

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF FINANCE AND ECONOMIC AFFAIRS**



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Ref: RFP/QCBS/MCAT/COM/0045

Date: December 24th, 2009

RFP Amendment 2

RFP/QCBS/MCAT/COM/0045

**A BASELINE STUDY AND PREPARATION OF TECHNICAL SPECIFICATIONS
FOR A PERFORMANCE BASED CONTRACT FOR NON REVENUE WATER IN
DAR ES SALAAM.**

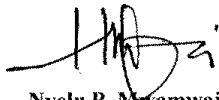
Amendment 1 of RFP MCAT/COM/0045 is issued to amend the following:

- A. Section 3 of the RFP - Qualification and Evaluation Criteria.
- B. Section 4B of the RFP - Financial Proposal Forms
- C. Section 6 of the RFP - Terms of Reference

A.	
Section 3 Qualification and Evaluation Criteria	Annex 1 of this Amendment 1 shall replace all reference to " <i>Sub-Sahara Africa</i> " in Section 3 Qualification and Evaluation Criteria (item 3.4) to " <i>Experience in Developing Countries</i> ".
B.	
Section 4B Financial Proposal Forms	Annex 2 of this Amendment to provided a revised Form FIN 2 to include: <ul style="list-style-type: none"> ➤ A Provisional Sum of USD 500,000 for purchase of equipment. ➤ A Provisional Sum of USD 400,000 for completion of establishment of DMAs (including excavation, installations and leak repairs necessary for Baseline Study and preparation of the Performance Based Contract). Annex 3 of this Amendment provides details of the equipment covered under the Provisional Sums.
C.	
Section 6 Terms of Reference	Annex 3 of this Amendment provides details of the equipment covered under the Provisional Sums. This shall form part of the Terms of Reference.
Overall Contract	The following is included in the overall Contract Deliverables and must be included in the Lump Sum Financial Proposal:

Deliverables	The consultant must allow for un-metered water checking. Portable meters may be required to do this work. The Consultant will also be responsible for identifying non-working meters for replacement by DAWASA.
Item 2.2.1.2	The following shall be added: DAWASA will ensure that the correct licenses are available. The Consultant will access the software via a DAWASA computer.
Item 2.2.1.5.	The following shall be added: Some of the meters may be loggable with appropriate pulse units, however in section 4.3 the suggested equipment for non-revenue water baseline assessment includes 10 no. loggable volumetric customer meter and data loggers. These should be used with reference to section 2.2.1.5 of the TOR in preparing consumption profiles of approximately 50 domestic customers to prepare consumption profiles. It should be noted that the majority of customer meters are external to the property and are located prior to internal storage tanks. To prepare consumption profiles for 50 customers, the loggable meters should be installed down-stream of the storage facility. DAWASCO will assist in communications with identified customers to enable internal installations post storage facility. Bulk meter installation is ongoing and will completed in early 2010. All bulk meters will have provision for data logging.
Item 2.2.1.6	The following shall be added: The aforementioned Billing and Collection Systems software was supplied and installed by Hydrocom of South Africa.

Sincerely



Nyelu P. Mwanwaja
For Chief Executive Officer

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RFP Amendment 2 Annex 1

Section 3 Qualification and Evaluation Criteria

Item 3.4 - Evaluation Criteria Shall now read

Criteria, sub-criteria, and point system for the evaluation of Technical Proposals.		
ITC 5.2	Criteria, sub-criteria	Points
1. Organizational Capability and Experience of the Consultant		
Evidence of organizational capability and relevant experience in the execution of projects of a similar nature, including the nature and value of the relevant contracts, as well as works in hand and contractually committed provided in Form TECH-4. The evidence shall include successful experience as the prime consultant in the execution of at least 2 projects of a similar nature and complexity during the last 5 years.		
In accordance with the MCC Program Procurement Guidelines, the Consultant's past performance on MCC-funded contracts will be considered as a criterion in the MCA Entity's evaluation of the Consultant's Technical Proposal.		
The MCA Entity reserves the right to contact the Form Tech-5 References as well as other sources to check references and past performance.		
	Organizational capability	5
	Experience in the Non Revenue Water management	20
	Regional experience in Developing Countries	5
Total Points for this criterion		30
2. Approach, Methodology and Work Plan		
	Proposed approach and methodology	10
	Proposed work plan	10
	Proposed project organization and staffing - Extent to which the Proposal provides a clear, logical and appropriate staffing pattern with responsibilities among different staff positions adequately defined.	10
Total Points for this criterion		30
3. Key Professional Personnel Qualifications for the Assignment		
	Team Leader/Project Manager	10
	NRW Management Specialist	7
	Leak Detection Specialist	4
	Flow and Pressure Measurement Engineer	4
	Metering Specialist	3
	Hydraulic Analyst	3
	Customer Meter Reading, Billing, and Collection Specialist	3
	Community Development/Social Scientist Specialist	2
	Resettlement Specialist	2
	Environmental Specialist	2
The number of points to be assigned to each of the above positions shall be determined considering the following three sub-criteria and relevant percentage weights:		
	Education and training, including knowledge of English.	35%
	Demonstrated successful experience and past performance in accomplishment of similar projects.	60%
	Experience in Developing Countries	5%
Total weight		100%
Total Points for this criterion		40
Total Points for the three (3) Criteria		100
The minimum technical score St required to pass is		75
ITC 5.7	The formula for determining the financial scores is the following: $S_f = 100 \times F_m / F$, in which S_f is the financial score, F_m is the lowest price and F the price of the Proposal under consideration. The weights given to the Technical and Financial Proposals are: $T = 80$ and $F = 20$	

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Form FIN-2. Price Summary (Including Provisional Sums)

**Re: A Baseline Study and Preparation of Technical Specifications for a Performance Based Contract for Non-Revenue Water in Dar es Salaam.
RFP Ref: MCAT/COM/0045**

	US\$	Price ¹ [Local Currency]
Base Period		
A Provisional Sum for purchase of equipment.	500,000	
A Provisional Sum for completion of establishment of DMAs (including excavation, installations and leak repairs necessary for Baseline Study and preparation of the Performance Based Contract).	400,000	
Option Period		
Total Price of Financial Proposal		

1. Indicate the total price to be paid by the MCA Entity in each currency. Such total price must coincide with the sum of the relevant sub-totals indicated in Form FIN-3. (Tax provisions relevant to this RFP are set out in Section 5: Contract Forms.)
2. If the RFP contains options, the options will be fully priced and evaluated at 100%.
3. Provide **fully loaded prices** (including any international travel, communication, local transportation, office expenses, shipment of personal effects, direct and indirect rates and profits).
4. See PDS 3.6 regarding travel-related expenses.

**RFP/QCBS/MCAT/COM/0045
RFP Amendment 2 Annex 3**

**A Baseline Study and Preparation of Technical Specifications for a Performance Based
Contract for Non-Revenue Water in Dar es Salaam.**

DETAILS FOR EQUIPMENT COVERED UNDER PROVISIONAL SUM

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Warranty, Calibration, and Equipment Records

All items must have a minimum one-year warranty that starts the first day of use. Longer period preferable.

Items such as meter testing equipment will have Certificates of Calibration or Document of Accuracy from a national or international calibration agency.

The Consultant will prepare an Equipment Record for each item with details such as equipment description, manufacturer and address, price, warranty, list of accessories and spare parts, and, if available, in-country contact for service and repair.

The Consultant will prepare a table of warranties listing equipment, serial number, contact for warranty, start date of warranty; and end date of warranty.

General Requirements

All equipment shall be new, current model, and include an Instruction Manual in English language. Computer software will be latest version and operable on a Personal Computer with Microsoft Windows. Equipment shall have an operating temperature range of negative 10 to plus 50 degrees Centigrade. Electricity will be 220 v, 50 HZ. Carrying cases shall be durable material and water tight.

Water Meter Test Bench

For Customer Water Meters less than 2 inches (50 mm)

A test bench for simultaneous testing of a number of customer water meters (5/8" to 2" or 15 mm to 50 mm sizes) that can be quickly and securely held (preferably hydraulically operated clamping mechanisms), an inlet valve, an electric control valve to stop the test flow automatically, a flow-regulating valve, a rate-of-flow indicator, small calibrated tank (1 ft³ or 10 gal) and a large tank (10 ft³ or 100 gal) of galvanized steel, with both tanks valved for quick drainage and both tanks preferably calibrated for volumetric testing. Bench shall be of fabricated steel, coated to resist corrosion, all wet parts brass, designed to hold pressures to 150 pounds per square inch (PSI), and with Nema-4x or -12 enclosures. 220 volt electrical connections enclosed in water tight conduit and boxes. Emergency Stop and Power On switches. Ball valves and pressure gauges at inlet and outlet. Flow Measurement: uses three precision roto-meters:

- (1) Low flow measurement of .1 to 1.5 GPM
- (2) Medium flow measurement of 1.5 to 15 GPM
- (3) High flow measurement of 15 to 60 GPM or 6 to 150 GPM

For Customer Water Meters size 3 inches to 8 inches (75 mm to 200 mm)

Similar to above except size of calibrated tank and method of measure can be either volumetric or gravimetric.

Portable Tester for Large Size Customer Water Meters

Portable device to field test commercial type water meters from 2 to 12 inches (50 mm to 300 mm) with a repeatable accuracy range of +/- 0.02% using two distinct testing modes. The high flow rate mode is designed to test water meters at a mid to high rate of water flow and the low flow rate mode is designed for testing low water flow rates. The device measures water flow through meters without removing the meter from the line. A pressure gauge is included to measure line pressure. Fire hoses, thread adaptors and fittings are also part of the package.

Portable Tester for Small Size Customer Water Meters

Similar to the Portable Tester for Large Size Customer Water Meters, this is a portable device to verify accuracy of residential water meters (0.5 to 0.75 inch, 15 mm to 20 mm) to within 0.5% to 1%. Connects to a tap or external connection. Battery powered.

Hot Tapping Machine

To drill and tap water mains (cast iron, ductile iron, PVC) while under pressure, then to install corporation stops in a 2-step operation. Valves to allow easy change-out from drill tap to corporation insertion tool without main shutdown. Saddles and chain extensions to accommodate a range of pipe sizes and materials. Hand or power operations.

Pressure Test Pump (for Pipelines)

Portable device for hydrostatic testing of new or repaired water mains. Material is suitable for contact with heavily chlorinated water.

Pressure Measurement

Pressure Testing Kit, 3 gauges in a protective case

- 1 Liquid Filled Inspection Pressure Testing Gauge
- 1 Fire Hydrant Gauge, 3-1/2"
- 1 Liquid Filled Hydrant Flow Gauge 0-100 lbs Dual Read GPM/PSI

Flow Measurement---Ultrasonic Flowmeters

Non-invasive flow metering of clean (i.e. treated) water using clamp-on sensors for pipes 2 inches to 36 inches. A single-channel NEMA 4X remote mount display/transmitter with push-button control, 4-20 mA output, pulse/frequency output and two clamp-on sensors with 15 meters of cable. More than one meter may be needed to accommodate pipe sizes.

Flow Measurement---Insertion Magnetic Flowmeter

For 0.5 to 8" Pipes and Flow-Rate Range: 0.05 to 5 m/s (0.15 to 16.4 ft/s). Include accessories for mounting and controller for 4 to 20 milliamp output

Logger for Flow Profile

Designed for demand monitoring and assisting in determining proper meter sizing by measuring water usage according to time. Stores 15 days of data at 10 second interval *or* 90 days of data at 1 minute interval. Results are used to prepare a flow profile to estimate peak water use and properly size the customer water meter. Data in the unit can be downloaded into a Personal Computer.

Data Logger [can be used for flow profile and pressure]

Portable, hand placed, battery powered; fully sealed and waterproof; one or two channel; pulse or encoder; optional 4-20 milliamp for pressure measurement. 3 month logging capacity at one minute intervals. Logs total flow, flow rate, and pressure (if fitted with optional pressure device against time). Capable of storing addresses and installation information. Data Transfer via waterproof cable to Personal Computer (PC) and into computer software programs such as Microsoft Excel.

Pipe Locator-Non-Metallic Pipe

Hand-held (weight less than 2.5 kilograms), battery powered device to locate plastic pipe by creating a low-frequency pressure wave that is carried by water in the pipe. This pressure wave can be located a distance of up to 150 meters. The pressure wave "signal" can be applied at any fire hydrant, meter base, sprinkler head or clean-out and is audible at the point of application. Battery Check Indicator preferred. Sturdy, water resistant carrying case.

Pipe Locator Metallic Pipe

Hand-held (weight less than 2.5 kilograms), battery powered, magnetic locator to detect the magnetic field of Iron, Steel, and Copper pipelines. It provides audio detection signals that peak in frequency when the locator's tip is held directly over the target. It is designed for one-hand operations, the On/Off-Sensitivity and Volume controls are located for easy access. Battery Check Indicator preferred. Sturdy, water resistant carrying case.

Leak Noise Correlator

System consisting of Main Processor Unit, Pre-Amplifiers with Radio Communication, Sensors for Metal Pipes and for Plastic Pipes, Aviation Grade Headphones, Instruction Manual and Field Guide, Windows PC Software, Heavy Duty" Plastic Carrying Case. Input

shall be radio or cable. Battery powered. Data Memory a minimum of 100 correlations that can be downloaded to a Personal Computer with MS Windows Operating System.

LD-18 Leak Detector Kit (listening devices)

Hand-held (weight less than 2.5 kilograms). Amplifier with LCD Display, Controls, and USB connection; high sensitivity Ground Microphone and Hand switch with 40" of cable; sensor with strong magnet and cable (to listen at valves and hydrants); Aviation-Grade Stereo Headphones with left and right volume controls; PC Software and USB Cable. All items in a heavy-duty ABS Plastic Carrying Case with interior protective padding.

GPS [for determining exact location]

Handheld (or mount in a vehicle), portable, battery operated, waterproof, readable in the bright sun. Gives map coordinates or latitude / longitude; can trace a route which is useful for meter reading or tracking pipeline route.

Hand Tools

These are needed for excavation, inspection, service, repair, and installation. Typical items are shovels and picks, wheel barrows, dewatering pumps and hoses, wrenches, sockets, grinders, drilling machines, welding machines, safety signage.

Valve keys to open and close valves in the water distribution system. Measuring Wheel to measure pipe distance on site.

Insertion Flow Meters

Device that can be inserted into and removed from a pipeline without interruption to normal flow.

Portable, battery operated, with accuracy of 2% of flow and linearity of 0.5%

Units of measure cubic meters per second (m³/sec)

Pipe Diameter from 200 mm to 800 mm

Maximum Pipe Pressure: 80 PSI.

Water Velocity Range: 0-10m/sec

Temperature Range: 0 to 50°C

Insertion Lengths of 0.3 to 3 meters that can be connected

Accessory: Gauging Rod to measure internal diameter of the pipe