

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF WATER**



**Invitation for Bids
Specific Procurement Notice**

**Request for Bids:
Goods
(One-Envelope Bidding Process)**

COUNTRY: TANZANIA

NAME OF PROJECT: SUSTAINABLE RURAL WATER SUPPLY AND SANITATION

CONTRACT TITLE:PROCUREMENT OF WATER WELL DRILLING LABORATORY EQUIPMENT, PIPE TESTING EQUIPMENT AND METER TEST BENCH

CREDIT NO. :IDA 6295-TZ

RFB REFERENCE NO.:TZ-MOW-154813-GO-RFQ/ME:011/2019-2020/G/25

1. The Ministry of Water has received financing from the World Bank toward the cost of the SUSTAINABLE RURAL WATER SUPPLY AND SANITATION and intends to apply part of the proceeds toward payments under the contract for Procurement of Water Well Drilling Laboratory equipment, pipe testing equipment and meter test bench.
2. The Ministry of Water (MoW) now invites sealed bids from eligible bidders for Procurement of Water Well Drilling Laboratory equipment, pipe testing equipment and meter test bench as follows:-

Item No.	Description <i>[A detailed list, Statement of Requirement/Specifications]</i>	Quantity	Unit of measure
	RIVER G 3 SYSTEM A totally new device and one of a kind worldwide River G, which is characterized by three systems (3D imaging system; Geophysical search system and Long-range	1	Numbers

system) for the detection of groundwater, artesian wells and bore wells in the ground.

Parts and components

- i. Bag machine
- ii. The main unit of the long-range system
- iii. The main unit of the geophysical system
- iv. Handle sensor device
- v. Sensor sent to the signal
- vi. Future signal
- vii. Antennas sent for the signal
- viii. Sensor cable connection sensor
- ix. Data bus cable
- x. Battery geophysical system
- xi. Battery charger
- xii. Antenna transmitted for the signal
- xiii. Special sensor for long-range system
- xiv. Ground sensors
- xv. Battery sensor system
- xvi. Battery charger special car
- xvii. Signal transmission wires
- xviii. Table graphic system

Technical specifications of River G device

- a) Three search systems in one device.
- b) Large 8-inch screen with high resolution and provides a touch option.
- c) A tablet for a 3D imaging system, working by the android system to show a three-dimensional photo of the places of water and the distribution of rocks in the search area.
- d) High speed and accuracy in processing search data.
- e) A compact printer with the main unit that prints an immediate report of the results of the water underground detection process.
- f) A 4.3-inch high-resolution color screen for a long-range system and provide a touch option.
- g) Works with touch screen and keypad.
- h) Provides six different languages: (German - English - French - Spanish - Italian - Arabic).
- i) The possibility of choosing the continent and the countries within it.
- j) Digital compass to determine the search direction.
- k) The possibility of determining the depth of underground water.
- l) The depth of the device reaches 1500 meters.

	<p>m) The Front Range up to 3000 meters with the possibility of determining the required Front Range.</p> <p>n) Determine the type of soil according to the nature of the place to be searched (rock - natural - mixed - metal - clay-sand).</p> <p>o) The device works all over the world and different terrains.</p>		
	<p>Resistivity / IP Surveying Instrument Abem Terrameter LS 2 Standard 2 /81 loaded with the following specifications</p> <p>Imaging cable w/21 take –outs, 30m spacing</p> <p>Steel electrode</p> <p>Cable –to-electrode jumper</p> <p>Cable joint for 12 take –out cable</p>	<p>1</p> <p>4</p> <p>20</p> <p>20</p> <p>2</p>	
	<p>ABEM TERRAMETER SAS 4000</p> <p>The Terrameter SAS 4000 system consist of the following specifications:</p> <p>SAS 4000 instrument with four input channels, including clip-on battery tray</p> <p>External Battery Connector</p> <p>RS 232 cable (with KPT connector to SAS 4000 and DSUB connector to PC)</p> <p>Documentation kit (two sets of Operators Manual, Warranty Registration Card)</p> <p>CD with software</p> <p>Resolution 1 μV (at 0.5 sec integration time)</p> <p>Bitstream A/D conversion</p> <p>Three automatically selected measurement ranges (\pm250 mV, \pm10 V and \pm400 V)</p> <p>Dynamic range as high as 140 dB at 1 sec integration time, 160 dB at 8 sec integration time</p>	<p>1</p>	

	<p>Precision and accuracy better than 1% over whole temperature range</p> <p>Galvanic separated input channels (SAS 4000)</p> <p>Built-in PC compatible microcomputer</p> <p>More than 1,000,000 data points can be saved on the internal flash disk</p> <p>Fast and highly time-efficient data acquisition</p>		
	<p>WALKING MAGNETOMETER</p> <p>GSM-19W v7.0 High Sensitivity Memory, 0.2 sec. Reading Interval, Overhauser Walking Magnetometer, standard complete with Back Pack</p> <p>Features:</p> <ol style="list-style-type: none"> i. Real-time, graphic data display ii. Interactive menu system iii. 0.022 nT @ 1 Hz sensitivity iv. +/- 0.1 nT absolute accuracy v. 20,000 - 120,000 nT dynamic range vi. < 10,000 nT/m gradient tolerance vii. Reading storage capacity per 32Mb memory module: M – 1,465,623 readings; B – 5,373,951 readings Walk Mag – 2,686,975 readings viii. RS-232 output with comprehensive software <i>including:</i> <ul style="list-style-type: none"> - GSM-19W v7.0 Magnetometer Console - Overhauser Sensor with Cables & Connectors - Sectional staffs (4 ½ pcs.) - Battery charger - universal AC input - Set of straps (carrying harness) - RS-232 cable with USB Cable Adapter 	1	nos

	<ul style="list-style-type: none"> - Backpack (for sensor hands-free operations) - Instruction Manual and GEMLink+ File Transfer, Diurnal Correction, Profiling and Basic Mapping & Modeling - Carrying case: 24.5" x 11.5" x 17.5" est. wt.: 17 kgs. 		
7	<p>RADIO CALLS (WALK TALK)</p> <p>Specifications;</p> <ul style="list-style-type: none"> ➤ WT77 DORO ➤ Coverage 5km 	10	
8	<p>BOREHOLE LOGGER</p> <p>SAS LOG 200 & 300 logging units. Cable length 200 or 300 m Customized cable lengths are available on request</p> <p>Cable markings Every Meter Probe diameter 40 mm Weight (200 m) 15 kg (300 m) 21 kg Dimensions 330x750x225 mm (WxLxH)</p> <p>Survey modes and ranges: 16 " short normal 0,05 -100 000 Ω m 64 " long normal 0,5 -100 000 Ω m 18 " lateral 0,5 -100 000 Ω m Fluid resistivity cell 0,05 -100 000 Ω m Self Potential 0,05 -1 000 mV Temperature 0°C to + 50°C Temperature precision ± 0,01°C (0-20°C) ± 0,1°C (20-50C) Temperature accuracy ± 1°C Water level indication</p>	1	
9	<p>POCKET GEOLOGICAL COMPASS</p> <p>Aluminium Alloy Crust Type: Compasses Brand Name: TBT Model Number: DQY-1 Product Detail: DQY-1 Geology Compass</p>	4	
10	<p>GEOLOGICAL HUMMER</p> <p>Hammer Type: geology hammer Application: geological hammer Hammer Material: Steel Brand Name: max tools Model Number: geology hammer</p>	10	
11	<p>BOREHOLE INSPECTION CAMERA</p> <p>300 Meters underwater camera, water proof water well inspection camera, multi function underwater camera. Sensor: CMOS</p>	1	

	Special Features: Waterproof / Weatherproof Type: IP Camera Style: Tube shape Technology: Network Resolution: 1280x960@30fps		
12	Dipper (Water Level Measuring Device) Cable length: 300 Cable markings: Every meter Probe diameter: 40 mm Weight (200 m): 15 kg Dimensions (W x L x H): 330 x 750 x 225 mm	2	
1	GPS Map 62S Global Positioning - OEM GPS Board (built-in type), NovAtel GPS Module or equivalent with Antenna into v7.0 Magnetometer / Gradiometer with Adaptation Kit** ** Adaptation Kit includes whichever applicable: GPS Cable, Antenna Holder with Adaptor Block or Captive Screw, Sensor Housing or Collar GPS Adaptation and Section Staff Battery Belt, v6.0 - 12V 7.2Ah for extended hours of operation Spare Battery Charger (Universal)	5 1	nos
1	Water meter calibration bench The bench is intended for calibration of domestic and industrial / bulk water meters – (Mechanical, Magnetic and Ultrasonic). Technical specifications <ul style="list-style-type: none"> i. The bench should be suitable for calibration of multiple meters (14 to 18 meters) of diameter: for domestic meters from ½" – 1" and for industrial / bulk water meters up to 3" diameter in one or more lines at once. ii. The bench should allow calibration of meters simultaneously as per ISO 4064/3, Standards 	1	

	<ul style="list-style-type: none"> iii. The bench should also allow calibration of water meters by: iv. Comparison using Pre-calibrated Electromagnetic Flow Meter Masters. v. Comparison using two pre-calibrated stainless steel volumetric tanks (low volumes). vi. The bench should also allow flow adjustment using Multiple Rotameters or Electro-Magnetic Flow Meters vii. The bench should be equipped with one or more pumps to suit with Manual throttle for flow control. viii. Clamping of the bench should be manual or hydraulic. 		
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3. Bidding will be conducted through national competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers of July 2016 revised November 2017 ("Procurement Regulations"), as well as Public Procurement (Goods, Works, Non Consultant Service and Disposal of Public Assets by Tender) Regulations, 2013 – Government Notice No.446 and is open to all eligible Bidders as defined in the Procurement Regulations.
4. Interested eligible Bidders may obtain further information from Secretary Ministerial Tender Board, Ministry of Water, email pmu@maji.go.tz and inspect the bidding document during office hours from 8.00 to 15:30 on Monday to Friday inclusive except on public holidays at the address given below.
5. The bidding document in English Language may be purchased by interested Bidders upon the submission of a written application to the address below and upon payment of a nonrefundable fee of Tanzania Shillings One Hundred Thousand (TZS. 100,000). Payment shall be made through the electronic payment system therefore interested bidders are invited to collect the Control number for effecting the payment. The document will be obtained to the address below.
6. All Bids must be accompanied by Unconditional Bid security equivalent to 2% of the tender price in an acceptable form as provided in the bidding document. Bid Security must properly addressed to the following address: Permanent Secretary, Ministry of Water, P.O. Box 456, 40473 Dodoma
7. Bids must be delivered to the address below on or before 27TH April, 2020. Electronic Bidding will not permitted. Late Bids will be rejected. Bids will be publicly opened in the presence of the Bidders' designated representatives and anyone who chooses to attend at the address below on 27TH April, 2020 at 14:00 hrs.
9. The address referred to above is:

Ministry of Water,
Kolon Building PMU Offices adjusted to DUWASA head office,
Chimwaga Road,
P. O. Box 456,
40473 Dodoma, Tanzania
Attn: Dr. Christopher P. Nditi
Tell: +255 716308473
E-mail: pmu@maji.go.tz
Web Site: www.maji.go.tz

**PERMANENT SECRETARY
MINISTRY OF WATER**