Anti-Corruption Commission



Head Office 1, Segunbagicha, Dhaka-1000 www.acc.org.bd



Memo: 00.01.0000.176.35.001.20-5854

handover.

Dated: 14/02/2023

Request for Expressions of Interest (REOI)

KE	Y INFORMA	TION			
1		oivision & Agency	Anti-Corruption Commission (ACC)		
2			Project Director, 'Strengthening Capacity of ACC (1st revised)' Project		
3			224244500		
4			Dhaka		
5	EOI for Se		A firm (JVCA is allowed) for "Development and Commissioning of		
			Administration, Prevention and ICT solution (software and hardware) for ACC"		
6 EOI Ref No and date 00.01.0000.		o and date	00.01.0000.176.35.001.20-5854, Date: 14/02/2023		
7			Quality and Cost Based Selection (QCBS)		
8	8 Source of Funds		GoB		
9	EOI Publis	shing Date	15/02/2023		
-	EOI Closing Date and Time		Date: 09/03/2023 Time: 12:00PM		
INE		FOR APPLICAN	r		
10	Brief	Selection of a firm	n for "Development and Commissioning of Administration, Prevention and ICT		
U		solution (software	and hardware) for ACC". The solution has following modules: (1) a) Centra		
	Description	LIDM b) Inventor	and nardware) for ACC. The solution has following modules. (1) a) Central v, c) Procurement Management, d) Task Management, e) IT Support System; (2)		
	of Assisanment				
	Assignment		dware installation Successfully and Platform Acceptance Test (PAT) & (3) 02		
		(two) years free ma	nintenance and support service after successfully commissioning.		
1	Experience,	"Strengthening Ca	apacity of ACC (1st revised)" Project is an important project for digital		
	Resources		ACC and its operations. The bidder must prove that they have solid technical		
	and	background and o	pperational strength to undertake and take this work forwards without an		
	Delivery	hindrances. Bidden	indrances. Bidder must also have adequate technical ability, resources, human resources and		
	Capacity	processes. As such,	uch, following are defined as minimum eligibility criteria:		
, e	Requires	1. Minimum 10	years' experience in ICT business as a registered company/entity in Bangladesh.		
	A 72	2. Must have 7	years practical experience of developing web-based Enterprise Resource Planning		
g ^{III} I		(ERP) for gov	vernment/autonomous body/statutory bodies of Bangladesh.		
			least CMMIDEV /3 certification in last 4 years.		
			e full time experienced human resource in business/system analysis and design		
		Web based s	oftware development, database management, hardware infrastructure delivery		
		installation a	nd optimization, project management and support management. Interested		
		Applicants m	ust submit proof of employment by submitting relevant documents like last 3		
			ips and salary transfer statement.		
			e test environment ready at vendor's premises. Vendor office should be located a		
- 1		Dhaka.	s are are constructed by states ✓ state of an area to the control of the control		
		6. Yearly average turnover of the firm shall be at least Tk 10.0 (ten) crore for that la			
			y registered and reputed Audit firm.		
			implementation and support of ERP or similar solution with minimum contrac		
			hree) crore in a single contract over period of last 3 (three) years.		
- 1		Project Director 'S	trengthening Capacity of ACC' Project, now invites eligible applicants to indicate		
		iding the services indicating that the interested firms are qualified to perform the			
			and other documents describing similar assignments, experience availability of		
		services (blochures	ional qualification and experience among applicant's staff, resources to carry ou		
	8.8	the assignment fin	ancial logistical capability, etc). Applicants may associate with other consultant		
	95	-			
	2.27	to fulfil their qualif			
			ts may obtain further information by applying to the address below during norma		
- 1	(A)	office hours. Intere	sted firms must submit the additional following information and their supporting		
	-		applicable: certificate of incorporation, trade licence, tax and VAT compliance		
1		documents where			

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		A firm/vendor will be selected using the Quality and Cost Based (QCBS) procurement method in accordance with the Public Procurement Act, 2006 & Public Procurement Rules 2008.					
	Other Details (if applicable)	The Expression of Interest in two sets (1 Original and 1 duplicate) shall be submitted in sealed					
13	Association with other firms	Joint Venture, Consort	ium or Association (JVCA) is allo	wed.			
14	Phasing of Services	Yes, based on Software Development Life Cycle (SDLC)					
CL	CLIENT DETAILS						
15	Designation and address of Official Inviting EOI		Project Director, 'Strengthening Capacity of ACC' Project, ACC, Head Office, 1 Segunbagicha, Dhaka-1000				
16	Contact detai	ls of Inviting EQI	Tel. No. 02-58316476	E-mail: pd.strengthening@acc.org.bd			
17	The Authorit	The Authority reserves the right to accept or reject any or all Expression of Interests (EOI) without assigning any reason whatsoever.					

Terms of Reference (ToR)

1 Background

In the United Nations General Assembly in 2003, anti-corruption conventions were held to take action against corruption. In line with international anti-corruption and agreements, on 21 November 2004, the government of Bangladesh formed the Anti-Corruption Commission (ACC) to curb corruption and prevention and to start a corruption-free country.

The ACC's 2017-2021 year-old anti-corruption plan has given a special preference to disciplinary measures to eliminate corruption to prevent corruption. Emphasis has been laid on building institutional capacity for such scheme; Effective Enquiry, Investigation and prevention strategies; innovative research development and organizational structure.

Improvement of the institutional capacity of ACC to play a more active role in preventing corruption and prevention, improving the efficiency of officers and staffs, effective enquiry, conducting investigation and conducting preventive measures through effective training and development of information and technology for the development of institutional skills are essential.

The Anti-Corruption Commission takes steps to reduce corruption by taking disciplinary measures and reviewing the system on priority basis. Determination of Operation Mechanism, adequate manpower, internal good governance, finance and logistic requirements are needed for the prevention of corruption. It is the improvement of the institutional capacity of the ACC for enquiry, investigation and prevention effectively. Besides, it is essential to increase its institutional skills by improving the necessary training and information and technology system of ACC officials and staffs. In this context, the proposed project proposal for strengthening the Anti-Corruption Commission has been formulated. Office automation is one of the deliverables of this ACC Strengthening project where all offices of ACC will be integrated and managed by central custom ERP system.

2 Functional Requirements

Anti-Corruption Commission Bangladesh plays a vital role to prevent corruption in Bangladesh. Modern anti-corruption commission with strong IT capacity is important for quick response to any preventive measure against corruption. That's why ACC has decided to automate and digitalize their internal processes and implementation reporting system. As part of strengthening anti-corruption commission project, following wings and their processes will be digitalized initially.

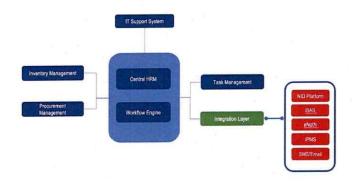
- Administration wing
- ICT & Training wing





3 High Level Solution Mapping

The following diagram shows the high level solution building blocks for ACC. Details will be provided in technical specification.



4 Non-Functional Requirements

The solution must have following generic features.

The system will be bi-lingual, web based and mobile responsive software. Both Bengali and English
option will be there for each relevant field.

The system should be run in LAN and WAN environment and accessible over secured private network

only.

 All browsers compatible. The application should support all major browsers which include Internet Explorer, Mozilla, Chrome, Opera and Safari. Users should also be able to access the application from their smart phones and other PDAs like tablets using any of the mentioned browsers.

Authentication system will be role base and office specific. Access control module must be robust and the

authorized admin users will be able to give access to specific function of each module.

 The system will be logically multi-tenant i.e. each office will have logical partition of data and associated access control. Head Office and Divisional Office will have access to the data of other offices underneath their regional offices but definitely by access control with position, wings, etc.

All Forms must have the Create, Read, Update and Delete (CRUD) option.

Confirmation message before any CRUD operation

Success message after any save

Error message with module specific custom notification template after any fail

The database schema should be flexible for further developments and new requirements.

- Fields in the eForms to capture user inputs in all modules and functionalities must be flexible and configurable.
- Attachments in different formats as such pdf, word, excel, image, video, audio and so forth.
- The reports must be exported in pdf, excel and word format upon user selection
- Option for using office seal or any designated seal of the user if he wants to use it if required as appropriate. All types of approval in the requisitions or workflow must have auto e-signature with designation same as e-Nothi.
- Document reference and memorial number of different modules must be configurable and follow the ACC standard.

Email & SMS Notification Integration

 The system must expose REŠT API with proper documentation for 3rd party integration and mobile apps development. System's front-end will exchange data with back-end over REST API.

 The supplier must accommodate all types of reports as per ACC prescribed format during implementation phases.

All reference data shown in drop-down list in the system must be stored as master data. Authorized users
can add/delete/edit the master whenever required as per requirements. The changes must be reflected in
the user level.









- Each module must have associated reports in ACC prescribed format which can be exported to Excel and pdf
- The solution components must be integrated with NMS Solution, for example, Zabbix for fault management.
- Location specific office and different entities, for example SAJEKA, CPC, Integrity Unit, Integrity Store, etc must be shown in responsive Bangladesh map.
- Each module must have central dashboard for authorized higher management. Beside module specific dashboard, there must be a central reporting dashboard for authorized management.
- The solution must have a testbed setup to ensure bug free update, upgrade, version management, etc.
- The solution must run in active-active setup to ensure redundancy and seamless operation. It also supports full and incremental backup and restore facility.

5 Scope of Works

Consultant will be responsible for following steps of standard Software Development Life Cycle (SDLC). SDLC plays a very important role to clear the ultimate project objectives precisely, to stable the project requirements, to monitor the progress with measurable deliverables and managing the entire project efficiently. Here the Consultant is requested to propose and submit a best possible suited SDLC approach for this project considering the project scopes, requirements, objectives, organizational environmental factors and behavior, project timeline, ultimate deliverables and various resources to be used.

- Customer Workshop
- System Requirement Analysis
- System Design
- UI/UX Design
- Development
- Testing
- Integration
- Bug fixing
- Master Data Configuration
- User Acceptance Testing
- Deployment (Testbed and Production)
- Integration with existing ACC IT Eco-system and government IT Systems
- Migration of Legacy Data and associated migration tool development
- Training and Knowledge Transfer
- Load Testing
- Cut-off and Solution Monitoring
- Documentation
- Maintenance and Support Service
- Application Hosting infrastructure

5.1 Customer Workshop and System Requirement Analysis

Requirements finalization will be a very important milestone of consultant's proposed development methodology. It is expected that, the selected vendor will conduct customer workshops and carry out detailed requirement study and analysis on the each and every scope that mentioned in the TOR. Under this scope of work, the selected consultant has to analyze the detail functions, processes, documents, actors, sites and infrastructure of the relevant prevailing system precisely of the concerned organization. At this phase, consultant's ultimate objective will be finalization of the requirements in details under the scope of TOR and approval of the concern organizational authority. Here vendor is requested to propose and submit a system requirement analysis plan which should cover the scope of work at this phase, relevant activities to be performed, time line, deliverables to be produced, dependencies and resources to be used.



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5.2 System and UI/UX Design

This is very vital and important phase of any SDLC. Considering the ultimate development and implementation scope, the proposed system design should be robust, scalable, user friendly and interoperable enough.

At this system-designing phase, consultant may performs following designing related task and will produce System Design Document (SSD) i.e. both High Level Design (HLD) and Low Level Design (LLD) document which will include followings but not limited to these only

- High Level Design (HLD) Document
 - o Brief description and name of each module
 - An outline about the functionality of every module
 - o Interface relationship and dependencies between modules
 - Database tables identified along with their key elements
 - o Complete architecture diagrams along with technology details
 - o Integration Plan
 - o Finalizing tools, technologies and frameworks to be used etc.
 - Dimensioning exercise
 - o High-level delivery plan
 - Low Level Design (LLD) Document
 - o Functional logic of the modules
 - Data Flow Diagram
 - Database tables, which include type and size
 - Complete detail of the interface
 - API Specification
 - o UI/UX design
 - Addresses all types of dependency issues
 - Listing of error messages
 - Complete input and outputs for every module

The consultant firm will discuss with the client to identify the information need to be collected and how the information will be disseminated. The firm will assess all the needs for developing a final design for Solution in consultation with the client and will submit a preliminary design (Graphical and Architectural) of Solution which will be finalize in after approval of the client.

5.3 Development

The consultant firm must take prior acceptance or approval from the concerned authority on tools, technologies and framework that will be used for the development of the solution. Based on approved SRS and SDD, consultant will prepare a comprehensive development plan for the Solution which should include a schedule consisting development item wise start date, test date, review date, completion date etc. At the development stage, consultant must follow the standard coding convention, code level documentations, header of each file, algorithms, interfaces, code compression and APIs should be supplied with proper description and documentations. All kinds of standard testing tasks that are required to be performed at the development phase, should be mentioned in the plan. Considering the scope mentioned in the TOR for this Solution, consultant is requested to include a preliminary development plan (standard approach) in their technical proposal.

The consultant must use the matured, multithreaded, open source tools and frameworks i.e. .NET Framework/Django Framework and Oracle Database for the development of the solution.

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5.4 Testing

The vendor must propose a testing plan for this Solution starting from development to deployment. This testing plan should cover all the standard suitable testing approaches which may include phase wise testing activities like test scripting, test cases, testing tools, testing process, test log, result and report formats i.e. expected test deliverables based on the application development requirements. The consultant should submit testing plan which may include standard test approaches. Some are mentioned below as examples for reference but not limited to these only.

- Unit Test
- Functional Test
- Installation testing
- Compatibility testing
- Smoke and sanity testing
- Regression testing
- Stress Testing
- Acceptance testing
- Alpha testing
- Beta testing
- Functional vs non-functional testing
- Continuous testing
- Destructive testing
- · Software performance testing
- Usability testing
- · Accessibility testing
- Security testing
- Load Testing

Load Testing is very important to measure the performance of the solution under expected load based on dimensioning parameters. The goal of Load Testing is to improve performance bottlenecks and to ensure stability and smooth functioning of software application before deployment.

5.5 Integration and Master Data Configuration

The consultant must provide integration details with plan to integrate the solution with other ACC and non-ACC solutions, for example IPMS, eNothi, NID Platform, iBAS, NMS, etc.

5.6 Hosting Plan

Consultant should submit the hosting plan for this application based on hardware requirements. ACC requirement is to host application in active-active redundant setup, hence following hardware will be required but not limited to these.

- Application Servers
- Database Servers
- Application Switches &firewall
- Testbed Server
- Storage
- Backup Solution
- o Online UPS









5.7 User Acceptance Test (UAT)

User Acceptance Test (UAT) is a very vital and essential phase in the Software Development Lifecycle (SDLC). At this phase, all types of users must test the developed modules by themselves and have to provide a details feedback and test report. Based on the UAT report, consultant has to update the application accordingly to ensure user satisfaction by making it more user friendly. Here, it is expected that, considering the type of users and their role in the solution, the consultant must propose a comprehensive UAT plan in their technical proposal which may cover the followings:

- UAT activities to be perform (planning, designing test cases, selection of testing team, Executing test cases and documenting, Bug fixing, sign-off etc.)
- Types of user wise roles and test items distribution
- Resource requirement,
- Activity wise time requirement
- Activity wise test case, test results/ deliverables
- Detail user feedback / test reports
- System update plan

5.8 Data Migration

Under the process of digital transformation and solution deployment, it may be necessary to move the legacy data of prevailing services. In this case, consultant may require to perform different relevant activities that may include data collection, softcopy conversion, data filter, data cleansing, data verification, data process, data entry, data migration and overall data management. Here, it is expected that, the consultant will propose their detail data management and data migration plan for this solution considering the estimation of legacy data mentioned below which will be required to migrate into the developed solution.

The plan may cover amount of data to be migrated, migration tool development, activities to be performed, amount of resources to be used, required time for different data migration phases for different activities (data collection, hardcopy to softcopy conversion, data entry, data transformation from soft copy, data filtration, data cleaning, data verification) etc.

5.9 Deployment and GO-LIVE

This is the phase of SDLC, when the consent is being given to "GO LIVE" of the developed system after completed all kinds of development integration, testing and hosting. This is very crucial and sensitive stage for a Government application because at this stage the system becomes live and expose to access towards all levels of users. The Pilot or full scale implementation period starts formally in this stage only. Vendor is requested to propose their deployment and implementation plan covering the major activities to be performed, the deliverables to be provided etc.

5.10 Training and Knowledge Transfer

Right knowledge transfer of the solution usages, operation & maintenance is very important for successful of IT projects. The solution is very critical for ACC business operation and all employees of ACC will be the users of this, the consultant must provide following but not limited to these only.

- The consultant must propose a detail training plan for the users like users, management, system administrators, trainers, etc of the all modules.
- The consultant should include necessary training methodology, documentation and training materials support in their training plan
- The training materials may include user manual, administration manual, quick start tutorial, online help, frequently asked questions

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- The training plan must describe the sequencing, time, duration and resources involved in implementation of each of the consultant's proposed training activities.
- The training plan should contain full course descriptions for all courses that to be carried out for respective users.
- The consultant should develop multimedia training materials for all users. These materials shall be available for viewing and reviewing for all users through a web portal.
- The training instructions should support both English and Bengali language.
- The training activities should cover the training feedback, evaluation and report also.
- The consultant also need to propose their smooth, efficient and effective knowledge transfer idea and plan here in this technical proposal with the training plan.

5.11 Project Plan

The selected consultant has to complete the acceptance and production deployment as per following tentative schedule

SL No	Particulars	Proposed Time line	
1	Final SRS preparation and sign-off	03 weeks	
2	Development of the solution	4.5 months	
3	Testing and Bug fixing	01 weeks	
4	Production Deployment and cut-over	01 week	
5	Training	01 week	

5.12 Maintenance and Support Service

The selected consultant firm has to provide a period of 02 (Two) years free of charge maintenance and support service from final acceptance and successful cut-over. Here it is expected that, the consultant must provide detail maintenance and support service plan in the technical proposal, which may include the followings:

- Support service types and mode of services
- Service desk functionalities
- Configuration management
- Change management
- Service layers for support
- Tools will be used for Support service management
- Communication management and modality
- Release management
- Incident management
- Problem management
- SLA (Service Level Agreement)
- Maintenance and support service related reporting
- Support service types
- Service Log Management

Apart from the above mentioned issues, if consultant thinks any other issue to be included in their plan, it would be considered as value addition.



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5.13 Team Composition

The vendor is expected to provide work distribution and team composition plan as deemed suited based on this project requirements and milestones and as per their proposed development and implementation methodology approach. The interested applicant (consultant) should provide a team composition plan in their proposal describing the position, roles, tasks to be assigned, expected man-days of involvement, expected deliverables and required skill and expertise.

However, for proper execution of the project the consultant may include at least the following personnel as minimum requirement.

5.13.1 Key Personnel

Name of The Position	No of Personnel	Qualification	Experience
Project Manager	1	 Masters in CSE/CS/ICT or MBA with BSc in CSE/CS/ICT) Certified Project Manager 	15 years in Software Development Management
Solution Architect	1	- Masters in CSE/CS/ICT	15 years in software development and solution architecture. Relevant Certification will be added advantage
Software Architect	1	- BSc in CSE/CS/ICT	15 years in software development and solution architecture. Relevant Certification will be added advantage
Business Analyst	2	- BSc in CSE/CS/ICT	10 years in software development and solution architecture. Relevant Certification will be added advantage
Database Designer	1	- BSc in CSE/CS/ICT	10 years in database design experience. Must have relevant Certification
Sr. developer	5	- BSc in CSE/CS/ICT	08 years in software development.
Developer	5	- BSc in CSE/CS/ICT	04 years in software development
UI/UX Expert	2	 BSc in CSE/CS/ICT or relevant degree from design institute 	03 years in software UI/UX design
QA Manager	1	- BSc in CSE/CS/ICT	10 years in software QA.
QA Engineer	4	- BSc in CSE/CS/ICT	03 years in software QA
Interoperability Expert	1	- BSc in CSE/CS/ICT	05 years in relevant field
Technical Document Writer	2	- BSc in CSE/CS/ICT	05 years in Technical Document writing
Trainers	3	- BSc in CSE/CS/ICT	05 years in Software Training
Support Engineer	2	- BSc in CSE/CS/ICT	03 years in relevant field. Must have relevant Certification
Project Support Staff	3	- Relevant Subjects	05 years in relevant fields.
Data Entry Operators	2	 Minimum HSC with experience in computer operation and typing speed 30 wpm. 	05 years in relevant fields.

ACC will provide necessary office facilities for on-site development.









5.14 Expected Deliverables

Considering the scope of service and scope of work of this project and based on the proposed project development & implementation methodology, the consultant has to submit here a complete list of all types of deliverables will be produced throughout the entire project timeline whether those are materials, services, applications, source codes, documents, plans, reports etc. in a table format mentioning the stages, activities and timelines.

Some examples of the deliverables are mentioned here under for your reference.

- Project inception and management report
- System requirement specification (SRS)
- System design document (SDD)
- Web Application as per requirements
- Complete Source Code
- Detail Source Code Documentation
- Test Plan with Test scripts and testing reports
- Technical Documentation (System Architecture, Module integration points, workflow engine, data dictionary, user manual, etc)
- Comprehensive Training Plan and Reports
- Training Materials and user Manuals
- Integration Plan and Reports
- Audit Log
- UAT Report
- Hosting Requirement specification, plan and report
- Implementation plan and report
- HR activity plan and report
- Progress and review reports
- Handover and Project Completion Plan
- Maintenance, agreement and SLA
- Maintenance and Support Log
- Application hosting infrastructure plan and required hardware list
- Git software repository access during development phase

5.15 List of hardware with installation (Required quantity from the Hardware specification):

Serial	Item Name	Quantity
1	Application & Test Server	3
2	Database Server	2
3	Monitor & KVM	1
4	Storage expansion/upgredation (50TB)	1
5	Firewall upgredation	2
6	Server Rack	1
7	Online UPS 10KVA	1





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5.16 Experience, Resources and Delivery Capacity Requires (Section 11 of REOI):

"Strengthening Capacity of ACC (1st revised)" Project is an important project for digital transformation of ACC and its operations. The bidder must prove that they have solid technical background and operational strength to undertake and take this work forwards without any hindrances. Bidder must also have adequate technical ability, resources, human resources and processes. As such, following are defined as minimum eligibility criteria:

- 1. Minimum 10 years' experience in ICT business as a registered company/entity in Bangladesh.
- 2. Must have 7 years practical experience of developing web-based Enterprise Resource Planning (ERP) for government/autonomous body/statutory bodies of Bangladesh.
- 3. Must have at least CMMIDEV /3 certification in last 4 years.
- 4. Needs to have full time experienced human resource in business/system analysis and design. Web based software development, database management, hardware infrastructure delivery, installation and optimization, project management and support management. Interested Applicants must submit proof of employment by submitting relevant documents like last 3 months pay slips and salary transfer statement.
- 5. Needs to have test environment ready at vendor's premises. Vendor office should be located at Dhaka.
- 6. Yearly average turnover of the firm shall be at least Tk 10.0 (ten) crore for that last 3 years audit report by registered and reputed Audit firm.
- 7. Experience in implementation and support of ERP or similar solution with minimum contract value of 3.0 (three) crore in a single contract over period of last 3 (three) years.

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