**SECTION 2.1: SPECIFICATIONS**

**HESSEQUA LOCAL MUNICIPALITY HESSEQUA LOCAL MUNICIPALITY (WC042)**
**NOTICE:**
**THE PROVISION OF A METER READING MANAGEMENT SYSTEM FROM INCEPTION UNTIL 30 JUNE 2029**

## 1. BACKGROUND

1.1    The Hessequa Municipality requires a service provider for the provision of a cloud-based meter reading system, software licenses and mobile devices.
1.2    Bidders are hereby invited to tender for the provision of a meter reading system for water and electricity meters within the Hessequa Municipal area.
1.3    The software solution will be used for the reading of electricity and water meters on a mobile device platform.
1.4    The Hessequa Municipality currently has approximately 18 801 electricity and water meters installed within its municipal area.

## 2. CURRENT STATE

2.1    The Hessequa Municipality has an existing contract with a service provider that is currently operating on a deviation until 30 June 2026.

## 3. SCOPE OF WORK

3.1    The tender specification consists of 2 sections namely:
   • Section A – Meter Reading System
   • Section B – Software
3.2    Hessequa Municipality requires a single supplier that will provide a cloud-based system to record and process meter readings.
3.3    Only bids that meet all technical requirements will be considered.
3.4    No tender will be accepted unless it includes a full description of the technical details of its entire solution.
3.5    The successful bidder must be able to facilitate and provide the functions for a period as per the tender specification following the termination of the existing tender contract.
3.6    The successful bidder must supply, install and maintain a complete web-based solution for the reading of water and electricity meters and any other meter related services from inception until 30 June 2029.

## 4. APPLICABLE LEGISLATION AND POLICIES

4.1    Municipal Finance Management Act, 56 of 2003
4.2    Preferential Procurement Policy Framework Act
4.3    Promotion of Access to Information Act, Act 2 of 2000
4.4    Supply Chain Management (SCM) Regulations
4.5    Preferential Procurement Regulations, 2022
4.6    HESSEQUA Municipality Supply Chain Management Policy Incorporating Preferential Procurement

## 5.  APPLICABLE STANDARDS AND SPECIFICATIONS

5.1   N/A

## 6.  PRE-QUALIFICATION CRITERIA

6.1  Bidders must comply with the following conditions of tender and must submit supporting proof, failure to comply will eliminate bidders from further evaluation:
- Bidders must provide a recorded demo of the meter reading system on a memory stick.
- Bidders must submit a detailed implementation plan with the expected date of final award being 29 June 2026.
- Bidders must submit an organogram indicating the personnel assigned to this project.

## 7.  GENERAL SPECIFICATIONS

## 7.1. PART A: METER READING SYSTEM

7.1.1    Bidders must provide a cloud-based system that offers and are compatible with the latest technology.

7.1.2    Complete system must be commissioned and operational by the 15th of the following month after final award.

7.1.3    The Software shall be compatible with most common handheld/mobile devices that is Android 10, or later versions, and IOS compatible.

7.1.4    The software shall have as a minimum requirement the following functionality:
- User login function to identify user(s) and management of user access.
- Make use of Satellite (GPS) technology to direct the meter reader to the meters.

7.1.5    Meter Readers must be able to record meter readings that will be stored on the database.

7.1.6    The system must be able to perform data validation when a reading is entered and perform validation steps such as:
- Forcing the meter reader to re-enter the reading backwards;
- Force a photo to be taken of the meter in instances of no-new readings or with every reading obtained;
- Force the meter reader to enter the meter number;
- Force a GPS co-ordinate in the background (users must not be able to interfere with this function);
- GPS and photo to be date and time stamped.

7.1.7    Allow notes by meter readers.

7.1.8    Meter readers must be able to take a photo at any time and the system must produce a description of the photo, date and time stamp of the photo and GPS co-ordinates.

7.1.9    The cloud-based meter reading system must be able to allow for data from the field to be uploaded into the system once devices are connected to the internet (either via wi-fi or sim card).

7.1.10   The system shall provide for a predefined drop-down menu of the municipality's choice that can be amended at any given time for maintenance issues, reasons for no access, no reading etc. and:
- force for a photo to be taken.
- enforce a time delay that can be set by the back-end office to force the meter reader to wait for a pre-determined time before any work can be done on the device;
- force for a second photo to be taken at the same position after the time delay, before the meter reader will be allowed to continue.

7.1.11   The software shall be user-friendly and easy to operate.

7.1.12   The software shall be customizable to ensure the municipality can make setting changes at any given time without interfering with operations/down time

7.1.13   The software shall communicate directly to the cloud service to upload/download data and works orders.

7.1.14   Data must be uploaded to the cloud in real time during the reading operation to prevent the loss of data in the

event of device/software failure and theft thereof.

7.1.15    GPS co-ordinates shall be recorded in the background for every action taken by a user.

7.1.16    The back-end system shall be cloud based to enable access to the system.

7.1.17    Username and password access control in line with approved standards shall be implemented to control user access.

7.1.18    The system shall provide for segregation of duties through customized menus/access control for different users.

7.1.19    The system shall provide for route changes without losing history or data linked to the meter/route.

7.1.20    The system shall provide for seamless integration of routes and data through importing and exporting of data from and to the financial system. Data fields to be transferred shall be determined by the municipality at any given time.

7.1.21    The bidder must have a mobile phone application (App) that consumers can download from Google Playstore; Apple Appstore or Huawei AppGallery for the purpose of taking readings and photos from their meters and submitting them directly into a cloud-based electronic meter reading system.

7.1.22    Quality Assurance

      7.1.22.1    The system must provide quality assurance through:

- listing of meter reading/location exceptions identified through predefined exception parameters.
- providing users access to view pictures and compare pictures taken against meter readings logged.
- enabling users to modify readings in order to resolve exceptions.
- enable users to modify readings not identified through predetermined exception parameters.
- scheduling of check-routes and allow re-readings, resolving of exceptions and to be uploaded on the different routes within the relevant billing cycle not yet exported to the financial system.
- forced data validation by a supervisor prior exporting to the financial system.
- enabling communication with accountholders in bulk or individually by sms/e-mail.

7.1.23    The system must provide for a general search function to lookup customer data and history by:

- Account number
- Meter number
- Stand number
- Address

7.1.24    Meter reading history and photo's must be available for viewing and downloading.

7.1.25    Meter position must be viewable on a platform like Google Earth and Google maps with the push of a button.

7.1.26    The system must provide a route scheduling module for a specific billing cycle, date, meter reader etc.

7.1.27    Routes that are ready for exporting must be flagged and alert the supervisor via e-mail.

7.1.28    The system must allow for multiple billing cycles to be operational and the storing of data in different billing cycles prior exporting and rolling of billing periods.

7.1.29    The system shall allow for workorder scheduling such as check readings, first and final readings etc. and communication with accountholders via sms/E-mail.

7.1.30    Notification Engine

The system must provide a notification engine (SMS/E-mail) as follow:

- Once No-Access was triggered, consumers must be notified thereof in real-time. The notification wording must be able to be edited and possibly request consumer to download the relevant App to submit readings;
- Consumers may also be notified of a planned route-reading.
- In order for the SMS's to be sent in "real time", the handheld devices will require sim cards and data. A line item must be presented in the quote as an optional extra.

7.1.31    Reporting

      7.1.31.1    The system must provide for a customisable reporting function of which 10 customized reports required by the municipality must be included in the pricing.

7.1.31.2   The system shall provide the following standard reports by billing period, date, route, service, user and/or reader
- Activity
- Meter reader productivity
- Meter reader notes
- Meter reader summary of readings
- Reading summary
- Route Trends
- Zero Consumption Detail
- Zero Consumption Summary
- User Access
- Audit Trail
- Meter Audit
- Route Audit
- Import/Export Audits

7.1.32   System Security
- The system shall have the ability to define online users, user roles and user specific role processes online via any standard web browser/cloud.
- Database security governing low- and high-level database access shall be via a proven technology and applied at both database and application level.
- The system shall allow for the addition of an unlimited number of named operators.
- Security shall be adjustable to allow for individualized access to any field within the database.
- All system passwords shall adhere to the Hessequa Municipality Password Policy.
- International best practice: full integration capability to active directory.
- All application code shall be obfuscated, digitally signed and assemblies strong named to prevent altering of code for fraudulent purposes.
- On application layer, all database connection details shall be encrypted.

## 7.2   PART B: SOFTWARE

7.2.1   The software and database shall have no limitation on the number of named users and workstations it can accommodate.

7.2.2   The system shall accommodate multiple languages on the same machine.

7.2.3   The system shall have a tool to facilitate the translation of the software.

7.2.4   System Software

7.2.4.1 The bidder shall provide and install the necessary software needed to operate the system and shall maintain and upgrade the software during the contract period.

7.2.4.2 The bidder shall be responsible for the migration from the current system to the new system.

7.2.4.3 The bidder shall be responsible for all upgrading costs during the contract period.

7.2.4.4 The bidder shall be responsible for the exporting/transferring of all data in a specified format if Hessequa Municipality should change to new software at the end of the contract period.

7.2.4.5 Should migration be necessary on the onset or during commissioning of the system all cost is for the bidder.

7.2.4.6 Should the municipality opt to use sim cards and data, a suitable "Lockdown Software" that prevents the meter reader from using the data for anything else than meter reading must available and quoted as an optional extra.

7.2.4.7 In order for the SMS's to be sent in "real time", the handheld devices will require sim cards and data. A line item must be presented in the quote as an optional extra.

7.2.5   Data Ownership
      7.1.5.1 All the information in the database will remain the property of Hessequa Municipality at all times and will not be disclosed as a whole or in part to any third party without the express permission of Hessequa Municipality.
      7.2.5.2 Any data archived and warehoused on behalf of Hessequa Municipality shall be accessible at any time by Hessequa Municipality or its appointed auditor.

7.2.6   Training
      7.2.6.1 The bidder shall provide training on all elements of the system for all the different users.
      7.2.6.2 The bidder shall provide on-site training and support for the initial implementation of the system and a 24 x 7 x 365 comprehensive support service and help desk for the contract period.
      7.2.6.3 Training to Hessequa Municipality operators must be conducted and scheduled on an annual basis; additionally, as and when required due to software upgrades, etc.

## 7.3    Negotiable SLA Requirements (Penalties apply for non-compliance)

7.4.1   Monthly Services Meeting to be held in the first two weeks of the month following the end of a month and must include a services report for compliance, KPI, auditory evidence and performance management.

7.4.2   Minimum Reporting
      7.4.2.1 Operational issues
      7.4.2.2 Adherence to SLA
      7.4.2.3 Call volume breakdown and breaches in accordance with SLA

7.4.3   ICT Policy Compliance
      7.4.3.1 Proactively ensuring policy compliance
      7.4.3.2 Constantly measuring the environment against the existing Policy

7.4.4   SLA Targets

| SLA Support | Hours | Target SLA | MTTR | Measurement |
|---|---|---|---|---|
| P1 | Match Municipal working hours<br>Monday, Tuesday & Thursday 07:45– 16:30<br>Wednesday 8:00 – 16:30<br>Friday 07:45 – 15:30 | 1 hour – Response to incident | 3 hours – Mean time to repair | Provider supplied incident management system |
| P2 | Monday - Tuesday 16:31– 07:44<br>Wednesday 16:31 – 7:59<br>Thursday 16:31 – 07:44<br>Friday – Monday 15:31 – 7:44 | 1 hour – Response to incident | 3 hours – Mean time to repair | Provider supplied incident management system |

## PRICING REQUIREMENTS

8.1. Tender prices must be in ZAR Currency (Rand).
8.2. The unit rates must include all costs.
8.3. Price increases will be limited to CPI upon the annual anniversary of the contract, refer pricing schedule.
8.4. Contract price adjustments will be considered at no more than CPI. However, bidders may provide their own CPI projection or minimum rate, which must not exceed actual CPI for the applicable period.
8.5. Bid prices must be inclusive of VAT.

## 9. METHOD OF PAYMENT

9.1 The Municipality is committed to pay service providers within 30 days after the submission of an invoice and statement of actual work performed.

9.2. No upfront payment will be considered.

## 10. SERVICE LEVEL AGREEMENT

10.1. The SLA will be concluded with the preferred service provider and will describe how a Service Level Agreement will be applied in general and also with specific reference to:

10.1.1 Turnaround Times

10.1.2. Frequency of meetings.

10.1.3. Confidentiality, integrity and security of consumer data.

10.1.4. Under-Performance and Non-Performance.

10.1.5. Penalties

## 11. EVALUATION

11.1. The tender will be evaluated on functionality.

11.2. The evaluation criteria is contained in the document.

11.3. A minimum score of 80% is required in order to be evaluated for price and preference.

11.4. No tender will be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality.

## 12. DEFINITIONS OF TERMS

12.1. Unless indicated by the context or explicitly stated otherwise, the following expressions will have the following meanings:

| 12.1.1. Council/Local Authority/Municipality | HESSEQUA Municipality |
| --- | --- |
| 12.1.2. Tender | A written offer, in a prescribed or stipulated form in response to an invitation, by the municipality, for the provision of a meter reading management system, at an agreed premium. |
| 12.1.3. Bidder | Any person or persons or anybody, incorporated or otherwise, making an offer to arrange a meter reading management system for the Municipality. |
| 12.1.4. Contract Period | This contract will be valid from the day of inception until 30 June 2029. |

## 13. ABBREVIATIONS

13.1. SCM - Supply Chain Management

13.2. HBD- HESSEQUA Municipality Bidding Document

13.3. VAT - Value-Added-Tax

**Failure to provide the information as stated above, will result in your tender being declared non-responsive.**

DECLARATION,

I, THE UNDERSIGNED (NAME)  ................................................................................................................

CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT. I ACCEPT THAT THE MUNICIPALITY MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

AUTHORISED SIGNATURE: ...........................................................................................................................

NAME: .......................................................................................................................................................

CAPACITY: ................................................................................. DATE: ..............................................