

## Terms of Reference (TOR)

for

### **Tender for Procurement of ERP Software Solution (Procure To Payable, Maintenance & Repair of Support Service & Inventory Management) for Trust Bank PLC. Purchase & Procurement Department**

**Date: February 03, 2025**

**Tender Ref. No. TBL/HO/GSSD/PPD/TOR/2025/01**

#### **A. Background:**

Trust Bank PLC. is one of the leading private commercial banks having a spread network of 119 branches & SME centers, 8 sub-branches, 267 ATM Booths and above 500 POS across Bangladesh and plans to open more branches to cover the important areas in all over Bangladesh. The bank, sponsored by the Army Welfare Trust (AWT), is first of its kind in the country. With a wide range of modern corporate and consumer financial products Trust Bank PLC. has been operating in Bangladesh since 1999.

Vision: Build a long-term sustainable financial institution through financial inclusion and deliver optimum value to all stakeholders with the highest level of compliance.

Mission:

- Long term sustainable growth – diversified business with robust risk management.
- Financial inclusion – Ensure procurement of various items & services for entire Bank with low cost offer and technology based service delivery.
- Accountable to all stakeholders – customers, shareholders, employees and regulators.
- Highest level of compliance and transparency at all levels of operation.

Trust Bank PLC. has 2 (two) sister concerns (Trust Bank Securities Ltd. & Trust Bank Investment PLC.) where separate books of accounts are maintained. In addition, TBL separately reports to IT Directorate Army Head Quarter for procurement of large IT projects. Trust Bank PLC. is currently using Core Banking System (CBS) of Flora Telecom Limited, Supplier Enlistment System etc.

#### **B. Objective:**

Trust Bank PLC. plans to deploy an advanced integrated system with enhanced features and functionalities through the implementation of an Enterprise Resource Planning (ERP) system that will assist in automating most of the processes of Purchase & Procurement Department.

In this context, TBL is seeking for a completely integrated ERP platform having required functionalities in line with the existing and expected features mentioned in this TOR. The shortlisted firms shall be invited to attend the need assessment session before submission of technical and financial proposals. TBL will thereafter evaluate the proposals and ask for their presentation on their probable solution.

The future ERP system will also be used by the above-mentioned 2 (two) sister concerns. The system will seamlessly be integrated with the sister concerns & IT Directorate Army Head Quarter. The new ERP should also cater the need for end-to-end operations and Purchase & Inventory Management.

**Trust Bank PLC. shall take the ownership of source code of the ERP solution at a mutually agreed price whenever the management deems necessary in future.**

**C. Integration with Core Banking Solution:**

Trust Bank PLC. expects that the future ERP system will be seamlessly integrated with the Core Banking System of the Bank.

**D. Expected modules/key features in the ERP Solution:** Each module has distinct functionality with interaction with different stakeholders and dependency/relation with other modules.

**I. Functional Requirements**

S/N	Module	Feature	Sub Feature	Vendor Response	
				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
1	Core Module	Master Data Management	-		
		User Registration and Role Management	-		
		Workflow Manager	-		
		Task/Notification Management	-		
		Audit Trail Log	-		
		Dashboard & Reporting	-		
2	Purchase Requisition Management Module	Two types of requisition	i. Store - for goods that available at hand ii. Purchase- for goods that need to purchase from vendor iii. Repair & Maintenance iv. Auction: Old vehicles, Furniture & Fixtures, IT Equipment, Printing Items etc.		
		Requisition Management	<ul style="list-style-type: none"> <li>➤ Pre-Factor Requisition</li> <li>➤ Post Factor Requisition</li> <li>➤ Item category &amp; Sub-category Tagging</li> <li>➤ CAPEX/OPEX Product Tagging</li> <li>➤ GL Tagging with Requisition &amp; Cost Center Management</li> <li>➤ Date &amp; Cost of Previous Purchase</li> <li>➤ Requisition List &amp; Status Management</li> <li>➤ Maker and Checker</li> <li>➤ Preparing Tender Document</li> <li>➤ Process Department/ Stock Manger will be able to view the stock status of different items from this menu and place</li> <li>➤ Minimum re-order quantity, current stock, stock in transit, stock under purchase and last purchase price of each item can be viewed</li> </ul>		

S/N	Module	Feature	Sub Feature	Vendor Response	
				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
			<ul style="list-style-type: none"> <li>➤ If stock is available, the Process department can deliver the product to Initiator</li> <li>➤ -If 'Needs to be Purchased', then the designated officer can add those items to a cart (separate list) and create a Bulk requisition of all the selected items.</li> <li>➤ List down available quantities from different vendors and their price in CS.</li> <li>➤ Approval process</li> </ul>		
3	e-Procurement Management Module	Select method as per justification and criteria of Bank's Procurement Policy	<ul style="list-style-type: none"> <li>➤ Open Tendering Method (OTM)</li> <li>➤ Limited Tendering Method (LTM)</li> <li>➤ Quotation Method (RFQ)</li> <li>➤ Direct Purchase Method (DPM)</li> <li>➤ a) Direct Cash Purchase</li> <li>➤ b) Direct Credit Purchase</li> <li>➤ Two Stage Tendering Method:                             <ul style="list-style-type: none"> <li>a) RFP of Technical Proposal</li> <li>b) RFP for Financial Proposal</li> </ul> </li> <li>➤ Request for Quotation (RFQ)</li> </ul>		
		Configure the following committees	<ul style="list-style-type: none"> <li>➤ Purchase Committee (PC)</li> <li>➤ Tender Opening Sub-Committee</li> <li>➤ Proposal Evaluation Committee (PEC)/Technical Evaluation Committee (TEC)</li> </ul>		
		Prepare Tender Documents	<ul style="list-style-type: none"> <li>➤ Tender Notice – General Information</li> <li>➤ Technical Specifications</li> <li>➤ Financial Offer Format</li> <li>➤ Scope of Work</li> <li>➤ Terms and Conditions</li> <li>➤ Eligibility for Tender Participation</li> <li>➤ Currency of the Tender</li> </ul>		
		Approval process for the Tender Document floating	<ul style="list-style-type: none"> <li>➤ Push notification</li> <li>➤ Auto reminder Push notification</li> </ul>		
		Publish the Tender electronically in the portal	<ul style="list-style-type: none"> <li>➤ Updated list &amp; status to initiator (open/close/cancelled) of all published</li> </ul>		

S/N	Module	Feature	Sub Feature	Vendor Response	
				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
			tenders with filter option and dashboard summary statistics/graphs/charts > Push notification to internal stakeholders		
		Tender security money collection options & (payment gateway integration)	-		
		Opening of Tender Proposal in online (Technical Part & Commercial Part)	-		
		Login track reference of each user and bidder.	-		
		Proposal Evaluation (Technical and Financial)	> Dependency: For two envelope system first, technical offer will be opened then after technical evaluation is complete the Financial Offer will be opened. > For one envelope system no dependency		
		Purchase Order Creation, Split & Finalization & Approval process	> Tagging Requisition & Board/EC/Mgt. approval > Item & Quantity matching of Requisition & Board/EC/Mgt. approval with work order > Error message if mismatch		
4	Maintenance & Repair Management Module	Asset register/Tracking	Set up Fixed Asset, Depreciation, Maintenance Information. See the details of all your assets, including their specifications and location.		
		Maintenance and repair operation	Work flow management, Work Order Management		
5	e-Auction Management Module	user registration and authentication processes			
		Input auction details by initiator			
		Anonymous bid submission			
		Auction Fee/Earnest money: payment gateway integration			
		Time count			
		Bid entry Field & Bid Submission			
		Bid Opening			
		Payment Collection			

S/N	Module	Feature	Sub Feature	Vendor Response	
				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
6	Vendor Enlistment Portal	Registration process of New Vendor	-		
		Documents Upload of the New Vendor	-		
		Document verification and approval process	-		
		Payment Gateway	-		
		Selection of new vendors/bidder	-		
		Vendor/bidder can have access via any browser within a network.	-		
		Vendor/bidder is be able to know details about a tender.	-		
		The registered vendor/bidder will get e-mail notification	-		
	Bidder/Vendor is able to sign in into the system after sign up.	<ul style="list-style-type: none"> <li>➤ Edit personal or organizational information.</li> <li>➤ Create/update profile.</li> <li>➤ Change the password.</li> <li>➤ View upcoming tenders</li> <li>➤ Input option for Trade License Expiry Date</li> <li>➤ Input option for Income Tax Submission Date</li> </ul>			
7	Tender/Bid Submission Module	Bidder/Vendor can view the tender invitation as per their interest and expertise	-		
		Bidder/Vendor can download the tender document	-		
		Bidder/Vendor can submit the Intention to Bid, if they interested	-		
		Bidder/Vendor can get notify the further steps of the bidding process (i.e. Pre-bid meeting invitation, Q&A submission, etc.)	-		
		Bidder/Vendor can view and download the tender Submission Format	-		
		Bidder/Vendor can upload their tender related documents (Legal & Financial Solvency, Technical, Functional, and Commercial)	-		
		Bidder/Vendor can view the tender status, if they participated	-		
		Bidder/Vendor can pay the bid/tender/performance security money through Payment Order/Bank Guaranty by using the system, if necessary (Payment gateway need to integrate)	-		
		Bidder/Vendor can get the option to submit multiple revised Technical or Financial Proposal and	-		

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		Terms & Condition, if the PEC allowed.			
		Bidder/Vendor can get the Notification of Award and Work Order electronically			
8	Electronic Dashboard (1)	Tender Name			
		Tender No			
		Procurement Nature			
		Product and Service wise			
		Location, Branch and division			
		Publishing Date & Time			
		Closing/Submission Date & Time			
		Tender status			
		Name & ID of Initiator (for internal stakeholders)			
		Tagging Single/Multiple Requisition No			
9	Electronic Dashboard (2)	Requisition No.			
		Requisition Name			
		Procuring Entity Name			
		Requisition Submission Date			
		Name of Maker & Checker			
		Name of Approver			
		Name of processor			
		Item Category & Sub-category Name			
		CAPEX/OPEX Product Tagging			
		GL Tagging with Requisition & Cost			
		Date & Cost of Previous Purchase			
10	Electronic Dashboard (3)	Work Order No			
		Work Order Date			
		Supplier Name			
		Product Name			
		Work Order Quantity			
		Work Order Amount			
		Requisition No.			
		Requisition Date			
		Tender No			
		Tender Publish Date			
		Tender Closing Date			
		11	Product Delivery & Receive Module	Notification	Requisition initiator get notification of available product delivery
Goods/Product and Service Receive	<ul style="list-style-type: none"> <li>&gt; Full &amp; Partial Delivery Management</li> <li>&gt; Product/Service Receive related option and make the update</li> </ul>				
GRN creation	-				
Challan	Challan issue and receive				
Workflow/Delegation Management	> Initiator Approval Process				

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			<ul style="list-style-type: none"> <li>➤ IT Workflow Management</li> <li>➤ GSD/FAD/Board Approval Process</li> <li>➤ Revert/Decline Process</li> <li>➤ Approval History Management</li> </ul>		
12	Invoicing and Payment Module	Create bill/invoice for the payment	-		
		Create bill/invoice from Procurement Module	-		
		Create bill/invoice from Repair & Maintenance Module	-		
		Manual bill/invoice creation	-		
		Create bill/invoice for Work Order	-		
		Processing for payment	<ul style="list-style-type: none"> <li>➤ Advance Payment Process</li> <li>➤ Phase wise Payment Process</li> <li>➤ Final Payment Process</li> <li>➤ Partial Payment Process</li> <li>➤ Forward payment approval for disbursement</li> <li>➤ Forward hard copy/digitized copy (if supplementary of hard copy) reference</li> <li>➤ Receive confirmation</li> <li>➤ Manage Security deposits</li> <li>➤ Track and reconcile Advance payments and subsequent adjustments</li> <li>➤ Ability to manage bulk transaction processing</li> <li>➤ Establish control to avoid vendor profile duplication</li> <li>➤ Ability to distribute the payments through cost center wise</li> <li>➤ Ability to generate reminder for past dues bills/advances</li> <li>➤ Ability to impose penalty as per the company policy, if the goods/services were not received timely</li> <li>➤ Ability to perform three-way match (PO/Delivery Challan/Invoices) against any specific POs</li> <li>➤ Ability to trigger the warranty claims</li> <li>➤ Ability to Identify Duplicate invoice</li> </ul>		
		Apply VAT & Tax Calculator			
		Apply Budget Control			
		Approval Process			
		Validation from User Point	<ul style="list-style-type: none"> <li>➤ Notify User Point for NOC</li> <li>➤ Cross check the claimed amount with (a) payment schedule and (b) NOC confirmation/recommendation</li> <li>➤ Calculate penalty as per work order condition</li> <li>➤ Calculated recommended value, remain value, etc.</li> </ul>		

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			> Prepare Note Sheet		
		Bill Receive and Check	> Cross checking bill with reference documents (work order) > Archive hard copies in digital format		
		Establish the level of approval authority as per the delegation matrix.	-		
		Automated Transaction Processing	Automatic Journal Processing/Ability to create payables transactions in General Ledger		
		Audit & Compliance			
13	Reports	Division/Department/Branch wise history and report			
		Product/Service category wise purchase history and report			
		Time (Weekly/Monthly/Quarterly/Yearly) wise report			
		Group, category or type wise history and report			
		Purchase history			
		CS history and report			
		Rate/Fix Agreement history and report			
		Verified Bidder/Vendor history			
		Token sell history			
		Tender Status history			
		Notification generation and sent history			
		OTM/DPM/LTM/RFP/RFQ history and report			
		Vendor wise Work Order issued history			
		Enlisted vendor history			
		Invoicing and Payment related reports			
		Earnest Money/APG/PG History			
		Others, if necessary			
14	Others functional Module	Administrator	An administrator is be able to log in into the system using given password. "After signing in an administrator is be able to a) Change the password. b) Add, view, edit and delete; bidders, tender categories, tenders etc. information. c) Grant or cancel bidders profile request. d) View submitted tenders and awards the bid." After signing in super admin is be able to do their assigned task.		
		After signing in procurement unit, the PC members and others procuring entity can do their assigned task as per role wise permission.			



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				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
		The system has the ability to arrange e-Tendering and bidding for procurement and carry out the complete cycle till negotiation, contracting, issuance of PO and payment.			
		The Application can facilitate to generate notice of the Tenders in enlisted vendors & online platform.			
		The system has the ability to collect tender security money, sell token money, earnest money from online.			
		The Application can facilitate to modify details of RFP/RFQ before dispatching to vendor.			
		The System is able to choose the mode of tendering - single part, two part, LTM, OTM, RFP, RFQ, DPM etc.			
		The System has the ability to extend the tender opening date if insufficient offers are received, even after the tender submission date has passed.			
		The System has the ability to make and send modifications/clarifications on the bids to the respective bidders and recording			
		The System is ability to record the details of tender/bid opening (technical & price bids separately).			
		The System has the ability to attach files and images (e.g., pdf file, word file, jpeg, png, design drawings, etc.).			
		The system can mechanism to enable vendors to share information, submit bid responses, in near real-time.			
		The system has the provision to monitor vendor negotiations real-time and provide insights into vendor responses through easy to navigate user interface and embedded analytics.			
		The Application has the facility to follow the procedure of Tender viz. receipt / opening and notices for opening of the tenders as scheduling of the tenders.			
		The Application has the facility to record quotation details with quantity price break to avail volume discounts and perform comprehensive quotation analysis.			

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				Fully Complied/Need Customization/Work around Available/ Cannot Customize/Not Available	Remarks (if any)
		The Application has the provision to record quantity discounts / slab rates in quotation.			
		The Application has the facility to prepare the comparative statements (CS) among tenders.			
		The System is able to evaluate offer online for technical and commercial aspects.			
		The System is able to send the offers for concurrence/approval to the respective authorities as per the Delegation of Power			
		The System is able to prepare a Purchase proposal automatically based on the recommendation made by evaluators/committee. Purchase committee member access required in system.			
		The Application has the facility to generate PO automatically or by specifying a valid quotation / tender.			
		The Application can provision to have purchase orders grouped under different 'category' or 'type' for better end user flexibility.			
		The Application has the facility to amend PO details such as items, quantities, rates, schedules terms & conditions, in multiple locations and propagate this information across locations.			
		The Application has the facility of PO amendment query to highlights changes between different amendments of a PO. Cancellation of PO (Partial or Fully).			
		The Application can facilitate capital purchase orders with integration to Fixed Assets System.			
		Central Banks guidelines/circulars in regard to e-tendering is ensured.			
		System is able to integrate with Banks existing platform, if necessary.			
15	Audit Trail Log	The system has the capability to identify user activity for audit purpose.			




## II. IT Infrastructure and Systems Requirements

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
1	System Architecture	a) Web, Application and Database server should be separated		
		b) System should support Network Load Balancer (NLB)		
		c) System should have separate URL for Admin and Customer portal in different physical servers		
		d) System should support Web Application Firewall (WAF)		
		e) System should support Rest & SOAP API format for Web services		
		f) System should support industry standard popular Operating System (Microsoft, RHEL) with latest version		
		g) System should support all kinds of standard browser (Chrome,		
		h) Mozilla Firefox, Edge, etc.) with latest version		
		i) System should be based on industry standard web servers (Apache, IIS)		
		j) System should be capable to run the operation from Data Centre (DC) and Disaster Recovery (DR) both.		
		k) TRUE HIGH AVAILABILITY REQUIRED with AUTOMATED SWITCHING. The system should support clustered high availability configurations to ensure primary site can continue to operate without degrading performance when one or more servers fail.		
		l) Low Bandwidth and high latency Support: Thin client must be able to support users on a low bandwidth (32 kbps) connection for merchants and payment pages.		
		m) Application must be device responsive and architecturally scalable		
		n) The bidder is requested to submit a complete deployment diagram		
o) with all interface requirements.				

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
2	Environmental Platform	a) All hardware requirements should be listed along with specifications for the proposed software architecture. The proposed hardware requirements have to be justified with the capacity and assumption of the volume of data and proposed growth for at least 8 years and shall be capable to accommodate future expandability.		
		b) Hardware requirement should cover:		
		• Development		
		• Testing		
		• Training		
		• Production		
		• DR site		
		c) Ability to deploy in VM environment and should have open storage support		
		d) System must be deployable on multiple hardware platforms and		
		e) network standards.		
		f) Scalability: Proposed Hardware and Software must have ability to		
g) linearly scale system based on reasonable growth patterns by adding incremental computing resources. Also to support clustering at each layer i.e. Web server, Application server and Database for Fault Tolerance & Load Balancing. The system would be deployed in clustered environment on 2 servers				
h) Core Servers: One of the following latest OS: IBM AIX, Unix, Sun Solaris, HP UX , Windows, Linux.				
i) Usable Storage capacity with required IOPS				
3	Disaster Recovery & Business Continuity	a) The Bidder must ensure the proposed system support to establishment of an appropriate disaster recovery site. Bidder must submit a detail disaster recovery plan. Data of the system should be stored in a SAN environment. The disaster recovery plan must include but not limited to the following:		
		b) System should be capable to maintain the uptime of 100% using the disaster recovery site. Mention all documents describing the disaster recovery planning.		

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
4	Implementation Plan	a) The Bidder must submit detail implementation plan divided into different phases. Implementation plan will be finalized by the bank and bidder after awarding of work order in line with detailed planning.		
		b) The bidder will be penalized for missing the accepted implementation plan for missing any milestones or activities without showing appropriate cause according to the applicable penalty terms.		
5	Support	The Bidder must maintain a 24x7 help desk with adequate technical personnel and infrastructure.		
6	Warranty	The warranty and support period for the solution must be mentioned in the proposal. The warranty period must be counted from the date of the successful go-live phase.		
7	Technical Training	Technical & Administrative training, Products Installations & Implementations, Database Architecture and Integrations Training must be provided.		
8	Performance bench marking	Provide in details the performance bench marking.		
9	Technical Documentation	a) The Bidder should submit necessary documents including SOP, technical documents, database, diagrams and illustrations having complete explanation of the system architecture.		
		b) Must provide Data Dictionary, Installation guide, Administrative Document, etc. Must be provided technical manual containing installation procedure, System architecture etc.		
10	User Manual	Must provide User Manual, should have FAQ, tooltips and online guide in built within the application		
11	Integration Manual	Security features and Interface requirements with other systems		
12	System Monitoring	Solution should be equipped with a monitoring console/dashboard for its operation or an administration console/dashboard		
13	Responsive & Adaptive	Solution should be device responsive. Based on resolution the solution will define position of functionalities on page.		
14	Upload/Download File format	System should support all type file format like TXT, CSV, Excel, PDF, MT, MX, ISO standard file, Word etc. for both uploading and downloading		
15	Cosmetic Changes	Bank willing to customization and validation the system home page, Look & Feel, content of the pages, Rearrangement of widget/DIV.		

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
16	User Reporting Tool/Custom Report Builder	The system must provide a powerful reporting tool to allow users to custom design daily, monthly and year-end reports and to automate the process of producing standard periodic operational analysis. System should provide platform to develop customized report by technical users.		
17	Licensing model	a) Location of license file that contains the license information		
		b) Licensing validity model: How many users can use the software?		
		c) How many computers can use the software?		
		d) How many locations (DC/NDC/FDC etc) the software can be hosted with the license?		
		e) How many high availabilities the license allowed?		
18	Monitoring Capability	a) Service monitoring		
		b) System monitoring		
		c) Dependency monitoring		
		d) Integration and API monitoring		
		e) Business Activity Monitoring (BAM)		
		f) Web performance monitoring.		
		g) Application Performance Monitoring (APM)		
		h) Database monitoring		
		i) Real User Monitoring (RUM)		
		j) Security monitoring		
		k) The application should generate automated alerts through email/SMS for any service, security, performance, abnormalities or shortcomings issues		
		l) The alerts should selectable by the bank through an enable/disable dashboard		

### III. Integration Requirements

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
1	Integration	System needs to integration with other third-party systems which will be identify during detail requirement gathering to full fill the implement of any functional requirement mention in this document.		
		Should have Interface capability through Bank's middleware systems too using standard protocols & services.		
		System must have standard API suits to connect with all other internal & external applications quickly maintaining all security standard		
		Capability for integration with Bank's Analytics/ MIS systems ad-hoc & batch reporting, both-way PUSH/ PULL basis.		
2	Process Change Options & Highly parameterized	System should support to do the customization and add new business process/logic/ data entry screen and change existing process by trained users.		
		The system should be parameterized to facilitate initial system set-up and future maintenance activities, as well as allow creation of new features without the need to alter application source code or data structures.		

### IV. Information Security Requirements

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
1	Architecture, Platform, Web Server	a) System shall support three (3) tier architecture		
		b) Web Server, Application Server and Database Server shall be separated		
		c) System shall support Network Load Balancer (NLB)		
		d) System shall have separate URL for Admin and User		
		e) System shall support Web Application Firewall (WAF)		
		f) System shall support Rest API format for Web services		
		g) System shall support Microsoft Windows or Red hat Linux Operating System		

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
		h) System shall support industry standard databases (e.g., Oracle, MySQL, PostgreSQL, MS SQL, etc.)		
		i) System shall support all kinds of standard browser (Chrome, Mozilla Firefox, Edge)		
		j) System shall be based on industry standard web servers (Apache, IIS)		
		k) System shall support high availability and clustered environment		
		l) System shall be capable to run the operation from Data Centre (DC) and Disaster Recovery (DR). m) Application shall have maker and checker features (Bank will select the desired option) in every aspect.		
		n) All the services shall start automatically after restarting or failover of the system		
2	Secure Transmission	a) Communication among all Web, Applications and Database shall be in open standard encryption format (It shall be noted that Base-64 encoding is not considered as an encryption format).		
		b) Application shall support running over Transport Layer Security (TLS) 1.2 or above.		
3	Role Based Access Control (RBAC)	Solution shall support role-based access controls		
4	Privilege accessibility	a) Application shall contain separate user accounts for Security Analyst, and Information System Auditor.		
		b) System shall prevent Application Administrators to perform other operational activities? System Admin shall perform only administrative activities (e.g., user creation, permission modification, etc.). He /She should not be capable to perform financial transactions.		
5	Authentication, 2FA, Password Policy, Password Reset	a) Application shall have support to integrate with industry standard Identity Access Management (e.g., MS Active Directory Service, LDAP)		
		b) Application shall be capable to integrate with industry standards 3rd Party Two Factor Authentication systems (e.g., Onespan, Google Authenticator, RSA etc.)		
		c) Application shall be capable to maintain Password policy according to the Bank ICT Security Policy. Privileged and regular user password policy shall be different.		
		d) Application shall prevent to reuse of immediate last 3 (three) passwords for change and reset password		



S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
		e) Application shall be capable to handle the user login session through Database.		
		f) Application shall not allow multiple sessions for same user at the same time.		
		g) Application shall support force session closure		
		h) Application shall be capable to lock (permanently / temporarily) the user account after a certain period of failed attempt.		
		i) System shall support to auto disable any user account after a certain duration of inactivity. User shall receive the notification of account disabled through mail/SMS or both.		
		j) User shall be notified for password reset by Admin/ System should generate One Time Password for login and resetting forgotten password		
		k) No default/Hard coded ID shall be present in the Application		
		l) System shall prevent Site Admin to reset his / her own password		
		m) Application shall have features to set following configuration from the front-end 1. User creation 2. Account disabling 3. User unlock and reactivation 4. Privilege / access management 5. Password reset 6. Force logout 7. Password Parameters change for all features 8. Maker and Checker function against each financial and nonfinancial transaction 9. Number of failed attempt while logon 10. Session Idle timeout (default 15 min)		
6	Encryption & Integration	a) Application shall encrypt all sensitive information at rest, in-transit		
		b) Application shall be capable to mask Card numbers and handle masked numbers. No plain text Card (Debit or Credit) Number are allowed to be viewed or stored		
		c) Application shall be capable to integrate with SMS system		
		d) Application shall be capable to support SMTP for email notification		
		e) System shall have capability to integrate with LogRhythm SIEM solution.		

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
		f) System shall store all the logs either in database (preferable) or flat file		
7	Backup and Archiving	a) System shall be capable to take backup through front-end application.		
		b) System shall be capable to archive through front-end application.		
8	Secure Coding and Miscellaneous	a) System shall maintain Code obfuscation, Signing, Anti Tampering, Licensing, IP Protection mechanism properly.		
		b) System shall be configured for Error/exception handling properly.		
		c) System shall set the X-frame-options to deny/same origin to restrict loading into iframe.		
		d) System shall support X-Forwarded-For for original user IP		
		e) System shall comply with security standards (OWASP, CWE /SANS 25 etc.). All findings after risk assessment by Bank have to be remediated before go-live.		
		f) Bank and Bank nominated external security vendor will conduct Vulnerability Assessment (VA) and Penetration Testing (PT) before go-live and vendor shall remediate all security findings (High, Medium, Low), if there is any before go-live.		
		g) "Bank and Bank nominated external security vendors will perform VA and PT quarterly, half-yearly, yearly. Vendor shall mitigate all the findings without any cost based on the following timeline: High: Within One Month Medium: Within Two Months Low: Within Three months"		
		h) Before release of any minor or major release, vendor shall perform proper software and security testing according to environment.		
		i) Winning bidder have to submit Application Penetration Testing Report performed by an external independent organization		
		j) File upload validation should be available, if any upload is there.		
k) Entire Application shall be parameter based and shall be configurable from front-end application, not from back-end database				
l) Solution shall comply with all the applicable controls of Bangladesh Bank ICT Security Guideline and Bank ICT Security Policy				

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
		m) Application shall be ISO 27001:2013 compliant		
9	API Security	a) OWASP Top 10		
		b) For REST API, OAuth2 authentication mechanism shall be implemented		
10	Logs & Session Management	a) The key operations by customers, Support Officers and administrators must be audited by the application.		
		b) Application shall store the authentication-based activities (success / failure/ account lockout, change password etc.) in the audit trail or log		
		c) Application shall store the Maker, checker, and administrative activities log (i.e., user creation, password reset, permission, any type of Deletion / change / modification in audit trail or log		
		d) The system should allow bank administrator to view system log, activity inquiry, and transaction limit inquiry as per parameter.		
		e) System shall capture the IP address, MAC address, hostname, device-id (as applicable), browsers user-agent (OS, proxy etc.) for log analysis		
		f) Application must be able to track user log-on (and log-off) activities and the IP from which a user has logged on (and logged off).		
		g) System must be able to track changes in the records made by users.		
		h) Ability to encrypt passwords and other sensitive data based on industry-standard encryption mechanisms.		
		i) IP tracking must be incorporated and IP based restriction facility shall be available.		
		j) Application shall be able to keep proper access log		
		k) Comply regulatory requirement, global standard, laws and Bank policy		
		l) The system should comply with BB ICT security guideline		
		m) Application must force time-out based on time parameters. Time out parameters should be flexible, based on job role and function.		
		n) User generated session-ids must be rejected.		

S/N	Scope	Feature	Vendor Response	
			(Fully Complied, Need Customization, Workaround Available, Cannot Customization, Not Available)	Remarks (If any)
		o) Session expiration on idle timeout, absolute timeout.		
		p) Destroying Web Content Cache relevant info on Manual Logout, Browser /Tab Close.		
		q) Application shall not support multiple session from one user at the same time.		
		r) Session CoYESies: App should not store any critical information in coYESies (e.g. password), also, app should not keep anything in a coYESies that, if spoofed, can compromise the app (e.g. a reference can be used instead).		
		s) Shall have secure session tYESen based access during every access.		

**Training**

- a. Comprehensive onsite training for required officials has to be arranged by vendor.
- b. The training should cover product installation, configuration, administration and customization. It should also cover day to day operation of the product. The training should be hands on training with a detailed coverage of all the aspect configured for TBL environment.
- c. Detailed documentation and manuals should be provided as part of training.

**E. Scope of work:**

Collecting requirements and assessment for enhancing existing systems, provide concrete development plan with all required Designs (System Design, UI Design, Logical Design, Database Design, Architecture Design, etc.) which should include context diagram of the proposed system, Sequence Diagram, Use Case Diagram, Class Diagram, CRC, Process Flow Diagram with appropriate project plan. Ensure responsive UI/UX design that is easily understandable. The solution will have integration scope to share date and service as an integrated service among all stakeholders. Data Migration & Management (The existing data from the current system will have to be reused and migrated into a usable format. Provide an extensive 24x7 support service for the urgent platform with Migration & Configuration facilities and other required services in the new ERP solutions during the operational period as per SLA. The scope of work shall include all probable business requirements, not limited to the features mentioned above. It will also include a detailed work plan for Project Management, BRS, SRS, system analysis, design & development, UAT & QAT, data migration, go live and one-year post go live maintenance & support.

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**Annual Maintenance Contract:** The comprehensive maintenance charges (including VAT & Tax) must be quoted in percentage terms on a yearly basis, in the Commercial Offer/bid. The vendor is expected to ensure same maintenance standards as during post go-live warranty period. The vendor is also expected to make available the spare parts for the systems. Thereafter, vendor will give notice within reasonable time prior to discontinuation of support services. If any of the peripheral's components etc. are not available or difficult to procure or if the procurement is likely to be delayed, the replacement shall be carried out with equipment of equivalent capacity or higher capacity at no additional charges to Trust Bank PLC.

**F. Deliverable:**

Stage of Development	Deliverable
Requirement Collection	Collections of requirements for the input of the system. Collection of information by interviewing, meeting etc.
Project Inception	Proposed Project Management Plan with time schedule indicating Milestone, Resources plan, Gantt Chart, Risk and its mitigation plan etc. time-slot (Deliverables, Deployment, Maintenance) according to TOR
System Requirement Analysis	Software Requirement Specification (SRS), User Story, Use Case, E-R diagram. Also estimated time-slot for each module.
High-level System Design (HLD)	High-level design document or HLDD, all levels of DFD, Database Template Design and UI based non-functional prototype/ Mock. Share the QC reports.
Development	Developed features, modules, components, applications, code documentation, database and related files (For code-review, understanding), algorithm & interface related documents, development & versioning report, Test Design, Test driven development (TDD) approach should be included at this stage to ensure smooth development etc.
Integration	Integration testing reports, test-cases, Integration activity report, User manual
Testing	Test Plan, Test Scripts, Test Logs, Test Reports, Feedback
Release	Released application modular/part wise with appropriate versions control mechanism and details Release notes of each release
User Acceptance Test (UAT)	User Acceptance Test report of module/tasks of all features in application is met clearly. After UAT, submit a showcase/piloting report.
Operational Acceptance Test (OAT)	Bug fixing and modification due to smooth operation of the product. Bug fixing report and updated operational manual.
User Training	Training Manual, Training Plan, Training Feedback, Training Report
Maintenance & Support	Support and Maintenance Plan, SLA, Running Digital Service

### G. Implementation Timeline:

The applicant must complete the assignment within a stipulated timeline based on the proposed Using Agile Scrum/Incremental SDM Model. The project timeline can be divided into four below phases that is – Requirement Analysis Design & Development, UAT, OAT and Maintenance & Support. So release and deployment of the part for going live will be done as per the SDM method.

Estimated time line could be divided as following phases:

Sl. No.	Deliverables	Timeline
1	Tender Issuing Date	03 <sup>rd</sup> February 2025
2	Pre-bid meeting	19 <sup>th</sup> February 2025
3	Submission of technical and financial proposal	19 <sup>th</sup> March 2025
4	Contract award	To be communicated
5	Requirement Analysis, Design & Development	06 (six) months.
6	UAT & Deployment	
7	OAT & Fix Bugs	
8	Maintenance & Support	12 (Twelve) Months
9	Post Maintenance & Support (AMC)	To be communicated

**Note:** After Completing OAT VAPT will be done (If failed/issue come up return to OAT phase again)

### G. Required Qualification Criteria of the Participating Firm/Company:

The firms/companies must meet the following eligibility criteria:

1. A registered entity having updated trade
2. Must be registered with RJSC (Applicable for Joint Stock Company & Firm)
3. Joint Venture not applicable
4. Bank Solvency Certificate
5. The firm should have at necessary full time ICT personnel in company payroll related to System Analysis, Design, Development, Integration, Testing, QC, Training & Implementation of ERP Software solutions.
6. Documents demonstrating the management and operational capacity of the firm. Brochures/Company profile & other documents describing company expertise, strength & experience, core functions, products & services, similar assignments or relevant project experience, availability of relevant professional staff and experience among applicant's staffs/resources to carry out the assignment.
7. The firm needs to have experience in developing ERP Software solution (must have multiple modules) in any large Govt./semi govt./autonomous body/private organizations of Bangladesh. experience in developing ERP Software solution in Banks shall be added advantage.
8. Must be a local IT/ITES firm with minimum 3 (Three) years of general enterprise application development experience.
9. Minimum 3 (three) years of practical experience of developing large scale software to automate organizational business processes.
10. Minimum 3 Work orders/SLA value in last three years.



11. The firm must be a member of BASIS (Active/Updated).
12. The firm must have minimum CMMI Level 3 certification.
13. ISO-9001 Certification is preferred.
14. Capable system development and project management team which include Project Managers, Enterprise Architects, Software Architects, Database Experts, Development Leads, Sr. Software Engineers, Software Engineers, Mobile Software Developers, Infrastructure Experts, UI Experts, QA and Test Engineers, Technical Writers and Support Engineers.
15. Must have valid up to date Trade License, Income Tax Payment Certificates, VAT Registration Certificates, Certificate of Incorporation.
16. Independent Auditors' report of the previous 3 (Three) years.
17. Yearly average turnover of the firm shall be at least BDT 10 (ten) million.

**H. Evaluation Criteria (Total 100, Technical Mark - 70 and Company Profile Mark – 30)**

S/N	Specification	Allotted Marks
1	Year of establishment (Min 3 Years gets 5 Marks; every subsequent years carries 1 Marks each)	10
2	Total No. of Work Order/SLA in related product (Min 2 W/O gets 3 Marks, every additional W/O carries 1 Marks each)	5
3	No. of Engineer in related product (Min 2 Engineer gets 5 Marks, every additional engineer carries 1 Marks each)	10
4	Total No. of Work Order in other products	5

Interested firm/company must submit tender with proper index and page number mentioning the above criteria.

**I. Place of Submission:**

The tender is required to be submitted at the following address on or before **March 19, 2025, within 12:30 PM.**

**Trust Bank PLC., Purchase & Procurement Department, Head Office, Shadhinata Tower (Level # 05), Bir Srestha Shaheed Jahangir Gate, Dhaka Cantonment, Dhaka.**

For all necessary communication and inquiry, the interested firms/companies are requested to communicate as per the contact details mentioned below:



**Col Khandaker Yusuf Hasan (Retd.)**

Head of Purchase & Procurement Department.  
Trust Bank PLC.


