Expected operating environment

The new e-Procurement system will have to ensure alignment with the SHED procedural requirements. Developing e-procurement has the following benefits:
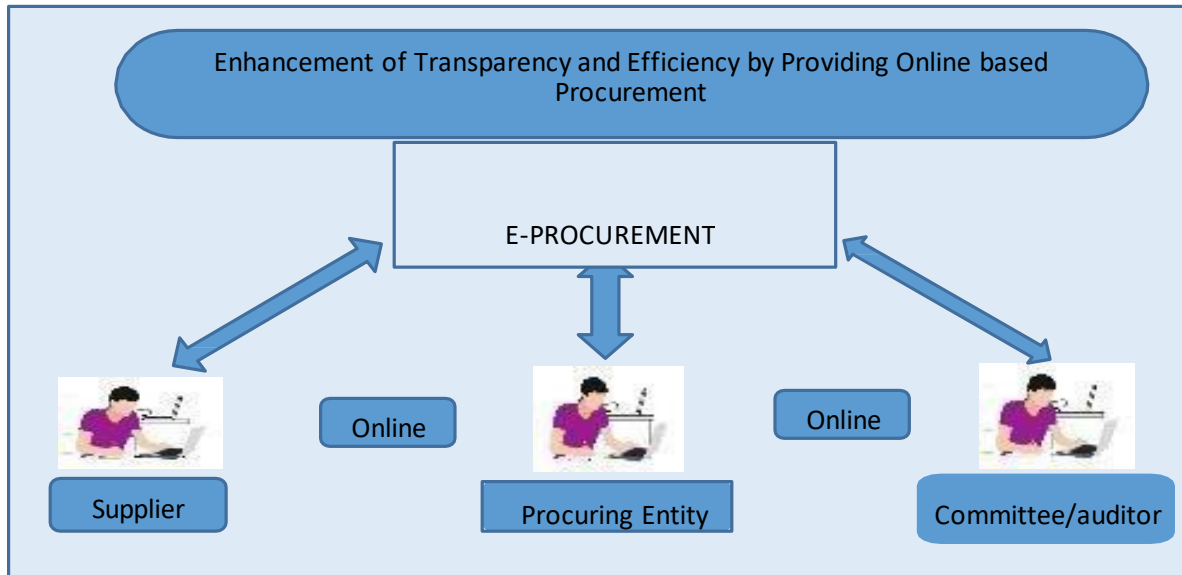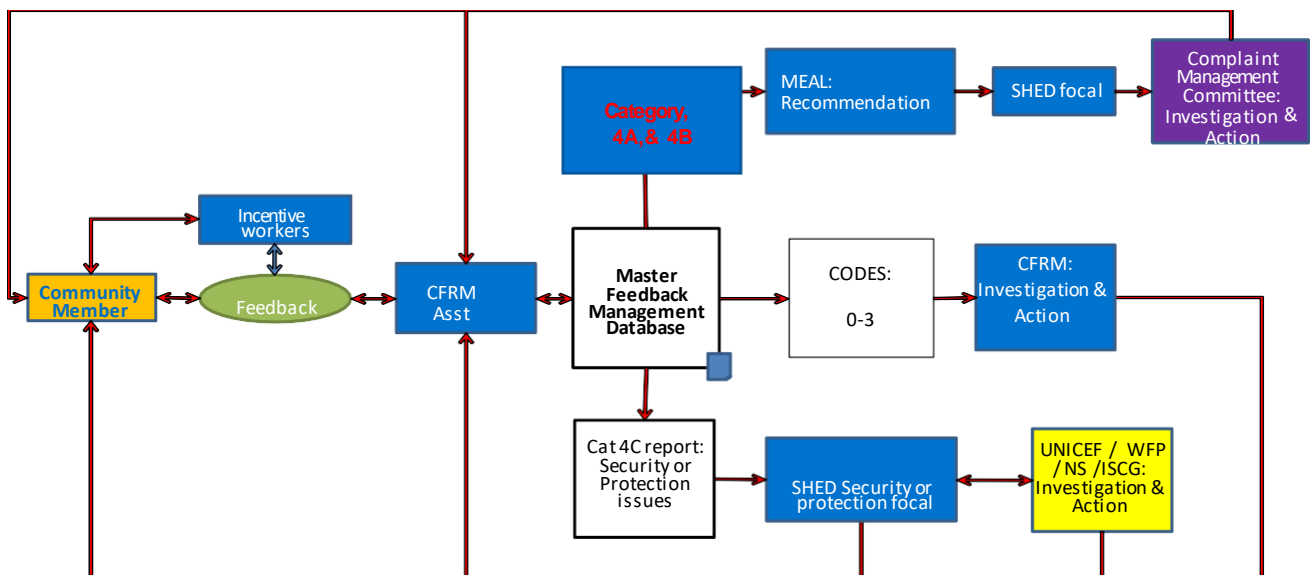
a) Reduced paperwork

b) Increased productivity
c) Increased control to purchasing process
d) Transparent spending and reduced errors.
e) Time management.
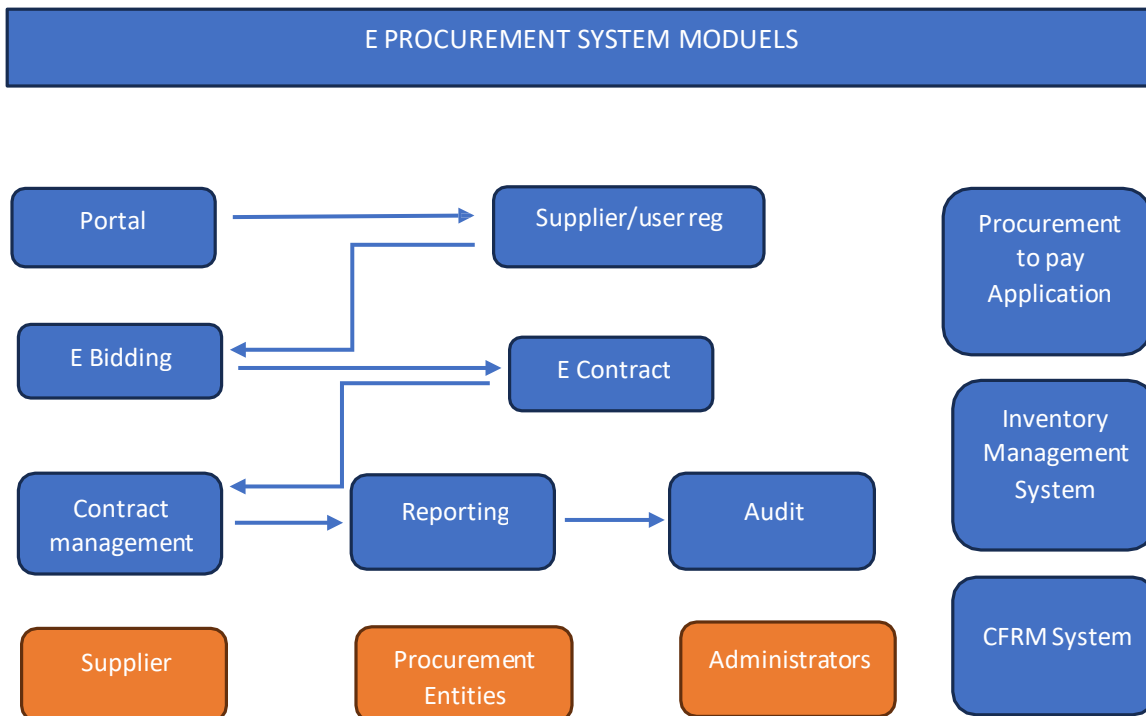
Below are the targeted E-Procurement and CFRM systems:

Feedback Flow and Management of CFRM for Code 0 to 4c (Annex A):

4. Key Modules:

E PROCUREMENT SYSTEM MODUELS

Portal → Supplier/user reg

Procurement to pay Application

E Bidding → E Contract

Inventory Management System

Contract management → Reporting → Audit

CFRM System

Supplier | Procurement Entities | Administrators

5. Scope of Work:

The selected vendor/consultant will be responsible for the following:

5.1. Needs Assessment and System Design:

- Conduct a comprehensive needs assessment with relevant stakeholders (procurement, logistics, warehouse, finance, and program teams).
- Review existing processes and tools currently used for procurement, inventory management, logistics tracking, accounting, complaint and feedback management and reporting.
- Design a system architecture that integrates procurement, inventory management, supply chain management, Warehouse Management, financial management, CFRM and reporting functions.
- Ensure the software design accommodates multiple users with different access levels, including program staff, warehouse managers, and senior management.

5.2.   Major Functions of e-Procurement System:

- Develop a cloud-based software solution based on the approved system design.
- Ensure the software includes the following core modules:

i.   **Portal System**

Portal system is an integrated gateway to support smooth business processing and to provide integrated information of public procurement. The system provides whole services in single window and unified user environment. Therefore, users can access the necessary information in one website. The user interface will be integrated with all e-procurement modules and Asset & Inventory management System.

ii.   **E-Registration System**

E-Registration system provides users registration function (procurement entities, supplier, and administrators) including their approval or rejection function. It also provides information to other sub-systems.

iii.   **Procure-to-pay application**

The e-Procurement software handles the entire procure-to-pay process of requisitioning, purchasing, receiving and paying for services and materials. With integrated requisition module, SHED can compare prices from selected suppliers and make the best choice more efficiently.

iv.   **E-Sourcing**

An e-sourcing software choosing vendors by managing documents like Request for Information, Request for Approval, and Request for Requisition, providing a platform that makes comparison easy. E-sourcing systems also help with the management of purchase requisition and purchase order.

v.   **E-Tendering**

An integral platform of the procurement process helps streamline the process and allows the whole tendering process to be done online, from the preparation of tender documents, advertisement, bids submission, evaluation process and contract preparation. The system should have inbuilt capabilities for automating procurement processes for consultancy, services and goods with varying approval options including functions for approval of committee involved in stages of procurement processes (Expression of Interest, Request for Proposal etc.)

vi.   **Contract Management**

A contract management tool identifies and organizes all the legally binding contracts a company enters and makes these contracts available for contract negotiation and e-signature processes. A contract management tool tracks procurement contracts and checks for compliance.

vii.   **Supplier Management**

The e-Procurement software consolidates the vendor database and manages any supply information. By providing real-time analytics on supplier information and performance, this software makes purchase assessments scientific and eases the path to better supplier relationships.

viii.   **Asset and Inventory Management**

An Inventory management module consolidates the real-time stock tracking, automated alerts for low stock, and inventory reporting (FIFO, FAFO and LIFO options), touchless creation of Good Received Note (GRN), logistic management information system, Logistics assessment system, Warehouse Management (Storage, stock location tracking, order picking, and dispatch, e-way bill) and will be an integral part of the e-Procurement software.

ix.   **E-Procurement Planning**

- This module should support creation, amendment and publishing Annual Procurement Plans of the Organization followed by periodical requisition management, and purchase planning.
- The system should present Procurement Plan template in a user-friendly and human readable format.
- The Procurement Plan template should be created in a way that it clearly marks the minimum information required to be accepted as a valid plan by the System, upon its submission.

x.   **Complaint, Feedback and Response Management (CFRM)**

CFRM module will encompass collecting feedback and complaints through mobile and web-based application, reviewing, and referring information, reviewing, and responding to feedback and complaints, closing the feedback loop with master feedback & complaint management database.

xi.   **Reporting and Analyticsk**

Customizable dashboards, real-time analytics, and automated reporting for internal use and donor requirements.

xii.   **User Management**

Role-based access control for up to 30 users, ensuring data security and confidentiality.

5.3.   NON-FUNCTIONAL REQUIREMENTS

Non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with functional requirements that define specific behavior or functions.

a. SECURITY

Mandatory

I.   All sensitive data stored in the various components of the system must be encrypted before they are stored.

II.   System must support appropriate security controls, including user roles with pre-defined access rights that control the data and functionality each user has access to.

III. For all sensitive communications with clients, communication protocols with encryption (e.g., HTTPS) must be used.
IV. System must be protected against known security threats (e.g., SQL injection, DoS, DDoS, buffer overflows, XSS, etc.).
V. System must be able to guarantee that its data is not disclosed to unauthorized persons or processes.

b. AUDITABILITY

Mandatory

I. For critical system events (e.g., tender bid submission etc.), System must support methods with which the sender of data can be provided with evidence of delivery. Such evidence will be implemented by means of e-Mail.
II. System must be able to audit all system and user actions. System should ensure that all actions performed on received/stored data are recorded, keeping track of actors, date/time, input/output data and any other information necessary to allow specialized personnel to monitor and fully reconstruct a transaction.

c. EXTENDABILITY

Mandatory

I. System must be built in a modular approach that will allow the addition of new functional modules without affecting the overall system functionality. The need for this software type of architecture is to allow the development of the system by different software vendors, to avoid possible lockdowns or delays in system implementation and deployment cycle.
II. System must be based in an architecture that will allow the addition of extra hardware resources to enhance the systems capabilities (e.g., performance, storage, bandwidth, etc.).

d. PORTABILITY

Mandatory

I. System must be designed in a manner that will not be coupled to any hardware specific technologies.
II. System must be possible to be deployed on different hardware and software infrastructures and not dependent on the software technology used for implementation.

d. RELIABILITY

Mandatory

xiii. System must ensure the integrity of the transmitted data.

e. USABILITY

Mandatory

System should abide to the latest standards for Graphical User Interface design.

    I.   The e-Procurement software should be capable to support various kinds of output reports in different formats, like XLS, PDF, TXT, XML, DOC, CSV, HTML etc.

    II.   System must be accessible over the web through the link to our website and use of any available web-browser.

    III.   System should at a minimum support all versions of the most widely used web browsers that the relevant vendors continue to support.

    IV.   System must be integrated with conversation trail function to allow discussions & provision of remarks at various stages of approval.

f. PERFORMANCE

Mandatory

    I.   System must be able to cope with the expected load and traffic.

5.4. Testing and Quality Assurance:

- Conduct system testing, including user acceptance testing (UAT), to ensure the software meets functional requirements and is free of critical bugs.
- Collect feedback from key stakeholders and incorporate necessary adjustments and improvements.

5. 5. Training and Capacity Building:

- Develop comprehensive user manuals and training materials.
- Conduct training sessions for end-users.
- Provide ongoing support during the initial rollout phase to troubleshoot issues and ensure smooth adoption.

5.6. Post-Implementation Support and Maintenance:

- Provide a maintenance plan covering software update, bug fixes, and technical support for a minimum of 12 months post-implementation.
- Ensure the system is scalable and flexible to accommodate future updates and additional features based on organizational needs.

4. Deliverables:

E-Procurement centralizes and automates interactions between stakeholders (end users, procurement department, suppliers, etc.) to improve the performance of the procurement process, management and strategy. The e-Procurement system will help the coordination between the departments in implementing their functions as below.

    a.   The procurement department which defines and optimizes the procurement strategy.

    b.   The end users who are the source of the need, those who place the order.

    c.   The person who approves orders.

    d.   The financial and accounting departments, which reconcile orders and invoices and make payments.

The selected vendor/consultant is expected to deliver the following:

1. **Inception Report:** A detailed project plan, including methodology, timeline, and milestones.
2. **Needs Assessment Report:** Findings from the needs assessment and proposed system design.
3. **Software Prototype:** An initial prototype for stakeholder review and feedback.
4. **Final Software Solution:** Fully functional software with all agreed modules and features.
5. **Training Materials:** User manuals, training guides, and support documents.
6. **Training Sessions:** Training workshops for all relevant staff.
7. **Post-Implementation Support:** Ongoing technical support and maintenance plan for at least 12 months.

5. Qualifications of the Consultant/Development Team:

- Proven experience in developing logistics and procurement software, particularly for NGOs or humanitarian organizations.
- Strong understanding of supply chain management, inventory control, and procurement processes in a humanitarian or development context.
- Proficiency in relevant programming languages and software development frameworks (e.g., Python, Java, .NET, SQL).
- Experience with cloud-based solutions and data security best practices preferably AWS.
- Excellent project management and communication skills.
- Ability to work collaboratively with diverse stakeholders in a multicultural environment.
- Familiarity with donor regulations and reporting requirements (e.g., UNICEF, WFP, UNHCR, USAID, ECHO) is a plus.

6. Application Process:

Interested consultants or firms are invited to submit the following documents by 10 May 2025; 2 PM.

1. **Technical Proposal:**

    a.   Outlining the approach,

    b.   methodology,

    c.   work plan, and timeline together with Company profiles/Portfolio,

    d.   Copy of Registration Certificate, TIN Certificate &VRN Certificate (If Applicable), Business License,

    e.   Valid copy of Tax Clearance Certificate or exemption,

    f.   Litigation History,

    g.   Declaration – No Conflict of interest,

    h.   Anti-Bribery commitment.

2. **Financial Proposal:**

a. Detailed budget, including a breakdown of costs for software development,
b. testing, training, and post-implementation support
c. Bank Statement from January to May 2023,
d. Audited financial report for the last two years.

3. **Portfolio/References:** Past work experience (Attach at least 3 to 5 experiences for Contract /Local Purchase Order of related assignment) and contact information for references.
4. **Team Composition:** CVs of key personnel who will be involved in the project.

Applications should be sent by following the instruction annex-01. Please use the subject line **"Development of e- Procurement and Logistic Management System & Mobile and Web application for Complaint, Feedback and Response Management."**

7. Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- Technical approach and methodology (30%)
- Relevant experience and past performance (25%)
- Qualifications of the proposed team (20%)
- Financial proposal and cost-effectiveness (15%)
- Timeline and project management plan (10%)

Proposed budget should be adjustable after evaluation and selection of the supplier considering scope of work and number of users defined after comprehensive need assessment.

8. Contact Information:

For any inquiries related to this ToR, please contact:

Amir Hossain
Program Manager
amirpmnut@shedbd.org
01712583394