

REQUEST FOR PROPOSALS

FOR

**TITLE: DEVELOPMENT AND MAINTENANCE OF
THE CUSTOMER MANAGEMENT SYSTEM
FOR RURAL WATER SUPPLY SERVICES**

RFP NUMBER: WFP/LTR/792/2022

ISSUE DATE: September 30, 2022

DUE DATE: October 31, 2022

4:00 p.m. Central Africa Time (Rwandan time)

INVITATION TO TENDER INSTRUCTIONS

CONTENTS

- 1. Introduction**
- 2. Instructions for Submitting a Tender**
 - 2.1. Pre-bid meeting
 - 2.2. Format of the Tender
 - 2.3. Part A – Administrative Documents
 - 2.4. Part B – Technical Proposal
 - 2.5. Part C – Financial Proposal
 - 2.6. Confirmation of availability
 - 2.7. Government Tax
 - 2.8. Evaluation Criteria & Process
 - 2.9. Technical Submission Evaluation
 - 2.10. Financial Submission Evaluation
 - 2.11. Competitive Negotiation
 - 2.12. Packaging and Delivery of Tenders
- 3. Terms of Reference**
- 4. Annexes**
 - 4.1. Bids Responding Format
 - 4.2. Technical Bid Submission Form
 - 4.3. Curriculum Vitae Template
 - 4.4. Financial Bid Submission Form
 - 4.5. Financial Proposal Pro-Forma Templates

1. Introduction

With funding from USAID, Water For People is implementing the Isoko y’Ubuzima project to improve water, sanitation, and hygiene (WASH) governance, increase access to drinking water, and improve access to sanitation and hygiene products and services.

The main objective of this RFP is to identify an experienced company/firm to develop a robust **“Customer Management System for Rural Water Supply Services (CMS-RWSS)”** to be used by private operators under RURA management for effective billing, revenue collection, reporting, and customer database management. The system is expected to contribute to the reduction of non-revenue water (NRW) in rural water supply, especially commercial losses.

This Request for Proposal (RFP) is designed to help you produce a tender that is acceptable to Water For People as well as to ensure that tenders are given equal consideration. Bids will be selected under and in compliance with the **Quality and Cost Based Selection** method and procedures described hereinafter in the present Request For Proposals. It is essential, therefore, that you provide the information requested in the specific format and no other.

Water For People is not bound to accept the lowest price, or any, tender. Water For People also reserves the right to request any, or all, bidders to clarify the bids submitted.

2. Instructions for Compiling and Submitting your Tender

2.1 Pre-bid Meeting

There shall be a pre-bid meeting to be held on October 14, 2022, at 14:00 at Water For People’s office in Kacyiru, KG 7 Avenue. Please forward any clarifications or queries 48 hours prior to the pre-bid meeting through the procurement email, (rwanda@waterforpeople.org). The technical team shall be available in the pre-bid meeting to respond to all queries.

2.2 Format of the Tender

The tender should be submitted in English and be set out in three (3) main parts:

- Part A – Administrative documents
- Part B – Technical Proposal
- Part C – Financial Proposal

Parts A and B should be contained in one PDF document. However, the Financial Proposal (Part C) must be submitted as **separate Excel and PDF documents** to enable the Technical and Financial bids to be evaluated independently.

Please do not include any financial/price information in Part A or B. Inclusion of any price information in Parts A or B shall lead to bid rejection.

2.3 Part A – Administrative documents

Bidders are required to submit scanned copies of the below documents:

- Signed consortia/joint venture agreements (applicable to consortia/joint ventures) between your selected partners.
- Company registration certificate
- VAT registration certificate
- Valid Tax clearance certificate
- RSSB clearance certificate

2.4 Part B – Technical Proposal

Your technical submission should contain the following:

- Executive summary: a brief overview of your tender covering how you intend to achieve the outputs and your assessment of the resources required
- Signed and stamped Technical Bid Submission Form
- The firm's previous relevant experience should include the client's contact details, description of the assignment undertaken, start and end dates of each assignment, and completion certificates
- Technical Response (including method of implementation and your proposed quality assurance mechanisms)
- A list of the names and designation of all proposed experts/key personnel who will work on this project. Please clearly indicate the roles to be played by the personnel to match those requested in the Terms of Reference
- Curriculum Vitae (CVs) of proposed experts with information relevant to this project to support the proposed expert for this assignment

Bidders are advised to respond in line with or in reference to the scoring criteria as captured within this RFP document.

2.5 Part C – Financial Proposal

All prices must be submitted in **United States Dollars** and shall be inclusive of all applicable taxes.

Your financial bid should contain the following information:

- Signed and stamped Financial Bid Submission Form; and
- Pricing details: bidders must state fees and expenses basis to demonstrate the cost breakdown of the milestone payments. The financial proposal should not be combined with the technical proposal but should be submitted as a separate document. The financial proposal **MUST be in both Excel and PDF and be password protected.**

2.6 Confirmation of availability

The selected bidder must sign an exclusivity statement confirming that your proposed key personnel will be available to provide the required services for the duration of the contract.

2.7 Government Tax Obligations

The contract shall be domiciled in **Rwanda** and Government of Rwanda tax laws shall apply.

2.8 Evaluation Criteria and Process

In assessing the proposals submitted, the evaluation panel will use the Quality and Cost Based Selection (QCBS) as per the present tender document.

2.9 Technical submission evaluation

The technical submissions will be evaluated in five stages:

- **Stage 1:** Administrative Requirements (Pass or Fail);
 - **Stage 2:** Firm/consultant's experience (21 Marks);
 - **Stage 3:** Team's qualification and experience (42 marks);
 - **Stage 4:** Technical proposal for the assignment (46 Marks); and
 - **Stage 5:** Demo of one of the submitted assignments in Stage 2 (16 Marks).
- a) Only bids that pass in all elements of Stage 1 will be evaluated in Stage 2;
 - b) Only bids that attain a total of **14.70 out of 21 Marks** in Stage 2 will be evaluated in Stage 3;
 - c) Only bids that attain a total of **29.40 out of 42 Marks** in Stage 3 will be evaluated in Stage 4;
 - d) Only bids that attain a total of **32.20 out of 46 Marks** in Stage 4 will be evaluated in Stage 5.
 - e) Only bids that attain a total of **87.5 out of 125 Marks** for Stages 2+3+4+5 will be deemed "substantially responsive" to proceed to financial evaluation.

The detailed evaluation criteria for each stage are provided below:

Stage 1: Administrative requirements

Bidders will be required to demonstrate the following mandatory requirements:

	Criteria <i>(For each criterion below, a pass will be provided only where Independently Verifiable evidence has been provided by the bidder)</i>	PASS/FAIL
1.	The bidder must deposit a bid security equivalent to 2% of the total bid amount	
2.	A valid tax clearance certificate for the relevant revenue authority (<i>attach a copy of a valid tax clearance certificate</i>)	
3.	The bidder must be a company registered in Rwanda, or in case of a joint venture, the lead company must be registered in Rwanda. (<i>attach a copy of the company's registration certificate</i>)	
4.	The bidder must present a valid RSSB clearance certificate	
5.	Two (2) of the three (3) similar assignments (as per the ToR considerations) must have been implemented in Sub-Saharan Africa. The second and/or the third assignments will be disqualified if they do not adhere to this threshold	

Stage 2: Firm's experience (21 Marks)

	Criteria	Assignment 1	Assignment 2	Assignment 3
	<i>(Scoring: Zero or Full. For each criterion below, a full score will be provided only where Independently Verifiable evidence is provided)</i>			
	Notes:			
	1. Only assignments with completion certificates will be assessed.			
	2. Two of the 3 assignments must have been implemented in Sub-Saharan Africa. The second or/and the third assignments will be disqualified if they do not adhere to this threshold.			
	3. Only assignments that are considered similar (as per the ToR considerations) will be assessed.	(Max Score)	(Max Score)	(Max Score)
1.	The assignment was implemented in the last 7 years. (Scoring: Full or Zero)	1	1	1
2.	The assignment was completed within a period of not more than 2 years. (Scoring: Full or Zero)	1	1	1
3.	The assignment was implemented using open-source technologies. (Scoring: Full or Zero)	1	1	1
4.	There was implemented using web technology such as RESTFul, SOAP, web services, XML used to implement. Two-factor authentication was included. (Scoring: Full or Zero)	2	2	2
5.	The proposed Project Manager for this tender was the project manager for a similar assignment (as per the ToR considerations) (Scoring: Full or Zero only)	1	1	1

6.	The proposed Business Analyst for this tender was the business analyst for similar assignments (as per the ToR considerations) (Scoring: Full or Zero only)	1	1	1
	Sub-Total	7	7	7
	Total	21		

Stage 3: Team's qualification and experience (42 Marks)

	Resource	Years of general experience	Years of relevant experience	Individual Participation in similar assignment (1 mark per assignment)	Sub-Total
		(Max score)	(Max score)	(Max score)	
1.	Project Manager	1	2	3	6
2.	Business Analyst(s)	1	2	3	6
3.	Change Management / Training Expert(s)	0	1	3	4
4.	Infrastructure Expert(s)	1	1	2	4
5.	UX/UI Expert(s)	0	1	2	3
6.	Database Expert(s)	0	2	4	6
7.	Developer(s)	0	3	2	5
8.	WASH Expert	0	2	1	3
9.	Integration expert	0	2	3	5
	Total				42

Note: One person can be considered for more than one position if he/she fulfils the required skillset.

Stage 4: Technical proposal for the assignment (46 Marks)

Criteria (<i>Scoring: Zero, Half, or Full</i>)		Max Score
Objective 1: Requirements review/gathering and needs analysis		
1.	The proposed documentation/review process is adequate and will enable the team to successfully complete requirements gathering and needs analysis	1
2.	Proposed measures to ensure that no requirements are missed out are appropriate and likely to be effective	1
3.	There is a clear way of dealing with change requests before and after going live	2
4.	The proposed solution demonstrates a clear integration strategy with RURA existing Converged Licensing Management System (CLMS), Payment Gateway (where applicable), SMS Gateway, Email Exchange, USSD, InfoSec, RURA SAP S4/HANA ERP and any third-party systems when requested	4
5.	The proposed solution demonstrates a clear mechanism for hardening the solution against potential hackers	3
Objective 2: Prototyping		
6.	The proposal details what will be incorporated into the prototype.	1
7.	There is a clear approach to collecting, documenting, and incorporating feedback during prototyping.	1
Objective 3: Development		
8.	The proposed development approach details how the firm will ensure that all requirements are adequately covered in the solution.	1
9.	The proposed development approach details how the development will adhere to the identified standards and follow the Quality Management Framework.	2
10.	The proposal details the technologies to be used. The proposed technologies are the most recent and use open-source technologies in accordance with the ToRs and with unlimited functionalities as defined in the requirements.	3
11.	The proposed system reporting meets the client's expectations.	2
12.	The output of the solution generates secure documents "E-Invoice" as per the client's expectations.	8
Objective 4: Testing		

13.	The proposal includes a draft test plan for the assignment.	1
14.	The proposed test plan adheres to the best industry standards (includes various types of tests and users).	1
15.	The proposed test plan includes an elaborate issue log, with clear status tracking and closing mechanism.	2
Objective 5: Change Management (Stakeholder Engagement and Training)		
16.	The proposal includes a draft change management plan for the assignment	1
17.	The proposed change management plan includes a clear training strategy/approach with the materials to be used	1
18.	The proposal details how various stakeholders will be engaged at every stage of the assignment	1
Objective 6: Piloting, data migration, and deployment of the enhancements		
19.	The proposal includes a pilot plan	1
20.	The pilot plan has a clear data migration strategy	3
21.	The pilot plan has a clear changeover strategy	2
Objective 7: Documentation		
22.	The proposal includes a matrix with a list of all documents to be delivered in this assignment with clear details on when they will be delivered, signed off, reviewed, updated, and used	1
Objective 8: Support and Maintenance		
23.	The proposal includes a draft Service Level Agreement (SLA) plan for the assignment; The SLA includes terms & conditions, issue identification & resolution, escalation matrix	1
24.	The proposed SLA covers a period of not less than two (2) years when the system will be under warranty	1
General Aspects		
25.	There is a clear role definition for each expert. That is who, role in the assignment (assigned to specific deliverables)	1
26.	The proposed Draft Assignment Plan has all mini plans as per the ToR	1
27.	The proposed schedule under the Assignment Plan covers all objective areas of the assignment they are logically sequenced and have clear deliverables.	1
Total		46

Stage 5: Demo of one of the submitted assignments in Stage 2 (16 Marks)

Prospective bidders will be notified to prepare their practical demonstrations at least 7 days before the presentation date to the evaluation committee. This date will be communicated once Stage 4 evaluations have been completed.

Note: A PowerPoint presentation will not be considered as a demonstration of the proposed system.

The practical demonstration will be evaluated as follows:

Criteria Notes:		Max Score
1. Only demos for assignments submitted in this bid as part of the two Sub-Saharan assignments will be assessed		
2. The assignment must meet all conditions set in Stage 2 of this evaluation.		
3. Only one solution will be demonstrated. The bidder must pick the best based on their own judgment		
4. A maximum of 45 minutes will be provided for the demo before the Q&A session.		
(Scoring: Zero, Half or Full)		
1.	The UI and UX are appealing, easy to use, minimalistic, self-explanatory, and easily to navigate	3
2.	The solution has features similar to those highlighted in the Terms of References	3
3.	The solution has been developed in technologies similar to those of the existing RURA Converged Licensing Management System (CLMS)	2
4.	The solution has BI tools such as ad-hoc reporting and visualization tools as per ToRs	2
5.	The solution is able to interface with other existing RURA systems	2
6.	The solution has effectively incorporated user notification mechanisms	2
7.	The solution is compatible to mobile gadgets and USSD	2
Total		16

Only those proposals scoring the minimum cut-off score of 70% in one stage will proceed to be evaluated in the next stage.

Bidders that achieve a total minimum technical score of **87.50 marks** (out of the possible 125 marks) will qualify for the financial evaluation.

The weight given to the technical proposal shall be **70%** and the weight given to the financial proposal shall be **30%**.

2.10 Financial Submission Evaluation

All substantially responsive proposals that score **87.50 marks or more** from the **Technical submission evaluation** shall have their Financial proposals evaluated.

The formula for determining the financial score (SF) shall be as follows:

SF = 30% x FM/F where:

SF is the financial score

FM is the lowest fees quoted and

F is the fee of the proposal under consideration.

The lowest fees quoted will be allocated a maximum score of **30%**.

The bidder's proposals will be ranked according to their combined technical score (ST) and financial score (SF) and weighted accordingly. The formula for the combined scores shall be as follows: $S = ST \times T\% + SF \times P\%$

Where:

S is the total combined scores of technical and financial scores

ST is the technical score

SF is the financial score

T is the weight given to the technical proposal (in this case **70%**) and

P is the weight given to the financial proposal (in this case **30%**)

Note: P + T will be equal to **100%**.

The bidder who has achieved the highest combined technical and financial score shall be declared successful and subsequently invited for clarifications.

2.11 Competitive Negotiation

Water For People, may at its discretion, choose to negotiate either with all tenderers that have passed technical and financial evaluation, or a shortlist of tenderers with the highest scores, on any aspects of the Terms of Reference, proposed methodology, inputs, price, and/or conditions of the contract.

2.12 Packaging, Submission, and Delivery of Tenders

- **All submissions must be submitted** via Water For People's procurement mailbox using the email address, rwanda@waterforpeople.org on or before **October 31, 2022, 4:00 p.m. Central Africa Time (Rwandan time)**.
- Please note that the maximum size of each email with attachments must not exceed **5MB**. The Technical and Financial proposal shall be submitted **as two separate documents in PDF format**, in the same email.
- The financial proposal **MUST be password protected**.
- All queries quoting the tender title and number should be emailed to rwanda@waterforpeople.org. **Water For People cannot answer any query relating to this tender after the pre-bid meeting which is open to all potential bidders.**
- **Late tenders will not be accepted.** No special pleading will be accepted. Faxed or hard copy proposals/samples shall be rejected.
- Water For People reserves the right to cancel the entire procurement process without incurring any liability whatsoever.

3. TERMS OF REFERENCE

1.0 Background

The Rwanda Utilities Regulatory Authority (RURA) was initially created by Law n° 39/2001 of 13 September 2001, the latter was replaced by Law N° 09/2013 of 01/03/2013, with the mission to regulate key public utilities namely:

- Telecommunications, information technology, broadcasting, and converging electronic technologies including the internet and any other audio-visual information and communication technology;
- Postal services;
- Renewable and non-renewable energy, industrial gases, pipelines, and storage facilities;
- Water;
- Sanitation;
- Transport of persons and goods;
- Radiation Protection; and
- Other public utilities, if deemed necessary.

RURA's vision is to be a leading global regulator of public utilities. To achieve this, RURA is keen to: promote free and fair competition, protect the rights of consumers, and balance the interests of all stakeholders, promote the availability of affordable, quality services to all; and lead in the development of the public utility sectors.

Water For People, through the USAID-funded Isoko y'Ubuzima project, seeks to provide support to RURA and contribute to the improvement of the water services provision in rural areas. Isoko y'Ubuzima project requests experienced IT firms to develop a **Customer Management System for Rural Water Supply Services**.

The focus will be on the development of software that can help private operators to effectively bill the water services provided, collect revenues, track arrears, and map customers. In addition, the system will contribute to monitoring and reporting efficiency as well as the management of the customer base of private operators in Rwanda.

Currently, RURA's existing system operates in the following environment:

- Data centre at RURA-HQ, DR Site, Windows and Linux virtualized Server environment, SQL and MySQL, manpower proficient in PHP, Java, and MySQL; and
- The existing RURA applications software includes a mixture of technologies and platforms, including Microsoft SQL Server databases, HTML & HTML5, Java, JavaScript, MySQL, Laravel, WordPress, and PHP.

2.0 CMS-RWSS Components and Objectives

A. CMS-RWSS main components

The CMS-RWSS is summarised into four main components to be implemented as listed below:

- **Consumers Management:** The system should allow private operators to capture the consumers' records with a unique registration number (Consumer identification as well as the consumer location—Using Geospatial records data). In addition, the system should allow private operators to link identified consumers with their meters. The consumer should be able to access the system by using USSD, Mobile Application or Web Application. This will ensure that even consumers with internet limitations can access the system.
- **Water consumption billing:** The system should allow the billing officer to record meter readings through a handheld device. The system should be able to calculate the consumption and generates related charges. A customer statement (bill) will be produced at the end of the billing process and the system should communicate the billing details to the customer by SMS and email.
- **Bill payment:** the system should allow various payment channels for the customer to be able to pay the outstanding bills. A payment gateway should be developed to allow the CMS-RWSS to integrate with all payments collection providers and E-Wallet (banks and all available Mobile Money payment platforms). The system should be able to keep track of payment histories and tracking arrears. Furthermore, the system should support multimedia incorporation for all the billing officers to take and upload the picture of the meter reading index into CMS-RWSS. In case of customer disconnection, the system should notify the meter owner(customer) by SMS and email.
- **Reporting:** The CMS-RWSS should allow dynamic reports generation as requested by the system's end-users. Users will be able to select required columns, filtration, and sorting at runtime for any module according to their access levels and permissions. Such reports generated will also be crucial for future use. The reporting module should have the feature to export all reports into PDF, Microsoft Excel, and CSV files and enable front-end first-hand search, PDF, and CSV files export.
- **Accounting and Financial Management:** The system should allow taking financial records including daily expenses, debtors, creditors, and stock management, and generating standard financial reports (financial statements, balance sheets, profit and loss, and cash flow).
- **Measure of performance:** The system should be able to display the main performance indicators and help the Private Operator to score his or her performance at the end of a defined period.

B. Objectives

Objective 1: Requirements Review/Gathering and needs analysis

To review documented requirements for the proposed **Customer Management System for Rural Water Supply Services (CMS-RWSS)** to ensure the system operates optimally to contribute to

the improvement of the water services in rural areas for effective billing, revenue collection, reporting, and customer database management.

This should include a desk review of any existing relevant documents and systems related to rural water supply services (MININFRA, RURA, WASAC, and Private Operators).

Purpose:

This gives the consultant development team an opportunity to review the provided high-level requirements and elaborate the requirements to a detailed level that will enable the team to undertake the assignment. This also gives the contracted firm the opportunity to document aspects that might have been missed out in the high-level requirements.

Objective 2: Prototyping

To develop prototypes that give the look and feel (with minimal functionality) for the proposed **Customer Management System for Rural Water Supply Services**.

Purpose:

These will be used as tools to assist all system prospective users to visualize the requirements and subsequently refine them and capture emerging issues as well as getting early-stage feedback from the users for the purpose of enriching and accelerating development.

Objective 3: Development

To develop the **Customer Management System for Rural Water Supply Services** to be an intuitive solution for RURA by enhancing the already developed solution by preferably using open-source new age web-based technologies, emerging technologies with aspects of artificial/augmented intelligence, and mobile compatible/enabled without system features extension, storing size, processing capacity limitations. Therefore, the ownership of the source code and associated software materials will belong to RURA.

Purpose:

Deliver a system with unlimited functionalities as defined in the requirements. This objective area ensures that the desired solution is not bound by recurring license requirements. In case of one-time/lifetime license payment obligation, the Consultant will bear the cost.

RURA will provide the license of SQL Server, Windows/Linux Operating System, and free MySQL DBMS while the rest of the configuration and DBMS purchases for system optimization required for the Production Environment are the responsibility of the Contractor.

Objective 4: Testing

To subject the **Customer Management System for Rural Water Supply Services** to various kinds of system tests by the contracted firm and users, especially after specific stages of development where the most critical functions and features are delivered.

Purpose:

This ensures that the CMS-RWSS does the right things in the right way. These tests check for the validity and integrity of processes and data. Beyond the functionality, the tests also look at system security and overall conformity to set standards and best practices.

Objective 5: Change Management (Stakeholder Engagement and Training)

To engage all critical stakeholders at various points of the assignment and conduct various types of training (ordinary users, advanced users, training of trainers) for all users who will be using the developed system using innovative and current techniques.

Purpose:

This will ensure that there is knowledge transfer to all types of users of the CMS-RWSS. The depth/level of knowledge transfer should be to the extent that advanced (highly technical) and ordinary users would be able to effectively and optimally use the solution to deliver the required services with very minimal or no technical supervision from the contracted firm. This is an important foundation for the sustainability of the solution. Deliberate stakeholder engagement is designed to ensure that all critical parties of interest are involved at all critical steps in the life of the assignment so that issues such as resistance are minimized.

Objective 6: Piloting, data migration, and deployment of the CMS-RWSS

To expose the system to the real environment on trial (piloting) and eventually moved to the production environment with the required data to effectively and optimally operate.

Purpose:

Piloting allows for trials of the tested system in a controlled and live environment while under close observation with the intention of refining not only the system but also the deployment approach. Pilots bring to reality assumptions made during development.

The consultant shall perform any available legacy data migration with a parallel run; at the time of Production Deployment, both environments (Production and Development) will be run parallel for a certain time period for smooth Functionality Testing. After successful verification and approval, the Production Environment will be the one live.

Objective 7: Documentation

To document all the aspects of the assignment at all stages of the assignment.

Purpose:

This will ensure that all stages of the assignments are fully documented for the purpose of not only enabling the delivery of subsequent processes but also for future references. Documentation facilitates reviews/audits of various stages of the assignments.

Objective 8: Support and Maintenance

To provide full support and maintenance services during the guarantee/warranty period for the CMS-RWSS based on the set SLA and all tendering document conditions/requirements.

Purpose:

Support and Maintenance ensure that the system operates at the desired performance and availability level consistently. It deals with both routine and periodical aspects of maintenance.

3.0 Scope of work

A. General Scope

This assignment will include the review of all available documentation that would support the delivery of this assignment. These reviews will happen all through the life of the assignment as the need emerges. The documentation will especially facilitate all stages of the assignment from the requirements stage to support & maintenance. Various available documents are highlighted in the Methodology section of this TOR.

The cost of the project will be aligned to the scope defined and should cover, but not be limited to technical fees, statutory fees, associated travel and communication (where applicable), warranty, support, and maintenance (for one year and a half). All affiliated/required facilitation for making delivery of this assignment will be assumed to be under the scope of this assignment. It is the responsibility of the Contractor to ensure there are no omissions in the designs and execution of this assignment. The geographical scope of the project will be Rwanda with the web solutions being accessible from any part of the globe.

All documentation, system development, testing, data migration, deployment, and maintenance must follow the following standards where applicable:

- Agile Programming Principle;
- ISO/IEC 12207: International Standard for Software Life-cycle Processes;
- ISO 9001:2015: Quality management systems — Requirements;
- ISO 27001 ISMS (International standard) together with ITIL framework; and
- ESB and SOA architecture.

B. Specific Scope

Assignment Plan

An assignment plan will be developed as the first point of this assignment. The assignment plan will constitute multiple mini plans. This includes a plan on how the Requirements Review/Gathering and needs analysis, development, testing, training, piloting, and deployment will be conducted and documented. Each mini plan will highlight the key deliverables, the required resources, and other required inputs. An assignment schedule/activity plan will encompass all deliverables from each mini-plan. The Assignment Plan will be delivered as one document that will be approved before the commencement of the assignment. The document may be updated from time to time based on needs and emerging realities with approvals from the project team. It should be noted that RURA doesn't allow remote access and thus, during all system development and implementation phases, the Consultant's implementation team must execute their job onsite (at RURA HQ) including warranty support and maintenance period.

Objective 1: Requirements Review/Gathering and Needs Analysis

The contracted firm will be required to review all existing requirements documents under the CMS-RWSS and any other that may be deemed fit for the purpose of ensuring that no functions

and features are missed out. This stage of the assignment will include elaborate documentation of requirements (in Systems Requirement Specification model) to ensure that the functions and features of the CMS-RWSS are able to handle the following functions/services (but not limited to):

- Development of a CMS-RWSS as per the requirements;
- Loading (Data Migration) or importing any existing required records/files into the new CMS-RWSS database;
- CMS-RWSS integration with RURA existing systems where applicable (CLMS, SMS gateway, Infosec, Email exchange, SAP S/4 HANA);
- CMS-RWSS mobile application
- Embed USSD functionalities, SMS, and email notification services with CMS-RWSS -; and
- Develop ready RESTful-based APIs for all future development and data exchange needs.

The Requirements Review/Gathering phase will also document aspects of Business Intelligence needs and tools that will support data mining and advanced reporting for pre-defined as well as ad hoc parameters. A Quality Management Framework (for the process and the solution) will be developed and approved together with the requirements before the development of the system commences. It is expected that the requirements documentation will include establishing mechanisms to support/integrate with notification systems such as SMS, emails, etc. for specific processes that will be used for notification for specific actions that will be deemed sensitive and critical. In addition, the requirement stage should also consider fault identification, tolerance, and correction mechanisms to be embedded in the design of the solution. The solution must adhere to:

- Provision for all entitlements/privileges for all types of Profiles like End Users, Super Users, IT Users, IT Administrators, DB Administrators, and Super Administrator with password assistance through SMS and email. Role-based access and authorization of various modules;
- The Application should pass the OWASP Top10 security check certificate to stop hacking attempts before going LIVE. A CERT or IT Security Auditing organization must certify that the application is found to be free of all OWASP Top 10 vulnerabilities. Managing the security of the new system from all types of external attacks (like hacking, SQL Injection, Cross Side Scripting, Denial of Service Attack, etc.);
- The Contractor will be responsible for maintaining and managing the performance and real-time display of the software system developed and implemented by configuring and optimizing the Operating system, Database optimization and management/shipping for DR and backup, SSL, software updates/patches, minor updates, etc. of the Production Environment during the contract period;
- The solution should be scalable and published / accessible without distortion across the latest four versions/types of browsers (IE/Chrome/Mozilla/Safari etc);
- The solution should have a mobile application to be used mostly by water billing officers and water consumers, as well as a USSD feature for invoice and status checking;
- The CMS-RWSS forms and interfaces should be in Kinyarwanda and English languages;
- The application(site) should be tested against daily peak access of 1,000 concurrent users' access/transactions;
- Dashboards: Use of extensive dashboards to visualize the key strategic invoicing and pricing information and data in the form of maps, charts, and threshold limits;
- System Reporting Requirements:

- The Application should contain a Dashboard of tailor-made MIS pages which shows output in the form of maps, and charts with threshold limits;
 - There should be a dynamic report generation/analysis feature within the CMS-RWSS. Users should be able to select required columns, filtration, and sorting at runtime for any module according to their access. The template can be saved for future use also;
 - Authoring and Maintaining templates for Email / SMS for each trigger (action against any updates). The contractor will integrate with the available RURA SMS Gateway and mailing system. Furthermore, the contractor should bear in mind that the vendor for Bulk SMS and Bulk Mailing systems of the Regulator may change in future. In view of the same, the vendor has to design and develop the system such that it may cater to the change of the system of the new form with a few configurations here and there which may be documented and provided to the Client;
 - Given various reports to be generated in CMS-RWSS, the consultant should provide all reports as per end-user needs & requirements;
 - All system reports should be exportable into PDF, Microsoft Excel, and CSV files; and
 - Enabling font-end first-hand search, PDF, and CSV files export;
-
- User management/Role profiling: Robust login system/Secure Log-in allowing system users to access the system as per their roles/authorization thereby having to retrieve & reset password facility on email / SMS.
 - The vendor must provide the list of hardware such as servers and processing capacities that will be required to create the Development, Staging, and Production Environment as a part of the solution along with the required configuration details. The details must be submitted by the Vendor as a part of the Technical Bid.
 - All pages should customize themselves to Mobile (compatible with iOS, Android, Windows) Apps for Software applications for all environments.
 - The end output of CMS-RWSS which is basically “E-Invoice” should be encoded with a machine-readable optical label that contains invoice identifiable information capable of being read by any imaging device such as a camera or matrix barcode reader.
 - The Software application / DBMS should maintain logs and keep a record of events for later verification with search features for readable output. The database should be in Normalized form with proper indexing and exception handling.
 - The application is expected to allow business users to design and generate reports on the fly. The bidder to propose a mechanism and detail how the proposed application will address the needs of ad-hoc reports.
 - The proposed CMS-RWSS should use Social Media and system users’ moderated Discussion Boards. The bidder is to propose how interaction with Social Media can benefit the application. Preferably Integration with Facebook, Twitter, etc.
 - The CMS-RWSS should be able to communicate with RURA CLMS in place for fetching/placing some files (images/documents) and processing afterward.
 - The developed CMS-RWSS should be designed in such a manner so that it would cater below listed Strategic Action Points:
-
- Live chat tool before and after login;
 - Feedback monitoring with reminders (SMS/Email) based on rules; and
 - Discussion board.

- Desktop & SMS & Email alerts for the failure of any process, database, threshold limit, the crash of the system

Objective 2: Prototyping

The desired prototype will give an end-to-end simulation with a near-real look and feel of the proposed CMS-RWSS. The prototype will be required to encompass all the critical features with limited functionalities to critical aspects. An iterative approach to prototyping will be used, where users will be required to contribute to refining the conceptualization of features and functions. The development of the CMS-RWSS will commence once most feedback is received and incorporated, and the prototype is signed-off.

Objective 3: Development

The final Business Requirements Document, the Systems Requirements Specification, and other required documentation will be the basis from which the development of the solution will be done. The team of actual developers must adequately acquaint themselves with the documentation before the development of the solution commences. It is expected adequate technical resources will be deployed to ensure that the turnaround time is within the assignment timelines as per the Assignment Plan and as per the correct quality standards set in the Quality Management Framework.

Objective 4: Testing

It is expected that in the Assignment Plan, the mini plan under the Test section will detail all types of Tests that will be conducted within the contracted firm's environment and test environment. Among other tests, such tests as security, stress, and functional (to be conducted as User Acceptance Tests) must be conducted at this stage of the assignment. All critical tests will be signed off before proceeding to the next phase of the assignment where there is any risk of proceeding to the next before closing the test phase. A log of all tests, emerging issues and resolutions must be maintained all through the life of the assignment from the time the first tests are conducted to when the warranty period ends. It should be possible to go back and refer to the test logs whenever a need arises.

Objective 5: Change Management (Stakeholder Engagement and Training)

It is expected that training materials will be developed and approved in advance (before being used). The materials will be in the form of hard copy documents (professionally designed and produced/published), their soft copy versions that are easy to render on computers electronic gadgets such as tablets and phones, in-built help tools in the solution, how to do videos and step-by-step infographics for critical and common processes. The delivery methodology of these training should be a mix of various modern and innovative techniques that will ensure optimal results are achieved. A mini-training plan will be detailed in the Assignment Plan. For stakeholder engagement, all the mini-plans in the Assignment Plan must clearly highlight the various points in the assignment where various stakeholders will be engaged; this is expected to be throughout the life of the assignment. Deliberate efforts to engage all interested parties in the design of the assignment is required.

The Training Plan and the Training must be designed to ensure there is deliberate knowledge transfer to all types of users. In specific terms, RURA system administrator, network administrator, developers, and database administrator must be properly trained to a level they can operate and manage the CMS-RWSS end-to-end with almost no help from the contracted firm especially after go live.

Objective 6: Piloting, Data Migration, and Deployment of the CMS-RWSS

In the Assignment Plan, it is expected that the Pilot and Deploy mini-plan will detail modules and how they will be piloted and then deployed. The plan will take into consideration various aspects that would ensure feedback is gathered and incorporated into the solution during the pilot phase and that the deployment strategies proposed to ensure there is a minimal business disruption for the current CMS-RWSS at the deployment phase. The deployment strategy will include data migration of all critical and legacy data where applicable, to ensure that not only the new system transactions are not affected but Business Intelligence requirements are fulfilled. That is, there is adequate historical data to conduct various analyses deemed critical. All data migration needs are covered within the set budget limits.

Objective 7: Documentation

At various stages of this assignment, various documents will be generated and updated from time to time. The quality of the documentation is expected to be guided by the Quality Management Framework and best practices in general. The various documents must have the required technical depth and clarity depending on the targeted users. Some of the documents that must be submitted in hard copies with printable soft copies include the final user manual (at least 20 copies of high-quality printouts). As part of the proposal, provide a documentation matrix listing all documents that will be generated/updated during the assignment, the purpose of the document, who will be responsible to track the status, and when the final version is to be submitted or signed off.

Objective 8: Support and Maintenance

The submitted bid and the Assignment Plan will incorporate Draft Service Level Agreements detailing essential/critical aspects of the proposed SLA. The SLA must take into consideration that the minimum support and maintenance period from the day of signoff of the last module after going live will be one (1) calendar year. In the Draft SLA, the cost of support and maintenance warranty period will not exceed 20% fees of the original contract value. It is expected that the warranty period will include system updates/patch releases for aspects that are required to enhance performance, security, use, etc. resulting from emerging issues such as new operating systems, databases, security threats, industry compliance standards, etc. Also to be noted, for purposes of ensuring that utmost integrity is maintained throughout the life of the assignment and beyond, the contracted firm will not conduct any business with users of the system to be developed that may compromise the integrity of the system and may lead to a conflict of interest. The submitted proposal must include a draft Service Level Agreement. The Draft and the Final SLA must adhere to the following bare minimums:

- During the maintenance period, the company will update structural upgrades, design and fix any raised system bugs;
- During the maintenance period, the Consultancy firm shall remedy the system unpredicted/outstretched defects within a maximum of 6 hours at his/her risks and expenses

and without prejudice to any other rights which the Client may have according to the Contract;

- In case of unexpected system dysfunctional behaviours after the go-live period, the Consultant will bear the whole responsibility of fixing and addressing the issues within a period not later than 6 hours;
- The consultant will migrate the data from existing electronic billing systems currently used by some private rural water service providers
- It will also have an incident resolution mechanism and an escalation matrix;
- The SLA will also clearly stipulate exclusions and how they should be dealt with in case of occurrence;
- All possible risks that may hinder 99.7% availability of the system will have to be documented with clear mitigation measures; and
- Delays to fix the raised issues by the Client during the warranty and support period will be penalized at the rate of 1/100 of the warranty and support contract value per day and up to a maximum amount of 100% of the contract value.

4.0 Methodology

A. General Principles

The following essential principles will guide the assignment from the onset to the end. It is expected that the overall approach to delivering this assignment will be through consistent consultation and collaboration/partnership to ensure there is optimal utilization of resources so that the solution is delivered efficiently and effectively. Engagement of all critical actors where necessary will be done at each stage of the assignment as defined. Gathering and effecting feedback in each stage of the assignment will also be done diligently to ensure there is no loss in critical contributions. There are various documents that will be generated at various stages of the assignment, these must meet best practices in terms of quality, and they will be subjected to review and approval as may be deemed necessary. Also, the contracted firm is expected to advise the recipients on various aspects of this assignment, especially where there are better, newer, different ways of handling specific aspects of the assignments.

B. Specific Methodologies

Objective 1: Requirements Review/Gathering and Needs Analysis

Inputs

- Assignment plan;
- This Terms of Reference;
- RURA Internal Information Resources Policy;
- Existing Requirements Documentation; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm is required to seek all clarifications where necessary;

- Document all requirements gathered and undertake needs analysis;
- Develop a Business Requirements Document that will detail at a high level the business process to be automated;
- Develop a System Requirements Specifications that will detail the functions and features of the solution;
- Develop Hardware Specifications for the CMS-RWSS that detail the required ICT infrastructure to run the solution;
- Develop a System Security Specifications for the CMS-RWSS that will detail the required security considerations that must be implemented for the solution;
- Develop a Quality Management Framework for the management of quality throughout the assignment;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment; and
- Consolidate and incorporate reviews/feedback on the Draft Business Requirements Documents, System Requirements Specifications and Quality Management Framework from the identified stakeholders through the established communication channels.

Outputs

- Business Requirements Documents;
- System Requirements Specifications;
- Hardware Specifications;
- System Security Specifications; and
- Quality Management Framework.

Objective 2: Prototyping

Inputs

- All inputs and outputs in objective 1 above; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm is required to seek all clarifications where necessary;
- Conduct demos for various users/stakeholders on the prototype to refine the documented requirements;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment;
- Ensure that prototyping activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on the prototype from the identified stakeholders through the established communication channels.

Outputs

- System Prototype(s); and
- Feedback from project team.

Objective 3: Development

Inputs

- All inputs and outputs in objective 2 above; and
- Findings from research on current technologies and related issues.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm is required to seek all clarifications where necessary;
- Develop specific modules of the solution based on the assignment schedule. The solution should be done as per the requirements document and feedback from the prototyping process;
- The source code and its documentation must be submitted in accordance with the client's IR policy, the assignment plan, and the assignment SLA;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment;
- Ensure that the system development activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on the system module(s) under development from the testing Test Log Matrix from the identified stakeholders through the established communication channels.

Outputs

- Fully tested and signed off System Modules; and
- Source code with its documentation.

Objective 4: Testing

Inputs

- All inputs and outputs in objective 3 above; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm is required to seek all clarifications where necessary;
- Conduct various types of tests as detailed in the Assignment Plan under the Testing mini-plan;
- It is expected that the contracted firm/consultant will conduct in-depth in-house tests before subjecting the system to the various user tests;
- Review test cases incorporated in the Test Plan;

- Update the Test Log Matrix or on equivalent tools used. At the end of all tests, a Test Report must be submitted;
- Participate in validation/verifications activities at points deemed necessary during this stage;
- Ensure User Acceptance Testing (UAT) signoffs are done for each module. For interrelated modules, where signoffs of one module are required before proceeding, that condition must be observed;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment.
- Ensure that the testing activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on the Test Cases and system module(s) under development from the identified stakeholders through the established communication channels.

Outputs

- Updated Test Log Matrix or equivalent;
- Signed-Off UATs; and
- Test Report (containing updates on test cases).

Objective 5: Change Management (Stakeholder Engagement and Training)

Inputs

- All inputs and outputs in objective 4 above; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm is required to seek all clarifications where necessary;
- Undertake all the required activities in the assignment plan under the change management mini-plan;
- with the required approvals, update the change management mini-plan in the assignment plan;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment;
- At the end of each training cycle, submit a training report detailing how the training transpired;
- Ensure that change management activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on the change management mini plan from the identified stakeholders through the established communication channels.

Outputs

- Updated Change Management Plan;
- Adequately sensitized stakeholders and adequately trained users; and
- Training Report(s).

Objective 6: Piloting, Data Migration, and Deployment of the CMS-RWSS

Inputs

- All inputs and outputs in objective 5 above; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted consultant is required to seek all clarifications where necessary;
- Undertake all the required activities in the assignment plan under the change management mini-plan;
- With the required approvals, update the change management mini-plan in the assignment plan;
- At the end of each training cycle, submit a training report detailing how the training transpired;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment;
- Ensure that piloting, data migration, and deployment activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on the piloting, data migration, and deployment mini-plan from the identified stakeholders through the established communication channels.

Outputs

- Deployed system that is fully functional;
- Updated Change Management Plan; and
- Training Report(s).

Objective 7: Documentation

It is expected that documentation will happen consistently all through the life of this assignment. It is important that all development and review of documentation is done taking into account the following:

- Review various input documentation for each document to be developed;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm/consultant is required to seek all clarifications where necessary;
- Ensure there is consistent consultation and collaboration;
- Ensure that the documentation process adheres to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback from the identified stakeholders through the established communication channels.

Objective 8: Support and Maintenance

Inputs

- Draft Service Level Agreement (SLA);

- All inputs and outputs in objectives 1 to 7 above; and
- Insights from the project team.

Approach

- Review the documents under the inputs of this objective area;
- Hold working sessions with the designated teams/persons as may be required. The contracted firm/consultant is required to seek all clarifications where necessary;
- Implement the signed-off SLA;
- Provide a monthly report update every month on support and maintenance activities;
- Ensure there is consistent consultation and collaboration during the entire life of the assignment;
- Ensure that piloting, data migration, and deployment activities adhere to the QMF guidelines; and
- Consolidate and incorporate reviews/feedback on support and maintenance from the identified stakeholders through the established communication channels.

Outputs

- Periodical Report

5.0 Deliverables

Based on the scope and methodology detailed above, below is a summary of the key deliverables of this assignment:

- **Assignment Plan:** This will detail how the assignment will be conducted. It will include the understanding of the assignment by the consultant, the assignment schedule/work plan, and various required resources that have been planned to execute the assignment. This will be considered as the inception report for this assignment;
- **Business Requirements Document:** Will detail at a high level the business process to be automated (it includes AS-IS Processes, a list of user expectations, gap assessment, highlighting best practices to be adopted) for the technical parts of this assignment;
- **System Requirements Specifications:** Will elaborate functions and features of the solution including details TO-BE Processes, general and user-specific functional requirements, constraint requirements, infrastructure requirements, design principles, integration readiness assessment;
- **Hardware Specifications:** will elaborate minimum and optimal hardware specifications that will be able to run the CMS-RWSS and must include estimations on data traffic, hosting options, and projections of the required infrastructure up to 6 years from the go-live date;
- **System Security Specifications:** Will elaborate security specifications that will be able to securely run the CMS-RWSS. The specifications must detail the minimum and optimal security requirements for the solution at various levels including application, infrastructure, database, and web among others;
- **Quality Management Framework:** Will detail the quality managers' roles and responsibilities, quality control & assurance approach, and tools for system prototyping, development, testing, change management (stakeholder engagement and training), piloting, data migration, system deployment, and documentation;

- **System Prototype(s):** End-to-end system module prototypes that give a look and feel of key business processes and core functions as well as features;
- **Fully tested and signed off System Modules:** These are functional modules that have been reviewed by the required users and all feedback have been received for consideration;
- **Source code with its documentation:** This will be the code for the final solution submitted based on open-source tools together with all the appropriate documentation;
- **Updated the Test Log Matrix or equivalent:** This will be a living document that will be continuously updated and monitored. It will be the basis from which testing reviews will be done to confirm completion;
- **Signed-Off UAT Reports:** This will be done at the end of each module. It will be signed off once all aspects raised in the Test Log Matrix have been addressed for the respective modules;
- **Test Report:** At the end of all tests a summary of the test exercise will be compiled and submitted for future reference. This report will look at the solution from end to end;
- **Functional system in the production environment:** This is the actual signed-off system that meets the requirements and is in use;
- **Training Report:** At the end of all tests, a summary of the training exercises is conducted. It will have details of how the training happened. This document will be drafted in line with the Change management plan and will be progressively developed as training is conducted;
- **Signed Off Support and Maintenance SLA (documentation and actual activities):** This Agreement will detail the Terms and Conditions on what and how support and maintenance will be conducted during the 1year period from the commissioning date. The document will detail all obligations of the consultant, RURA, and Water For People. Completed Support and Maintenance activities as per the SLA. These include day-to-day support as well as scheduled/on-demand maintenance activities.

6.0 Recipient of this assignment

The main recipients of this assignment are RURA and Water For People.

7.0 Reporting

The contractor will work with the Project Implementation Team (PIT) on the day-to-day operations of the project.

It is expected that if the contracted party is a consortium/joint venture, the designated principal party will act as the focal point for all engagements in line with tender guidelines. It will also be required that all the parties in the consortium/joint venture will have their responsibilities and liabilities clearly defined. Also, a clear dispute resolution mechanism between the parties in the consortium/joint venture is provided (with the intention of avoiding delays or disruptions of delivering the assignment).

8.0 Timeframe

This assignment is expected to take a maximum period of 1.5 years as proposed below:

Objective Area	Details	Months										Payment on milestone completion
		1	2	3	4	5	6	7	8	9	10 to 18	(% of the Total)
Assignment Plan	Assignment Plan is submitted, approved and its use starts											N/A
Objective 1: Requirements review and needs analysis	BRD, SRS and QMF submitted and validated											N/A
Objective 2: Prototyping	End-to-end prototype completed, demos done, feedback collected and signed-off											20%
Objective 3: Development	Development of modules/components as planned are completed and are ready for testing											N/A
Objective 4: Testing	All tests are completed and signed-off											N/A
Objective 5: Change Management (stakeholder engagement & training)	All through the life of the assignment, all relevant stakeholders are engaged appropriately											N/A
	Training is completed and signed off based on the Training Plan											
Objective 6: Piloting, data migration,	Pilots are completed and signed off to help refine the solution and											10%

deployment and Go Live	design deployment strategy												
	Data migration of all critical old data is done is completed and signed-off												
	Then the system is deployed to the production environment and signed-off												
	System Go-Live												50%
Objective 7: Documentation	All required documents are submitted and approval/sign-off given where applicable												N/A
Objective 8: Support and Maintenance	The SLA is completed and signed off and gets the system in action. SLA period ends successfully												20%

Note: Failure to respect the above timeframe the Consultant will be penalized at the rate of 1/1000 of the contract value per day and up to a maximum amount of 30% of the contract value.

9.0 Qualifications and eligibility criteria

A. The firm

The firm is required to have previously undertaken at least three (3) similar assignments in terms of nature (design and functions assignment – in this case a complex systems interface platform between multiple agencies, from multiple countries, etc.), magnitude, complexity (refer to Objective 1: Requirements Review/Gathering and needs analysis) and value (in USD). Evidence to support each of these aspects must be provided. The three assignments must have been undertaken in the last 7 years. Each solution must have been completed/in operation within 2 years from the commencement date. In addition:

- The consulting firm should have a deep experience with RESTful or SOAP, web services, XML, and other web development technologies;

- The bidder needs to demonstrate experience in dealing with online systems which issue secure documents or process secure transactions including but not limited to payment, document authentication, OTP (one-time passwords), multi-user and multi-session, and having different levels of approvals;
- The consulting firm should have developed a secure application with double factor authentication with the ability to send notifications using SMS and Emails;
- The bidder must be a Company registered in Rwanda or in a joint venture with a company registered in Rwanda;
- The bidder must present a bid security certificate equivalent to 2% of the total bid amount
- The successful bidder must present a performance guarantee of 20% from a licensed financial institution before signing the contract. Water For People will execute this performance guarantee if the contracted consultant/firm fails to fully implement the contract.
- The consulting firm must have successfully undertaken at least two similar Web Based Application development and implementation projects over the last seven (7) years for Government or Large Private Corporates in Sub-Saharan Africa. (2 copies of work completion certificates are required) and one more similar project elsewhere in the world (1 genuine copy of work completion certificates are required). The developed interactive systems should have used technologies in “The existing RURA applications software environment”.

B. The proposed team

The three assignments must have been undertaken in the last 7 years and each should have been completed in a period not more than 2 years from the date of commencement to full completion.

Below is the summary of the roles required for the assignment:

Resource	Role	Minimum no. required	Bachelor's Degree	Years of general experience	Years of specific experience	Specialized skills	Participation in similar assignments
Project Manager	This person will have the overall responsibility of delivering the assignment. The person will be the contact person the project team will deal with during the life of the assignment.	1	Bachelor's Degree with relevant experience	5	3	Information Systems project management	At least 1 in the last 5 years
Change Management / Training Expert	This role will ensure that stakeholders are engaged all through the assignment. The holder will be the developer and executor of the Training plan.	1	As above	5	3	Stakeholder engagement and user training	At least 1 in the last 5 years
Business Analyst(s)	The Business analyst will be responsible for Requirements Review/Gathering, analysis and documentation	1	Bachelor's Degree in Business / Computer science / Information Technology / Information Systems or equivalent	5	3	Information Systems (requirements gathering, analysis and documentation)	At least 1 in the last 5 years

Resource	Role	Minimum no. required	Bachelor's Degree	Years of general experience	Years of specific experience	Specialized skills	Participation in similar assignments
Infrastructure Expert(s)	Will be responsible for defining infrastructure requirements, guide infrastructure deployment.	1	As above	5	3	Developing hardware and undertaking hardware setups	At least 2 in the last 5 years
UX/UI Expert	The UX/UI role will be responsible for designing the user interface for the solution.	1	As above	4	2	User interface design	At least 2 in the last 3 years
Database Expert(s)	This role will design and update the system databases. They will also develop and execute data migration strategies.	1	As above	5	3	Database design and administration.	As above
Developer(s)	Programme the solution.	3	As above	4	2	Programming in specific mentioned RURA Existing System environment	As above
WASH Expert	The WASH expert will provide the technical expertise in water service provision	1	Master's degree in water supply engineering/ water service	10	5	Experience working with water utilities	

Resource	Role	Minimum no. required	Bachelor's Degree	Years of general experience	Years of specific experience	Specialized skills	Participation in similar assignments
			management or equivalent				
Integration expert	Perform the systems integration as required	1	Bachelor's Degree in Business / Computer science / Information Technology / Information Systems or equivalent	4	5	Familiar with SOAP and RESTFul, web services	At least 2 in the last 3 years

Notes:

1. The proposed experts/engineers/developers/analysts for this proposal will be the ones to execute the assignment. Any intention to change experts during the life of the assignment must be brought to the attention of the client at least one month in advance and the client must agree to the change before it is affected.
2. Copies of original certificates for the required degrees and certifications must be provided. Only valid (for instance not expired) documents will be considered.
3. Each of the firm's and expert experience & qualification **MUST** be presented in a standard format provided in the Evaluation Criteria.

4. ANNEXES

ANNEX 1. RESPONDING FORMAT

The response to the Technical Specifications **MUST** be presented in the following format and the number of pages must strictly be adhered to. **Any bid that doesn't follow this format may be deemed non-compliant:**

Proposal Section		Max pages
Section A	Table of Content (with active links to respective pages)	1
	Executive Summary	1
	Introduction	2
Section B	Stage 2: Firm's experience (Refer to "How to document Firm's experience" as the guideline for responding in this section)	6
	Stage 3: Team qualification and experience (Refer to "How to document Team qualification and experience" as the guideline for responding in this section)	20
Section C	Stage 4: Technical Proposal for the Assignment	
	Objective 1: Requirements review/gathering and needs analysis	5
	Objective 2: Prototyping	5
	Objective 3: Development	5
	Objective 4: Testing	5
	Objective 5: Change Management (Stakeholder Engagement and Training)	5
	Objective 6: Piloting, data migration, and deployment	5
	Objective 7: Documentation	5
	Objective 8: Support and Maintenance	10
	General Considerations	5
Total pages (Proposal Section)		80
Section D: Annexes		
<ul style="list-style-type: none">• All annexes to be signed are listed as part of the tender document.• Copies of required education and professional certificates.• Certificate/Evidence of Completion of assignments.• All annexes MUST be clearly referenced to the proposal content section.		

Text Formatting Notes:

Font type: Calibri (Body)

Font size: 11

Paragraph Spacing: Before - 6pts, After - 6pts, Line Spacing - Single

Document the Firm's Experience using the template below:

Assignment (e.g. Assignment 1)	
Project Aspect	Details
Project name/Title:	
Organization/Client:	
Client's Address (Country, Building No, Email and phone number, Contact Person email and address number)	
Description of the Beneficiaries:	
Project/assignment value in USD \$:	
Project start date:	
Project end date:	
In-depth description of project/assignment deliverables:	
Technologies (for both hardware and software) used:	
Project Management approach/Methodology used during implementation:	
List and description of documentation developed and submitted during and after delivery of the assignment:	
Change Management approach/strategy (ies) used:	
Warranty, Maintenance, and Support provided:	
Security measures integrated into the project at plan, build, operate and maintenance:	
Training tools and techniques used:	
Team composition for the previous assignment submitted (provide: the role, required skills, name of the holder during the assignment)	
A certified (for independent verification) copy of Certificate of Completion or equivalent (Assignment value information must be included).	<i>Attach each Completion certificate as an Annex.</i>

ANNEX 2: TECHNICAL BID SUBMISSION FORM

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted]

Date: *[insert date (as day, month and year) of Bid Submission]*

To: **Water For People**
Gasabo, Kacyiru, Kamatamu, Urugwiro, KG 7 Ave, House 41

We, the undersigned, declare that:

- (a) We have examined and have no reservations about the Bidding Documents;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Related Services *[insert a brief description of the Related Services]*;
- (c) Our bid shall be valid for a period of **120 days**, from the date fixed for the bid submission deadline in accordance with the ITT, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) If our bid is accepted, we commit on request to obtain performance security (if applicable) for the due performance of the Contract;
- (e) We have no conflict of interest;
- (f) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall not constitute a binding contract between us, until a formal contract is prepared and executed.
- (g) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: *[signature of a person authorized by the Bidder to sign the bid submission form, and whose name and title are shown below]*

Name: *[insert full name]*

Title: *[insert official title]*

Duly authorized to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

ANNEX 3. CURRICULUM VITAE TEMPLATE

Document the Team Qualification and Experience using the template below:

(Strictly follow this template; do not attach CVs. The information below is adequate for this bid)

Role (e.g Project Manager)	
Full Name:	
Identification document and Number:	<i>[e.g. Passport No.12345678]</i>
Date of Birth:	
University First Degree:	<i>[Month &Year of graduation, Awarded Degree, Awarding Institution, Reference Number]</i>
Post Graduate Qualification(s):	<i>[Month &Year of graduation, Awarded Degree, Awarding Institution, Reference Number]</i>
Certification(s):	<i>[Month &Year of award, Awarded Certification, Awarding Institution, Reference Number, Validity]</i>
Technical Skills competent in:	
Work Experience (List all previous roles held with the detail as provided below for each role):	<i>[Start Date, End Date, Institution, Role/Position, Brief Role Description, List of projects involved, and role played in those projects]</i>
Prove that you participated in similar project	<i>[Responsibility, Accomplishment, Address of your immediate supervisor].</i>
Working Permit/ Residence permit number and expiry date (for foreigners)	
<i>Attach all certificate to the Annex section.</i>	

ANNEX 3: FINANCIAL BID SUBMISSION FORM

Dear Sir/Madam:

We, the undersigned, offer to provide consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal.

Our attached Financial Proposal is for the amount of

(indicate the corresponding amount(s) in words and figures and the currency (ies)), including all applicable taxes in line with Clause 10 of this RFP tender document.

This financial bid submission/ proposal is in line with Pro-forma 1, 2, 3, and 4 of Annex 1 of this RFP tender document.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from any contract negotiations, up to the expiration of the validity period of the Proposal, up to a period of **120 days** after the bid submission deadline date.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours Sincerely,

Authorized Signature [In full and initials]: _____

Name and Title of Signatory: _____

In the capacity of: _____

Address: _____

E-mail: _____

[For a joint venture, either all members shall sign or only the lead member/ consultant, in which case the power of attorney to sign on behalf of all members shall be attached]

ANNEX 4: FINANCIAL PROPOSAL PRO-FORMA TEMPLATES

A. MILESTONE PAYMENTS PROPOSAL

The amount to be paid for the completion of the services is fixed at USD (USD)

Payment will be made either:

- a) as a lump sum on completion of the services
- or
- b) at relevant points throughout the contract period as detailed below

CRITERIA FOR PAYMENT	AMOUNT (USD \$)
TOTAL	\$

B. PROPOSAL BREAKDOWN - PERSONNEL INPUTS AND FEE RATES

NAME	Country	No. of days	Daily Fee Rate (\$)	Cost (USD \$)
Long Term (> 4 months)				
Short term				
TOTAL FEES				

C. PROPOSAL BREAKDOWN – PROJECT EXPENSES

Costs should be shown separately in the format set out below using separate sheets to provide full details under each heading. Fees proposed by tenderers should be inclusive of all taxes.

		No.	RATE	COST (USD \$)
TRAVEL (state country) FARES				
	International			
	Domestic			
	Other travel costs			
Sub Total				\$
DAILY LIVING COSTS (state country)	Long Term			
	Short Term			
Sub Total				\$
EQUIPMENTS	Items Purchased/Rented (including vehicles)			
Sub Total				\$
Any other expenses (Please list)				
Sub Total				\$
TOTAL PROJECT EXPENSES				\$

D. PROPOSAL BREAKDOWN - SUMMARY OF MILESTONES

PROPOSED MILESTONE PAYMENT BREAKDOWN	AMOUNT (USD \$)
TOTAL	\$