

To all Bidders.

## PROCUREMENT

### **Bid161- Request for Proposals for the purchase & installation of meters, management of cloud-based automated meter reading system for public buildings and wastewater treatment plants for a period of 24 months.**

### ERRATA 1

---

#### RESPONSE TO QUESTIONS

**Note the following as this addresses most of the questions:**

1. This bid was actually designed to have a SANEDI M&V expert already present at each of sites make a request to the **appointed metering company for Bid 161** to install one or more smart meters according to his M&V design requirements. The M&V expert is tasked with providing all the required site details like CT, VT ratios & types, breaker sizes, load carried, LV/MV, mount type, meter box requirements, Point of Metering specifications and more for the metering company to initiate installation. The metering company is then expected to verify all information/specifications provided and carry out installation stating all deviations encountered during site installations. The actual cost for the installation, materials and hardware is what is paid for and not simply a standard cost.
2. All bidders must use the following information in their quotation:
  - All 50 meters will be 3 Phase Smart Meters (0.5 class)
  - All 50 modems shall be 3G externally mounted modems
  - All CT's are split core of 800:5A, to be mounted at busbar
  - Assume all networks are LV 400V and not MV
  - 30 standard external meter wall enclosure boxes mounted 50m next to the Distribution Board (DB) – DIN rail mount (IP65 Certified)
  - All breaker sizes are 250 Amps, quote for both single and triple pole breakers

- Standard installation practices apply. During your site audit, you will determine the strongest network signal. Your modem installation must utilise the strongest network. A 3G network at minimum will suffice for data transfer
  - Plan for the load to be shut down at each site after 17h00 daily and during weekends
  - All Points of Metering shall be 3 Phase, Low Voltage side
  - Key personnel for this project like technicians on site, back-office engineers, stating fixed hourly rate is required in your quotation but does not have to be individually specified
1. Must the meter be panel or external enclosure mounted. This makes a significant difference in pricing.
    - To be panel-mount the distribution panel must be hinge mounted.
    - If bolt mounted it and any meter mounting can fall to the ground when removed.
    - If it is panel-mounted then is it cutout and mount or DIN rail mount?
    - Is it mounted externally (IP54) or internally and is there sufficient space available?
    - If external enclosure mount same applies and here meter has to be installed a prewired off-site adding further installation costs.

[See information above](#)

2. What is the breaker size and load carried to allow CT to be sized.
  - Are the CT's at MV (11kV) or 400V?
  - As 3 CT's are required the costs may exceed meter pricing if MV or split core
  - Are the CT's to be mounted around cables or busbars.
  - In either case the load will have to be switched off. If so must this take place during normal working hours or after hours, which entails additional labour costs?
  - Unlike LV, MV CT's require the load to be removed and 11kV CT's cannot just be installed but careful sizing, manufacture, and installation on the 11kV bus-bars is required.
  - Are CT blocks required?
  - Are there multiple or single meters per site? This affects modem, modem type and a number of modems

[See information provided above](#)

3. If MV what CT and VT ratios apply. Is the VT 100V or 68V?

[Not MV network](#)

4. If VT is it open delta or star connected?

[M&V to confirm this, but LV network](#)

5. Can the load be shut down? If so when, If not when?

The bidder should plan for the load to be shut down daily after 17h00 and during weekends

6. If cable mount CT's then costs are lower than Busbar mount.

CT's are busbar mount

7. If busbar mount can just meter circuit be switched off or entire plant needs to be switched off.

This will be negotiated with the building owners and wastewater treatment plants controllers

8. How must one determine the GSM network and signal strength present to determine whether an aerial is required or not when location details are not provided.

These facilities are located in towns and the signal strength should be assumed as sufficient but quote for modems as requested above

9. Also what networks are available in the said area?

Vodacom, MTN and Telkom networks are available. But most municipalities might prefer or already contracted with one of these network operators for comms

10. 4G and LTE modems are far more expensive than 3G modems but the latter might not be supported in areas where the sites are located?

3G Modems, see information provided above

11. Breaker size for each site. Single or triple pole breaker?

The bidder should provide cost for both single and triple pole breaker, see information above

12. Space in DB - Board dimension of meter 200x250x70 plus minus?

You are not installing meter within existing site DB Box

13. Do we need to install an enclosure?

Yes, see information provided above

14. Can we switch power off during business hours to do the installation of the meter.

This will depend from site to site

15. Please provide the Current Transformer (CT) ratios for each site where CT's will be required.

[See information provided above](#)

16. Please confirm which type of CT's are preferred to be used for the meter installations, i.e. based on business requirements, which CT type does SANEDI prefer to be used between split core and solid core CT's?

[Spilt core CT's only](#)

17. Please provide the circuit breaker sizes for every Point of Metering (POM) for each site.

[250 Amps](#)

18. Please also confirm for each site whether the Point of Metering (POM) is on the low voltage side (LT side) or high voltage side (HT side), i.e. will it be on 400V or 11KV side?

[Low voltage side, see information provided above](#)

19. Please confirm for each site whether meter enclosures (meter boxes) will be required or the existing electrical panels have adequate space to house the new meters.

[See information provided above](#)

20. Please confirm whether the Point of Metering (POM) is single phase or three phase.

[See information provided above](#)

21. Confirm whether installations will need to be done during normal working hours or after hours or weekends.

[See information provided above](#)

22. On page 13, the evaluation criteria it does not mention any key personnel for this request **for proposal. Does that mean we shouldn't put any?**

[Key personnel is not required on the evaluation criteria but this required in your quotation](#)

23. Detailed implementation plan, is the same as the preliminary programme?

Yes this is the same thing as only after site audit can a truly detailed implementation plan be put in place

**Statement to consider from a bidder**

Whilst the rationale for locant is well understood it is well known within the local SA market that there are no local C&I meters due to small quantities apart from some specialist Power Quality Meters. The same requirements are set for local water meters yet all meters above 20mm diameter are imported.

It is clear that Govt, having set these requirements, has never ever tried to get such detailed information from local suppliers/distributors and which proves to be very difficult, yet SANEDI seem to think that this is an everyday occurrence and requirement.

Although a distinction is made between meter manufacturers: and importers and distributors it is highly unfair competition when manufacturers and distributors use their discounted pricing against system integrators to win bids. For example, entities like Schneider offer 40-60% discounts, yet the BID seems to make no difference or recognize this difference yet claim to support small businesses and SME's. These are market realities that preclude smaller bidders from being price competitive.

If SANEDI or Government can identify the meter manufacturers it refers to that meet these requirements it would be very beneficial. Some of the biggest players like MOL and RMS and who support large organizations and municipalities support meters that are unavailable to others due to licensing, quantities, and being the sole local representative such that others simply cannot competitively BID in terms of pricing. Thus SANEDI makes no attempt to level the playing fields but simply excludes others through such unobtainable local content requirements.

If meters came with a label or certificate which denoted local content requirements are being met it would be very useful but suppliers simply withhold such information as they too are bidders.

Answer: The requirements for local content are not set by SANEDI but rather the Department of Trade, Industry and Competition (the dtic) and National Treasury. The availability or unavailable of companies meeting the local content requirements can only be assessed once the bid has closed. Please refer to the dtic's website for more information.

<http://www.thedtic.gov.za/sectors-and-services-2/industrial-development/industrial-procurement/>

Regards

**SANEDI Procurement**

**25.05.2021**