TENDER DOCUMENT FOR PROVISION OF AN INTEGRATED TEA TRADING SYSTEM

TENDER NUMBER: 1/IT/2023

AUGUST 2023

TENDER TITLE: SYSTEM DEVELOPMENT, DEPLOYMENT AND MAINTENANCE OF THE PROPOSED INTEGRATED TEA TRADING SYSTEM FOR EAST AFRICAN TEA TRADE ASSOCIATION.

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1. Introduction

East Africa is the world's largest exporter of black tea and one of the region's biggest generators of foreign currency earnings. Tea is the leading foreign currency earner for Kenya, second to diaspora remittances. The organization of tea export processes in Eastern Africa is structured around the tea auction, operated by the East African Tea Trade Association (EATTA) and based in Mombasa. The Mombasa Auction, the world's biggest black tea auction, was established in 1956 and handles about 75% of tea exported through the Port of Mombasa including shipments from countries including Kenya, Uganda, Tanzania, Rwanda, Burundi, Malawi, Mozambique, Democratic Republic of Congo and Ethiopia. The tea value chain in Eastern Africa consists of several actors from the farm level to the consumers of tea:

a. Producers/Farmers
b. Tea pickers
c. Brokers
d. Warehousemen
e. Buyers
f. Packers
g. Banks

This Request for Proposal (RFP) is to invite eligible bidders to submit a proposal to provide an Electronic Trading System to the East African Tea Trade Association. The RFP provides bidders with the relevant operational, performance, application and architectural requirements that the system must fulfil.

EATTA is inviting eligible bidders that will be able to provide an Integrated Tea Trading System as stipulated in the tender document. Tender documents can be downloaded at **https://eatta.co.ke/tenders**.
In case of any queries kindly send an email to tenders@eatta.co.ke quoting the above Tender Title and Number. The closing date for applications is **Monday, 28th August 2023 at 10.00 a.m. (Kenya Time).** Only successful applicants will be contacted.

2.   Objectives

Objective 1: Assignment Plan

To provide and implement an end-to-end system software development plan that will incorporate various components that will be used at different stages of the assignment.

Objective 2: Systems Requirements

To review and analyze the compiled Systems Requirements Specification (SRS) and update it based on emerging realities at the preliminary stages of preparing commencement of software development.

Objective 3: Prototyping

To develop prototypes that will be used to actualize the SRS requirements, refine the requirements, capture emerging issues and get early-stage feedback from users.

Objective 4: Software Development

To develop an intuitive software solution for the automation of the East Africa Tea Auction using current web-based technology and non-proprietary software platforms (open source) and compatible with mobile/portable miniature gadgets.

Objective 5: Software Testing and Piloting

To undertake various tests, audits and pilot analysis in line with best practices and based on definite standards that will guarantee the quality of the solution(s) developed.

Objective 6: Training

To conduct various types of training (ordinary users, advanced users, training of trainers etc.) for all users who will be using the new system.

Objective 7: Hosting and Operations Specifications

To analyze and define the the optimal and ideal hosting and operational ICT infrastructure requirements for the developed solution.

Objective 8: System Deployment

To deploy advanced system solution(s) developed to the final hosting environment, migrate existing data seamlessly from the current form and ensure the system can operate at its optimal capacity with all the interfaces working.

Objective 9: System Documentation

To document all the aspects of the solution at the various stages of development. In the scope and methodology, all required documentation of the associated stages is detailed.

Objective 10: Support, Maintenance and Upgrades

To provide full support services during the guarantee/warranty period for the solution.

The warranty period will not be less than two calendar years from the date of the sign-off of the last module going live.

A. SCOPE
1. The primary document where the technical scope is defined for this assignment is the System Requirements Specifications attached to this ToR as Annex 1.

2. At a minimum, the following documentation (but not limited to) must be provided at the proposal stage and final approved documents during the life of the assignment:
   a) Software Development Plan
   b) Updated Systems Requirement Specifications
   c) System Design and Architecture Document
   d) Robust System Security and Audit Plan
   e) Source Code Documentation
   f) Test and Piloting Plan
   g) Training Plan
   h) Training manuals that will include print and video versions
   i) System Deployment Plan
   j) Guarantee/Warranty Service Level Proposal Agreement (also referred to as Maintenance Plan).

3. At a minimum, the following are important considerations that must be noted. These aspects will be considered critical success factors during the evaluation of bids as well as the execution of assignment:

   1. East African Tea Trade Association users are spread in East Africa and other EATTA member countries. Site-based stakeholder engagement/involvement will require the vendor to undertake specific activities on the ground.
   2. The contracted firm must spend at least 50% of the contract period on-site during the system development phase. 75% of the time on site during Testing, Debugging and Piloting. 100% of the time during Deployment and Maintenance.
   3. The developed solution must support/integrate with notification systems such as SMS functions that will be used for notification for specific actions that will be deemed sensitive and critical.

4. The developer to implement a technologically advanced go-live ready electronic auction solution. Only solutions that have a national level electronic auction in a live environment along with multi-hall capabilities.
5. A pre-determined rate for maintenance and upgrade after the warranty period must be provided for a minimum period of two years from the date of the end of the warranty period. This period must include minimal change requests that will be required to streamline the functions and operations of the solution because of emerging realities that hinder optimal operationalization of the requirements.
6. The contracted firm will not conduct any business with users of the system to be provided that may compromise the integrity of the system and may lead to a conflict of interest.
7. The independence of the contracted firm will be observed throughout the development of the system and will not be party to any instructions/influence that is not structured in the official project channel. The principle of conflict of interest will apply.
8. The bidder proposed Project Team must include a Team Leader (who is the Project Manager in the qualifications section of this ToR) and all the required experts as per the qualification section of this ToR.

B. METHODOLOGY

Objective 1: Assignment Plan

- To be developed in consultation with the ICT Committee.
- Update the plan every month at a minimum.
- Report on project implementation status on a fortnight basis.
- From time to time clarification may be sought and provided by the Requirements Gatherings/Quality Assurance service provider and users.
- The Assignment Plan must include a Project Team and precise descriptions of the role each of the team members will play in the project.

Objective 2: System Requirements

- Review developed documents including the previous studies, SRS and Quality Assurance Framework.
- Meetings with various actors in the trade and especially focal point users.
- Establish the required system-system interfaces and update the overall development assignment plan/schedule.
- Update the SRS to include the required interfaces, a training module (or similar) and the emerging realities.
- Produce a System Design document that will require approval as will be guided by the Project Implementation Team (PIT).
- A module definition matrix will be developed based on realities and rationale established from the SRS. This matrix will guide the software development and deployment prioritization.
- All updates on the requirements during the assignment will require written and approved change notice.

Objective 3: Prototyping

- This process will be managed using a Prototyping Plan.
- Signoffs/approvals of specific modules will be required ahead of the development of a module.

- Meetings with various actors in the trade and especially focal points/users will be undertaken.
- Onsite stakeholder engagement/involvement will be required.

Objective 4: Software Development

- This will be undertaken based on the defined modules and prioritization criteria.
- The development process at minimum, will meet all the requirements and specifications provided and as reviewed.
- This process will be managed using a software development schedule.
- This will be achieved through prototyping and agile development approaches.
- The development must adhere to the fundamentals stipulated in the Quality Assurance Framework.
- Onsite stakeholder engagement/involvement might be required.
- All completed modules (source code, code structure and related) and the final unified system must be documented in line with the fundamentals stipulated in the Quality Assurance Framework.

Objective 5: Software Testing and Piloting

- A phased approach to releasing modules will be used.
- This process will be managed using an approved Test and Piloting Plan that adheres to the fundamentals stipulated in the Quality Assurance Framework. Aspects of debugging will be covered here.
- Onsite stakeholder engagement/involvement will be required.

Objective 6: Training

- A phased approach based on the released modules.
- This process will be managed using an approved Training Plan that adheres to the fundamentals stipulated in the Quality Assurance Framework.
- Onsite stakeholder engagement/involvement will be required.

Objective 7: Hosting Specifications

- ICT infrastructure requirements documents will be developed covering the hosting and operations, especially on the trading floor or remotely.
- The vendor may be required to provide technical advice to facilitate the Quality Assurance process for the procurement and testing of hardware equipment and (or) colocation services and (or) managed services for hosting the system.

Objective 8: System Deployment

- A phased approach based on the released modules.
- The system deployment plan will include a data migration strategy. A data migration assessment must be done and the data to be migrated approved.
- Migrate the historical data up to the date of the deployment from the existing sources (electronic and manual).

- This process will be managed using an approved System Deployment Plan that adheres to the fundamentals stipulated in the Quality Assurance Framework.
- The deployment must be done in a manner that will have minimal impact on business continuity.
- Onsite stakeholder engagement/involvement will be required.

Objective 9: System Documentation

In the scope, all required documentation of the various stages is detailed.

- The final manuals (for various types of users) must be designed professionally.
- The final manuals must include audio audio-visual version for self-training.

Objective 10: Support, Maintenance and Upgrades

- The warranty period will not be less than two calendar years from the date of the sign-off of the last module going live.
- Support and Maintenance SLA must detail what resources will be provided, how the SLA will be delivered and clear exclusions by the successful bidder during the Warranty period.
- Support and Maintenance SLA must include a detailed escalation matrix, how the SLA will be delivered and clear exclusions by the successful bidder during the Warranty period.
- On a need basis, all desired changes to be implemented in line with the requirements will be covered under the warranty; this will be done through a written and approved change notice.

C. QUALIFICATIONS

The firm/consortium (as a firm/consortium) MUST have previously undertaken at least three (3) similar assignments in terms of functions, magnitude, complexity and value (You may include the estimated amount in dollars). Such assignments must have been undertaken in the last five years.

Each of the proposed resources MUST have a bachelor's Degree in ICT/Information Systems/Computer Science or related fields with relevant experience of not less than five years (except for the project manager). Each of the experts must have participated in at least two (2) similar assignments. The specific skill set required for this assignment at minimum includes:

1. Project Manager with relevant project management experience of 10 years and above (Required Certification: PMP or Prince2). The other experts experience should range between 5 and 7 years of experience.
2. Business Analyst – General.
3. Business Analyst – Digital Exchange platforms.
4. System Architects and Designers (maybe one or different experts)>
5. System Developers (at least one for each of these: core system, database, interface services).
6. System Testers with Certification (Required Certification: ISTQB).

7. System Security Expert with Certification (Required Certification: CISSP or CISM or (ISC)²).
8. System Deployment/Cloud Specialists (Required Certification: Windows/Linux/Unix).
9. System Administrator/Support Expert. (Required Certification: Windows/Linux/Unix).

Notes:

Copies of the original certificate for the required degrees and certification **MUST** be provided. Only valid (for instance not expired) documents will be considered.

The experts above **MUST** be the same experts during the project execution stage.

Each expert's CV MUST be presented in a standard format and must not exceed three pages. The CVs must elaborate on previous assignments undertaken by the expert and their role in the assignment.

D. TIMEFRAME

Objective	Description	Timeline (Months)													Max payment Upon completion of an objective (in % of the Total)
		1	2	3	4	5	6	7	8	9	10	11	12	13-36	
Assignment Plan	The assignment plan must be signed off by the end of the first month and reviewed monthly at minimum.	▓													15%
Systems Requirements	The annexed Requirements Specification must be reviewed and updated within the first month.	▓													5%
Prototyping	The first module's prototype must be available by the end of the second month and the last module prototype must be approved by the end of the 6th month.	▓	▓	▓	▓	▓	▓								5%
Software Development	The first module must be completed within the first 6 months and the last module before the end of the 9th month.		▓	▓	▓	▓	▓	▓	▓	▓					15%
Software testing and piloting	Testing of the first module must commence by the 4th month, piloting of the first module by the 6th month and completion of the last pilot by the end of the 9th month.				▓	▓	▓	▓	▓	▓					10%

Task	Description		Weight
Training	The first training will commence upon the release of the first module for piloting. Training will continue throughout the life of the assignment.		10%
Hosting and Operations Specifications	The Hosting and Operations ICT infrastructure will be defined by the end of the 2nd month. The infrastructure will be set up before the pilot of the first module commences.		0%
System Deployment	The deployment will be phased by module; the first module will be deployed by the end 7th month and the last by the end of the 12th month.		20%
System Documentation	All the documentation required from the assignment will be delivered at the various stages above.		0%
Support, Maintenance and Upgrades	This will occur from the sign-off date of deploying the last module for two years at the minimum.		20%
			100%

E. REPORTING/COORDINATION

The vendor (s) will work with the ICT Committee on the day-to-day operations of the project. For institutional level co-ordination, the following will apply:

1. In EATTA - designated ICT Project Manager.
2. The Vendor – designated Team Leader.

F. RECIPIENT
1. East African Tea Trade Association

G. Evaluation Criteria

Objective Area	Criteria *(Scoring: zero, half or full)* **The Bidder has:**	Score
Understanding of the SRS and the assignment at large.	***The bidder is required to make a 20 minutes presentation to elaborate on the SRS (5 slides) and the assignment plan (5 slides)*** 0-4 Marks: There are obvious gaps in understanding the SRS and the assignment at large or 5-9 Marks: If the bidder understands the SRS and the assignment or 10-13 Marks: The bidder demonstrates innovation and value addition beyond understanding the SRS and the assignment. (Upon contracting, the proposed value add/innovation will be deemed mandatory for delivery).	13
Objective 1: Assignment Plan	***Provided a draft assignment plan.*** 2 Mark: The provided timelines match the proposed work plan and it is logically and realistically sequenced. 2 Marks: Team composition with a Team Leader, all required experts and clear role definition. (score 2 marks or 0). 1 Mark: There is a clear indication of the time allocation of the experts in the project.	5
	Elaborated the following information in the work plan: 2 Mark: 50% of the contract period on-site during the system deployment phase. 2 Mark: 75% of the time on site during Testing, Debugging and Piloting. 2 Mark: 100% of the time during Deployment and Maintenance.	6
	2 Marks: Provided a clear approach to establishing the required system-to-system interfaces.	2
	Provided a clear strategy to deliver an Application Programming Interface (API) for the proposed iTTS, that is, how prioritization and implementation will be done.	2
	2 Marks: Provided a clear approach to changes will be managed during the pilot, deployment and warranty periods.	2
	2 Marks: Demonstrated how stakeholders will be engaged at each phase of the project (based on the objective areas of this ToR).	2

Objective Area	Criteria *(Scoring: zero, half or full)* The Bidder has:	Score
Objective 2: System Requirements	***An approach for reviewing and implementing the SRS and QA Framework should be provided.*** 1 Mark: If an approach is provided. 1 Mark: The approach has a mechanism for establishing status and tracing implementation requirements. 1 Mark: In the approach a module definition matrix has been provided.	3
Objective 3: Prototyping	***Provided a summary of a Prototyping Plan*** 1 Mark: If a draft document is provided and has a clear approach. 1 Mark: There is a clear indication of the time allocation of the experts in the project.	2
Objective 4: Software Development	Provided information on how the implementation of requirements will be verified and validated during development.	2
	Provided information on how the Agile approach to software development will be used in this assignment.	2
Objective 5: Software testing and piloting	***Provided a draft Test and Piloting plan.*** 1 Mark: If a Test and Piloting plan is provided.	2
	Provided a clear strategy to release, test and pilot modules as development is ongoing.	2
	Provided information on how the Training Module will be structured and operated.	2
Objective 6: Training	***Provided a Training plan.*** 1 Mark: If a template is provided. 1 Mark: if elaborate and meets the methodology minimum expectation.	2
	Provided an elaborate training plan covering all types of users with different training approaches including Training of Trainers, Self-training etc.	2
	Provided an elaborate plan on how self-training tools will be and work.	1
	Proposed approaches that offer Value Addition/Innovation in delivering training.	1
Objective 7: Hosting Specifications	Provided a hosting Infrastructure specifications draft (2 pages max).	1
	Provided a clear approach to assessing and defining the hosting specifications.	1
Objective 8: System Deployment	***Provided a System Deployment plan.*** 1 Mark: If a template is provided. 1 Mark: if elaborate and meets the methodology minimum expectation.	2
	A strategy to deploy the tested and piloted modules is provided.	1

Objective Area	Criteria (Scoring: zero, half or full) The Bidder has:	Score
	Provided a strategy that details matters of business continuity on matters relating to the uptake of the system (minimal business disruptions).	2
	The proposed strategy has a clear data migration strategy.	2
Objective 9: System Documentation	**Provided a draft template of the source code documentation.** 2 Mark: If a template is provided and details the purpose of the various sections.	2
Objective 10: Support, Maintenance and Upgrades	**Provided a summary of a Maintenance and Upgrades Plan.** 1 Mark: If a template is provided. 3 Marks: If the bidder has clearly defined the Warranty as a min of 2 years within the set budget. 1 Mark: If the Maintenance and Upgrades Plan details what is included and what is excluded. 1 Mark: If the Maintenance and Upgrades Plan has an incident resolution mechanism. 2 Marks: If the Maintenance and Upgrades Plan has at least Semi-Annual Upgrades within the set budget. 1 Mark: The bidder demonstrates innovation and value addition.	13
	Provided the following post-warranty information: 1 Mark: If the proposed post-warranty (2yrs) costs of maintenance and upgrades are 11-15% of the original contract value. (Any values above 15% will be assumed to be 15% during contracting) or 2 Marks: If the proposed post-warranty (2yrs) costs of maintenance and upgrades are 6-10% of the original contract value or 3 Marks: If the proposed post-warranty (2 years) costs of maintenance and upgrades are 0-5% of the original contract value.	3
	TOTAL	**80**

Mandatory Technical Response Layout (The following must be strictly adhered to)

Proposal Section	Max No of pages
Table of Content (with active links to respective pages)	1
Executive Summary	1
Introduction	1
Objective 1: Assignment Plan	5
Objective 2: System Requirements	2
Objective 3: Prototyping	2
Objective 4: Software Development	2
Objective 5: Software Testing and Piloting	2
Objective 6: Training	2
Objective 7: Hosting Specifications	1
Objective 8: System Deployment	2
Objective 9: System Documentation	2
Objective 10: Support, Maintenance and Upgrades	5
Other Considerations (e.g. general proposal, value addition/innovation, etc.)	2
Annex 1: CVs (all presented in a standard format and numbered, respective certifications to follow respective CVs)	30
TOTAL	**60**

H. Pricing Details

All prices quoted by the vendor must be fully itemized, in US Dollars and inclusive of all taxes and expenses. East African Tea Trade Association expects to contract with the vendor on a Fixed Price basis for all components of the supply. We expect the vendor to quote a fixed price for:

- Product
- Implementation services
- Customizations
- All software licenses for the vendor's products
- All software licenses for third-party products supplied by the vendor.

Please clearly identify all assumptions made when providing these prices.