INTERNATIONAL TENDER DOCUMENT

TENDER REFERENCE: BOAK/ICT/0111/2026-2027
TENDER TITLE: Supply, Delivery, Installation and Commissioning of Advanced Smart Water Metering Systems
PROCUREMENT METHOD: International Competitive Tendering
TENDER CATEGORY: Water Infrastructure, Smart Metering and Digital Monitoring Technology
TENDER CURRENCY: United States Dollars (USD)
PROCURING ENTITY: Borehole Owners Association of Kenya (BOAK)
TENDER STATUS: Published

SECTION 1: INVITATION TO TENDER

The Borehole Owners Association of Kenya (BOAK) invites qualified international manufacturers, technology providers, authorised distributors and specialised water infrastructure suppliers to submit competitive bids for the supply, delivery, installation and commissioning of Advanced Smart Water Metering Systems.

The procurement forms part of BOAK's initiative to improve water abstraction monitoring, operational efficiency, water resource management and technological adoption among borehole owners and institutional water users in Kenya.

The selected supplier will provide modern, high-precision water metering technologies capable of measuring, recording, transmitting and securely managing water abstraction and consumption data.

The proposed systems should support remote monitoring, automated data collection, digital reporting and integration with relevant water resource monitoring infrastructure, subject to applicable technical and regulatory approvals.

BOAK intends to establish a reliable supply arrangement with a technically competent supplier capable of supporting deployment across multiple member locations in Kenya.

1.1 Procurement objectives

The principal objectives are:

1. Improve accuracy and transparency in groundwater abstraction measurement.
2. Introduce advanced digital and remotely monitored water metering systems.
3. Reduce manual meter-reading requirements.
4. Facilitate accurate water consumption and abstraction reporting.
5. Support integration with appropriate regulatory monitoring systems.
6. Improve the ability of borehole owners to monitor their water infrastructure.
7. Establish a dependable supply chain for smart metering equipment and associated technology.
8. Provide long-term technical support and maintenance capabilities.

1.2 Indicative tender budget

The proposed procurement budget is $500,000.

This figure is an indicative planning allocation and does not constitute a guaranteed contract award or minimum purchase commitment. Final quantities and contract value will be established through the approved bill of quantities and procurement process.

SECTION 2: SCOPE OF SUPPLY

The successful bidder shall be responsible for supplying a comprehensive smart water metering solution comprising the following components.

2.1 Advanced ultrasonic smart water meters

Supply of high-precision ultrasonic water meters suitable for groundwater abstraction monitoring and water distribution applications.

Required characteristics:

- Non-invasive or wetted ultrasonic measurement technology.
- High measurement accuracy.
- Digital flow measurement.
- Totalised water volume measurement.
- Instantaneous flow-rate monitoring.

- Low-flow detection capability.
- Reverse-flow detection.
- Electronic display.
- Tamper detection.
- Historical consumption recording.
- Configurable measurement intervals.
- Long operational battery life.
- Remote data transmission capability.

2.2 Electromagnetic water meters

Supply of industrial electromagnetic flow meters suitable for large-volume water abstraction and transmission systems.

Required characteristics:

- Electromagnetic flow measurement technology.
- Corrosion-resistant wetted components.
- Digital flow-rate display.
- Totalised volume recording.
- Low-flow measurement capability.
- Configurable output signals.
- Remote monitoring compatibility.
- Diagnostic and fault reporting.
- Suitable protection against environmental exposure.

2.3 NB-IoT and 4G communication-enabled meters

Meters shall incorporate communication technologies capable of transmitting measurement data to designated monitoring platforms.

Supported communication technologies may include:

- NB-IoT.
- LTE-M.
- 4G LTE.
- LoRaWAN.
- Other approved low-power wide-area communication technologies.

Bidders must clearly identify supported communication standards, network dependencies, transmission costs and geographical coverage requirements.

2.4 Remote telemetry and data acquisition equipment

Supply of:

- Remote telemetry units.
- Communication gateways.
- Data transmission modules.
- Industrial data loggers.
- Remote monitoring controllers.
- Signal repeaters where required.
- Secure communication interfaces.
- Backup power systems.
- Meter communication accessories.

2.5 Centralised water monitoring software

The procurement shall include a centralised digital platform capable of collecting and managing information from installed smart meters.

The platform should provide:

1. Real-time or near-real-time meter monitoring, subject to network availability.
2. Individual borehole identification.
3. Water abstraction history.
4. Daily, weekly and monthly consumption reports.
5. Flow-rate monitoring.
6. Abnormal usage alerts.
7. Leak and reverse-flow alerts where supported.
8. Tampering notifications.
9. Meter communication status.
10. Data export functionality.
11. User access management.
12. Geographical mapping of installed meters.
13. Historical data retention.

14. Administrative reporting dashboards.

The software must provide appropriate security controls, data ownership provisions and administrative access for BOAK.

SECTION 3: TECHNICAL SPECIFICATIONS

All proposed equipment must be new, unused, commercially supported and manufactured to recognised international quality and metrological standards.

3.1 Meter technical requirements

Specification	Minimum requirement
Measurement technology	Ultrasonic or electromagnetic
Meter application	Groundwater abstraction and water distribution
Measurement accuracy	Target ±2% or better under specified operating conditions
Flow measurement	Instantaneous and cumulative
Display	Digital electronic display
Communication	NB-IoT, LTE-M, 4G or approved equivalent
Data storage	Internal historical data storage
Tamper protection	Electronic tamper detection
Power	Long-life battery or suitable external power
Protection	Appropriate IP-rated environmental protection
Installation	Horizontal or vertical as permitted by manufacturer
Data output	Digital communication interface
Reporting	Automated remote data transmission

The bidder must provide detailed performance specifications for every proposed meter model.

Accuracy claims must be supported by manufacturer documentation and applicable test certificates. Meter sizing, operating flow range and metrological performance must be appropriate to the intended installation.

3.2 Applicable standards and certifications

The proposed equipment should comply with relevant editions of:

- ISO 4064 – Water meters for cold potable water and hot water.
- OIML R49 – Water meters for cold potable water and hot water.
- IEC 60529 – Degrees of protection provided by enclosures (IP Code).
- ISO 9001 – Quality management systems.
- Relevant electromagnetic compatibility standards.
- Applicable electrical safety standards.

- Applicable Kenyan KEBS conformity requirements.

Where applicable, bidders should provide evidence of relevant type approvals, calibration certificates, verification certificates and conformity assessments.

3.3 Water meter sizes

The proposed supply should accommodate different installation requirements, including:

Nominal diameter	Application
DN15–DN25	Small installations
DN32–DN50	Medium installations
DN65–DN100	Commercial borehole installations
DN125–DN200	Large water abstraction systems
DN250–DN300	Industrial and bulk water installations

Bidders must submit separate technical and commercial pricing for each offered meter size.

The final required quantities and diameter distribution shall be stated in the approved bill of quantities before tender publication.

3.4 Environmental operating conditions

Equipment must be suitable for deployment in Kenyan operating environments, including:

- High ambient temperatures.
- Dust exposure.
- Variable humidity.
- Outdoor installations.
- Unstable electrical supply where applicable.
- Areas with limited telecommunications coverage.

Bidders must disclose operating temperature limits, environmental protection ratings and any special installation requirements.

SECTION 4: SOFTWARE AND DIGITAL INFRASTRUCTURE REQUIREMENTS

The successful bidder shall supply and configure the associated digital monitoring platform.

4.1 Platform functionality

The system shall provide:

- Centralised monitoring dashboard.
- Individual meter registration.
- Meter identification and location records.
- Automated data collection.
- Historical consumption analytics.
- Water abstraction reports.
- User management.
- Role-based access controls.
- Data export in CSV, Excel or equivalent formats.
- Notifications and system alerts.
- Meter fault diagnostics.
- API access for approved integrations.

4.2 Data ownership and security

All data generated by meters installed under this procurement shall remain under the ownership and control of the designated data owner, as defined in the final contract.

The supplier shall:

1. Implement appropriate access controls.
2. Protect transmitted and stored data using suitable encryption.
3. Prevent unauthorised access.
4. Provide BOAK with administrative access.
5. Document data backup and recovery procedures.
6. Provide data export facilities.
7. Disclose all recurring software, hosting and communication charges.
8. Avoid proprietary restrictions that prevent reasonable data portability.

The solution must also comply with applicable Kenyan data protection legislation.

4.3 Regulatory integration

Where technically and legally applicable, the proposed system should support integration with the Water Resources Authority's relevant water abstraction monitoring infrastructure.

Bidders must explain:

- Supported communication protocols.
- Data transmission formats.
- Available API interfaces.
- Existing regulatory integrations.
- Additional hardware or software requirements.
- Any necessary approvals or certification.

Compatibility with WRA systems must not be assumed solely from the presence of NB-IoT or 4G connectivity. The successful supplier may be required to demonstrate compatibility and obtain the necessary technical acceptance.

SECTION 5: SCOPE OF DELIVERY AND IMPLEMENTATION

The successful supplier shall undertake the following:

1. Manufacture or procure the approved equipment.
2. Conduct factory quality inspections.
3. Package and transport the equipment.
4. Deliver equipment to the designated BOAK delivery location(s) in Kenya.
5. Provide installation accessories.
6. Install and configure the agreed monitoring infrastructure.
7. Commission the equipment.
8. Conduct functional and performance tests.
9. Configure the monitoring software.
10. Train designated BOAK personnel.
11. Provide operational manuals.
12. Provide maintenance and troubleshooting documentation.

The final deployment locations, installation quantities and implementation schedule shall be agreed upon before contract execution.

5.1 Training requirements

The supplier shall provide technical training covering:

- Meter installation and configuration.
- Meter reading and diagnostics.
- Communication configuration.
- Dashboard administration.
- Data interpretation.
- Troubleshooting.
- Routine maintenance.
- Reporting and data exports.

Training shall include practical demonstrations and documented training materials.

SECTION 6: BIDDER ELIGIBILITY AND QUALIFICATION

Interested bidders must demonstrate the technical, financial and operational capacity to undertake the proposed procurement.

6.1 Corporate eligibility

Bidders must submit:

1. Certificate of incorporation or equivalent registration document.
2. Valid business operating licence where applicable.
3. Company ownership and directorship information.
4. Registered business address.
5. Company profile.
6. Tax compliance documentation applicable to their jurisdiction.
7. Details of authorised representatives.
8. Declaration of non-debarment and conflicts of interest.

International bidders shall provide equivalent documentation issued in their country of registration.

6.2 Technical experience

Bidders should demonstrate:

- At least five years of relevant experience in smart metering, water infrastructure or industrial instrumentation.
- Evidence of previous smart water meter supply contracts.
- Experience supplying remote monitoring systems.
- Demonstrated experience with industrial communication technologies.
- Access to qualified installation and commissioning personnel.
- Manufacturer authorisation where bidding as a distributor.

6.3 Financial capacity

Bidders shall submit:

- Audited financial statements for the previous three financial years, where available and legally required.
- Evidence of financial capacity to execute the proposed contract.
- Bank reference or equivalent financial standing documentation.
- Details of major ongoing contracts.
- Evidence of access to adequate working capital.

BOAK may request additional financial documentation during due diligence.

6.4 Manufacturer authorisation

Where the bidder is not the manufacturer, an official manufacturer authorisation letter must be submitted.

The authorisation shall confirm that the bidder is permitted to supply, distribute and provide warranty support for the proposed equipment.

SECTION 7: REQUIRED BID SUBMISSION DOCUMENTS

Each bidder must submit the following documentation:

No.	Required document
1	Signed tender submission form
2	Company incorporation documents
3	Company profile
4	Manufacturer authorisation, where applicable
5	Technical proposal
6	Product catalogue and datasheets
7	International certification documents

8 Previous contract experience
9 Financial statements
10 Bank reference
11 Delivery and implementation schedule
12 Warranty commitment
13 After-sales support proposal
14 Software and cybersecurity documentation
15 Completed bill of quantities
16 Signed declaration of compliance
17 Signed declaration of conflict of interest

All documents must be submitted in English.

Documents originally issued in another language must be accompanied by certified English translations where required.

SECTION 8: FINANCIAL PROPOSAL AND PRICING SCHEDULE

The bidder must submit a detailed financial proposal in United States Dollars (USD).

The financial proposal shall separately identify:

No.	Description	Unit price (USD)	Quantity	Total (USD)
1	Ultrasonic smart water meters			
2	Electromagnetic water meters			
3	NB-IoT/4G communication modules			
4	Remote telemetry units			
5	Data acquisition gateways			
6	Industrial data loggers			
7	Centralised monitoring software			
8	Server and hosting infrastructure			
9	Meter installation accessories			
10	Installation and configuration			
11	Testing and commissioning			
12	Personnel training			
13	Technical documentation			
14	Warranty and maintenance support			
15	Transportation and delivery			
	TOTAL BID PRICE			

The supplier must separately identify:

- Equipment costs.
- Software licensing costs.
- Recurring subscription charges.
- Communication/network charges.
- Installation charges.
- Training charges.
- Transportation costs.
- Customs duties and applicable taxes.
- Any other associated costs.

Prices shall be clearly presented in USD. Applicable Kenyan taxes, import duties and withholding obligations must be identified separately, where relevant.

The bidder must state the proposed Incoterms 2020 delivery basis and identify the party responsible for import clearance and local delivery.

SECTION 9: BID EVALUATION CRITERIA

BOAK intends to evaluate submissions using a structured and transparent evaluation process.

9.1 Preliminary evaluation

The following shall be assessed on a pass/fail basis:

- Submission of required documentation.
- Legal eligibility.
- Bidder registration.
- Manufacturer authorisation where applicable.
- Signed declarations.
- Financial submission completeness.

Bids failing mandatory requirements may be rejected, subject to the applicable procurement rules.

9.2 Technical evaluation

Technically compliant submissions shall be evaluated using the following proposed scoring framework.

Evaluation criterion	Weight
Meter technology and measurement accuracy	20%
Communication and remote monitoring capability	15%
Software and dashboard functionality	15%
Certifications and regulatory compatibility	10%
Previous relevant experience	10%
Installation and commissioning capacity	10%
Warranty and after-sales support	10%
Training and technical documentation	5%
Delivery schedule	5%
Total	**100%**

A minimum technical score of 75% shall be required to proceed to financial evaluation.

9.3 Financial evaluation

Financial proposals from technically qualified bidders shall be evaluated based on:

- Total evaluated cost.
- Equipment pricing.
- Installation costs.
- Software and licensing charges.
- Recurring operational costs.
- Delivery costs.
- Warranty and maintenance costs.

BOAK shall consider the total cost of ownership rather than equipment purchase price alone.

The final award methodology shall be confirmed in the published tender notice.

9.4 Due diligence

BOAK reserves the right to:

- Verify submitted documentation.
- Contact previous clients.
- Request product demonstrations.
- Request additional technical information.
- Inspect manufacturing facilities.
- Verify manufacturer authorisations.

- Conduct supplier financial due diligence.
- Request sample equipment for independent testing.

SECTION 10: DELIVERY AND IMPLEMENTATION TIMELINES

The bidder shall submit a realistic delivery and implementation schedule.

The proposed planning framework is:

Activity	Proposed timeline
Contract execution	Day 0
Technical design and approvals	Within 30 days
Manufacturing and procurement	Within 60–90 days
Shipment and delivery	Within 90–120 days
Installation and configuration	Within 30 days after delivery
Commissioning and testing	Within 15 days
Training and handover	Within 15 days after commissioning

The supplier must provide a detailed implementation programme with milestones.

Any changes to the delivery schedule must be approved in writing by BOAK.

SECTION 11: WARRANTY AND AFTER-SALES SUPPORT

The supplier shall provide:

1. Minimum 24-month equipment warranty from acceptance, unless a longer manufacturer warranty is offered.
2. Manufacturer warranty documentation.
3. Replacement of defective equipment covered by warranty.
4. Technical troubleshooting support.
5. Software updates and security patches during the agreed support period.
6. Access to spare parts.
7. Technical support contacts.
8. Maintenance documentation.
9. Defined response and resolution times.
10. Training for designated technical personnel.

The bidder shall provide a separate quotation for extended warranty and maintenance options covering up to five years.

SECTION 12: PAYMENT TERMS

The proposed payment structure is subject to negotiation and approval during contract finalisation.

Milestone	Proposed payment
Upon approved contract execution and receipt of acceptable advance-payment security	20%
Upon verified equipment manufacture and inspection	30%
Upon delivery and inspection in Kenya	30%
Upon successful installation, commissioning and acceptance	15%
Upon completion of training and final documentation	5%
Total	**100%**

Payments shall be made against approved invoices and supporting documentation.

Advance payments shall only be made against appropriate security acceptable to BOAK.

SECTION 13: CONTRACTUAL CONDITIONS

The successful bidder shall enter into a formal supply agreement with BOAK.

The contract shall address:

- Contract scope and specifications.
- Approved bill of quantities.
- Delivery obligations.
- Quality assurance.
- Inspection and acceptance.
- Payment conditions.
- Performance security, where applicable.
- Warranty obligations.
- Confidentiality.
- Intellectual property.
- Data ownership and security.
- Liability and indemnification.
- Insurance.
- Delays and liquidated damages.
- Force majeure.

- Dispute resolution.
- Contract termination.
- Governing law.

The proposed governing law shall be the laws of Kenya, subject to final legal review and agreement.

Any dispute-resolution mechanism shall be expressly defined in the final contract.

SECTION 14: GENERAL CONDITIONS OF TENDER

1. BOAK reserves the right to accept or reject any bid in accordance with the applicable procurement framework.
2. Submission of a bid does not guarantee contract award.
3. Bidders shall bear their own tender preparation costs.
4. All submitted information must be accurate and verifiable.
5. False or misleading documentation may result in disqualification.
6. BOAK may seek clarification from bidders during evaluation.
7. No bidder shall attempt to influence the evaluation process improperly.
8. All equipment offered must comply with the published technical requirements.
9. BOAK may negotiate implementation details with the preferred bidder, without materially altering the competitive requirements.
10. The final contract shall supersede any inconsistent preliminary correspondence.

SECTION 15: TENDER SUBMISSION INSTRUCTIONS

Procuring Entity: Borehole Owners Association of Kenya (BOAK)

Tender Reference: BOAK/ICT/0111/2026-2027

Submission Format: Electronic submission in PDF format, with financial schedules also provided in Excel format.

Submission Email: procurement@boak.or.ke

Tender Publication Date: 30 September, 2026

Clarification Deadline: 20 October, 2026

Tender Closing Date: 30 November, 2026

Tender Opening Date: 15 December, 2026

Tender Validity Period: 120 calendar days from the tender closing date.

Subject Line: BOAK/ICT/0111/2026-2027 – Advanced Smart Water Metering Systems

All submissions must be received before the stated closing deadline.

Late submissions shall be handled in accordance with the published tender conditions.

ANNEX A: BID SUBMISSION FORM

To: The Procurement Committee
Borehole Owners Association of Kenya

Tender Reference: BOAK/ICT/0111/2026-2027

Tender Title: Supply, Delivery, Installation and Commissioning of Advanced Smart Water Metering Systems.

We, the undersigned, having examined the tender requirements, hereby submit our bid for the supply of the specified equipment and associated services.

We confirm that:

1. We have examined and understood the tender requirements.
2. The information supplied in our submission is accurate.
3. We possess the necessary technical and financial capacity.
4. We are authorised to submit this proposal.
5. We agree to comply with the tender conditions.
6. Our bid shall remain valid for the specified validity period.
7. We shall honour the warranties and support commitments offered in our proposal.

Company Name: _____

Country of Registration: _____

Registered Address: _____

Authorised Representative: _____

Position: _____

Email: _____

Telephone: _____

Total Bid Price (USD): _____

Signature: _____

Company Stamp: _____

Date: _____

ANNEX B: TECHNICAL COMPLIANCE SCHEDULE

Bidders shall complete the following table.

Technical requirement	BOAK requirement	Bidder's offered specification	Compliant (Yes/No)
Meter technology	Ultrasonic/ electromagnetic		
Measurement accuracy	Target ±2% or better		
Remote communication	NB-IoT/4G or equivalent		
Historical data storage	Required		
Tamper detection	Required		
Digital display	Required		
Remote dashboard	Required		
Data export	Required		
API integration	Required		
Environmental protection	Appropriate IP rating		
Warranty	Minimum 24 months		
Installation support	Required		
Training	Required		

Bidders must attach supporting technical datasheets and relevant certification documents.

ANNEX C: BIDDER DECLARATION

We hereby declare that:

- Our company is legally registered.
- We have not submitted fraudulent documents.
- We have disclosed all relevant conflicts of interest.
- We are not engaged in collusive bidding.
- We have the authority to supply the proposed equipment.
- We shall comply with applicable anti-corruption laws.
- We shall maintain confidentiality regarding BOAK procurement information.

Company Name: _____

Authorised Representative: _____

Signature: _____

Date: _____

Official Company Stamp: _____

END OF TENDER DOCUMENT

BOREHOLE OWNERS ASSOCIATION OF KENYA (BOAK)

Advancing Sustainable Groundwater Management Through Technology, Innovation and Collective Action.