



**RFP49/2022**

**SUPPORT, UPGRADE AND  
MAINTENANCE OF THE EXISTING  
CENTLEC AUTOMATED METER  
READING SYSTEM**

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## 1. Invitation

CENTLEC (SOC) Ltd, a municipal entity distributing electricity in Mangaung and other local municipalities invites suitable service providers to support, upgrade and maintain the existing Automated Meter Reading system for a period of thirty-six (36) months.

## 2. Minimum Submission Requirements

### **Any omission of the below listed items would render and automatic disqualification**

- 2.1 Supply unique security personal identification number (PIN) and/or original TAX Clearance Certificate for TAX compliant status.
- 2.2 Supply municipal services (water, sanitation, rates and electricity) clearance certificate or Lease Agreement with a current Bill and rates clearances, or Current Bill of Account not owing more than 90 days. In a case where the services are paid by the Landlord, the signed lease agreement and statement of account must be submitted by the bidder.
  - 2.2.1 In an event, that the Bidder utilizes prepaid services (e.g. Water or electricity) a valid municipal clearance certificate(s) must still be provided.
- 2.3 The bidder must be registered on the National Treasury Centralized Suppliers Database
- 2.4 Submit proof of STS certification
- 2.5 The Bidder shall comply to all the Special Conditions as per Table 1 below.

### 3. Special Conditions of the Contract

DESCRIPTION	Yes	NO	SUBMIT DOCUMENTATION
The successful bidder will be expected to enter into a <b>Service Level Agreement with CENTLEC for thirty-six (36) months.</b>			N/A
The successful bidder will be expected to enter into a Service Level Agreement with CENTLEC for thirty-six (36) months. Bidder will provide annual licensing subscription for the system.			N/A
The successful bidder shall submit a list of proposed team members including competent supervisor and highlight their experience and qualifications in rendering similar work.			Company Profile
The successful Bidder shall within seven (7) days of commencement of the contract, provide CENTLEC with a list of all employees appointed for this contract including supervisor(s) and site manager for vetting to be done by CENTLEC as the work will be carried in the National Key Point area.			Submit upon appointment

The successful bidder will be required to undergo and complete all applicable IT related induction and requirements.			N/A
The successful bidder will be subjected to a twelve (12) months defects liability period on the work done.			Letter of commitment
Implementation delays: Upon receipt of the official order the successful bidder shall commence the work immediately and inform the CENTLEC project manager of any delay anticipated.			N/A
If it becomes apparent that delivery of goods or rendering of the services are likely to be delayed on account of unforeseen circumstances, full written particulars of the circumstances must immediately be submitted. The bidder at the same time must state the new date of delivery of services.			N/A
The bidder shall prepare and supply comprehensive manuals for the successful operation and maintenance of the AMR system.			Submit upon appointment.

## 4. Scope of Work

CENTLEC has an installation base of more than 2000 combination kWh/kVA programmable microprocessor controlled electricity meters for Large Power Users (LPU) installed on its network.

The successful service provider will be responsible to support, upgrade and maintain the total integrity of the existing CENTLEC AMR system; together with all the necessary components and options for a comprehensive support package programming languages (JAVA Script, C#, SQL, Postgres). System support shall include minimum functions done by a Help Desk to more sophisticated functions that should be done on site by a Project Manager.

## 5. Technical Specification

### 5.1 SUPPORT AND MAINTENANCE

**THE SUPPORT, UPGRADE AND MAINTENANCE SERVICES WILL BE AS AND WHEN REQUIRED.**

Maintenance, Upgrade and Support Activities shall consist of development on daily maintenance of the hardware and software located at CENTLEC premises. This support is crucial to be able to maintain CENTLEC's AMR system in a fully operational condition. The scope of work shall include, but not be limited to, the supply of all labour, supervision, installed and consumable materials, equipment, software development, tools, services and transport for the extended system support and service of the CENTLEC's energy monitoring and management information system.

#### 5.1.1 Daily System Checks - Help Desk Facility

The main function of the Help Desk is to monitor the system and to report back daily, on the integrity of the system and the communication of the system and AMR meters. Provisioning of quality repair and maintenance service – to offer the capacity of a 24 hour, 7 days per week service; to perform the work as required to

take all necessary precautions to prevent reoccurrence; and provide quality parts and material to maintain related equipment in proper operating condition. The bidder should be able to generate all technical and revenue related reports.

- 5.1.2 Maintenance and Support on all AMR system equipment at CENTLEC premises. The successful service provider shall draw up the necessary job cards from their maintenance program, or in response to ad-hoc reporting requests, and hand the completed cards to CENTLEC for verification and acceptance that the work has been duly executed.
- 5.1.3 Implement a system whereby each item of equipment's (software and hardware) history of maintenance and repairs are always recorded and retrievable.

## 5.2 SOFTWARE MAINTENANCE AND SUPPORT

- 5.2.1 The software maintenance and support shall include regular checks, backups and restore for disaster recovery configurations on the software to optimize functionality.
- 5.2.2 System development should consist of change log configurations, password parameter settings as per CENTLEC ICT Security Policy. This will include the password log in for single sign on.
- 5.2.3 System administration will include the assigning of different user roles.
- 5.2.4 The Service Provider/Contractor will provide support onsite as well as show the capability to remotely support the AMR system.
- 5.2.5 The service provider shall provide the necessary step by step maintenance and support manuals/ user documentation.
- 5.2.6 The service provider will be required to interface with the CENTLEC Financial system in compliance with the MSCOA requirements as well as with Geographical Information (GIS) Systems and Asset Management System.
- 5.2.7 To be able to maintain the total data integrity (Data Analytic and Data Purification) of the system, all the necessary components and options of a comprehensive support package for the AMR system must be in line. The contractor is to check the data integrity, view each channel for spikes and odd data and recalculate affected groups and sections with SYSTEM. All Meter Management and Statistical Metering reports shall be provided from this exercise.

## 5.3 SYSTEM EXPANSION/ADDITIONAL SOFTWARE (ADDITIONAL SOFTWARE)

In the event of system expansion, where additional software or modules of the SYSTEM software are added that are NOT listed in this clause (i.e. as at the commencement date of the Support Agreement), the monthly cost for software



maintenance shall be tendered for accordingly as specified in the pricing schedule. In the case where fixed contract costs are offered, the contract will be amended to cater for support on the additional equipment.

#### 5.4 PREPAYMENT SOFTWARE

The bidder must be able to upgrade the existing CENTLEC AMR system to integrate with the existing CENTLEC vending system for token generation.

#### 5.5 MANAGEMENT SERVICES (VALUE ADDED SERVICES)

As part of NRS 057 (which forms part of CENTLEC's License agreement with NERSA) certain Management Services needs to be done and compliance needs to be certified accordingly. Thus, all these functions shall form part of the Support and Maintenance Service Contract, namely:

- Energy Information Services
- Customized Software
- Training
- System Documentation
- Feed Back reports
- ToU prepayment

##### 5.5.1 Energy Information Services.

Month-end reconciliation services with consumption tracking, billing, cost reports and internal tariff structure setup - internal auditing/reconciliation with Eskom account.

##### 5.5.2 Customized Development Software and additional reporting.

Site-specific requests such as meter software integration should be handled on an ad hoc basis and CENTLEC should only be liable for development costs if agreed to priory.

### 5.5.3 Training

Training by SYSTEM's Specialist to be given to CENTLEC's programmers on coding and technical team (one-on-one training), with regard to the use of the SYSTEM software module or alternative software as part of the Support Agreement, however, Administrator training pertaining to the SYSTEM/or alternative software to be provided on request.

### 5.5.4 System Documentation

The Service Provider shall provide all services for professional drawings and update documentation to all new additions to the CENTLEC's Energy Management and Data Acquisition System. This service shall be conducted with all printouts for operation, system back up and support.

### 5.5.5 Prepayment ToU

A solution for the commissioning and management of the prepayment ToU (Time of Use) functionality should be included.

## 5.6 SUPPORT OF SOFTWARE ON PC'S

The Service Provider/Contractor shall install and support the SYSTEM/alternative client software on CENTLEC PCs to ensure the correct access and operational functionality to the AMR system.

### 5.6.1 SPECIFICATIONS

#### 5.6.1.1 Web server Services

#### 5.6.1.2 System login

#### 5.6.1.3 Billing cycle management

#### 5.6.1.4 Postpaid and Prepayment Revenue Management

## 5.6.2 Database Management

- 5.6.2.1 System login
- 5.6.2.2 Data Synchronization between main and backup server
- 5.6.2.3 SQL, C# and Postgres Server Management
- 5.6.2.4 Configuration rules check
- 5.6.2.5 Database Maintenance Plan
- 5.6.2.6 Database Backup and Restore

## 5.7 COMMUNICATION

5.7.1 The communication network is a combination of the CENTLEC's Fibre Optic network from the Server (LAN)/Power Station to all the Distribution Centres (fibre optic communication) on the network.

5.7.2 The system supports different transmission networks for communicating with the meters and collecting data from them.

5.7.3 The system supports the following communication media:

- GSM 900/GPRS (Global System for Mobile Communications)
- GSM 1800/GPRS
- GPRS/3G (General Packet Radio Service / 3G – video calls, browsing Internet)
- GPRS/5G
- TCP/IP (Transmission Control Protocol and Internet Protocol)
- APN

The system communicates with meters using internationally recognized standards and communication protocols. The bidder should be able to integrate all different type of Time of Use meters` protocols, such as:

- DLMS/COSEM (IEC 62056) - mandatory (Device Language Message Specification / Companion Specification for energy metering) Standard for electricity metering data exchange
- IEC 1107 (EN61107) – via a handheld supporting a Bluetooth optical eye with Android operating system.
- SCTM – optional
- FNP – optional
- IEC 870-5-102 – optional

## 5.8 FUTURE DEVELOPMENT

System upgrades and development should be part of the licensing/support contract. The system should be supported in such a way as to interface with the Vending system, the Automated Metering Infrastructure System and it should be able to perform Energy Balancing and Monitoring.

The general support costs pertaining to CENTLEC's site in terms of the Support Agreement shall be included in the pricing schedule.

## 6. Evaluation Criteria

All proposals submitted will be evaluated in accordance with the criteria set out in the policy of Supply Chain Management of the Entity.

The most suitable candidate will then be selected. Please take note that CENTLEC is not bound to select any of the firms submitting proposals. CENTLEC furthermore reserves the right to select more than one bidder.

Furthermore, technical competence is the principal selection criteria, CENTLEC will evaluate the technical criteria first, and will only look at the price and BBBEE level of contribution if it is satisfied with the technical evaluation. As a result of this, CENTLEC does not bind itself in any way to select the firm offering the lowest price.

### The relative technical weighting of the criteria is as follows (Stage 1):

The relative technical weighting criteria / Qualification Parameters will be as follows:

No	Criteria	Description	Points
1.	Track record and experience	Submit referral letters signed by the duly authorized official with contact details to confirm the successful completion of some of the listed projects above.  Two (2) letters – <b>10 points</b> Three (3) or more letters – <b>15 points</b>	15
2.	Local (Mangaung) operational capability	Does the bidder have a local office with operational capability Existing and established local office (CENTLEC distribution area) = <b>20 points</b> If not (Within South Africa) = <b>10 points</b>	20
3.	Resource profile	Bidders will be evaluated on the strengths of individuals as well as the overall team proposed for the project. Bidders should demonstrate a commitment to devote the right personnel (including management) for the duration of the contract (include CV's/Resumes and certified qualifications of personnel as well as an organogram)  <i>The bidder must submit a portfolio reflecting the resources available to execute the project</i>  Database Developer with: • Minimum of (5) year experience in DB administration • BSc Honours I.T = <b>15 points</b>  Database administrator with:	35

		<ul style="list-style-type: none"> <li>Minimum of (5) year experience in DB administration</li> <li>BSc I.T = <b>10 points</b></li> </ul> <p>System Support</p> <ul style="list-style-type: none"> <li>Minimum of (5) year experience in DB administration</li> <li>BSc I.T = <b>10 points</b></li> </ul>	
4.	Skills Transfer	<p>Evaluate the capacity building and skills transfer plan</p> <p>Submit detailed training plan with milestones and deliverables per milestone (within 12 months):</p> <p>4.1 Train Programmers on AMR coding for C#, postgres = <b>10 points</b></p> <p>4.2 Train Technical Personnel as per items in 5.5.1-5.5.4 on how to conduct the following:</p> <ul style="list-style-type: none"> <li>Energy Information Services = <b>2 points</b></li> <li>Customized Software = <b>2 points</b></li> <li>System Documentation = <b>2 points</b></li> <li>Generate and analyze Feed Back reports = <b>2 points</b></li> <li>Tasks associated with ToU prepayment = <b>2 points</b></li> </ul> <p>4.3 Train System Administrators on SQL for engineering reverse code for meter (KWh,KVA) = <b>10 points</b></p>	30
		<b>Points</b>	<b>100</b>

**Table 2 – Evaluation criteria**

A bidder who gets a minimum of 85 points and above on will qualify to the next stage. Individual tenders would have to be evaluated according to the preferential point system.

The bidder must score minimum points as follows:

Item 1 – 10 points

Item 2 – 10 points

Item 3 – 35 points

Item 4 – 30 points; in the Evaluation Criteria.

The point system applicable to this project will be: 80/20

80 points for Price

20 points for BBEEE certificate from accredited verification agencies.

## 6.2 Price and referential points scoring – (Stage 2)

A Maximum of 90 Points is allocated for price on the following basis:

$$P_s = 80 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where

- $P_s$  = Points Scored for comparative price of bid under consideration  
 $P_t$  = Comparative Price of bid under consideration  
 $P_{min}$  = Comparative Price of lowest acceptable bid

In terms of Regulation 5(2) and 6(2) of the Preferential Procurement Regulations, Preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below

B-BBEE Status Level of Contributor	Number of Points(80/20 System)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-Compliant Contributor	0

**Table 3 - BBBEE level status**

## 7. Pricing

### 7.1 Contract Price

#### OPTION A: FIXED MONTHLY FEE AS AND WHEN REQUIRED

PART	SERVICE UPON REQUEST	UNIT OF MEASURE	PRICE ( R )
1	Month-end Service	Per month	
2	Helpdesk Facility	Per month	
3	Daily System Checks	Per month	
4	Support and Maintenance of software and hardware	Per month	
PART	ANNUAL SERVICE UPON REQUEST	UNIT OF MEASURE	PRICE ( R )
5	Financial Year-end Service	Annually	
6	Training, Skills and Knowledge transfer	Annually	
PART	ADHOC SERVICES	UNIT OF MEASURE	PRICE ( R )
7	Software integration and development as per growing/changing requirements	Per hour	
8	Reporting and analysis not included in the above	Per hour	
PART	ADDED SERVICES	UNIT OF MEASURE	PRICE ( R )
9	Geographical management of meters	Per hour	
10	Meter auditing	Per meter	

## 8. Contact details

- 8.1 For any further technical information regarding the document contents please contact Ms Moipone Mokanyane e-mail: [Moipone.Mokanyane@centlec.co.za](mailto:Moipone.Mokanyane@centlec.co.za)
- 8.2 For Supply Chain Related questions, please contact Ms Palesa Makhele at 051 412 2753 or at [Palesa.Makhele@centlec.co.za](mailto:Palesa.Makhele@centlec.co.za)