

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

BIDDERS NAME:		

INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR APERIOD OF THREE YEARS

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INVITATION TO BID



ADVERTISEMENT



INKOSI LANGALIBALELE LOCAL MUNICIPALITY

Inkosi Langalibalele Local Municipality hereby invites proposals from all suitable qualified and experienced organizations/consortia in terms of section 83 of the Municipal systems Act, Act 32 (as amended) and sections 110 and 112 of the Municipal Finance Management Act, Act 56 of 2003 for the following;

Project Name	Bid No	Closing Date
Panel of Service Providers for the Supply and Delivery of Electrical Material	ILM 15/22/23	24 February 2023 @ 10h00

Tender documents will be available in pdf format as from 03 February 2023 in the Inkosi Langalibalele Municipality webpage (www.ilm.gov.za).

NB: OBJECTIVE CRITERIA

Service providers must meet the minimum threshold percentage for local production and content in accordance with the terms of regulation 11 of the Preferential Procurement Regulations, 2017. Only local produced goods or services that meet the stipulated minimum threshold for local production and content as determined by DTI will be considered for acceptance. Any tender that does not meet the minimum threshold is an unacceptable tender.

This tender will be evaluated on the 80/20 preferential procurement policy framework (PPPFA) Regulations. The evaluation criteria will be based on the following functionalities:

Functionality Points Table: Please note that bidders must score a minimum of 70% to be considered for further evaluation.

No	Key aspect of criterion	Points allocated	Verification Method.
	Company previous completed projects in the relevant field 10 points per project	50	Please supply the proof in the form of appointment letter/Official Purchase Order
2	Location of the Branch office 50 Points for Branch Office Within Inkosi Langalibalele 30 Points for Branch Office Within Uthukela District	50	Provide the proof of office site in the form of rates and taxes statement/valid lease agreement



20 Points for Branch Office Within KwaZulu Natal 10 Points for Branch Office Within South Africa		
Total Points	100	

Tenders are to be completed in full bond and in accordance with the conditions and bid rules contained in the bid documents and supporting documents must be placed in a sealed envelope and clearly marked "Panel of Service Providers for the Supply and Delivery of Electrical Material" quoting the relevant Bid Number must be deposited in the Tender box at ground floor, Inkosi Langalibalele Municipality, Victoria Street, Estcourt, 3310 by not later than the above stipulated date and time, where they will be opened and registered in public.

The Inkosi Langalibalele Municipality subscribes to the Preferential Procurement Regulations, pertaining to the preferential procurement policy framework act (PPPFA) principles whereby a tenderer's submission will be evaluated according to the sum of the award of points in respect of the tender value and the B-BBEE status of the tenderer. The tender will be evaluated on 80/20 as per the PPPFA Regulations and shall be based on pre-qualification and functionality. Bidders are required to submit a Company Profile accompanied by the company's CSD (Central Supplier Database) Report, CIPC Documents, Certified Identity Documents of all Directors, Valid Tax Clearance Certificate/PIN from the Receiver of Revenue, Rates and Taxes Statement obtainable from the Local Municipality, alternatively, Valid Lease Agreement. Please note that the onus is upon the tenderer to ensure that the Tax matters are **always** up to date.

Service providers operating in exempted areas shall submit an exemption letter obtainable from a Local Municipality.

BID ENQUIRIES

Bid enquiries are to be addressed to SCM Section - Mr Sthembiso Memela at telephone number 036 342 7827 or e-mail to: majiki@ilm.gov.za.

Alternatively, in relation to the technical enquiries, enquiries to be addressed to Electrical Maintenance Section – Mrs R Bere at telephone number 036 342 7852 or email to: rudo@ilm.gov.za.

The INKOSI LANGALIBALELE Municipality does not bind itself to accept the lowest or any bid and reserves the right to accept a bid in whole or any part. The municipality further reserves the right not to award this bid.

Notice: 01/23

MR S.B MTHEMBU MUNICIPAL MANAGER



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

CONDITIONS OF THE BID



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR APERIOD OF THREE YEARS

CONDITIONS OF THE BID

A. GENERAL

- 1. Bid documents must be completed in black ink and prices must include VAT.
- 2. All pages and annexure must be initialed / sign in full signature where required.
- 3. The lowest or any Bid will not necessarily be accepted and Inkosi Langalibalele Municipality reserves the right to accept the whole or any part of a Bid or to reject any or all the Bid without stating the reasons thereof.
- 4. No Bid will be accepted by fax or e-mail.
- 5. Bids are to remain open for acceptance for a period of one hundred and twenty (120) days from the date they are lodged and may be accepted at any time during the said period of one hundred and twenty (120) days.
- 6. All prices and details must be legible / readable to ensure the Bid will be considered for adjudication.
- 7. Full details of services offered must be supplied together with the return documents. All additional documents returned with the Bid documents must be firmly bound and marked as "Additional" to the specific Bid reference number.
- 8. Only Bids on Inkosi Langalibalele Municipality official Bid document will be accepted and the original document must be returned, fully completed and signed, in the form presented. **Failure to do so will invalidate such Bid.**
- 9. Corrections may not be made by means of a correcting fluid. In the event of a mistake having been made by the Bidder it shall be crossed out in ink and be accompanied by a full signature at each and every alteration. The Municipality reserves the right to reject the Bid if corrections are not made in accordance with the above.
- 10. Should it be considered necessary by the Bidder that officials of Inkosi Langalibalele Municipality should proceed to other centres for inspection purposes, such costs shall be for the account of the Bidder.
- 11. This contract will be governed by Inkosi Langalibalele Municipality "Conditions of the Bid" only and not any conditions supplied by the Bidder.
- 12. The Bidder must submit a comprehensive company profile, for example the founding company statements, as well as detailed exposition of previous work done.
- 13. If items are not Bid for a line must be drawn through the space in pen.
- 14. Only Bids received by the given closing date and time in the specified municipal tender box will be considered.



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15. In cases where Training / Demonstrations might be required, the supplier must provide such training and issue relevant certificates for such training, without additional costs as indicated in pricing list.

B. DEMONSTRATIONS AND INSPECTIONS

- 1. All bidders must be prepared to demonstrate where required, free of charge and obligation, at the Inkosi Langalibalele Local Municipality or any other area within the boundary of the Inkosi Langalibalele Local Municipality, any services offered in this bid.
- 2. Where officials are required to attend demonstrations or inspections outside the boundary of the Inkosi Langalibalele Local Municipality Area, all costs to attend such demonstration must be borne by the Bidder.

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GENERAL CONDITIONS OF CONTRACT



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

GENERAL CONDITIONS OF CONTRACT

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General Conditions of Contract

1. Definitions

The following terms shall be interpreted as indicated:

- 1.1. "Closing time" means the date and hour specified in the Bidding documents for the receipt of Bids.
- 1.2. "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3. "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4. "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5. "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.6. "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7. "Day" means calendar day.
- 1.8. "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.9. "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- 1.10. "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.
- 1.11. "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- 1.12. **"Force majeure"** means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any Bidder, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Bidder of the benefits of free and open competition.
- 1.14. "GCC" means the General Conditions of Contract.
- 1.15. **"Goods"** means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.



- 1.16. "Imported content" means that portion of the Bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the Bid will be manufactured.
- 1.17. **"Local content"** means that portion of the Bidding price, which is not included in the imported content provided that local manufacture does take place.
- 1.18. **"Manufacture"** means the production of products in a factory using labor, materials, components and machinery and includes other related value-adding activities.
- 1.19. **"Order"** means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20. "Project site," where applicable, means the place indicated in Bidding documents.
- 1.21. "Purchaser" means the organization purchasing the goods.
- 1.22. "Republic" means the Republic of South Africa.
- 1.23. "SCC" means the Special Conditions of Contract.
- 1.24. **"Services"** means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25. **"Supplier"** means the successful Bidder who is awarded the contract to maintain and administer the required and specified service(s) to the State.
- 1.26. "Tort" means in breach of contract.
- 1.27. **"Turnkey"** means a procurement process where one Consultant assumes total responsibility for all aspects of the project and delivers the full end product / service required by the contract.
- 1.28. **"Written" or "in writing"** means hand-written in ink or any form of electronic or mechanical writing.

2. Application

- 2.1. These general conditions are applicable to all Bids, contracts and orders including Bids for functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the Bidding documents.
- 2.2. Where applicable, special conditions of contract are also laid down to cover specific goods, services or works.
- 2.3. Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

3.1. Unless otherwise indicated in the Bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a Bid. Where applicable a nonrefundable fee for documents may be charged.



3.2. Invitations to Bid are usually published in locally distributed news media and on the municipality/municipal entity website.

4. Standards

4.1. The goods supplied shall conform to the standards mentioned in the Bidding documents and specifications.

5. Use of contract documents and information

- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent Rights

- **6.1.** The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
- **6.2.** When a supplier developed documentation / projects for the municipality / municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality / municipal entity.

7. Performance security

- **7.1.** Within thirty (30) days of receipt of the notification of contract award, the successful Bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- **7.2.** The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- **7.3.** The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the Bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque.
- 7.4. The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.



8. Inspections, tests and analysis

- **8.1.** All pre-Bidding testing will be for the account of the Bidder.
- **8.2.** If it is a Bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the Bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.
- **8.3.** If there are no inspection requirements indicated in the Bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- **8.4.** If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- **8.5.** Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- **8.6.** Goods and services, which are, referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7. Any contract goods may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with goods, which do comply with the requirements of the contract. Failing such removal the rejected goods shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected goods, purchase such goods as may be necessary at the expense of the supplier.
- **8.8.** The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.

9. Packing

- 9.1. The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

10.1. Delivery of the goods and arrangements for shipping and clearance obligations shall be made by the supplier in accordance with the terms specified in the contract.

11. Insurance



11.1. The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.

12. Transportation

12.1. Should a price other than an all-inclusive delivered price be required, this shall be specified.

13. Incidental Services

- 13.1. The supplier may be required to provide any or all of the following services, including additional services, if any:
 - (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods:
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
 - (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- **13.2.** Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- **14.1.** As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
 - (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
 - **(b)** in the event of termination of production of the spare parts:
 - (i) advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warrantv

- 15.1. The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- **15.2.** This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.
- **15.3.** The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.



- **15.4.** Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- **15.5.** If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- **16.1.** The method and conditions of payment to be made to the supplier under this contract shall be specified.
- **16.2.** The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- **16.3.** Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- **16.4.** Payment will be made in Rand unless otherwise stipulated.

17. Prices

17.1. Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his Bid, with the exception of any price adjustments authorized or in the purchaser's request for Bid validity extension, as the case may be.

18. Variation orders

18.1. In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the contractor may be instructed to deliver the goods or render the services as such. In cases of measurable quantities, the contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.

19. Assignment

19.1. The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1. The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the Bid. Such notification, in the original Bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1. Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2. If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with



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or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.

- 21.3. The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available.
- 21.4. Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.
- 21.5. Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without canceling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1. Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1. The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
 - (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2. In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3. Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4. If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.



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- 23.5. Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised, or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.
- 23.6. If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information
 - i. The name and address of the supplier and / or person restricted by the purchaser;
 - ii. The date and commencement of the restriction
 - iii. The period of restriction; and
 - iv. The reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7. If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that person's name be endorsed on the Register of Bid Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for the period not less than five years or not more than ten years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Antidumping and countervailing duties and rights

24.1. When, after the date of Bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favorable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

25. Force Majeure

- 25.1. Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2. If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1. The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without



compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1. If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2. If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3. Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4. Notwithstanding any reference to mediation and/or court proceedings herein,
 - (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier for goods delivered and / or services rendered according to the prescripts of the contract.

28. Limitation of Liability

- 28.1. Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
 - (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
 - (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1. The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

30.1. The contract shall be interpreted in accordance with South African laws, unless otherwise specified.

31. Notices

- 31.1. Every written acceptance of a Bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his Bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
- 31.2. The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties



- 32.1. A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2. A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3. No contract shall be concluded with any Bidder whose tax matters are not in order. Prior to the award of a Bid SARS must have certified that the tax matters of the preferred Bidder are in order.
- 32.4. No contract shall be concluded with any Bidder whose municipal rates and taxes and municipal services charges are in arrears.

33. Transfer of contracts

33.1. The contractor shall not abandon, transfer, cede assign or sublet a contract or part thereof without the written permission of the purchaser.

34. Amendment of contracts

34.1. No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.

35. Prohibition of restrictive practices

- In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a Bidder(s) is / are or a contractor(s) was / were involved in collusive Bidding.
- 35.2 If a Bidder(s) or contractor(s) based on reasonable grounds or evidence obtained by the purchaser has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 0f 1998.
- 35.3 If a Bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the Bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the Bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the Bidder(s) or contractor(s) concerned.



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

SPECIAL CONDITIONS OF CONTRACT



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

SPECIAL CONDITIONS OF CONTRACT

SOURCE OF FUNDING

Funding shall be secured from Grant Funding and/or Municipal Funding.

2. SCOPE OF CONTRACT

This contract comprises the supply and delivery of all electrical equipment and materials as and when required.

3. DEFECTIVE MATERIAL

Any equipment / material covered under this contract which is found to be defective and/or which is not in accordance with these specifications or the relevant standard, will not be accepted and the Inkosi Langalibalele Local Municipality will not be liable for any charge whatsoever in respect of such materials.

4. PRICE AND ESCALATION

This contract is for the supply and delivery of electrical equipment and materials to the Inkosi Langalibalele Municipality. The price quoted shall include loading, transporting and off-loading of material at the Inkosi Langalibalele Municipal Stores in Kandahar Avenue.

The prices quoted will be subject to adjustment arising from statutory increase only. For the calculation of escalation, the SEIFSA formula for the adjustment of prices will apply. The base month to be used must be July 2023. The prices will be adjusted to a date one month prior to the date of delivery. The relevant table(s) of price indices and the calculation of the amount of adjustment must be clearly shown in a letter / statement supporting any invoice.

All prices quoted must indicate VAT separately.

5. DURATION OF CONTRACT

The service provider will be appointed to the panel, and from a panel, a service level agreement will be entered into with the successful bidder and signed by both parties. The contract is envisaged to subsist for a period from the date of confirmation of appointment of the Service Provider to the end date of the contract. The contract will be reviewed regularly and may be cancelled at any stage based on the performance of the service provider.

6. PAYMENTS

All payments will be made to the service provider within thirty (30) days of receipt of an invoice. All invoices should be submitted by the 15th of each month.

7. SERVICE LEVEL AGREEMENT

7.1 A service level agreement will be entered into with the successful Bidder.



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- 7.2 Negotiations in respect of the service level agreement must be finalised within fourteen (14) calendar days of receipt of the letter of acceptance by the successful Bidder."
- 7.3 Service level agreement entered into with the successful Bidder will capture the time frames or performance applying to this contract.
- 7.4 Should no consensus be reached within fourteen (14) calendar days of finalizing the Service Level Agreement (SLA), the Municipality will be entitled to:
 - cancel its acceptance of the Bid, or
 - extend the negotiation period without prejudice to any of its other rights in terms of this contract or common law.

8. **PENALTIES**

In the event of non-compliance with the agreed time frames, Penalty fees in the amount of R500.00 (Five Hundred Rand) per day will be deducted in lieu of each day the successful Bidder fails to render its service in respect of the Bid. Penalties will be applied for failure to comply with the conditions attached to this Bid. These penalties are more fully described in the Service Level Agreement.

9. **SPECIFICATION**

All electrical equipment and materials must comply with relevant SANS specification. Equipment and material not bearing the SANS mark, will not be accepted.

10. PRICE

The price quoted shall be based on supply, delivery and installation and commissioning.

11. BID VALIDITY

This Bid shall not be withdrawn during a period of one hundred and twenty (120) days from the date on which is to be lodged and it may be accepted at any time during that period.

12. BID COMPLIANCE

The Bid must comply with the following:

- ✓ Bid must be on the official schedule of quantities
- ✓ VAT must be indicated separately.
- ✓ This Bid or part thereof may not be ceded.

13. PERFORMANCE SECURITY

- ✓ A fixed amount in respect of Performance Security is applicable in respect of each Bid and must apply for the duration of the contract.
- ✓ The Performance Security shall be secured within thirty (30) calendar days of award of the Bid and shall apply from the date of award of the Bid.
- ✓ The Performance Security submitted has to be approved by the Inkosi Langalibalele Municipality.

14. PROGRAMME

It is compulsory to submit a program of confirmed activities to be undertaken within fourteen (14) days after the confirmation of the order, and fortnightly progress report.

15. RETURNABLE DOCUMENTS



Initial

The issued documents must be returned in the form and order in which they were issued to assist the Municipality to expedite adjudication of the Bids.

16. SUPREMACY OF SPECIAL CONDITIONS

The provisions of this section will take precedence over any other condition, term or stipulation in this document.

In the event of any contradiction with any other section in the contract (including Service Level Agreement) the provisions of this section will take precedence.

17. OTHER MATTERS

- ✓ Bidders must also submit three year audited financial statements of the company.
- ✓ Bidders must certify that he/she have no outstanding debts due to the Municipality where the Bidder originates and any other Municipality or any service provider.

18. LOCAL LABOUR AND SMME POLICY

Where the execution of the specifications/scope of work requires sub-contracting, Bidders are required to source local labour in terms of the Municipality's SMME policy.

Bidders awarded contracts of an amount greater than or equal to R3 000 000-00 must sub-contract at least 20% of the contract to local contractors, where sub-contracting is necessary to execute the contract.

Bidders awarded a contract of an amount greater than or equal to R3 000 000-00 must include 50% local labour in their staff component.

19. MANDATORY COMPLETION OF DELIVERY SCHEDULE TABLE PER ITEM IN BID DOCUMENT

- Failure to complete the Delivery Schedule in respect of each item the Bidder is bidding for will result in the Bid being disqualified.
- The guarantee/warrantee to be provided for each item shall not be less than the period stipulated in paragraph 15.2 of the General Conditions of Contract.



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

TECHNICAL SPECIFICATION (SECTION 1)



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

TECHNICAL SPECIFICATIONS: SECTION 1 SUPPLY AND DELIVERY OF ELECTRICAL MATERIALS

ITEM	DESCRIPTION	PAGE
1	TAPES	
2	CABLE TRAYS	
3	11 000 VOLT INSULATORS	
4	1 000 VOLT INSULATORS	
5	LV FUSES	
6	PG CLAMPS	
7	STRAINING AND SUSPENSION CLAMPS	
8	H.V JOINTS	
9	H.V TERMINATIONS OUTDOOR	
10	H.V TERMINATIONS INDOOR	
11	H.V CONNECTORS	
12	PIERCING CONNECTORS	
13	ABC LUGS	
14	ABC FERRULES	
15	COMPRESSION FERRULES	
16	ALU TRIANGULAR LUGS AND FERRULES	
17	M.V DROPOUT FUSES	
18	LIGHTNING ARRESTORS	
19	OVERHEAD STEEL HARDWARE	
20	OVERHEAR TOOLS AND LINE ACCESSORIES	
21	EARTH RODS	
22	CABLE GLANDS	
23	RESIN JOINT KITS	
24	HEAT SHRINK JOINT KITS	
25	HEAT SHRINK PRODUCTS	
26	FERRULES	
27	LUGS	
28	CIRCUIT BREAKERS	



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

PRICING SCHEDULE (SECTION 1)



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

PRICING SCHEDULE: SECTION 1 - SUPPLY AND DELIVERY OF ELECTRICAL MATERIALS

SEIFSA indices and weighting to be provided where prices are not fixed, **ALL PRICES TO INCLUDE VAT**

ITEM	DESCRIPTION	PRICE
1	TAPES	R
2	CABLE TRAYS	R
3	11 000 VOLT INSULATORS	R
4	1 000 VOLT INSULATORS	R
5	LV FUSES	R
6	PG CLAMPS	R
7	STRAINING AND SUSPENSION CLAMPS	R
8	H.V JOINTS	R
9	H.V TERMINATIONS OUTDOOR	R
10	H.V TERMINATIONS INDOOR	R
11	H.V CONNECTORS	R
12	PIERCING CONNECTORS	R
13	ABC LUGS	R
14	ABC FERRULES	R
15	COMPRESSION FERRULES	R
16	ALU TRIANGULAR LUGS AND FERRULES	R
17	M.V DROPOUT FUSES	R
18	LIGHTNING ARRESTORS	R
19	OVERHEAD STEEL HARDWARE	R
20	OVERHEAR TOOLS AND LINE ACCESSORIES	R
21	EARTH RODS	R
22	CABLE GLANDS	R
23	RESIN JOINT KITS	R
24	HEAT SHRINK JOINT KITS	R
25	HEAT SHRINK PRODUCTS	R
26	FERRULES	R
27	LUGS	R
28	CIRCUIT BREAKERS	R

TOTAL TRICE SECTION 2.	TOTAL PRICE SECTION 2:	R	
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Bidder is required to complete and submit pricing for minimum of 90% of all items listed above. The price must be the total for all items on the list for a particular range. **29** | Page

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		INKOSI L	INKOSI LANGALIBALELE MUNICIPALITY	LE MU	NICIPALITY	
		PUBLIC V	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	SERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 1	-		Inkosi Langalibalele
	4	All quantities	listed are for estimated and evaluation only	imated a	nd evaluation o	γlγ
			TAPES	ES		
ITEM	DESCRIPTION	LENGTH PER UNIT	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
П	PVC Tape No. 33 Black (0,2mm x 19mm x 20m)	20 m	500 Rolls	Each		
2	PVC Tape No. 33 Blue (0,2mm x 19mm x 20m)	20 m	500 Rolls	Each		
က	PVC Tape No. 33 White (0,2mm x 19mm x 20m)	20 m	500 Rolls	Each		
4	PVC Tape No. 33 Red (0,2mm x 19mm x 20m)	20 m	500 Rolls	Each		
5	PVC Tape No. 22 Black (0,2mm x 36mm x 30m)	30m	500 Rolls	Each		
9	Rubber Tape (6,6Kv/mm dielectric) (0,2mm x 19mm x 20m)	10m	500 Rolls	Each		
7	Empire Cloth Tape (1000mm x 1m)	20m	200 Rolls	Each		
8	Denso Tape (50mm Wide)	10m	500 Rolls	Each		



ITY Y	Inkosi Langalibalele	ion only		SANS/BSS DETAILS AND MANUFACTURER				
JNICIPAL S: ELECTRICIT		and evaluati	RAYS	PRICE				
ELE MU	7	imated	ABLE TE	HNU	Each	Each	Each	
KOSI LANGALIBALELE MUNICIPALITY PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 2	All quantities listed are for estimated and evaluation only	GALVANISED CABLE TRAYS	ESTIMATED ANNUAL REQUIREMENT	100	100	100	
INKOSI L		All quantities		LENGTH PER UNIT	3m	3m	3m	TOTAL
	Inkosi Langalibalele			DESCRIPTION	304mm x 3000 mm	457mm x 3000 mm	609mm x 3000mm	
				ITEM	1	2	3	



	4	Inkosi Langalibalele	
INKOSI LANGALIBALELE MUNICIPALITY	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 3	All quantities listed are for estimated and evaluation only
		Inkosi Langalibalele	

			TT OOD VOLI INSOLATONS	いろしたとい	JNS	
ITEM	DESCRIPTION	Rating	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Long Rod Insulators (Shackle type)	11 Kv	100	Each		
2	Insulators (2 disc replacement)	11 Kv	100	Each		
3	Pin Insulator	11 Kv	200	Each		
4	Galvanised Pin	11 Kv	200	Each		
2	Disc Insulator	11 Kv	100	Each		
9	Stay Strain Insulator Porcelain 95mm x 57mm	11 Kv	200	Each		
7	Stay Strain Insulator Porcelain 190mm x 85mm	11 Kv	200	Each		
∞	Surge Arrestor & Brackets	11 Kv	200	Each		
6	Silicon Insulators clevis/tongue 6 Sheds	11 Kv	200	Each		
10	Repeater Arrestor Cut-Outs	11 Kv	100	Sets		
		TOTAL				

	Inkosi Langalibalele	nly		SANS/BSS DETAILS AND MANUFACTURER				
NICIPALITY ELECTRICITY		ınd evaluation c	RS	PRICE				
LE MU	4	imated a	ISULATO	EN D	Each	Each	Each	
INKOSI LANGALIBALELE MUNICIPALITY PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 4	All quantities listed are for estimated and evaluation only	1 000 VOLT INSULATORS	ESTIMATED ANNUAL REQUIREMENT	100	100	100	
INKOSI L.		All quantities		LENGTH PER UNIT	n/a	n/a	n/a	TOTAL
	Inkosi Langalibalele	1		DESCRIPTION	Shackle Insulator	Shackle Strap and Bolt	D Bracket (iron) and Bolts	
				ITEM	1	2	8	



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		PUBLIC V	WORKS AND BASIC SERVICES: ELECTRICITY	SERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 6	9		Inkosi Langalibalele
	AI	l quantities	All quantities listed are for estimated and evaluation only	mated an	d evaluation or	γlı
	-18	METAL PAR	BI-METAL PARALLEL GROOVE CONNECTORS (PG CLAMPS)	CONNECT	ORS (PG CLAM	PS)
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
-	Gopher (Overall Diameter: 6mm to 8mm)	ACSR	1000			
2	Mink (Overall Diameter: 10mm to 12mm)	ACSR	1000			
3	Dog (Overall Diameter: 6mm to 8mm)	ACSR	1000			
4	PG Clamps (4mm to 12mm) 250 Amps	EBM	1000			
2	PG Clamps (6mm to 15mm) 300 Amps	EBM	1000			
9	Line Taps 10 mm	EBM	1000			
7	Line Taps 16 mm	EBM	1000			
8	Line Taps 25 mm	EBM	1000			
6	Line Taps 35 mm	EBM	1000			
10	Line Taps 70 mm	EBM	1000			
		TOTAL				

VIIITY	ALIT	RICHY	Inkosi Langalibalele	uation only	INSULATED	PRICE SANS/BSS DETAILS AND MANUFACTURER											
		SERVICES: ELECTI		mated and eval	ASSEMBLY ABC	TINU	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	
VIIIOIDIIIII	INGALIDALE	WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 7	All quantities listed are for estimated and evaluation only	& SUSPENSION ASSEMBLY ABC INSULATED	ESTIMATED ANNUAL REQUIREMENT	1000	1000	1000	1000	1000	1000	2000	2000	2000	1000	
VISONI	(PUBLIC		Il quantities li	LV STRAINING 8	TYPE / EQUIVALENT	EAS 54-10	PA 1500	PAB 1500	ES 54-14	PS 54-50-35	PSB 54-50-35	Airdac	Airdac	ABC	L Shape	TOTAL
			Inkosi Langalibalele	A	ΓN	DESCRIPTION	Strain Assembly 54,6mm to 70mm	Strain Assembly 54,6mm to 70mm	Strain Assembly 25mm to 54mm	Suspension Assembly 35, 50, 54,6 & 70mm	Suspension Assembly Pigtail Type 35, 50, 54,6 & 70mm	Suspension Assembly 25mm to 54,6mm	House Service Strain Assembly 7mm to 19 mm	Pigtail Screw	Pigtail Bolt M16	Insulator Pole Top L Bracket	
						ITEM	1	2	8	4	5	9	7	8	6	10	

			Inkosi Langalibalele	<u>\</u>		SANS/BSS DETAILS AND MANUFACTURER										
	GALIBALELE MUNICIPALITY	ELECTRICITY		ed are for estimated and evaluation only		PRICE										
	LE MU	SERVICES:	80	imated a	T KITS	TINO	Вох	Вох	Вох	Вох	Вох	Вох	Вох	Вох	Вох	
		PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 8	listed are for est	H.V JOINT KITS	ESTIMATED ANNUAL REQUIREMENT	20	20	20	20	20	20	20	20	20	
	INKOSI LAN	PUBLIC W		All quantities list		TYPE	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	Heat Shrink	TOTAL
	***		Inkosi Langalibalele			DESCRIPTION	Joint Kit 16mm to 50mm (PILC 11 Kv)	Joint Kit 50mm to 95mm (PILC 11 Kv)	Joint Kit 95mm to 185mm (PILC 11 Kv)	Joint Kit 185mm to 300mm (PILC 11 Kv)	Joint Kit 16mm to 50mm (XLPE 11 Kv)	Joint Kit 50mm to 95mm (XLPE 11 Kv)	Joint Kit 95mm to 185mm (XLPE 11 Kv)	Joint Kit 185mm to 300mm (XLPE 11 Kv)	Transitional Joint Kit (50mm to 95mm) 11 Kv	
38	Pag					ITEM	1	2	ю	4	5	9	7	8	6	

INKOSI LANGALIBALELE MUNICIPALITY Inkosi Langalibalete	39						
Tarkosi Langalibateta Tarkosi Langalibateta	Paş	***	INKOSI L	ANGALIBALE	ELE MU	NICIPALITY	90
ITEM PESCRIPTION TYPE ESTIMATED	g e		PUBLIC V		SERVICES:	ELECTRICITY	
TERMINATION KITS - OUTDOOR 1 Termination Kit 15mm to 50mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 7 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 7 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 1 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 1 Termination Kit 185mm to 300mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 1 Termination Kit 185mm to 300mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 300mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 300mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 300mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 Box (R.LE 11 Kv) Outdoor 2 Termination Kit 185mm to 185mm Heat Shrink 20 B		Inkosi Langalibalele		ITEM	6		Inkosi Langalibalele
TYPE PRICE		<i>f</i>	II quantities	listed are for est	timated a	nd evaluation o	nly
ITEM DESCRIPTION TYPE ESTIMATED ANNUAL ANNUAL ANNUAL ANNUAL ANNUAL ANNUAL ANNUAL ANNUAL ANDUAGOR TYPE ANNUAL ANDUAGOR Box PRICE 2 Terminations Kits 16mm to 95mm (PILC 11 kv) Outdoor Termination Kit 95mm to 185mm (PILC 11 kv) Outdoor Termination Kit 185mm to 300mm (PILC 11 kv) Outdoor Termination Kit 185mm to 300mm (PILC 11 kv) Outdoor Termination Kit 95mm to 185mm (PILC 11 kv) Outdoor Termination Kit 95mm to 185mm (PILC 11 kv) Outdoor Termination Kit 95mm to 185mm (PILC 11 kv) Outdoor Termination Kit 95mm to 185mm (PILC 11 kv) Outdoor Termination Kit 185mm to 300mm (PILC 11 kv) Outdoor Terminatio			L	ERMINATION KI	ITS - OUT	DOOR	
Terminations Kits 16mm to 50mm (PILC 11 Kv) Outdoor Termination Kit 50mm to 95mm (PILC 11 Kv) Outdoor Termination Kit 185mm to 185mm (PILC 11 Kv) Outdoor Termination Kit 16mm to 50mm (KLPE 11 Kv) Outdoor Termination Kit 50mm to 95mm (XLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm (KLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm (KLPE 11 Kv) Outdoor Termination Kit 185mm to 185mm (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (KLPE 11 Kv) Outdoor	ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	FIND	PRICE	SANS/BSS DETAILS AND MANUFACTURER
2 Termination Kit 50mm to 95mm Heat Shrink 20 (PILC 11 Kv) Outdoor Termination Kit 185mm to 185mm Heat Shrink 20 (PILC 11 Kv) Outdoor Termination Kit 185mm to 300mm Heat Shrink 20 (KLPE 11 Kv) Outdoor Termination Kit 50mm to 95mm Heat Shrink 20 (KLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm Heat Shrink 20 (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm Heat Shrink 20 (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm Heat Shrink 20 (KLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm Heat Shrink 20		Terminations Kits 16mm to 50mm (PILC 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 95mm to 185mm 4 (PILC 11 Kv) Outdoor Termination Kit 185mm to 300mm For Termination Kit 185mm to 50mm For Termination Kit 16mm to 50mm For Termination Kit 50mm to 95mm For Termination Kit 50mm to 95mm For Termination Kit 95mm to 185mm For Termination Kit 95mm to 185mm For Termination Kit 185mm to 300mm For Termination Kit 185mm		Termination Kit 50mm to 95mm (PILC 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 185mm to 300mm (PILC 11 Kv) Outdoor Termination Kit 16mm to 50mm (XLPE 11 Kv) Outdoor Termination Kit 50mm to 95mm (XLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor		Termination Kit 95mm to 185mm (PILC 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 16mm to 50mm (XLPE 11 Kv) Outdoor Termination Kit 50mm to 95mm (XLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor	4	Termination Kit 185mm to 300mm (PILC 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 50mm to 95mm (XLPE 11 Kv) Outdoor Termination Kit 95mm to 185mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor	2	Termination Kit 16mm to 50mm (XLPE 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 95mm to 185mm (XLPE 11 Kv) Outdoor Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor TOTAL	9	Termination Kit 50mm to 95mm (XLPE 11 Kv) Outdoor	Heat Shrink	20	Вох		
Termination Kit 185mm to 300mm Heat Shrink 20 (XLPE 11 Kv) Outdoor TOTAL	7	Termination Kit 95mm to 185mm (XLPE 11 Kv) Outdoor	Heat Shrink	20	Вох		
TOTAL	∞	Termination Kit 185mm to 300mm (XLPE 11 Kv) Outdoor	Heat Shrink	20	Вох		
TOTAL							
			TOTAL				



40 P			NV I SOM			VTI I VOI DI I VOI	
a g e			PUBLIC		SERVICES:	ELECTRICITY	
							L C
		Inkosi Langalibalele		ITEM 10	10		Inkosi Langalibalele
		Ą	II quantitie	All quantities listed are for estimated and evaluation only	imated a	nd evaluation o	γlr
				TERMINATION KITS - INDOOR	(ITS - IND	OOR	
	ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
	1	Terminations Kits 16mm to 50mm (PILC 11 Kv) Indoor	Heat Shrink	20	Вох		
	2	Termination Kit 50mm to 95mm (PILC 11 Kv) Indoor	Heat Shrink	20	Вох		
<u> </u>	3	Termination Kit 95mm to 185mm (PILC 11 Kv) Indoor	Heat Shrink	20	Вох		
	4	Termination Kit 185mm to 300mm (PILC 11 Kv) Indoor	Heat Shrink	20	Вох		
	5	Termination Kit 16mm to 50mm (XLPE 11 Kv) Indoor	Heat Shrink	20	Вох		
	6	Termination Kit 50mm to 95mm (XLPE 11 Kv) Indoor	Heat Shrink	20	Вох		
	7	Termination Kit 95mm to 185mm (XLPE 11 Kv) Indoor	Heat Shrink	20	Вох		
	8	Termination Kit 185mm to 300mm (XLPE 11 Kv) Indoor	Heat Shrink	20	Вох		
			TOTAL	,			

		INKOSI L	INKOSI LANGALIBALELE MUNICIPALITY	LE MU	NICIPALITY	
		PUBLIC WORI	VORKS AND BASIC SERVICES: ELECTRICITY	SERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 11	11		Inkosi Langalibalele
	1	ll quantities	All quantities listed are for estimated and evaluation only	imated a	nd evaluation o	γlγ
	_	11 (11 000 VOLT CONNECTORS & BOOTS	ECTORS &	k BOOTS	
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	FIND	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Rubber Barrier Boots 12 Kv (40mm to 70mm)	Straight	100	Set		
2	Rubber Barrier Boots 12 Kv (50mm to 300mm)	Straight	100	Set		
3	Screened H.V Connectors 12 Kv 250 A (25mm to 95mm)	Elbow	100	Kit		
4	Screened H.V Connectors 12 Kv 400 A (25mm to 95mm)	Elbow	100	Kit		
2	Screened H.V Connectors 12 Kv 400 A (95mm to 240mm)	Elbow	100	Kit		
9	Screened H.V Connectors 12 Kv 250 A (35mm)	Straight	100	Kit		
7	Screened H.V Connectors 12 Kv 250 A (70mm)	Straight	100	Kit		
8	Screened H.V Connectors 12 Kv 630 A (50mm to 95mm)	T Connector	100	Kit		
6	Screened H.V Connectors 12 Kv 630 A (95mm to 240mm)	T Connector	100	Kit		
		TOTAL				

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g e	70	INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MUF	VICIPALITY	
		PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: E	ELECTRICITY	
	Inkosi Langalibalele		ITEM 12	7		Inkosi Langalibalele
		All quantities list	isted are for estir	mated an	ed are for estimated and evaluation only	ΛĮ
		INSOL	JLATION PIERCING CONNECTORS	IG CONNI	ECTORS	
ITEM	DESCRIPTION	TYPE / EQUIVALENT	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Insulation Piercing Connectors (16mm to 95mm)	PC2 - 1	1000	Each		
2	Insulation Piercing Connectors Double Type (25mm to 95mm)	PC3WP2F	1000	Each		
3	Insulation Piercing Connectors Single Type (25mm to 95mm)	PC3WP1F	1000	Each		
4	Insulation Piercing Connectors Single Type (50mm to 185mm)	PC4WP1F	1000	Each		
5	Insulation Piercing Connectors Single Type (16mm to 95mm)	PC1WP1F	1000	Each		
9	Waterproof Connectors for Bare Conductor to Insulating Conductor (35mm to 70mm)	BC2WP1F	1000	Each		
7	Waterproof Connectors for Bare Conductor to Insulating Conductor (35mm to 70mm)	BC2WP1CF	1000	Each		
		TOTAL				

INKOSI LANGALIBALELE MUNICIPALITY PUBLIC WORKS AND BASC SERVICES: ELECTRICITY PUBLIC AND MANUFACTORS - FERRULES (JOINTS) FOR Insulated Joints MIPT 16 1000 Each Public Red Joints MIPT 35 1000 Each Each Public Red Joints MIPT 70-50 1000 Each Each Public Red Joints MIPT 70-50 1000 Each E	43						
Trem Trem Trem Trem Trem	Рая		INKOSI L	ANGALIBALEI	LE MUI	VICIPALITY	
Trace Trac	e		PUBLIC W	ORKS AND BASIC S	ERVICES:	ELECTRICITY	
Name to 95mm		Inkosi Langalibalele		ITEM 1;	6		Inkosi Langalibalele
DESCRIPTION TYPE / EQUIVALENT ESTIMATED ANNUAL REQUIREMENT UNIT PRICE Pre Insulated Joints (16mm to 16mm) MIPT 16 1000 Each PRICE Pre Insulated Joints (16mm to 16mm) MIPT 25-16 1000 Each PRICE Pre Insulated Joints (16mm to 16mm) MIPT 35-16 1000 Each PRICE Pre Insulated Joints (16mm to 25mm) MIPT 35-16 1000 Each PRICE Pre Insulated Joints (16mm) MIPT 70-50 1000 Each PRICE Pre Insulated Joints (16mm) MIPT 70-50 1000 Each PRICE Pre Insulated Joints (16mm) MIPT 95-30 1000 Each PRICE Pre Insulated Joints (16mm) MIPT 95-35 1000 Each PRICE Pre Insulated Joints (16mm to 70mm) MIPT 95-35 1000 Each PRICE Pre Insulated Joints (16mm to 35mm) MIPT 95-35 1000 Each PRICE Pre Insulated Joints (16mm to 35mm) MIPT 95-35 1000 Each PRICE			All quantities	listed are for estir	mated an	id evaluation on	ly
DESCRIPTION TYPE / EQUIVALENT ESTIMATED ANNUAL ANNUAL ANNUAL (16mm to 16mm) UNIT PREQUIREMENT PRICE ANNUAL (16mm to 16mm) Pre Insulated Joints (15mm to 25mm) MJPT 25-16 1000 Each Each Each Each Pre Insulated Joints (35mm to 25mm) MJPT 35-16 1000 Each Each Each Each Pre Insulated Joints (70mm to 35mm) MJPT 70-50 1000 Each Each Each Each Pre Insulated Joints (70mm to 35mm) MJPT 70-50 1000 Each Each Each Each Each Pre Insulated Joints (95mm to 35mm) MJPT 95-35 1000 Each Each Each Each Each Pre Insulated Joints (95mm to 35mm) MJPT 95-35 1000 Each Each Each Each			INSULATING P	IERCING CONNEC	CTORS - F	ERRULES (JOIN	rs)
Pre Insulated Joints MJPT 16 1000 (16mm to 16mm) Pre Insulated Joints MJPT 25-16 1000 (25mm to 16mm) MJPT 35-16 1000 Pre Insulated Joints MJPT 35-16 1000 Pre Insulated Joints MJPT 70-50 1000 Pre Insulated Joints MJPT 70-50 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-35 1000 Pre Insulated Joints MJPT 95-35 1000 Pre Insulated Joints MJPT 95-35 1000	ITEM	DESCRIPTION	TYPE / EQUIVALENT		TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
Pre Insulated Joints NJPT 25-16 1000 (25mm to 16mm) NJPT 35-16 1000 Pre Insulated Joints MJPT 35 1000 Pre Insulated Joints MJPT 70-50 1000 Pre Insulated Joints MJPT 70 1000 Pre Insulated Joints MJPT 95 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-35 1000	1	Pre Insulated Joints (16mm to 16mm)	MJPT 16	1000	Each		
Pre Insulated JointsMJPT 35-161000Pre Insulated JointsMJPT 351000Pre Insulated JointsMJPT 70-501000Pre Insulated JointsMJPT 701000Pre Insulated JointsMJPT 701000Pre Insulated JointsMJPT 951000Pre Insulated JointsMJPT 95-701000Pre Insulated JointsMJPT 95-701000Pre Insulated JointsMJPT 95-351000Pre Insulated JointsMJPT 95-351000	2	Pre Insulated Joints (25mm to 16mm)	MJPT 25-16	1000	Each		
Pre Insulated Joints MJPT 35 1000 (35mm to 35mm) MJPT 70-50 1000 Pre Insulated Joints MJPT 70 1000 Pre Insulated Joints MJPT 95 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-35 1000 Pre Insulated Joints MJPT 95-35 1000	3	Pre Insulated Joints (35mm to 25mm)	MJPT 35-16	1000	Each		
Pre Insulated Joints MJPT 70-50 1000 Pre Insulated Joints MJPT 70 1000 Pre Insulated Joints MJPT 95 1000 Pre Insulated Joints MJPT 95-70 1000 Pre Insulated Joints MJPT 95-35 1000 Pre Insulated Joints MJPT 95-35 1000 Pre Insulated Joints MJPT 95-35 1000	4	Pre Insulated Joints (35mm to 35mm)	MJPT 35	1000	Each		
Pre Insulated JointsMJPT 701000(70mm to 70mm)MJPT 951000Pre Insulated JointsMJPT 95-701000Pre Insulated JointsMJPT 95-701000Pre Insulated JointsMJPT 95-351000Pre Insulated JointsMJPT 95-351000	5	Pre Insulated Joints (70mm to 35mm)	MJPT 70-50	1000	Each		
Pre Insulated JointsMJPT 951000(95mm to 95mm)MJPT 95-701000Pre Insulated JointsMJPT 95-351000Pre Insulated JointsMJPT 95-351000	9	Pre Insulated Joints (70mm to 70mm)	MJPT 70	1000	Each		
Pre Insulated Joints MJPT 95-70 1000 (95mm to 70mm) Pre Insulated Joints MJPT 95-35 1000 TOTAL	7	Pre Insulated Joints (95mm to 95mm)	MJPT 95	1000	Each		
Pre Insulated Joints MJPT 95-35 1000 (95mm to 35mm) TOTAL	8	Pre Insulated Joints (95mm to 70mm)	MJPT 95-70	1000	Each		
TOTAL	6	Pre Insulated Joints (95mm to 35mm)	MJPT 95-35	1000	Each		
			TOTAL				

	Inkosi Langalibalele	ylv		SANS/BSS DETAILS AND MANUFACTURER							
VICIPALITY ELECTRICITY		d evaluation or	.UGS	PRICE							
ERVICES: E	et	nated an	IMETAL L	UNIT	Each	Each	Each	Each	Each	Each	
INKOSI LANGALIBALELE MUNICIPALITY PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 14	All quantities listed are for estimated and evaluation only	PRE INSULATED BIMETAL LUGS	ESTIMATED ANNUAL REQUIREMENT	1000	1000	1000	1000	1000	1000	
INKOSI LA PUBLIC W		All quantities l	Ь	TYPE / EQUIVALENT	CPTAU-16	CPTAU-25	CPTAU-35	CPTAU-54	CPTAU-70	CPTAU-95	TOTAL
	Inkosi Langalibalele			DESCRIPTION	Pre Insulated Bimetal Lugs 16mm	Pre Insulated Bimetal Lugs 25mm	Pre Insulated Bimetal Lugs 35mm	Pre Insulated Bimetal Lugs 54.6mm	Pre Insulated Bimetal Lugs 70mm	Pre Insulated Bimetal Lugs 95mm	
				ITEM	1	2	3	4	5	9	
a g <u>e</u>											

Раб		INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MUI	VICIPALITY	
		PUBLIC WO	ORKS AND BASIC SERVICES: ELECTRICITY	ERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 15	LO.		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated ar	id evaluation or	ly
		ALUMINIUM	_	I FERRUL	COMPRESSION FERRULES UP TO 33KV	
ITEM	DESCRIPTION	TYPE / EQUIVALENT	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Aluminium Compression Ferrules 16mm	XG8BM-16	1000	Each		
2	Aluminium Compression Ferrules 25mm	XG8BM-25	1000	Each		
3	Aluminium Compression Ferrules 35mm	XG8BM-35	1000	Each		
4	Aluminium Compression Ferrules 70mm	XG8BM-70	1000	Each		
2	Aluminium Compression Ferrules 95mm	XG8BM-95	1000	Each		
9	Aluminium Compression Ferrules 120mm	XG8BM-120	1000	Each		
7	Aluminium Compression Ferrules 240mm	XG8BM-240	1000	Each		
∞	Uninsulated Neutral Joint 35mm	MJ 35N	500	Each		
6	Uninsulated Neutral Joint 50mm	MJ 50N	500	Each		
		TOTAL				

		INKOSI LA	LANGALIBALELE MUNICIPALITY	LE MU	NICIPALITY	
		PUBLIC W	WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 16	9		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated ar	nd evaluation on	Ιγ
		ALUMINI	ALUMINIUM TRIANGULAR LUGS AND FERRULES	LUGS A	ND FERRULES	
ITEM	DESCRIPTION	TYPE / EQUIVALENT	ESTIMATED ANNUAL REQUIREMENT	TINU	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Aluminium Triangular Lugs 70mm with 12mm D/A Stud size	AL70-12A4	1000	Each		
2	Aluminium Triangular Lugs 95mm with 12mm D/A Stud size	AL95-12A4	1000	Each		
3	Aluminium Triangular Lugs 120mm with 12mm D/A Stud size	AL120-12A4	1000	Each		
4	Aluminium Triangular Lugs 240mm with 12mm D/A Stud size	AL240-12A4	1000	Each		
2	Aluminium Triangular Ferrules 70mm with 12mm D/A Stud size	AL704C	1000	Each		
9	Aluminium Triangular Ferrules 95mm with 12mm D/A Stud size	AL954C	1000	Each		
7	Aluminium Triangular Ferrules 120mm with 12mm D/A Stud size	AL1204C	1000	Each		
8	Aluminium Triangular Ferrules 240mm with 12mm D/A Stud size	AL2404C	200	Each		
6	Hand Operated Hydraulic Crimping Tool, interchangable dies for tubular lugs 6mm to 300mm	n/a	2	Each		
10	Die selection for Aluminium and Copper 6mm to 300mm	n/a	5	Sets		
		TOTAL				

		Inkosi Langalibalele	Α	FUSES	SANS/BSSDETAILS AND MANUFACTURE													
CIPALITY	CTRICITY		evaluation only	OR DROPOUT	PRICE													
ELE MUNIC	SERVICES: ELE	17	timated and e	FUSE LINKS FC	UNIT	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	
INKOSI LANGALIBALELE MUNICIPALITY	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 17	s listed are for estimated and evaluation only	JSE CUTOUTS & FUSE LINKS FOR DROPOUT FUSES	ESTIMATED ANNUAL REQUIREMENT	200	200	005	200	200	200	200	200	200	200	200	200	
INKOSI	PUBLIC		All quantities	M.V DROPOUT FUS	TYPE / EQUIVALENT	NCX 11/ 22	Туре К	Туре К	Туре К	Туре	Туре Т	Туре Т	Туре Т	Туре Т	Туре Т	Туре Т	Туре Т	TOTAL
		Inkosi Langalibalele		M	DESCRIPTION	MV Dropout fuse Cutouts 11kV	Fuse Links for Dropout Fuses 5 Amps	Fuse Links for Dropouts Fuses 10 Amps	Fuse Links for Dropout fuses 20 Amps	Fuse Links for Dropout Fuses	Fuse Links for Dropout Fuses 5 Amps	Fuse Links for Dropout Fuses 10Amps	Fuse Links for Dropout Fuses	Fuse Links for Dropouts Fuses 30 Amps	Fuse Link Holder	Fuse Link	Dropout Fuse Mount	
					ITEM	1	2	3	4	5	9	7	8	6	10	11	12	

	Inkosi Langalibalele	ylv	11 KV	SANS/BSS DETAILS AND MANUFACTURER			
VICIPALITY ELECTRICITY		d evaluation or	ING ARRESTORS DISTRIBUTION CLASS 11 KV	PRICE			
ERVICES: 1	8	nated an	S DISTR	UNIT	Each	Each	
NGALIBALELE MUNICIPALITY ORKS AND BASIC SERVICES: ELECTRICITY	ITEM 18			ESTIMATED ANNUAL REQUIREMENT	200	200	
INKOSI LAN PUBLIC WOR		All quantities l	M.V JOSLYN LIGHTN	TYPE / EQUIVALENT	ZNP0012-00	ZIP-0012-1231	TOTAL
	Inkosi Langalibalele		N.W	DESCRIPTION	M.V Joslyn Lightning Arrestors 5kA, 12 kV Rating	Joslyn Lightning Arrestors Station Class 12 kV, Polymer	
				ITEM	1	2	

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		PUBLIC WO	ORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: I	ELECTRICITY	
	Inkosi Langalibalele		ITEM 19	6		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated an	d evaluation on	ly
	OVERHEAD STE	STEEL HARDWARE		MER PLA T	FORM / STRUT	& TRANSFORMER PLATFORM / STRUT POLE BRACKETS
ITEM	DESCRIPTION	TYPE / EQUIVALENT	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Stay Strap	EBM 3032	1000	Each		
2	Wire Rope Thimble	EBM 3026	1000	Each		
က	H.V Stay Assembly Complete Standard Eskom H.V Specs	0163402	200	Set		
4	L. V Stay Assembly Complete Standard Eskom L. V Specs	0163396	200	Set		
5	Adjustable Stay Rods 300mm x 300mm x 6mm	0163417	200	Set		
9	Transformer Platform Complete, Suitable for Transformers up to 250 Kva	n/a	100	Set		
7	Strut Pole Bracket Complete Eskom Strut	0164307	200	Set		
∞	Hinge type Strut Pole Bracket Light Duty	Strut BKT	200	Set		
6	Insulator Pole Top Bracket	L Bracket	200	Each		
		TOTAL				

40		Inkosi Langalibalele	OWAPAWA UMASANI TIMANANI TIMANANI TIMANANI	λĮ		SANS/BSS DETAILS AND MANUFACTURER												
VICIPALITY	ELECTRICITY			id evaluation or	ESSORIES	PRICE												
E MU	ERVICES: I			nated an	S & ACCI	UNIT	Each	Each	Each	Rolls	Rolls	Box/100	Box/100	Each	Each	Each	Each	
KOSI LANGALIBALELE MUNICIPALITY	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 20		All quantities listed are for estimated and evaluation only	OVERHEAD LINE TOOLS & ACCESSORIES	ESTIMATED ANNUAL REQUIREMENT	20	50	200	200	200	2000	2000	50	200	200	100	
INKOSI LA	PUBLIC WO			All quantities li	OVER	TYPE / EQUIVALENT	Chain	Rope	NS 1000	Strapping	Strapping	Buckles	Buckles	n/a	n/a	n/a	n/a	TOTAL
***		Inkosi Langalibalele	(OCAL MUNCPALITY-IMKHANDLU WENDAWO			DESCRIPTION	Linesmen Safety Belts, padded back strip for kidney support, fall arrest harness	Linesmen Safety Belts, padded back strip for kidney support, fall arrest harness	Nylon Slings for installation of ABC	Bandit Strapping 12,70mm x 0,43mm	Bandit Strapping 19,05mm x 2,50mm	Bandit Buckles 12,70mm	Bandit Strapping 19,05mm	Bandit Strapping Machine	Eye Nuts M16	Eye Nuts M20	Phase Seperators for ABC, Cam Action and Wedge Action	
						ITEM	τ	2	m	4	ī	9	7	8	6	10	11	



		Inkosi Langalibalele	ıly		SANS/BSS DETAILS AND MANUFACTURER				
VICIPALITY	ELECTRICITY		ted are for estimated and evaluation only	IPS	PRICE				
E MU	ERVICES:		nated ar	ID CLAN	UNIT	Each	Each	Each	
INKOSI LANGALIBALELE MUNICIPALITY	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ITEM 21	sted are for estir	EARTH RODS AND CLAMPS	ESTIMATED ANNUAL REQUIREMENT	200	200	200	
INKOSI LA	PUBLIC W(All quantities list		TYPE	SABS APPROVED ONLY	SABS APPROVED ONLY	SABS APPROVED ONLY	TOTAL
		Inkosi Langalibalele			DESCRIPTION	Earth Rod (M16 x 1500mm) SABS Approved Earthing Copper Rods, NOT TINTED	Earth Rod Coupler 16mm Thread	Earth Rod Clamps (Brass forged)	
					ITEM	1	2	3	



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	***	INKOSI L	SI LANGALIBALELE MUNICIPALITY	E MU	VICIPALITY	90
		PUBLIC M	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: I	ELECTRICITY	
	Inkosi Langalibalele		ITEM 22	2		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated an	id evaluation or	lly
			CABLE GLANDS	ANDS		
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
⊣	Metal Glands including Shroud No. 0	Metal	1000	Each		
2	Metal Glands including Shroud No. 1	Metal	1000	Each		
က	Metal Glands including Shroud No. 2	Metal	1000	Each		
4	Metal Glands including Shroud No. 3	Metal	1000	Rolls		
5	Metal Glands including Shroud No. 4	Metal	1000	Rolls		
9	Metal Glands including Shroud No. 5	Metal	1000	Box/100		
7	Metal Glands including Shroud No. 6	Metal	1000	Box/100		
8	Metal Glands including Shroud No.	Metal	1000	Each		
6	PVC Glands including Shroud No. 0	ϽΛd	1000	Each		
10	PVC Glands including Shroud No. 1	ϽΛd	1000	Each		
11	PVC Glands including Shroud No. 2	DVC	1000	Each		
		TOTAL				

	910	INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MU	VICIPALITY	The state of the s
	出	PUBLIC WO	ORKS AND BASIC SERVICES: ELECTRICITY	SERVICES: 1	LECTRICITY	***
	Inkosi Langalibalele Iocai murepalityumeninu		ITEM 23	<u> </u>		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated an	d evaluation or	ly
)1	LOW VOLTAGE R	RESIN JOINT KITS AND JOINTING MATERIAL	S AND JO	INTING MATER	IAL
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	FIND	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	1,5mm to 4mm 2/4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
2	4mm to 10mm 2/4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
3	10mm to 16mm 2/4 Core 1000 Volt Al/Cu Cable	Resin	700	Each		
4	25mm to 50mm 2/4 Core 1000 Volt Al/Cu Cable	Resin	700	Each		
2	70mm 4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
9	95mm 4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
7	120mm 4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
8	185mm 4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
6	240mm 4 Core 1000 Volt Al/Cu Cable	Resin	200	Each		
		TOTAL				



54							
Ра́́		***	INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MUR	VICIPALITY	
g e		光光	PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: F	LECTRICITY	
		Inkosi Langalibalele (осы микемиру ченемо		ITEM 24	4		Inkosi Langalibalele
			All quantities	All quantities listed are for estimated and evaluation only	mated an	d evaluation or	ly
		TOM	LOW VOLTAGE HEAT S		KITS AN	HRINK JOINT KITS AND JOINTING MATERIAL	TERIAL
ITEM	Σ	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
Н		1,5mm to 4mm 2/4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
2		4mm to 10mm 2/4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
3		10mm to 16mm 2/4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
4		25mm to 50mm 2/4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
2		70mm 4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
9		95mm 4 Core 1000 Volt AI/Cu Cable	Heat Shrink	200	Each		
7		120mm 4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
8		185mm 4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
6		240mm 4 Core 1000 Volt Al/Cu Cable	Heat Shrink	200	Each		
			TOTAL				

	90	INKOSI LA	KOSI LANGALIBALELE MUNICIPALITY	E MU	VICIPALITY	
		PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES:	ELECTRICITY	
	Inkosi Langalibalele		ITEM 25	ь		Inkosi Langalibalele
		All quantities l	uantities listed are for estimated and evaluation only	mated an	ıd evaluation on	ly
		HEAT	HEAT SHRINK JOINT KITS AND TUBING	(ITS AND	TUBING	
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	End Caps 4mm² to 25mm²	Heat Shrink	200	Each		
2	End Caps 35mm² to 70mm²	Heat Shrink	200	Each		
3	End Caps 95mm² to 185mm²	Heat Shrink	200	Each		
4	End Caps 185mm² to 240mm²	Heat Shrink	200	Each		
2	Heat Shrink Tubing 20mm² Red	Heat Shrink	50	Meters		
9	Heat Shrink Tubing 20mm² White	Heat Shrink	50	Meters		
7	Heat Shrink Tubing 20mm² Blue	Heat Shrink	50	Meters		
8	Heat Shrink Tubing 20mm² Black	Heat Shrink	50	Meters		
6	Heat Shrink Tubing 25mm² Red	Heat Shrink	50	Meters		
10	Heat Shrink Tubing 25mm² White	Heat Shrink	50	Meters		
11	Heat Shrink Tubing 25mm² Blue	Heat Shrink	50	Meters		
12	Heat Shrink Tubing 25mm² Black	Heat Shrink	50	Meters		
		TOTAL				

	***	INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MUR	NICIPALITY	40
	光光	PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: F	LECTRICITY	
	Inkosi Langalibalele		ITEM 26	9		Inkosi Langalibalele
	August and the second s	All auantities l	All quantities listed are for estimated and evaluation only	mated an	d evaluation or	A
	INDI	INDENT CRIMPING	IMPING AND TORQUES SHEAR FERRULES BI-METALLIC	SHEAR FI	RRULES BI-ME	TALLIC
ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	UNIT	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	1,5mm² 10 Amp per box of 100	SABS APPROVED	50	Boxes		
2	2,5mm² 10 Amp per box of 100	SABS APPROVED	50	Boxes		
3	4mm² 15 Amp per box of 100	SABS APPROVED	50	Boxes		
4	10mm² 50 Amp per box of 100	SABS APPROVED	50	Boxes		
5	16mm² 80 Amp per box of 100	SABS APPROVED	50	Boxes		
9	25mm² 100 Amp per box of 100	SABS APPROVED	50	Boxes		
7	Torque Shear Bi-Metallic 16mm² to 35mm² Stranded Conductor	Round	500	Each		
8	Torque Shear Bi-Metallic 50mm² to 95mm² Stranded Conductor	Segmented	500	Each		
6	Torque Shear Bi-Metallic 120mm² to 185mm² Stranded Conductor	Segmented	200	Each		
10	Torque Shear Bi-Metallic 185mm² to 300mm² Stranded Conductor	Round	500	Each		
		TOTAL				



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		INKOSI LA	I LANGALIBALELE MONICIPALITY	LE MO	VICIPALII Y	
		PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: E	LECTRICITY	
	Inkosi Langalibalele		ITEM 27	7		Inkosi Langalibalele
		All quantities	All quantities listed are for estimated and evaluation only	mated an	d evaluation or	λĮ
		TORQ	TORQUES SHEAR FERRULES BI-METALLIC	ULES BI-	METALLIC	
ITEM	DESCRIPTION	ТҮРЕ	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	Torque Shear Bi-Metallic 16mm² to 95mm² Stranded Conductor	Round	200	Each		
5	Torque Shear Bi-Metallic 120mm² to 300mm² Stranded Conductor	Round	200	Each		
т	Torque Shear Bi-Metallic 25mm² to 70mm² Segmented Conductor	Segmented	200	Each		
4	Torque Shear Bi-Metallic 95mm² to 185mm² Segmented Conductor	Segmented	200	Each		
2	Torque Shear Bi-Metallic 185mm² to 300mm² Segmented Conductor	Segmented	200	Each		
9	Torque Shear Bi-Metallic 25mm² to 70mm² Segmented Solid Conductor	Segmented Solid	200	Each		
7	Torque Shear Bi-Metallic 95mm² to 185mm² Segmented Solid Conductor	Segmented Solid	200	Each		
8	Torque Shear Bi-Metallic 185mm² to 300mm² Segmented Solid Conductor	Segmented Solid	200	Each		
		TOTAL				



		INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	LE MU	VICIPALITY	(A)
		PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES: I	ELECTRICITY	
	Inkosi Langalibalele		ITEM 28	∞		Inkosi Langalibalele
		All quantities l	All quantities listed are for estimated and evaluation only	mated an	id evaluation or	ly
		INDE	INT CRIMPING LUGS BI-METALLIC	JGS BI-M	ETALLIC	
ITEM	DESCRIPTION	ТҮРЕ	ESTIMATED ANNUAL REQUIREMENT	TIND	PRICE	SANS/BSS DETAILS AND MANUFACTURER
1	1,5mm² X 5mm per box of 100	SABS APPROVED	50	Boxes		
2	2,5mm² x 5mm per box of 100	SABS APPROVED	50	Boxes		
3	4mm² x 5mm per box of 100	SABS APPROVED	50	Boxes		
4	4mm² x 8mm per box of 100	SABS APPROVED	20	Boxes		
5	4mm² x 10mm per box of 100	SABS APPROVED	50	Boxes		
9	6mm² x 4mm per box of 100	SABS APPROVED	50	Boxes		
7	10mm² x 6mm per box of 100	SABS APPROVED	50	Each		
8	16mm² x 6mm per box of 100	SABS APPROVED	50	Each		
6	16mm² x 10mm per box of 100	SABS APPROVED	50	Each		
10	16mm² x 12mm per box of 100	SABS APPROVED	50	Each		
		TOTAL				

62		_					
Page			INKOSI LA	INKOSI LANGALIBALELE MUNICIPALITY	E MUI	VICIPALITY	
			PUBLIC W	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	ERVICES:	ELECTRICITY	
		Inkosi Langalibalele		ITEM 29	6		Inkosi Langalibalele
			All quantities l	All quantities listed are for estimated and evaluation only	nated ar	d evaluation on	ly
		NI	INDENT CRIMPING		S SHEAR	AND TORQUES SHEAR LUGS BI-METALLIC	LLIC
I	ITEM	DESCRIPTION	TYPE	ESTIMATED ANNUAL REQUIREMENT	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
	1	16mm² X 16mm per box of 100	SABS APPROVED	50	Boxes		
	2	25mm² x 8mm per box of 100	SABS APPROVED	50	Boxes		
	3	25mm² x 10mm per box of 100	SABS APPROVED	50	Boxes		
	4	25mm² x 12mm per box of 100	SABS APPROVED	50	Boxes		
	5	16mm² - 35mm² Round Conductor	Round	200	Each		
1	9	50mm² - 95mm² Segmented Conductor	Segmented	500	Each		
	7	120mm² - 185mm² Segmented Conductor	Segmented	200	Each		
·	8	185mm² - 240mm² Segmented Conductor	Segmented	500	Each		
			TOTAL				

	INKO	OSI LANGA	INKOSI LANGALIBALELE MUNICIPALITY	MUNIC	CIPALITY	90
	and .	LIC WORKS AN	PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY	CES: ELI	CTRICITY	***
	Inkosi Langalibalele		ITEM 30			Inkosi Langalibalele
	All qua	ntities listed ar	All quantities listed are for estimated and evaluation only	d and ev	aluation onl	Y
			CIRCUIT BREAKERS	EAKERS		
ITEM	DESCRIPTION	ТҮРЕ	ESTIMATED ANNUAL REQUIREMEN T	TINO	PRICE	SANS/BSS DETAILS AND MANUFACTURER
₽	5 Amp Single phase	SABS Approved	20	each		
2	10 Amp Single phase	SABS Approved	20	each		
3	20 Amp Single phase	SABS Approved	20	each		
4	63 Amp Single phase Orange toggle SABS Approved	SABS Approved	50	each		
2	63 Amp Three phase Orange toggle SABS Approved	SABS Approved	50	each		
9	80 Amp Single phase Orange toggle SABS Approved	SABS Approved	50	each		
7	80 Amp Three phase Orange toggle SABS Approved	SABS Approved	50	each		
∞	100 Amp Three phase	SABS Approved	50	each		
6	150 Amp Three phase	SABS Approved	50	each		
10	200 Amp Three phase	SABS Approved	10	each		
11	250 Amp Three phase	SABS Approved	10	each		
12	300 Amp Three phase	SABS Approved	10	each		
13	600 Amp Three phase	SABS Approved	10	each		
14	800 Amp Three phase	SABS Approved	10	each		
		TOTAL				

ESCALATION:	
Fixed Price: Y	ES / NO
ADJUDICATION:	
It is anticipated that the R50,000,000.00, hence	e total value of goods to be procured over a three (3) year period will be less than the 80/20 rule will be applied.
80% - Price 20% - Preference	
PROPOSED DELIVERY	Y SCHEDULE:
For purposes of this sec in respect of the item in	ction, the prospective Bidder is required to indicate to the Municipality the delivery time question.
D	elivery
delivery to which it will	section, the Bidder understands and accepts that the time provided is the time for be bound. Failure to comply with the time provided will result in penalties being with Clause 22 of the General Conditions of Contract.



Initial_____

INKOSI LANGALIBALELE MUNICIPALITY

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

TECHNICAL SPECIFICATION (SECTION 2)



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

TECHNICAL SPECIFICATION: SECTION 2 - SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT

SEIFSA indices and weighting to be provided where prices are not fixed

ITEM	DESCRIPTION	PAGE
1	Pole Mounted CDU Boxes – Circuit Breaker Only	
2	Pole Mounted CDU Boxes – Meters	
3	Mini-Substations – 11/6.6kv Dual Ratio	
4	Ring Main Units	
5	Wooden Transmission Poles	
6 A	Tubular Steel Transmission Poles	
6 B	Tubular Steel Street Light Poles with 3m Out Reach	
7 A - F	High Pressure Sodium Luminaires - 70w, 150w and 250w	
8 A - J	Transformers – Dual Ratio 11/6.6kv – 100, 200, 315, 400 & 500kva	
9	KWH Meter – Electronic	
10 A - E	Prepaid Meters	
11 A	Single Phase – Prepayment Ready Boards	
12	Aluminium Stranded 11/6.6kv 3 Core – 300mm ²	
13	Copper Stranded 11/6.6kv 3 Core – 185mm²	
14	Aluminium Stranded 11/6.6kv 3 Core – 150 mm ²	
15	Copper Stranded 11/6.6kv 3 Core – 95 mm²	
16	Aluminium Stranded 11/6.6kv 3 Core – 70 mm ²	
17	Copper Stranded 11/6.6kv 3 Core – 50 mm ²	
18	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 185 mm ²	
19	Copper Stranded Conductors 600 /1100 Volt 4 Core – 120 mm ²	
20	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 95 mm²	
21	Copper Stranded Conductors 600 /1100 Volt 4 Core – 70 mm ²	
22	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 70 mm ²	
23	Copper Stranded Conductors 600 /1100 Volt 4 Core – 50 mm ²	
24	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 50 mm ²	
25	Copper Stranded Conductors 600 /1100 Volt 4 Core – 35 mm ²	
26	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 35 mm²	
27	Copper Stranded Conductors 600 /1100 Volt 4 Core – 25 mm²	
28	Copper Stranded Conductors 600 /1100 Volt 12 Core – 4 mm²	
29	Copper Stranded Conductors 600 /1100 Volt 4 Core – 2.5 mm ²	
30	Copper Stranded Conductors 600 /1100 Volt 4 Core – 16 mm ²	
31	Copper Stranded Conductors 600 /1100 Volt 2 Core – 16 mm²	
32	Copper Stranded Conductors 600 /1100 Volt 4 Core – 6 mm ²	
33	Aluminium Steel Cored Bare Overhead Conductors – Hare – 72 mm ²	
34	Aluminium Steel Cored Bare Overhead Conductors – Mink – 66 mm ²	
35	Aluminium Steel Cored Bare Overhead Conductors – Squirrel – 11 mm ²	
<u> </u>	I street	I



36	Medium Voltage ABC – 95 mm²	
37	Medium Voltage ABC – 50 mm²	
,	Low voltage ABC 35M	
	Low voltage 70 mm	
	Single Phase ABC 35 mm ²	
38	Low Voltage ABC – 95 mm ²	
39	Low Voltage ABC – 50 mm²	
40	Airdac – 10 mm²	
41 A - D	Glass Fibre LV Kiosk (Service Boxes)	
42 A – H	LED Street Light – 150w High Pressure Sodium & 250w High	
	Pressure Sodium Replacement	
43 A – D	LED Street Light – 70w High Pressure Sodium & 125w Mercury	
	Vapour Replacement	
44 A	LED Post to Replacement – 125w Mercury Vapour Replacement	
45 A – D	LED Fluorescent Panel	
46 A - C	Smart Metering	
47	Tiger unit medium voltage	
	120EFMA: 63 Amps,80 Amps,100 Amps	
48	Robots controller Units	
49	Crystilline silica gel	
50.	Streetlight materials	
	Daynight switches , sensors , contactors	
51	House wires: Red, white, Blue, Black	
52	Christmas Decorations	

INKOSI LANGALIBALELE MUNICIPALITY

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

PRICING SCHEDULE (SECTION 2)

INKOSI LANGALIBALELE LOCAL MUNICIPALITY



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

PRICING SCHEDULE: SECTION 2 - SUPPLY AND DELIVERY OF ELECTRICAL EQUIPMENT

SEIFSA indices and weighting to be provided where prices are not fixed. ALL PRICES TO INCLUDE VAT

ITEM	DESCRIPTION	PRICE
1 A - C	Pole Mounted CDU Boxes – Circuit Breaker Only	R
	Allbro boxes	
2 A - B	Pole Mounted CDU Boxes – Meters	R
	FSJ boxes 450, 750	
3 A - J	Mini-Substations – 11/6.6kv Dual Ratio	R
4	Ring Main Units	R
5 A - C	Wooden Transmission Poles	R
6 A	Tubular Steel Transmission Poles	R
6 B	Tubular Steel Street Light Poles with 3m Out Reach	R
7 A - F	High Pressure Sodium Luminaires - 70w, 150w and 250w	R
8 A - J	Transformers – Dual Ratio 11/6.6kv – 100, 200, 315, 400 & 500kva	R
9	KWH Meter – Electronic	R
10 A - E	Prepaid Meters	R
11 A	Single Phase – Prepayment Ready Boards	R
12	Aluminium Stranded 11/6.6kv 3 Core – 300mm ²	R
13	Copper Stranded 11/6.6kv 3 Core – 185mm²	R
14	Aluminium Stranded 11/6.6kv 3 Core – 150 mm ²	R
15	Copper Stranded 11/6.6kv 3 Core – 95 mm²	R
16	Aluminium Stranded 11/6.6kv 3 Core – 70 mm²	R
17	Copper Stranded 11/6.6kv 3 Core – 50 mm²	R
18	Aluminium Solid Conductors 600 /1100 Volt 4 Core –	R
	185 mm ²	
19	Copper Stranded Conductors 600 /1100 Volt 4 Core – 120 mm ²	R
20	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 95 mm ²	R
21	Copper Stranded Conductors 600 /1100 Volt 4 Core – 70 mm ²	R
22	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 70 mm ²	R
23	Copper Stranded Conductors 600 /1100 Volt 4 Core – 50 mm ²	R
24	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 50 mm ²	R
25	Copper Stranded Conductors 600 /1100 Volt 4 Core – 35 mm ²	R
26	Aluminium Solid Conductors 600 /1100 Volt 4 Core – 35 mm ²	R
27	Copper Stranded Conductors 600 /1100 Volt 4 Core – 25 mm ²	R
28	Copper Stranded Conductors 600 /1100 Volt 7 Core – 2.5 mm²	R
29	Copper Stranded Conductors 600 /1100 Volt 4 Core – 2.5 mm²	R
30	Copper Stranded Conductors 600 /1100 Volt 1 Core – 16 mm²	R
31	Copper Stranded Conductors 600 /1100 Volt 2 Core – 16 mm²	R
32	Copper Stranded Conductors 600 /1100 Volt 4 Core – 16 mm²	R
33	Aluminium Steel Cored Bare Overhead Conductors – Hare – 72 mm ²	R
34	Aluminium Steel Cored Bare Overhead Conductors – Mink – 66 mm ²	R
35	Aluminium Steel Cored Bare Overhead Conductors – Squirrel – 11	R
	mm ²	



36	Medium Voltage ABC – 95 mm²	R
37	Medium Voltage ABC – 50 mm²	R
38	Low Voltage ABC – 95 mm ²	R
39	Low Voltage ABC – 50 mm ²	R
40	Airdac – 10 mm²	R
41 A - D	Glass Fibre LV Kiosk (Service Boxes)	R
42 A – H	LED Street Light – 150w High Pressure Sodium & 250w High	R
	Pressure Sodium Replacement	
43 A – D	LED Street Light – 70w High Pressure Sodium & 125w Mercury	R
	Vapour Replacement	
44 A	LED Post to Replacement – 125w Mercury Vapour Replacement	R
45 A – D	LED Fluorescent Panel	R
46 A - C	Smart Metering	R
47	Tiger unit medium voltage	R
	120EFMA: 63 Amps,80 Amps,100 Amps	R
48	Robots controller Units	R
49	Crystilline silica gel	R
50.	Streetlight materials	R
	Daynight switches , sensors , contactors	R
51	House wires: Red, white, Blue, Black	R
52	Christmas Decorations	R

TOTAL PRICE SECTION 3:	R
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Bidder is required to complete and submit pricing for minimum of 90% of all items listed above. The price must be the total for all items on the list for a particular range.

ITEM 1: POLE MOUNTED CDU BOXES - CIRCUIT BREAKER ONLY

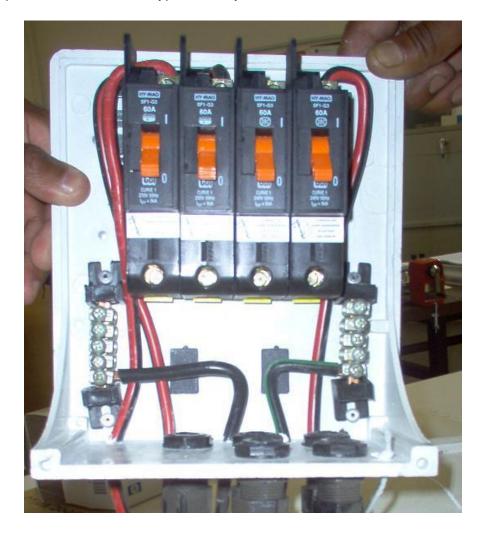
Pole mounted CDU box for the housing of customer circuit breakers only.

CONTAINING:

- Earth and neutral busbars with all the necessary connectors.
- Clip tray suitable for CBI breakers.
- Orange toggle curve 1- 5kA CBI.
- Breaker (60 Amp) 6 way 6 breakers; 4 way 4 breakers, 2 way 2 breakers.
- Neutral and Earth 16 mm² PVC (1.5 meter) tails.
- Phase Tails 16 mm² PVC (1.5 meter) tails, 2 Way 1 Phase, 4 Way and 6 Way 3 phases.
- UV stabilized glands (Glass filled nylon) (No 1) Quantity equal to the unit size i.e. 4 Way will have 4 glands.

DIAGRAM

The picture below shows a typical 4 Way unit.





Initial

PRICING

Sub-Item Number	Description	Price Each	VAT	TOTAL
1. A	2 Way			
1. B	4 Way			
1. C	6 Way			
TOTAL PRICE Total price to be used on pricing schedule for Pricing evaluation				

SAMPLE:

Bidders are required to submit a clearly marked (supplier name, item number), complete sample of Item 1.C – 6 Way Pole Mounted CDU Box for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closing of the Bid. Failure to submit SANS approved samples will render the Bid submission invalid. Samples will be returned to unsuccessful Bidders after the Bid Adjudication Process.

ESCALATION:	
Fixed Price:	YES / NO

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) year period will be less than R50,000,000.00, hence the 80/20 rule will be applied.

80% - Price

20% - Preference



PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties being instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 2: POLE MOUNTED CDU BOXES – METERS

Pole mounted CDU box for the housing of customer meters i.e. split prepaid meter or standard kilowatt hour meter.

CONTAINING:

- Earth and neutral busbars with all the necessary connectors.
- Clip stray suitable for CBI breakers.
- Orange toggle curve 1 CBI breaker (60 Amp) Quantity is unit size less one i.e. 4 way must have 3 breakers.
- Suitable mounting for meters split type meters and electronic kWh meters.
- Neutral and Earth 16mm² PVC (1,5 meter) tails.
- Phase Tails 16 mm² PVC (1,5 meter) tails, 2 Way 1 Phase, 4 Way and 6 Way 3 phases.
- UV stabilized glands (Glass filled nylon) (No 1) Quantity equals 1 gland per unit i.e. 4 way to have 4 glands.

PRICING:

Sub-Item Number	Description	Price Each	VAT	TOTAL	
2 A	2 Way				
2 B	4 Way				
2 C	6 Way				
Total price to be u	TOTAL PRICE Total price to be used on pricing schedule for Pricing evaluation				

SAMPLE:

Bidders are required to submit a clearly marked (supplier name, item number), complete sample of Item 2.C – 6 Way Pole Mounted CDU Box for assessment and pre-qualification. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit SANS approved sample will render the Bid submission invalid. Samples will be returned to unsuccessful Bidders after the Bid Adjudication Process.





ESCALATION:

Fixed Price: YES / NO

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000 000.00, hence the 80/20 rule will be applied.

80% - Price

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties being instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 3: MINI-SUBSTATIONS – STANDARD 11 & 11/6.6kV DUAL RATIO

TO BE READ IN CONJUNCTION WITH NATIONAL RATIONLISED SPECIFICATIONS (NRS) 004/1:1991 (AS AMENDED)

A.1 GENERAL PARTICULARS OF MINI-SUBSTATIONS

Bid requirement is indicated where applicable. Please circle correct response.

A.1.1 Number of mini-substations required as and when required

A.1.2 Nominal voltage of system (see 6.1 of NRS)

Standard: 11kV Dual Ratio: 11/6.6kV

A.1.3 Rated no-load secondary voltage (see 6.2.2 & 4.5 of NRS) 231/420V

A.1.4 Rated output (see 6.2 of NRS) 200, 315, 400, 500, 800 kVA

A.1.5 Minimum high-voltage power-frequency withstand

A.1.6 Equipment in MV compartment (see 6.4.1 of NRS)

test voltage at sea level (see 6.1 of NRS)

Ring Main Units - Specification of Requirements

Initial



12kV

TYPE/MAKE OF RMU

a)	Suitable for 12kV	Yes / No
b)	Comply to SANS and S.I. standards	Yes / No
c)	Comply to Health and Occupational Safety Act	Yes / No
d)	Busbar Rating: 400 Amps continuous	Yes / No
e)	Isolator rating: 400 Amps continuous	Yes / No
f)	Switch fuse rating: 90 Amps minimum	Yes / No
g)	Three phase switching only	Yes / No
h)	Fault rating: 250MVA	Yes / No
i)	Carry an ASTA certificate: Equipment offered must have been tested at a recognised testing station - Certificate to be included	Yes / No
j)	Capable of fault making load breaking	Yes / No
k)	Capable of being locked off	Yes / No
l)	Earthing switches or devices	Yes / No
m)	Blank labels	Yes / No
n)	Not to include oil or compound, except where special compound are required	Yes / No
o)	Switch fuse units to accommodate striker pin type HRC fuses up to 100 Amp rating	Yes / No
p)	Cable boxes to be constructed of steel suitable for use with jelly compound	Yes / No
q)	Out door oil immersed ring main unit	Yes / No
r)	Two isolators and one switch fuse unit	Yes / No
s)	Cable gland to be brass, suitable to take a 150mm 11kV PILCSTA cable	Yes / No
t)	HRC fuses to be excluded	Yes / No
A.1.7	Incoming cable to be allowed for in terminations (see 6.4.2 of NRS)	
	a) 1 x Three-core	Yes / No
	b) Cable material - Aluminium	Yes / No
	c) Maximum size of core area - 240mm²	Yes / No
	d) Type of cable – PILC / XLPE	Yes / No
	e) Type of gland - Brass (if applicable)	Yes / No / NA

Initial_____

A.1.8 Transformer Particulars

a)	Rated output kVA: Standard – 11kV	
	200 kVA 315 kVA 400 kVA 500 kVA 800 kVA	Yes / No Yes / No Yes / No Yes / No Yes / No
	Dual Ratio – 11/6.6kV	
	200 kVA 315 kVA 400 kVA 500 kVA 800 kVA	Yes / No Yes / No Yes / No Yes / No Yes / No
Gei	neral specification - SANS 780	Yes / No
Pha	ases – Three	Yes / No
Cor	nnection HV – Delta	Yes / No
Cor	nnection LV – Star	Yes / No
Ved	ctor Group - DNY 11	Yes / No
Imp	pedance (B.S.S. Method) - 4%	Yes / No
Ne	utral LT – Out	Yes / No
		Yes / No
Dua	al Ratio – 11/6.6kV	Yes / No
Lov	v Voltage - 400/231 V	Yes / No
Fre	quency Hz - 50	Yes / No
Par	rallel Operation – Yes	Yes / No
Wir	ndings (Copper) – Copper	Yes / No
Тур	e - Indoor Mini Sub/s	Yes / No
Loa	ad - Mixed & domestic	Yes / No
Loa	ad factor - 30 – 60	Yes / No
Pov	wer factor - 0.8 - 0.9	Yes / No
Cod	oling Temp – Rise - O.N. 50°C	Yes / No
Тар	opings 11kV - ±21/2% & 5%	Yes / No
	Gei Pha Cor Vec Imp Nei Hig Sta Lov Fre Par Wir Typ Loa Pov Cor	Standard – 11kV 200 kVA 315 kVA 400 kVA 500 kVA 800 kVA Dual Ratio – 11/6.6kV 200 kVA 315 kVA 400 kVA 500 kVA



Initial_____

t)	Tapping switch – Internal	Yes / No
u)	High Voltage changing - N/A	Yes / No
v)	Terminals high voltage - Cable box steel	Yes / No
w)	Terminals low voltage - Bushing I / D	Yes / No
x)	Rollers - No	Yes / No
y)	Maximum temp indicator – No	Yes / No
z)	Conservator – No	Yes / No
aa)	Bucholtz relay - No	Yes / No
bb)	Oil level gauge – Yes	Yes / No
cc)	Oil – Yes	Yes / No
dd)	Explosion vent - No	Yes / No
ee)	Spares - No	Yes / No
ff)	Breather - No	Yes / No
gg)	Sealed (not welded) – Yes	Yes / No
hh)	LV terminals relative to HV terminals - 180°	Yes / No
ii)	Colour - Light grey No 631 to BS381C	Yes / No
A.1.9	Construction (see 4.2.5 NRS) – Modular	Yes / No
A.1.10	Layout (see 4.2.1 of NRS) - Type A	Yes / No
A.1.11	Material of housing (see 4.3 of NRS) - Metal and GRP	Yes / No
A.1.12	Compartment fastening (see 4.4.2.2 of NRS) – Three-point locking	Yes / No
A.1.13	Compartment lock protection facility (see 4.4.2.2 of NRS) – Required	Yes / No
A.1.14	Compartment base - black epoxy tar (see 4.6.3 of NRS) – Required	Yes / No
A.1.15	Corrosive conditions: radiator to be galvanized (see annex D) – Required	Yes / No
A.1.16	Corrosive conditions: roof & compartments to be galvanized (see annex D) – Required	Yes / No
A.1.17	Provision of a socket outlet in LV compartment (see note 2) – Required	Yes / No
A.1.18	Provision of earth leakage protection to suit socket outlet (see A.1.19 and note 2) – Required	Yes / No

Initial_____

A.1.19	Lighting (see note 2)

	Provision of one 11 W CFL lamp with industrial type switch in LV compartment – Required	Yes / No
	MV compartment lighting as for LV – Required	Yes / No
A.1.20	Additional notices, nameplates or labels (see 8.3 of NRS) – Required	Yes / No
	Details of information required on these additional Labels – Required	Yes / No
	Danger Notices MV / LV - Blank labels on doors	Yes / No
	Name plates & labels required – Blank	Yes / No
A.1.21	Drawings (see 8.4.2) Quantity of each additional drawing (if any) required	Yes / No
A.1.22	Documentation required (see 8.4.1) to be supplied with the Bid - One set	Yes / No
A.2	PARTICULARS OF LV PANEL	
A.2.1	Busbars - rating (6.5.2.2) - NRS004/1:1991 Section 6.5.2.2	Yes / No
A.2.2	Busbars - insulation (6.5.2.2) - NRS004/1:1991	Yes / No
A.2.3	Busbars (6.5.2.2) - 3 + Neutral + Earth	Yes / No
A.2.4	Clearance bottom to top between phases (see 6.5.2.2) - 150mm	Yes / No
	Clearance neutral to blue phase - 200mm	Yes / No
	Clearance neutral to earth - 100mm	Yes / No
A.2.5	LV main switch (6.5.2.7(d))	Yes / No
A.2.6	LV Circuit Breakers for outgoing circuits (see 6.5.2.7 (c))	
	- Vertical Mounting – Yes	Yes / No
	- Neutral arrangement – Separate	Yes / No
	- Type of current - limiting C/B – 25 kA	Yes / No
	- Three-phase circuits/quantity - 5	Yes / No
	* Rated current - 400 Amp	Yes / No
	* Current-limiting Circuit Breaker rating - 200 Amp	Yes / No
A.2.7	Gland plates or rail (see 6.5.2.4) – Rail	Yes / No

A.2.8	Thermal maximum demand ammeters (see 6.5.2.7(b)) – Yes	Yes / No
	- Current transformers – type – Ring	Yes / No
	- Location - LV Busbar	Yes / No
	- Ratio/Burden Accuracy - 500/515VA/Class One	Yes / No
	- Ammeter - 600 Amps	Yes / No
	- Quantity – 3	Yes / No
	- Type/Manufacturer – PSI	Yes / No
A.2.9	Street lighting panel required – Yes	Yes / No
A.2.10	Auxiliary wiring to be ferruled (see 6.5.2.6) – Yes	Yes / No
A.2.11	Circuit diagram to be submitted for approval (see 6.5.2.6) – Required	Yes / No
A.2.12	Colour - Stone to SANS 1091 to 1975 colour shade C37	Yes / No
B1	PARTICULARS OF EQUIPMENT TO BE SUPPLIED	
B.1.1	Type of mini-substation	Type A or B
B.1.2	Total mass of mini-substation (kg)	
B.1.3	Manufacturer	
B.1.4	Overall dimensions (mm)	
	- MV Compartment length	
	- LV Compartment length	
	- Overall length	
	- Width	
	- Height	
B.1.5	Is provision made for lifting the complete mini-substation onto a concrete plinth without the need for dismantling?	Yes / No
B.1.6	Are the MV switchgear, LV panel and transformer confined to separate compartments?	Yes / No
B.1.7	Housing cubicle material	
B.1.8	Corrosion Protection	
	- Manufacturer of paint/coating system	
	- Finish of paint/coating system	
	- Specification of paint/coating system	



Initial____

B.1.9 MV	Cable Termina	ation				
- Ca	able box type					
- Ca	able box manu	facturer				
- Po	ost insulators: ⁻	Гуре				
	anufacturer	,,				
B.1.10 MV	tuses - Transt	ormer feeder leg on R	IMU			
- Ту	pe/Type numb	per				
- Ma	anufacturer					
- Ra	ating					
PRICING:						
	ubmitted below	v should be inclusive o	of delivery to	Estcourt Kwe	-Zulu-Nətəl	
						.
Item Number	ט	escription	PRICE	VAT	TOTAL	Delivery
3. A	200 KVA	Standard 11kV				(Weeks)
		Mini -Substation				
3. B	315 KVA	Standard 11kV Mini –Substation				
3. C	400 KVA	Standard 11kV Mini –Substation				
3. D	500 KVA	Standard 11kV				
3. E	800 KVA	Mini –Substation Standard 11kV				
2.5	200 KVA	Mini –Substation				
3. F	200 KVA	Dual Ratio 11/6.6kV Mini -				
3. G	315 KVA	Substation Dual Ratio				
3. G	313 KVA	11/6.6kV Mini -				
3. H	400 KVA	Substation Dual Ratio				
• • • • • • • • • • • • • • • • • • • •	100 10171	11/6.6kV Mini -				
3. I	500 KVA	Substation Dual Ratio				
		11/6.6kV Mini -				
3. J	800 KVA	Substation Dual Ratio				
		11/6.6kV Mini - Substation				
Total price	e to be used o	n pricing schedule for		OTAL PRICE	I	
- ·					- 1	
Based on a	a maximum ord	der of 2 units per mont	n.			
GENERAL	:					
Guarantee:		Months				

Initial_			

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ESCALATION:	
Fixed Price:	YES / NO
If NO, please provide details for the calculation of Escalation i.e.	SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of goods to be procured ov R50,000 000.00 hence the 80/20 rule will be applied.	er a three (3) Year period will be less than
80% - Price 20% - Preference	
PROPOSED DELIVERY SCHEDULE:	
For purposes of this section, the prospective Bidder is required to in respect of the item in question.	indicate to the Municipality the delivery time
Delivery	
By completion of this section, the Bidder understands and accedelivery to which it will be bound. Failure to comply with the time in accordance with Clause 22 of the General Conditions of Cont	provided will result in penalties be instituted
ITEM 4: RING MAIN UNITS	
SPECIFICATION OF REQUIREMENTS	
a) Suitable for 12KV	Yes / No
b) Comply to SANS and S.I. standards	Yes / No
c) Comply to Health and Occupational Safety Act	Yes / No
d) Busbar rating: 400 Amps continuous	Yes / No
e) Isolator rating: 400 Amps continuous	Yes / No
f) Switch fuse rating: 90 Amps minimum	Yes / No
g) Three phase switching only	Yes / No
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h)	Fault rating:	
i)	Carry an ASTA certificate: Equipment offered must have been tested at a recognised testing station	Yes / No
j)	Capable of fault making load breaking	Yes / No
k)	Capable of being locked off	Yes / No
I)	Earthing switches or devices to be provided	Yes / No
m)	Blank labels to be provided	Yes / No
n)	Not to include oil or compound, except where special compound are required	Yes / No
o)	Switch fuse units to accommodate striker pin type HRC (High Rapturing Capacity) fuses up to 100 Amp rating. Striker pin, fuses and associated gear to be immersed in oil.	Yes / No
p)	Cable boxes to be constructed of steel suitable for use with jelly compound	Yes / No
q)	Out door oil immersed ring main unit	Yes / No
r)) Two isolators and one switch fuse unit or three isolators Yes / No	
s)	Cable gland to be brass, suitable to take a 300mm 11kV PILCSTA cable Yes / No	
t)	HRC fuses to be excluded	Yes / No
GEN	ERAL INFORMATION AND CONTRACT PRICES	
1) 2)	Delivery in weeks Prices each - Delivered to Estcourt	
	VAT 15%	
	TOTAL	
3)	Type of Ring Main Unit	
GEN	ERAL:	
Guar	antee: Months	
ESC	ALATION:	
Fixed	Price: YES / NO	
If NC	, please provide details for the calculation of Escalation i.e. SEIFSA including	ng indices and weighting.



It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000 000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 5: WOODEN TRANSMISSION POLES

SPECIFICATION OF REQUIREMENTS:-

1.	General Specification	SANS 754	Yes / No
2.	Type of Timber	Eucalyptus	Yes / No
3.	Banding (Top and Base)	Wire Bound	Yes / No
4.	Fibre stress withstand	55 - 75 MPA	Yes / No
5.	Preservative treatment	Creosote and Waxy Oil	Yes / No

GENERAL INFORMATION AND CONTRACT PRICES

1)	Delivery in weeks for an order of 100 units:	
1)	Delivery in weeks for all order or 100 drills.	

PRICING

Sub-Item Number	Length	Top Diameter	PRICE	VAT	TOTAL	
5. A	7 m	100 – 120mm				
5. B	9 m	140 – 160mm				
5. C	11 m	140 – 160mm				
Total price to	be used on pr	icing schedule for P		TAL PRICE	l	

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7		М	$\overline{}$	\mathcal{L}	\vdash

ESCALATION:							
Fixed Price:	YES/N	NO					
ADJUDICATION:							
It is anticipated tha R50 000 000.00 h					three (3) Yea	ır period will be	e less than
	% - Price % - Preferer	nce					
PROPOSED DEL	IVERY SCH	HEDULE:					
For purposes of the item in respect of the item.			e Bidder	is required to i	ndicate to the	Municipality th	e delivery time
	Deliver	у					
By completion of delivery to which it in accordance with	will be bou	ınd. Failure to	comply	with the time p	rovided will re		
ITEM 6 A: TU	BULAR ST	EEL TRANSI	MISSION	I POLES			
SPECIFICATION	OF REQUI	REMENTS:-					
 Design of Fabricatio 	poles to the n of poles to Ilvanised to	e new SANS ()225-199	Ultimate tensil 91 Specificatio pecification 02	n.	ЭМра.	
GENERAL INFOR	RMATION A	AND CONTRA	ACT PRI	CES			
1) Delivery i	n weeks for	an order Tra	nsmissio	on Poles:			
PRICING							
Sub-Item Number	Length			PRICE	VAT	TOTAL	
6 1	0.25 m						

Sub-Item Number	Length	PRICE	VAI	IOIAL
6. A	9.25 m			



ESCALATION:						
Fixed Price:	YES / N	10				
If NO, please provi	ide details f	or the calculation of E	scalation i.e. S	EIFSA includin	g indices and	I weighting.
ADJUDICATION:						
It is anticipated tha 000 000.00 hence		ralue of goods to be prule will be applied.	ocured over a	three (3) Year _I	period will be	less than R50
	% - Price % - Preferer	nce				
PROPOSED DELI	VERY SCH	HEDULE:				
For purposes of thi in respect of the ite		ne prospective Bidder ion.	is required to ir	ndicate to the M	lunicipality the	e delivery time
	Deliver	У				
delivery to which it	By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.					
ITEM 6 B: TUE	BULAR ST	EEL STREET LIGHT	POLES WITH	3m OUT REAC	СН	
SPECIFICATION (OF REQUII	REMENTS:-				
2. Design of poles	to the new oles to be i sed to SAN	Grade 250 Mpa Ultim SANS 0225-1991 Sprelevant SANS Specifi S 763.	ecification.			
GENERAL INFORMATION AND CONTRACT PRICES						
1) Delivery in wee	eks for an	order Street Light Po	oles:			
PRICING						
Sub-Item Number	Length	With 3m Outreach	PRICE	VAT	TOTAL	
0.0	40					

Sub-Item Number	Length	With 3m Outreach	PRICE	VAT	TOTAL
6. B	10 m				



ESCALATION:	
Fixed Price: YES / NO	
If NO, please provide details for the ca	Iculation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of R50,000,000.00 hence the 80/20 rule	goods to be procured over a three (3) Year period will be less than will be applied.
80% - Price 20% - Preference	
PROPOSED DELIVERY SCHEDULE:	
For purposes of this section, the prosper in respect of the item in question.	ective Bidder is required to indicate to the Municipality the delivery time
Delivery	
	dder understands and accepts that the time provided is the time for re to comply with the time provided will result in penalties be instituted eneral Conditions of Contract.
ITEM 7: HIGH PRESSURE SOE	DIUM LUMINAIRES – 70w, 150w, 250w & 400 Watts
Please indicate if your compliance or n	not with each item of this specification by circling the correct response

Please indicate if your compliance or not with each item of this specification by circling the correct response.

SPECIFICATION: REQUIRED

1. The luminaire must bear the SANS IEC 60598-2-3 mark.

(SANS Certificates to be provided) Complies: Yes / No

2. The luminaire must bear the SANS 475 mark.

(SANS Certificates to be provided) Complies: Yes / No

Luminaire to have the 'A' mark in the diamond on

Luminaire Complies: Yes / No

3. Luminaire spigot entries shall comply with SANS 1088 – Table 1 for Type 2.

Side entry – 42mm diameter x 125mm long. Complies: Yes / No

Bottom entry – 76mm diameter x 75mm deep. Complies: Yes / No

4. The luminaire shall have a degree of protection that complies with SANS IEC 60598- 2-3 and SABS 098:

Part 1 – 1990 Code of Practice Table B-1.

Complies: Yes / No



Separated Lamp compartment: IP65 (minimum)
 (SANS IEC 60598-2-3 IP Test Report to be provided)

6. Separated Control gear compartment: IP65 (minimum) (SANS IEC 60598-2-3 IP test Report to be provided)

Complies: Yes / No

SPECIFICATION:

- 1. The luminaire should consist of 3 separate compartments;
 - a. the lamp compartment,
 - b. the control gear compartment and,
 - c. the spigot compartment.

These should be separated for thermal and ingress protection reasons.

Complies: Yes / No

Complies: Yes / No

2. The lamp housing should be robustly constructed, weatherproof, hail proof, corrosion proof and vandal resistant. It should be manufactured from filled ultra-violet stabilized engineering polymer and should be grey in colour. An exterior lip of 7mm should be provided on the lamp housing ensuring that no moisture should be sucked into the diffuser. If aluminium is used it must be a minimum grade of LM6 and it must be painted. (Grade of aluminium must be confirmed by an independent metallurgical report).

Complies: Yes / No

3. The high impact acrylic diffuser bowl should have no external prisms and should be held to the housing by three stainless steel clips. It should remain attached to the housing when hinged open. The gasket sealing the lamp compartment should be made of silicone sponge rubber and should be fitted into a tongue and groove arrangement. Glass is not to be used. Access to the lamp must only be from below the luminaire.

Complies: Yes / No

4. Reflectors should be manufactured from 99.98% super pure deep anodised aluminium and should not be subject to accidental misalignment. The lamp holder should comply with VC 8011, be rated to withstand 240° C and should prevent loosening of the lamp caused by vibrations.

Complies: Yes /No

5. The body should be manufactured from filled ultra-violet stabilized engineering polymer. All control gear should be housed fully within the body of the luminaire in a separated gear compartment. If aluminium is used it must be a minimum grade of LM6 and it must be painted. (Grade of aluminium must be confirmed by an independent metallurgical report). For the 150W, 250W and 400W version a high heat grade of engineering polymer must be used.

Complies: Yes / No

6. The control gear compartment should be covered by a hinged non-corrosive cover, which should fit into a silicon sponge gasket in the body, in a tongue and groove arrangement. Access to the control gear compartment should be from underneath the luminaire. Access should be gained by loosening one captive stainless screw. No clips to be used.

Complies: Yes / No

7. The control gear should be mounted on a removable gear tray and be suitable for operation with the specified rating of the lamp on a 230V ± 10% 50Hz single phase system. All control gear components should be removable and should bear the relevant SABS mark.

Complies: Yes / No

8. All internal wiring should be Teflon coated with protective sleeving to prevent damage by possible abrasion. All screws, bolts and metal parts should be stainless steel or non-corrosive material.

Complies: Yes / No



9. The luminaire should be power factor corrected to a minimum of 0,90.

Complies: Yes / No

- 10. The luminaire must have a TA rating of at least:
 - 35 degrees for 70 and 150 W fittings
 - 40 degrees for 250 W and 400 W fittings.

This is to be proven by a submitted certificate by independent authority

11. All luminaires should be of South African Manufacture. Manufactured by an ISO 9001 certified manufacturing company. Assembling only of goods in South Africa does not comply

	Complies: Yes / No
a. Delivery in weeks:	
b. Guarantee (Months):	

PRICING

Sub-Item Number	Luminaire	Entry Type	PRICE	VAT	TOTAL
7. A	70w HPS	Side			
7. B	70w HPS	Bottom			
7. C	150w HPS	Side			
7. D	150w HPS	Bottom			
7. E	250w HPS	Side			
7. F	250w HPS	Bottom			
Total price to	o be used on pricing s	schedule for Pricing	TOTAL PR evaluation	ICE	'

SAMPLE:

Bidders are required to submit clearly marked (supplier name, item number), complete samples of Item 7.A, 7.C and 7.E for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

FSC	ΔΙ	ΔΤΙ	10	J-

Fixed Price: YES / NO

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If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and we						

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 8: TRANSFORMERS: 100, 200, 315, 400 and 500 kVA: STANDARD 11kV and DUAL RATIO 11/6.6kV

SPECIFICATION AND SCHEDULE OF REQUIREMENTS - TRANSFORMERS

1.	General specification - SANS 780	Yes / No
2.	Phases – 3	Yes / No
3.	Connection HV – Delta	Yes / No
4.	Connection LV – Star	Yes / No
5.	Vector Group - DYN 11	Yes / No
6.	Impedance (B.S.S.S Method) - 4%	Yes / No
7.	Neutral LT – Out	Yes / No
8.	High voltage between phases:- 11kV – Standard: 11/6.6kV – Dual Ratio:	Yes / No Yes / No
9.	Low Voltage - 420 / 235 V	Yes / No
90	I D a g a	



10. Frequency Hz – 50	Yes / No
11. Parallel Operation – Yes	Yes / No
12. Windings – Copper	Yes / No
13. Type – Outdoor	Yes / No
14. Load - Mixed & domestic	Yes / No
15. Load factor - 30 – 60	Yes / No
16. Power factor – 0.8 – 0.9	Yes / No
17. Cooling Temp – Rise - O.N. 50'C	Yes / No
18. Tappings 11kV - 2.5% & 5%	Yes / No
19. Tapping switch – External	Yes / No
20. High voltage changing - N/A	Yes / No
21. Terminals high voltage - Cable box steel	Yes / No
22. Terminals low voltage - Bushing O/D	Yes / No
23. Rollers – Yes24. Maximum temp indicator – Yes	Yes / No Yes / No
25. Conservator – No	Yes / No
26. Bucholtz relay – No	Yes / No
27. Oil level gauge – Yes	Yes / No
28. Oil – Yes	Yes / No
29. Explosion vent – No	Yes / No
30. Spares – No	Yes / No
31. Breather – No	Yes / No
32. Sealed (not welded) – Yes	Yes / No
33. L.V. terminals relative to H.V. terminals – 180'	Yes / No
34. Colour - Light grey No 631 to BS381C	Yes / No

Item	Description	Price	VAT	Total Price	Delivery (In Weeks)	Guarantee (In Months)
8. A	100 kVA – 11kV Pole Mounted					
8. B	200 kVA – 11kV					
8. C	315 kVA – 11kV					
8. D	400 kVA – 11kV					
8. E	500 kVA – 11kV					
8. F	100 kVA – 11/ 6.6kV Dual Ratio Pole Mounted					
8. G	200 kVA – 11/ 6.6kV Dual Ratio					
8. H	315 kVA – 11/ 6.6kV Dual Ratio					
8. I	400 kVA – 11/ 6.6kV Dual Ratio					
8. J	500 kVA – 11/ 6.6kV Dual Ratio					
	TOTAL PRICE Total price to be used on pricing schedule for Pricing evaluation					

ESCALATION:

Fixed Price:	YES / NO
If NO, please provide	details for the calculation of Escalation i.e. SEIFSA including indices and weighting.



It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery		
Delivery		

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 9: KILOWATT HOUR METER - ELECTRONIC

SPECIFICATION AND SCHEDULE REQUIREMENT - KILOWATT HOUR METER

SPECIFICATION: REQUIRED

Power Supply

Rated Voltage: 220 – 240V Complies: Yes / No

Operating voltage range: From 0.9 to 1.1 rated Complies: Yes / No

Current Range

Range: 20 – 100A Complies: Yes / No

Accuracy

Approved IEC 1036, Class 1 and Class 2: Complies: Yes / No

Temperature Range

Operating Range: - 10°C to 45°C Complies: Yes / No

Limited Range of Operation: - 20°C to 55°C Complies: Yes / No

Storage Range: -25°C to 70°C Complies: Yes / No

Optical Interface:

The meter is to have an Optical Interface with an

IEC 62056-21 protocol: Complies: Yes / No

SPECIFICATION: PRE-QUALIFICATION



Dis	pΙ	ay
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The meter is to have a LCD display with no decimal point displayed.

The meter should have a six-digit display.

Р	R	IC	IN	G

a.	Delivery	in weeks for an order of 200 units:	
u.	DCIIVCIY	in weeks for an order of 200 driks.	

b. Guarantee	(Months):	

Sub-Item Number	Description	PRICE	VAT	TOTAL	
9. A	Single Phase				
9. B	Three Phase				
TOTAL PRICE					
Total price to be used on pricing schedule for Pricing evaluation					

SAMPLE:

Bidders are required to submit a clearly marked (supplier name, item number), complete sample of both items 9.A and 9.B for assessment. The samples **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

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Fixed Price: YES /	NO
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ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	



By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 10: PREPAID METERS

<u>SPECIFICATION AND SCHEDULE REQUIREMENT - SPLIT PREPAID METERS - WIRELESS SINGLE PHASE AND THREE PHASE</u>

TABLE OF CONTENTS

1.1 MUST HAVE WIRELESS KEYPAD

1.2 SOUTH AFRICA

IEC specifications, the prepayment meter must comply fully with the following Local Standards.

No	Name	Revision	Title	Component	Remarks	
Met	Metering Unit (Active and Passive Part)					
1.	SANS 1524-1	Edition 5 2005	South African National Standard Part 1: Prepayment Meters	Meter	Yes / No	
2.	SCSSCA AA9 (MC171)	Rev 2 Aug 2005	SPECIFICATION Particular requirements for Prepayment meters	Meter	Yes / No	
3.	SCSSCA AJ1	Rev 0.2 Jun 1996	Standard Passive Units for single Phase 230V Service Connections	Meter Base	Yes / No	
4.	TRMSCA AP2	Rev 2 Dec 1994	Specification for Indoor arrestors for the protection of electricity dispensers	Lightning Protection	Yes / No	
5.	MC195	20-11- 1994	Internal Contactor Specification for Electricity Dispensers	Contactor Specification	Yes / No	

- IEC Metering Standards IEC62055-31.
- STS IEC62055-41/51 the worldwide prepayment standard.
- DLMS Device Language Message Specification.
- COSEM Companion Specification for Energy Metering sets the rules, based on existing standards, for data exchange with energy meters.
- IDIS The Interoperable Device Interface Specifications is an industry association for smart metering companies which provide interoperable products based on open standards.
- G3-PLC the world's only CENELEC/FCC PLC solution supporting true IPv6 addressing is standards based to ensure interoperability and a future proof solution.
- RF communication to be quoted separately.
- All of the above is to be compliant in terms of NRS057 (smart metering).

2. PRE-QUALIFICATION REQUIREMENTS

2.1 Meter Types

2.1.1 Standard Base Type Meter

1. The meter shall be an integrated meter consisting of two parts, namely, an Active part and Passive part (Meter Base) – This is commonly referred to as the standard base type meter.



2.1.2 Retrofit Type Meter

- 1. The meter shall be of British Standard (BS) 5685 footprint for standardised mounting.
 - a) The meters shall have terminals with bottom entry for cables and the arrangements shall be: Symmetrical/BS i.e. L:N:N:L

2.1.3 Split Meters – Single and Three Phase (Wireless)

- 1. The split meter shall consist of two parts, The MCU and CIU
 - The Single Phase MCU shall have British Standard (BS) 5685 footprint for standardised mounting
 - The operating distance between the MCU and CIU shall be at least 250m.

2.1.4 Three Phase Prepaid Meter (Wireless)

Standard three phase prepaid meter.

2.2 **Electrical Requirements**

- 1. The meters shall be operated from mains with reference values of: 220 / 240V, 50 Hz, with an operating range from 0.8 to 1.15Un
- 2. The meter shall have reference standard currents of: -
 - Single Phase meters: Ib = 5A, Imax = 80A
 - Three Phase Meters: Ib <_ 20A, Imax = 100A

2.4 Metering Accuracy Requirements

- 1. The meter's accuracy shall be of Class 2/Class 1 for active energy.
- 2. The meters calibration shall be retained for the life of the meter.

2.5 Meter Life Expectancy and Accelerated Life Tests

The meter shall have a life expectancy of at least 15 years. Supplier are required to submit certificates, from an accredited reputable standards body confirming that Accelerated Life tests have been done on their meters.

2.6 Tamper Detection

Pre-qualification points will be given to meters that are fitted with some form of tamper detection. The following will be considered:

- a. Tamper switch fitted on the terminal cover plate which puts the meter into a tamper state when opened.
- b. Electronic detection which detects whether the meter has been bypassed or not. If a bypass is detected then the meter will go into a tamper state.
- c. Must be programmable to not go on tamper mode after power outages

TAMPER SWITCH: YES / NO

ELECTRONIC BYPASS DETECTION: YES / NO

POWER OUTAGE TAMPER MODE YES / NO

3. MANDATORY REQUIREMENTS

3.1 Approval Certificates

Copies of type approval certificate(s) with test and calibration results of the meter being offered obtained from an international or national meter certificate body shall be provided.



Failure to provide proof of certification will result in non-compliance on Bid.

- 3.2 The meter must comply to 30V/m requirement for Immunity to radiated RF electromagnetic fields as per test (b) of Clause 7.8.3. of IEC 62055-31.
- 3.3 The meter must support a "Meter key recovery" feature for reasons explained below

The meter key often becomes unknown during maintenance in the field. It is therefore preferred that an acceptably secure means be provided to revert to the original meter key that was in use when the meter was dispatched from the manufacturer; (i.e. not necessarily the previous key in use). This original key shall then be used by the meter for subsequent token description and processing.

- 3.4 The meter shall have the capability to display at least the last 5 credit tokens entered. This feature is required to assist technicians with customer queries in the field without having to remove the meter from service or requiring special tools to extract this data.
- 3.5 The meter shall have an IP54 rating.

Р	R	ICI	N	G

a.	Delivery for an order of 200 units (weeks):	
b.	Guarantee: (Months)	

Sub-Item Number	Description	PRICE	VAT	TOTAL
10. A	Single Phase Prepaid Meter – Base Type (Inclusive of Base)			
10. B	Single Phase Prepaid Meter – Retrofit Type (Excluding Base)			
10. C	Three Phase Prepaid Meter			
10. D	Single Phase Split Prepaid Meter Wireless			
10. E	Three Phase Split Prepaid Meter Wireless			
Total price to be us	T sed on pricing schedule for Pricing evalu	OTAL PRICE ation		

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Fixed Price:	YES / NO



It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Dolivory	
Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 11: SINGLE PHASE - PREPAYMENT READYBOARDS

Single phase Prepayment Ready Board:

Must comprise of the following:

- Must have a common base to allow a standard base type Prepaid meter to be plugged in.
- Must have a 60A bulkhead fitting, supplied with a 11W CFL lamp.
- > 60A Earth leakage unit with overload protection.
- 10A Circuit breaker for lighting.
- 2 x 20A Circuit breaker for plugs.
- > 3 x plug points on Ready Board.

PRICING

a. Delivery for an order 200 units: (Weeks)	
b. Guarantee (Months)	

Sub-Item Number	Description	PRICE	VAT	TOTAL
11. A	Single Phase Prepayment Ready Board			



SAMPLE:	
for assessment. The sa Waterworks Road, Est	o submit a clearly marked (supplier name, item number), complete sample of item 11.A ample must be delivered to the Public Work and Basic Services, Electricity Department, tcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will sion invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication
ESCALATION:	
Fixed Price:	YES / NO
-	

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 12: ALUMINIUM STRANDED 11/6.6kV 3 CORE – 240mm²

Aluminium stranded conductors screened (Table 19) non draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall **(240mm² conductors)**

DRUM LENGTH REQUIRED 300 m

Price (per drum)	
VAT	
Total Price (per drum)	





Delivery (In Weeks)		
Guarantee (In Months)		
Note: Prices quoted are inc	clusive of delivery to Estcourt, KwaZulu	-Natal.
ESCALATION:		
Fixed Price: YES	/ NO	
If NO, please provide details	s for the calculation of Escalation i.e. S	EIFSA including indices and weighting.

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price/Pre-qualification

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 13: COPPER STRANDED 11/6.6kV 3 CORE – 185mm²

Copper stranded conductors screened (Table 19) non-draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall. **(185 mm² conductors)**

DRUM LENGTH REQUIRED 300 m



		1
	Price (per drum)	
	VAT	
	Total Price (per drum)	
	Delivery (In Weeks)	
	Guarantee (In Months)	
No	te: Prices quoted are inclusive of deliver	y to Estcourt, KwaZulu-Natal.
ES	SCALATION:	
Fix	ted Price: YES / NO	
If N	NO, please provide details for the calculat	tion of Escalation i.e. SEIFSA including indices and weighting.
ΑD	JUDICATION:	
	s anticipated that the total value of good 0,000,000.00 hence the 80/20 rule will be	ds to be procured over a three (3) Year period will be less than applied.
	80% - Price 20% - Preference	
PR	OPOSED DELIVERY SCHEDULE:	
	r purposes of this section, the prospective respect of the item in question.	Bidder is required to indicate to the Municipality the delivery time
	Delivery	
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By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 14: ALUMINIUM STRANDED 11/6.6kV 3 CORE – 150 mm²

Aluminium stranded conductors screened (Table 19) non draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall (150 mm² conductors)

DRUM LENGTH REQUIRED 300 m

Price (per drum)	
VAT		
Total Price (per	drum)	
Delivery (In Wee	eks)	
Guarantee (In M	lonths)	
Note: Prices quote	d are inclusive of deli	very to Estcourt, KwaZulu-Natal.
ESCALATION:		
Fixed Price:	YES / NO	
f NO, please provi	de details for the calcu	ulation of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

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PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective	Bidder is required to indicate	to the Municipality the	delivery time
in respect of the item in question.			

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 15: COPPER STRANDED 11/6.6kV 3 CORE – 95 mm²

Copper stranded conductors screened (Table 19) non-draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall. (95 mm² conductors)

DRUM LENGTH REQUIRED 300 m

	1
Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of delivery	y to Estcourt, KwaZulu-Natal.
ESCALATION:	
Fixed Price: YES / NO	
If NO, please provide details for the calculat	ion of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

Initial

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference



PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time
in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 16: ALUMINIUM STRANDED 11/6.6kV 3 CORE - 70 mm²

Aluminium stranded conductors screened (Table 19) non draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall (70 mm² conductors)

DRUM LENGTH REQUIRED 300 m

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

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Initial			
miriai			

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 17: COPPER STRANDED 11/6.6kV 3 CORE – 35 mm²

Copper stranded conductors screened (Table 19) non-draining 11/6,6 kV 3 core earthed, paper insulated, Lead sheathed, steel tape armoured PVC anti-electrolyses protection overall. (35 mm² conductors)

DRUM LENGTH REQUIRED 300 m

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.



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ADJUDICATION:
It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.
80% - Price 20% - Preference
PROPOSED DELIVERY SCHEDULE:
For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.
Delivery
By completion of this section, the Bidder understands and accepts that the time provided is the time fo delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.
ITEM 18: ALUMINIUM SOLID CONDUCTORS 600/1100 VOLT 4 CORE – 240 MM ²
Aluminium solid conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall (240 mm² 4 core conductors)
DRUM LENGTH REQUIRED 300 m
SPECIFICATION: SANS 150 /1970
Price (per drum)
VAT

Г	T				
	Total Price (per drum)				
_	Delivery (In Weeks)				
	Guarantee (In Months)				
No	te: Prices quoted are inclusive of delivery	to Estcourt, KwaZulu-Natal.			
ES	CALATION:				
Fix	red Price: YES / NO				
If N	If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.				
<u> </u>).IUDICATION:				

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price/Pre-qualification

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 19: COPPER STRANDED CONDUCTORS 600 /1100 VOLT 4 CORE - 120 MM²

Copper stranded conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection

(120 mm² 4 core conductors)

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DRUM LENGTH REQUIRED 300 m

SPECIFICATION: SANS 150 /1970

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of delivery	y to Estcourt, KwaZulu-Natal.
ESCALATION:	
Fixed Price: YES / NO	
If NO, please provide details for the calculat	ion of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of good	s to be procured over a three (3) Vear period will be less than

Α

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

> 80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

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	der understands and accepts that the time provided is the time for re to comply with the time provided will result in penalties be instituted eneral Conditions of Contract.
ITEM 20: ALUMINIUM SOLID CO	ONDUCTORS 600 /1100 VOLT 4 CORE – 95 MM ²
Aluminium solid conductors 600 /1100 overall (95 mm² 4 core conductors)) volt 4 core, PVC insulated steel or wire armoured, PVC protection
DRUM LENGTH REQUIRED 300 m	
SPECIFICATION: SANS 150 /1970)
Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of deli	ivery to Estcourt, KwaZulu-Natal.
ESCALATION:	
Fixed Price: YES / NO	
If NO, please provide details for the cal	Iculation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of R50,000,000.00 hence the 80/20 rule v	goods to be procured over a three (3) Year period will be less than will be applied.
109 Page	
Initial	Inkosi Langalbaleke

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 21: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 70 MM²

Copper stranded conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall

(70 mm² 4 core conductors)

DRUM LENGTH REQUIRED 300 m

SPECIFICATION: SANS 150 /1970

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.



ADJUDICATION:	
It is anticipated that the total value of goods R50,000,000.00 hence the 80/20 rule will be	to be procured over a three (3) Year period will be less than applied.
80% - Price 20% - Preference	
PROPOSED DELIVERY SCHEDULE:	
For purposes of this section, the prospective E in respect of the item in question.	Bidder is required to indicate to the Municipality the delivery time
Delivery	
	nderstands and accepts that the time provided is the time for comply with the time provided will result in penalties be instituted Conditions of Contract.
ITEM 22: ALUMINIUM SOLID CONDUC	CTORS 600/1100 VOLT 4 CORE – 70 MM ²
Aluminium solid conductors 600 /1100 volt 4 overall (70 mm² 4 core conductors)	4 core, PVC insulated steel or wire armoured, PVC protection
DRUM LENGTH REQUIRED 300 m	
SPECIFICATION: SANS 150 /1970	
Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
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Guarantee (In Months)
Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.
ESCALATION:
Fixed Price: YES / NO
If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:
It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.
80% - Price
20% - Preference
PROPOSED DELIVERY SCHEDULE:
For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.
Delivery
By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.
ITEM 23: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 50 MM ²
Copper stranded conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall (50 mm² 4 core conductors)
DRUM LENGTH REQUIRED 300 m
SPECIFICATION: SANS 150 /1970
SPECIFICATION. SAINS 130/1910



	Price (per drum)	
	VAT	
	Total Price (per drum)	
	Delivery (In Weeks)	
	Guarantee (In Months)	
No	te: Prices quoted are inclusive of deliver	ry to Estcourt, KwaZulu-Natal.
ES	CALATION:	
Fix	ed Price: YES / NO	
If N	IO. please provide details for the calcula	tion of Escalation i.e. SEIFSA including indices and weighting.
	/1 1	
AD	JUDICATION:	
	s anticipated that the total value of good 0,000,000.00 hence the 80/20 rule will be	ds to be procured over a three (3) Year period will be less than e applied.
	80% - Price 20% - Preference	
PR	OPOSED DELIVERY SCHEDULE:	
	purposes of this section, the prospective espect of the item in question.	e Bidder is required to indicate to the Municipality the delivery time
	Delivery	
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By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 24: ALUMINIUM SOLID CONDUCTORS 600/1100 VOLT 4 CORE - 50 MM²

Aluminium solid conductors 600 / 1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall

(50 mm² 4 core conductors)

Price (per drum)

DRUM LENGTH REQUIRED 300 m

SPECIFICATION: SANS 150 /1970

(Por analy)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of delive ESCALATION :	ry to Estcourt, KwaZulu-Natal.
Fixed Price: YES / NO	
If NO, please provide details for the calcula	ation of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

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Initial



80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section,	the prospective Bidder is	required to indicate to	o the Municipality the	delivery time
in respect of the item in que:	stion.			

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 25: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 35 MM²

Copper stranded conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall

(35 mm² 4 core conductors)

DRUM LENGTH REQUIRED 300 m

SPECIFICATION: SANS 150 /1970

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

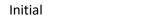
Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.





ADJUDICATION:		
It is anticipated that the total value of g R50,000,000.00 hence the 80/20 rule wi	oods to be procured over a three (3) Year period will be less than II be applied.	
80% - Price 20% - Preference		
PROPOSED DELIVERY SCHEDULE:		
For purposes of this section, the prospec in respect of the item in question.	tive Bidder is required to indicate to the Municipality the delivery time	
Delivery		
By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.		
ITEM 26: ALUMINIUM SOLID CON	NDUCTORS 600/1100 VOLT 4 CORE – 35 MM ²	
Aluminium solid conductors 600 /1100 voverall (35 mm² 4 core conductors)	volt 4 core, PVC insulated steel or wire armoured, PVC protection	
DRUM LENGTH REQUIRED 300 m		
SPECIFICATION: SANS 150 /1970		
Price (per drum)		
VAT		
Total Price (per drum)		
Delivery (In Weeks)		
Guarantee (In Months)		
Note: Prices quoted are inclusive of deli	very to Estcourt, KwaZulu-Natal.	
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Initial____

ESCALATION:	
Fixed Price:	YES / NO
If NO, please provide	e details for the calculation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that	the total value of goods to be procured over a three (3) Year period will be less than ce the 80/20 rule will be applied.
80% - 20% -	Price Preference
PROPOSED DELIVE	ERY SCHEDULE:
For purposes of this s in respect of the item	section, the prospective Bidder is required to indicate to the Municipality the delivery time in question.
	Delivery
delivery to which it wi	s section, the Bidder understands and accepts that the time provided is the time for Ill be bound. Failure to comply with the time provided will result in penalties be instituted lause 22 of the General Conditions of Contract.
ITEM 27: COPP	ER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 25 MM ²
Copper stranded cor overall (25 mm² 4 core cond	nductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection uctors)
DRUM LENGTH REG	QUIRED 300 m
SPECIFICATION:	SANS 150 /1970



Initial_____

Price (per drum	1)	
VAT		
Total Price (per	drum)	
Delivery (In We	eks)	
Guarantee (In M	flonths)	
ESCALATION: Fixed Price:	YES / NO	ivery to Estcourt, KwaZulu-Natal. culation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:		
It is anticipated that t	he total value of g	goods to be procured over a three (3) Year period will be less that

AD

It is R50,000,000.00 hence the 80/20 rule will be applied.

> 80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.



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ITEM 28: COPPER STRANDED CONDUCTORS 600/1100 VOLT 12 CORE – 4 MM²

Copper	stranded	conductors	600 /1100	volt 12	2 core,	PVC	insulated	steel	or wire	armoured,	PVC	protection
overall												

(4 mm² 12 core conductors)

DRUM LENGTH REQUIRED 500 m

SPECIFICATION: SANS 150 /1970

	Price (per drum)	
	VAT	
	Total Price (per drum)	
	Delivery (In Weeks)	
Guarantee (In Months)		
No	te: Prices quoted are inclusive of delivery	to Estcourt, KwaZulu-Natal.
ES	CALATION:	
Fix	ed Price: YES / NO	
If N	IO, please provide details for the calculati	on of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

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PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery ti	ime
in respect of the item in question.	

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 29: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 2.5 MM²

Copper stranded conductors 600 /1100 volt 4 core, PVC insulated steel or wire armoured, PVC protection overall

(2.5 mm² 4 core conductors)

DRUM LENGTH REQUIRED 500 m

SPECIFICATION: SANS 150 /1970

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

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Initial		
Initiai		

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 30: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 16 MM²

Copper stranded conductors 600 /1100 volt 3 core, PVC insulated steel or wire armoured, PVC protection overall

(16 mm² 4 core conductors)

DRUM LENGTH REQUIRED 500 m

SPECIFICATION: SANS 150 /1970

Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

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If NO, please provide details for the calculati	on of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of goods R50,000,000.00 hence the 80/20 rule will be	s to be procured over a three (3) Year period will be less than applied.
80% - Price 20% - Preference	
PROPOSED DELIVERY SCHEDULE:	
For purposes of this section, the prospective in respect of the item in question.	Bidder is required to indicate to the Municipality the delivery time
Delivery	
	nderstands and accepts that the time provided is the time for comply with the time provided will result in penalties be instituted I Conditions of Contract.
ITEM 31: COPPER STRANDED CONE	OUCTORS 600/1100 VOLT 2 CORE – 16 MM ²
Copper stranded conductors 600/1000 volts, (16 mm² 2 Core PVC PVC SWA / ECC Cabl	, PVC insulated, Steel or Wire armoured PVC protected overall. e)
DRUM LENGTH REQUIRED 500 m	
SPECIFICATION: SANS 150 /1970	
Price (per drum)	
Frice (per druin)	
VAT	
Total Price (per drum)	
122 P 2 g o	



Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of deli	very to Estcourt, KwaZulu-Natal.
ESCALATION:	
Fixed Price: YES / NO	
If NO, please provide details for the calculation	ulation of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
It is anticipated that the total value of go R50,000,000.00 hence the 80/20 rule wil	poods to be procured over a three (3) Year period will be less than II be applied.
80% - Price	

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	
Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 32: COPPER STRANDED CONDUCTORS 600/1100 VOLT 4 CORE – 6 MM²

Copper stranded conductors 600/1000 volts, PVC insulated, Steel or Wire armoured PVC protected overall. (6 mm² 4 Core PVC Cable)

DRUM LENGTH REQUIRED 500 m

SPECIFICATION: SANS 150 /1970



Price (per drum)	
VAT	
Total Price (per drum)	
Delivery (In Weeks)	
Guarantee (In Months)	
Note: Prices quoted are inclusive of deliver	y to Estcourt, KwaZulu-Natal.
ESCALATION:	
Fixed Price: YES / NO	
f NO, please provide details for the calculat	tion of Escalation i.e. SEIFSA including indices and weighting.
ADJUDICATION:	
t is anticipated that the total value of good R50,000,000.00 hence the 80/20 rule will be	ds to be procured over a three (3) Year period will be less than e applied.
80% - Price 20% - Preference	
PROPOSED DELIVERY SCHEDULE:	
For purposes of this section, the prospective n respect of the item in question.	Bidder is required to indicate to the Municipality the delivery time
Delivery	
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0 -	



By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 33: ALUMINIUM STEEL CORED BARE OVERHEAD CONDUCTORS – HARE – 72 MM²

Aluminium steel cored bare overhead conductors to SANS part 2 of 1973 (ASCR) HARE (6/1/186) 6/1/4, 72 mm²

Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		
Guarantee (In Months)		
Solution: Sixed Price: YES / NO	e of delivery to Estcourt, KwaZulu-l	Natal.
f NO, please provide details for	the calculation of Escalation i.e. SE	IFSA including indices and weighting.
ADJUDICATION:		

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It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than

R50,000,000.00 hence the 80/20 rule will be applied.

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective	Bidder is required to	indicate to the Munici	pality the delivery time
n respect of the item in question.			

Delivery	
Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 34: ALUMINIUM STEEL CORED BARE OVERHEAD CONDUCTORS - MINK - 66 MM²

Aluminium steel cored bare overhead conductors to SANS part 2 of 1973 (ASCR) MINK (6/1/144) 6/1/3, 66 mm²

Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		
Guarantee (In Months)		

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price:	YES	/ NO
I INCU I IICC.	1 L O /	111

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.







ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 35: ALUMINIUM STEEL CORED BARE OVERHEAD CONDUCTORS – SQUIRREL – 11 MM²

Aluminium steel cored bare overhead conductors to SANS part 2 of 1973 (ASCR) SQUIRREL (6/1/083) 6/1/2, 11 mm²

Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		



	Guarantee (In Months)
Not	e: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.
ESC	CALATION:
Fixe	ed Price: YES / NO
If N	O, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.
AD.	JUDICATION:
	anticipated that the total value of goods to be procured over a three (3) Year period will be less than 0,000,000.00 hence the 80/20 rule will be applied.
	80% - Price

80% - Price

20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 36: MEDIUM VOLTAGE ABC – 95 MM²

ABC Medium voltage 6.35/11 kV single cores laid up around galvanised wire PVC served. Outer serving of all 3 cores & catenary are carbon loaded for UV protection. With phase identified. Cable size 95 mm² To comply with SANS 1339 (adapted)



Drum Length (Metres)			
	Per Drum	Per Metre	
Price			
VAT			
Total Price			
Delivery (In Weeks)			
Guarantee (In Months)			
Note: Prices quoted are inclusive	of delivery to Estcourt, K	waZulu-Natal.	
ESCALATION:			
Fixed Price: YES / NO			
If NO, please provide details for th	e calculation of Escalatio	n i.e. SEIFSA including indices and weight	ting.
ADJUDICATION:			
It is anticipated that the total value R50,000,000.00 hence the 80/20		ed over a three (3) Year period will be les	s than
80% - Price 20% - Preference			
PROPOSED DELIVERY SCHEDU	JLE:		
For purposes of this section, the print in respect of the item in question.	ospective Bidder is requir	red to indicate to the Municipality the delive	ry time



Delivery

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 37: MEDIUM VOLTAGE ABC – 50 MM²

Initial

ABC Medium voltage 6.35/11 kV single cores laid up around galvanised wire PVC served. Outer serving of all 3 cores & catenary are carbon loaded for UV protection. With phase identified. Cable size 50 mm² To comply with SANS 1339 (adapted)

Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		L
Guarantee (In Months)		
Note: Prices quoted are inclusive	of delivery to Estcourt, K	(waZulu-Natal.
ESCALATION:		
Fixed Price: YES / NO		
f NO, please provide details for the	ne calculation of Escalation	on i.e. SEIFSA including indices and weightin
ADJUDICATION:		
130 Page		

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 38: LOW VOLTAGE ABC – 95 MM²

ABC Low voltage 660/1000 v self-supporting 5 core hard drawn stranded & compacted aluminium conductors insulated with carbon loaded XLPE for UV protection. With phase 1, 2 & 3 identified. Non-strained neutral with 2 longitudinal ribs.

Cable size 95 mm²

Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		
Guarantee (In Months)		

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCA	LAT	ION:
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Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

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ADJUDICATION:		
It is anticipated that the total value R50,000,000.00 hence the 80/20 ru		ree (3) Year period will be less than
80% - Price 20% - Preference		
PROPOSED DELIVERY SCHEDUL	.E:	
For purposes of this section, the pro in respect of the item in question.	spective Bidder is required to indica	te to the Municipality the delivery time
Delivery		
	ailure to comply with the time provid	hat the time provided is the time for ed will result in penalties be instituted
ITEM 39: LOW VOLTAGE AE	3C – 50 MM ²	
	for UV protection. With phase 1,	d & compacted aluminium conductors 2 & 3 identified. Non-strained neutral
Drum Length (Metres)		
	Per Drum	Per Metre
Price		
VAT		
Total Price		
Delivery (In Weeks)		



Guarantee (In Months)	
Note: Prices que	oted are inclusive o	of delivery to Estcourt, KwaZulu-Natal.
ESCALATION:		
Fixed Price:	YES / NO	
If NO, please pro	ovide details for the	e calculation of Escalation i.e. SEIFSA including indices and weighting.
AD IUDICATION		

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 40: AIRDAC – 10 MM²

AIRDAC House service cable. Circular stranded hard-drawn copper phase conductor, having 2 additional control wires, XLPE insulated with identified neutral & bare earth arranged concentrically around it. 600/1000v cable with nylon ripcord

Cable size 10 mm².

To comply with SANS 1339 (adapted)



	Drum Length (Metres)			
		Per Drum	Per Metre	
	Price			
	VAT			
	Total Price			
	Delivery (In Weeks)		I	
	Guarantee (In Months)			
No	ote: Prices quoted are inclusive	of delivery to Estcourt, h	(waZulu-Natal.	
ES	SCALATION:			
Fix	ked Price: YES / NO			
If I	NO, please provide details for the	ne calculation of Escalati	on i.e. SEIFSA including indic	es and weighting.
Αľ	DJUDICATION:			
	s anticipated that the total values of 50,000,000.00 hence the 80/20		ed over a three (3) Year per	iod will be less than
PF	80% - Price 20% - Preference ROPOSED DELIVERY SCHED	ULE:		
	r purposes of this section, the prespect of the item in question.		ired to indicate to the Municipa	ality the delivery time
	Delivery			
13	4 Page			



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By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 41: LV KIOSK (SERVICE BOX)

SPECIFICATION - GLASS REINFORCED POLYESTER (GRP) ELECTRICAL ENCLOSURES

1 **GENERAL CONSTRUCTION:**

- 1.1 The metering kiosk shall consist of a 2 door free standing fibreglass box mounted on a fibreglass plinth.
- 1.2 The consumer side shall accommodate 2, 6, 9 or 12 meters and single-phase miniature circuit breakers. The busbars shall be mounted at the rear of the box.

2 **GRP REQUIREMENTS:**

- 2.1 All GRP components must be manufactured in accordance with the latest issue of SANS 141, <u>must bear the SANS mark for G.R.P. laminates</u> and may only be constructed by a fabricator who has been approved by the South African Bureau of Standards. (<u>CERTIFICATE TO BE SUPPLIED WITH BID</u>)
- 2.2 All GRP components are to be ultra-violet stabilized, manufactured from FIRE RETARDANT RESIN (Type F) laminates and resistant to accelerated weathering.
- 2.3 The exterior surface shall be covered with a pigmented gelcoat, the colour to be in accordance with SANS 1091 Light Stone Number C37, and thickness between 0.4 and 0.6mm thick. The layer of gelcoat shall be smooth, without cracks, holes or air bubbles and shall be worked off smooth on all edges and joining planes.
- 2.4 The laminate shall consist of 3 layers of 450 g/m² totalling 1350 g/m² chopped strand mat bound with unsaturated Fire Retardant orthophthalic polyester resin that contains no fillers or dilutants. The laminate shall have a glass-to-resin ratio not less than 2:1 and not more than 3:1 as per SANS 141,
- 2.5 All cut edges shall be reinforced with an extra 2 layers of mat. After curing the inside of the box and doors shall be finished to a smooth surface and painted with 2 coats of white alkyd enamel.

3 FIBREGLASS DOORS

- 3.1 The doors shall be placed in such a way to allow easy access to all equipment on the metering side.
- 3.2 The danger notice as required by the Occupational Health and Safety Act shall be of the flash type with the words "Danger", "Gevaar" and "Ingozi" on it. The danger notice shall be **moulded into the gelcoat** prior to laminating and shall not consist of an adhesive transfer.
- 3.3 The hinges shall be of the butt type and manufactured of 316 stainless steel. No die cast hinges will be accepted. Galvanized steel plates shall be laminated into the doors to affix the hinges. Brass countersunk screws shall be used for mounting the door onto the box and a galvanized steel backing plates shall be used on the inside of the box for reinforcing.
- 3.4 Each door shall have a locking mechanism consisting of a 316 stainless steel thru lock suitable for padlocking. No hasp and staple or lever lock will be accepted.
- 3.5 No meter reading window is required.

4 MOUNTING PANEL

- 4.1 Mounting panels must be manufactured from tempered Masonite 6.4 mm thick.
- 4.2 In order to prevent the tempered Masonite panels from absorbing moisture, panels must be totally immersed in varnish after the drilling of all holes and prior to assembly.

5 METAL FRAME and FASTENERS

- 5.1 The metal frame shall have a 3mm hot dip galvanized gland plate, bolted to the bottom for clamping incoming and outgoing cables with provision for earthing.
- 5.2 All metal framework and components shall be hot-dip galvanized after fabrication and **NOT** electroplated.
- 5.3 Galvanizing must be conducted in accordance with the latest issue of SANS 763 and must preferably bear the SABS mark. Thickness of the galvanizing must be in accordance with Table I, General Applications (SANS 763).



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- 5.4 The metal frame shall be bolted to the base by means of two M10x25 hex bolts welded onto a 2mm steel strip and laminated onto the inside of the base once electro plated.
- 5.5 All nuts, bolts and washers shall be Cadmium plated and not Zinc plated.

6 VENTILATION

- 6.1 The box shall have adequate ventilation holes under the bull nose of the box to avoid water entering the box.
- 6.2 A non-corrosive gauze preventing vermin from entering the box shall cover the ventilation holes.

7 BUSBARS

- 7.1 Copper busbars shall be tinned after the holes have been drilled. The phase and neutral busbars shall be 25 x 6.3mm and mounted on the back of the panel.
- 7.2 The busbars shall be tin plated and have 2 x 11mm holes and 4x7mm holes with M10x25 hex bolts and M6x16 CH screws in respectively with washers and nuts for connecting cables.
- 7.3 The busbars shall be identified to phase by colour- coded insulators.

8 BUSBAR INSULATORS

- 8.1 Busbar insulators shall be colour coded to (red, white, blue) for phase and (black) for neutral.
- 8.2 The insulator shall have an M6 insert of brass on either side with the gap allowing the insulation to withstand a working voltage of 600v and a high voltage withstand test of 2500v.

PRICES

Sub-Item Number	DESCRIPTION	PRICE	VAT	PRICE INCL. VAT
41.A	2 Way Kiosk			
41.B	6 Way Kiosk			
41.C	9 Way Kiosk			
41.D	12 Way Kiosk			
Total price to	be used on pricing so	chedule for Pricin	TOTAL PRI g evaluation	CE

1)	Delivery in weeks for an order of 100 units:	
	SAMDI E-	

Bidders are required to submit a clearly marked (supplier name, item number), complete sample of both items 41.B and 41.D for assessment. The samples **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

ESCALATION:

Fixed Price: YES / NO

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Initial



weighting.	details for th	e calculation	or Escalation 1.	e. SEIFSA	including	indices a	ana

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 42: LED STREET LIGHT – 100W HIGH PRESSURE SODIUM, 250W & 400W HIGH PRESSURE SODIUM REPLACEMENT

- The LED streetlight luminaire must be supplied with 48 LED's (250w HPS replacement) and 32 LED's (100w HPS replacement) with a CRI > 70 and make use of 4000k – neutral white LED's.
- It must have a complete circuit wattage of between 105 Watts and 110 Watts (250w replacement) and 70Watts and 77Watts (150w replacement) and a lumen output of 12500 and 13000 lumen (250w HPS replacement) and 8000 and 8500 lumen (150w HPS replacement). The luminaire offered must be a direct replacement for the current 250w HPS and 400w HPS fittings and must have an energy saving of no less than 60% for the 250w HPS Replacement and 57% for the 150w HPS replacement. No other wattage will be accepted.
- The luminaire must consist of 3 separated compartments, the Spigot compartment, the lamp LED compartment and the gear compartment. The luminaire may only have an IP rating of 66(Certified by a recognised authority) for the LED compartment and the gear compartment.
- The luminaire must only be manufactured from marine grade die cast aluminium (EN 1706 AC-47000 grade) only (a metallurgical report from an independent metallurgist confirming the grade of aluminium for all the luminaires offered will be requested if required). Inkosi Langalibalele Municipality reserves the right to submit luminaires for metallurgical testing when necessary. It must consist of two pieces. (The spigot mounting compartment shall be suitable for side entry and have a spigot entry that complies with SANS 1088(42mm x 125mm only).



This compartment is attached to the spigot by two stainless steel screw. The lamp and control gear section will hinge on this compartment on a stainless steel bar hinging mechanism. It will be shut by means of two stainless steel latches.

- The lamp and gear compartment must have cooling fins above the lamp compartment that are designed in such a manner as to prevent dirt accumulation. The cooling rib height to width ratio may not exceed 0.7.
- The luminaires shall deliver 80% of the initial lumens, when installed for a minimum of 60 000 hours. If required, the bidder will have to provide depreciation graphs by means of IES LM 80-08 data of the LED's.
 The LED light source test data shall provide the expected data for at least 25% of rated LED light source lifetime, i.e.15 000hrs.
- Temperature sensors shall be fitted as protection devices to the luminaire, placed directly next to the LEDs.
 These shall not switch off the luminaire completely. Full details of how the luminaire manages its temperature through the use of sensors and the effect on lumen maintenance shall be supplied.
- The replacement (upgrading and service) of the LED unit and the driver/power supply shall be possible
 without removing the whole luminaire but by means of replacing only the optical/gear compartment by
 means of a hinging mechanism, or other such simple method which does not require tools, to allow
 integration of future technological development of LEDs and power supply.
- The lifetime of the power supply or driver shall be 100 000hrs with 90% survival over the lifetime.
- The LED's are to be covered by a flat tempered glass with an IK08 rating.
- Each LED must be covered with a lens that provides the required distribution Lens type 5102 lenses to be used to meet Inkosi Langalibalele current requirements.
- The power supply (which is mounted within the luminaire in its own IP 66 separated compartment) must be able to operate between 185-265VAC at 50Hz on single phase system. It must comply with EMC – EN55015 an EN 61347-1. It must be able to operate between -15 deg to +60 deg case temperature. It must have the same life as the LED's. It must be power factor corrected to >95 and have a efficiency of >89%.
- The PCB board must have temperature monitoring sensors incorporated within. The luminaire must have a Ta rating of 35 Degrees (Certified by an independent Authorised authority). The luminaire is to be provided with a 10kV/10kA surge or 20kV/20kA protection device. The luminaire must automatically disconnect when hinged open.
- Various components such as the aluminium housings, glass protectors, silicon gaskets and stainless steel
 latches/clips shall be manufactured in South Africa, in line with the government directive of local
 manufacturing support.
- The assembly and testing of the LED luminaire shall be undertaken within an ISO 9001 certified factory, in South Africa.

Compliance to Specification

- The luminaire must bear the SANS 60598-2-3 mark (Proof will be required).
- The luminaire is to comply with the specifications laid out in the SABS ARP 035 revised document.

	(To be completed by Bidder)	
	ders must complete this schedule. Failure to answer this questicalify you and possible disqualify you for all future Bidding	ons honestly will
No	Question	Please State "Yes" or "No"
1	Is the Luminaire Assembled, Tested and designed in a South Africa ISO 9001 facility?	
2	Has the luminaire got 3 separated compartments with an IP66 rating on two of them?	
3	Does the luminaire bear the SANS 60598-2-3 mark?	
4	Is the luminaire manufactured from marine Grade EN 1706 AC- 47000 aluminium and verified by an independent Metallurgist?	
5	Is the minimum energy saving specified above achieved?	
6	The offered luminaire used the above minimum lumen outputs?	
7	LED's being used are 4000k?	



8	Does the luminaire being offered comply 100% with what is specified?	
9	The luminaire has the exact number of LED as specified?	

Please note that the above SANS 60598-2-3 Certificates and ISO 9001 certificate need to be provided to prove that you comply.

we	_ confirm that the above information is true and correct, and
•	e product being supplied does not comply completely with will be cancelled and all goods supplied will be returned a
Name _	
Signature _	

PRICES

Sub-Item Number	DESCRIPTION	Entry Type	Surge Protection	PRICE	VAT	PRICE INCL. VAT
42.A	LED Replacement 100w	Side	10kA			
42.B	LED Replacement 100w	Bottom	10kA			
42.C	LED Replacement 100w	Side	20kA			
42.D	LED Replacement 100w	Bottom	20kA			
42.E	LED Replacement 250w	Side	10kA			



42.F	LED	Side	10kA		
	Replacement				
	400w				
42.G	LED	Side	20kA		
	Replacement				
	250w				
42.H	LED	Side	20kA		
	Replacement				
	400w				
	·	•	TO	TAL PRICE	
Total price	to be used on pricing	schedule fo	r Pricing evaluat	ion	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

SAMPLE:

Bidders are required to submit clearly marked (supplier name, item number), complete samples of Item 42.A, 42.B, 42.C, 42.D, 42.E, 42.F, 42.G and 42.H for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

ESCALATION:	
Fixed Price:	YES / NO
If NO, please provide	details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	



By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 43: LED STREET LIGHT – 70W HIGH PRESSURE SODIUM & 125W MERCURY VAPOUR REPLACEMENT

- The LED streetlight luminaire must be supplied with 16 LED's with a CRI > 70 and make use of 4000k neutral white LED's.
- It must have a complete circuit wattage of between 50 Watts and 55 Watts and a lumen output of 5000 and 5500 lumen. The luminaire offered must be a direct replacement for the current 70w HPS and 125w MV fittings and must have an energy saving of no less than 37% for the 70w HPS and 62% for the 125w MV version. No other wattage will be accepted.
- The luminaire must consist of 3 separated compartments, the Spigot compartment, the lamp LED compartment and the gear compartment. The luminaire may only have an IP rating of 66 (Certified by a recognised authority) for the LED compartment and the gear compartment.
- The luminaire must only be manufactured from marine grade die cast aluminium (EN 1706 AC-47000 grade) only (a metallurgical report from an independent metallurgist confirming the grade of aluminium for all the luminaires offered will be requested if required). Inkosi Langalibalele Municipality reserves the right to submit luminaires for metallurgical testing when necessary.
- The spigot mounting compartment shall be suitable for side entry and have a spigot entry that complies with SANS 1088 (42mm x 125mm only).
 - This compartment is attached to the spigot by two stainless steel screw. The lamp and control gear section will hinge open and pivot on itself. It will be shut by means of two stainless steel latches.
- The lamp and gear compartment must have cooling fins above the lamp compartment that are designed in such a manner as to prevent dirt accumulation. The cooling rib height to width ratio may not exceed 0.7.
- The luminaires shall deliver 80% of the initial lumens, when installed for a minimum of 60 000 hours. If required, the bidder will have to provide depreciation graphs by means of IES LM 80-08 data of the LED's.
 The LED light source test data shall provide the expected data for at least 25% of rated LED light source lifetime, i.e.15 000hrs
- Temperature sensors shall be fitted as protection devices to the luminaire, placed directly next to the LEDs.
 These shall not switch off the luminaire completely. Full details of how the luminaire manages its temperature through the use of sensors and the effect on lumen maintenance shall be supplied.
- The replacement (upgrading and service) of the LED unit and the driver/power supply shall be possible
 without removing the whole luminaire but by means of replacing only the optical/gear compartment by
 means of a hinging mechanism, or other such simple method which does not require tools, to allow
 integration of future technological development of LEDs and power supply.
- The lifetime of the power supply or driver shall be 100 000hrs with 90% survival over the lifetime.
- The LED's are to be covered by a flat tempered glass with an IK08 rating.
- Each LED must be covered with a lens that provides the required distribution Lens type 5068 lenses to be used to meet Inkosi Langalibalele current requirements.
- The power supply (which is mounted within the luminaire in its own IP 66 separated compartment) must be able to operate between 108-305 VAC at 50Hz on single phase system. It must comply with EMC – EN55015 an EN 61347-1. It must be able to operate between -15 deg to +60 deg case temperature. It must have the same life as the LED's. It must be power factor corrected to >95 and have a efficiency of >89%.
- The PCB board must have temperature monitoring sensors incorporated within. The luminaire must have a Ta rating of 35 Degrees (Certified by an independent Authorised authority). The luminaire is to be provided with a 10kV/10kA surge or 20kV/20kA protection device. The luminaire must automatically disconnect when hinged open.
- Various components such as the aluminium housings, glass protectors, silicon gaskets and stainless steel
 latches/clips shall be manufactured in South Africa, in line with the government directive of local
 manufacturing support.
- The assembly and testing of the LED luminaire shall be undertaken within an ISO 9001 certified factory, in South Africa.
- The luminaire must bear the SANS 60598-2-3 mark (Proof will be required).
- The luminaire is to comply with the specifications laid out in the SABS ARP 035 revised document.



Initial

Compliance to Specification (To be completed by Bidder)

All Bidders must complete this schedule. Failure to answer this questions honestly will disqualify you and possible disqualify you for all future Bidding

No	Question	Please State "Yes" or "No"
1	Is the Luminaire Assembled, Tested and designed in a South Africa ISO 9001 facility?	
2	Has the luminaire got 3 separated compartments with an IP66 rating on two of them?	
3	Does the luminaire bear the SANS 60598-2-3 mark?	
4	Is the luminaire manufactured from marine Grade EN 1706 AC- 47000 aluminium and verified by an independent Metallurgist?	
5	Is the minimum energy saving specified above achieved?	
6	The luminaire offered uses the above minimum lumen outputs?	
7	LED's being used are 4000k?	
8	Does the luminaire being offered comply 100% with what is specified?	
9	The luminaire has the exact number of LED as specified?	

Please note that the above SANS to prove that you comply.	60598-2-3 Certificates and ISO 9001 certificate need to be provided
and acknowledge that if it's found	confirm that the above information is true and correct, that the product being supplied does not comply completely order will be cancelled and all goods supplied will be returned
Name	
Signature	

PRICES

Sub-Item Number	DESCRIPTION	Entry Type	Surge Protection	PRICE	VAT	PRICE VAT	INCL.
43.A	LED Replacement 70w & 125w	Side	10kA				
43.B	LED Replacement 70w & 125w	Bottom	10kA				
43.C	LED Replacement 70w & 125w	Side	20kA				



43.D	LED Replacement 70w & 125w	Bottom	20kA			
TOTAL PRICE						
Total price to be used on pricing schedule for Pricing evaluation						

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

SAMPLE:

Bidders are required to submit clearly marked (supplier name, item number), complete samples of Item 43.A, 43.B, 43.C and 43.D for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

ESCALATION:	
Fixed Price:	YES / NO
If NO, please provide	details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.





ITEM 44: LED POST TO REPLACEMENT – 125W MERCURY VAPOUR REPLACEMENT

- The LED streetlight luminaire must be supplied with 24 LED's with a CRI > 70 and make use of 4000k neutral white LED's.
- It must have a complete circuit wattage of between 52 Watts and 56 Watts and a lumen output of 5800 and 6200 lumen. The luminaire offered must be a direct replacement for the current 70w HPS and 125w MV fittings and must have an energy saving of no less than 60% for the 125w MV version. No other wattage will be accepted.
- The luminaire must consist of 3 separated compartments, the Spigot compartment, the lamp LED compartment and the gear compartment. The luminaire may only have an IP rating of 66 (Certified by a recognised authority) for the LED compartment and the gear compartment.
- The luminaire top cover must be round in shape with a slight curve. It must be manufactured from a Plasmid material that is UV resistant.
- The luminaire must be glare free and the LED's must shine upward in its IP66 enclosure onto a highly efficient glare free white reflector.
- The diffuser must be tapered from the top lid downwards to the spigot housing. The material must be high impact and clear with a IK 08 rating.
- The luminaire spigot must only be manufactured from marine grade die cast aluminium (EN 1706 AC-47000 grade) only (a metallurgical report from an independent metallurgist confirming the grade of aluminium for all the luminaires offered will be requested if required). Inkosi Langalibalele Municipality reserves the right to submit luminaires for metallurgical testing if necessary.
- The spigot mounting compartment shall be suitable for bottom entry and have a spigot entry that complies with SANS 1088 (76 Diameter).
 - This spigot compartment is attached to the optical department by two stainless steel screw.
- The luminaires shall deliver 80% of the initial lumens, when installed for a minimum of 60 000 hours. If required, the bidder will have to provide depreciation graphs by means of IES LM 80-08 data of the LED's.
 The LED light source test data shall provide the expected data for at least 25% of rated LED light source lifetime, i.e.15 000hrs.
- The replacement (upgrading and service) of the LED unit and the driver/power supply shall be possible
 without removing the whole luminaire but by means of replacing only the optical compartment by means
 of two stainless steel screws.
- The lifetime of the power supply or driver shall be 100 000hrs with 90% survival over the lifetime.
- The LED's are to be covered by a Tapered PMMA protector with a impact resistance of IK08 rating.
- The luminaire supplied must give a symmetrical distribution.
- The power supply (which is mounted within the luminaire in its own IP 66 separated compartment) must be able to operate between 185- 285 VAC at 50Hz on single phase system. It must comply with EMC EN55015 an EN 61347-1. It must be able to operate between -15 deg to +60 deg case temperature. It must have the same life as the LED's. It must be power factor corrected to >95 and have a efficiency of >89%.
- The PCB board must have a form of temperature monitoring sensors incorporated within. The luminaire must have a Ta rating of 35 Degrees (Certified by an independent Authorised authority). The luminaire is to be provided with a 10kV/10kA surge protection device.
- Various components such as the aluminium housings, PMMA protectors, silicon gaskets, top covers and stainless steel latches/clips shall be manufactured in South Africa, in line with the government directive of local manufacturing support.
- The assembly and testing of the LED luminaire shall be undertaken within an ISO 9001 certified factory, in South Africa.
- The luminaire must bear the SANS 60598-2-3 mark (Proof will be required).
- The luminaire is to comply with the specifications laid out in the SABS ARP 035 revised document.

	Compliance to Specification (To be completed by Bidder)	
	ders must complete this schedule. Failure to answer this questions hon ssible disqualify you for all future Bidding	estly will disqualify you
No	Question	Please State "Yes" or "No"



1	Is the Luminaire Assembled, Tested and designed in a South Africa ISO 9001 facility?	
2	Has the luminaire got 3 separated compartments with an IP66 rating on two of them?	
3	Does the luminaire bear the SANS 60598-2-3 mark?	
4	Is the spigot manufactured from marine Grade EN 1706 AC- 47000 aluminium and verified by an independent Metallurgist?	
5	Is the minimum energy saving of 60% achieved?	
6	The luminaire offered uses the above minimum lumen outputs?	
7	LED's being used are 4000k?	
8	Does the luminaire being offered comply 100% with what is specified?	
9	The luminaire has the exact number of LED as specified?	

Please note that the above SANS 60598-2-3 Certificates and ISO 9001 certificate need to be provided to prove that you comply.

<u> </u>	confirm that the above informathat the product being supplied does order will be cancelled and all goods	es not comply completely
Name		
Signature		

PRICES

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Sub-Item Number	DESCRIPTION	Entry Type	Surge Protection	PRICE	VAT	PRICE VAT	INCL.
44.A	LED Replacement 125w	Bottom	10kv/10ka				

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.





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Bidders are required to submit clearly marked (supplier name, item number), complete samples of Item 44.A for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

FSCA	I ATI	ANI.

Fixed Price:	YES / NO
If NO, please provide	details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

Delivery	

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

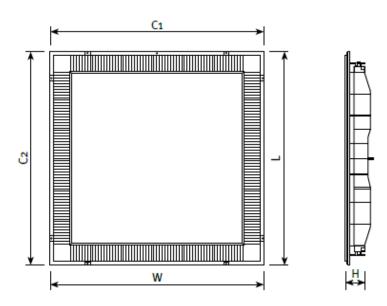
ITEM 45: LED FLUORESCENT PANEL

- The LED streetlight luminaire must be supplied with LED's with a CRI > 80 and make use of 4000k neutral white LED's.
- It must have a complete circuit wattage of between 35 Watts (for the 600 x 600 version) 3080 lumen and 70 Watts (1200 x 600 version) 6160 lumen. The luminaire offered must be a direct replacement for surface mounted fluorescent or recessed fluorescents.



- The luminaire must consist of a single enclosed housing with non-discolouring opaque acrylic diffuser and a white (White RAL 9016) polycarbonate body frame.
- The inner module must be no more than 70mm in depth
- Long useful lifetime of the LEDs (50 000hrs @ Tq 25°C, L70)
- Light colour neutral white light (4000K)
- Ambient temperature range of -10 to 40°C
- The PCB board must have a form of temperature monitoring sensors incorporated within. The luminaire must have a Tq rating of 25 Degrees.
- The assembly and testing of the LED luminaire shall be undertaken within an ISO 9001 certified factory, in South Africa
- Made in accordance to EN 60598 and EN 62262
- Must be available in surface mounted version as well

DIMENSIONS



Dari	600x600	600X1200
L	595mm	1195mm
W	595mm	595mm
Н	69.5mm	69.5mm
C1 (Cut-out)	575mm	1175mm
C2 (Cut-out)	575mm	575mm

Compliance to Specification (To be completed by Bidder)

All Bidders must complete this schedule. Failure to answer this questions honestly will disqualify you and possible disqualify you for all future Bidding

No	Question	Please State "Yes" or "No"
	Is the Luminaire Assembled, Tested and designed in a South Africa ISO 9001 facility?	



2	Is a one piece luminaire?	
3	Luminaire in accordance with EN 60598 and EN 62262?	
4	Complies with dimensions as above?	
5	The luminaire offered uses the above minimum lumen outputs?	
6	LED's being used are 4000k?	
7	Does the luminaire being offered comply 100% with what is specified?	

Please note that the above ISO 9001 certificate needs to be provided to prove that you comply.

	confirm that the above informathat the product being supplied does order will be cancelled and all goods	es not comply completely
Name		
Signature		

PRICES

Sub-Item Number	DESCRIPTION	Entry Type	PRICE	VAT	PRICE INCL. VAT
45.A	LED Office Light 600 x 600	Surface			
45.B	LED Office Light 600 x 600	Recessed			
45.C	LED Office Light 1200 x 600	Surface			
45.D	LED Office Light 1200 x 600	Recessed			
Total price t	o be used on pricing	schedule for P	_	L PRICE	

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

SAMPLE:

Bidders are required to submit clearly marked (supplier name, item number), complete samples of Item 45.A, 45.B, 45.C and 45.D for assessment. The sample **must** be delivered to the Public Work and Basic Services, Electricity Department, Waterworks Road, Estcourt within one (1) week of the Closure of the Bid. Failure to submit a sample will render the Bid submission invalid. Unsuccessful Bidders to collect their samples after the Bid Adjudication Process.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.

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Initial



ADJUDICATION:

It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.

80% - Price 20% - Preference

PROPOSED DELIVERY SCHEDULE:

For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.

By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.

ITEM 46: SMART METERING

Smart Prepayment Meter Solution Overview

1.0 **Delivering Revenue Security**

Securing the revenue from the various services that the Utility provides to its citizens in a timely and accurate manner is fundamental to keeping its strong financial position. Advanced, multi-layer, anti-fraud protection system is to provide real time tampering prevention and loss analysis on the meter level and on the grid level delivering full transparency of losses in the grid no matter where they are generated.

1.1 Prepayment

This project is designed to implement a technology platform that establishes an equitable and dependable smart prepaid electricity metering system that is highly accessible and simple to use for all residents.

Operationally, the functional requirements of the Smart Meter Solution have been designed to support the following Electricity Consumer experience.

The Electricity Consumer will be able to access multiple vending channels where they can pay for their prepaid electricity. These channels will include a network of Point of Sale Mobile Vending Terminals, mobile money, PC-Based Vending Terminals.

The Smart Meter (and Back End Systems) will know how much credit has been applied to the Smart Meter and the remaining credit balance can be sent by SMS to the customer or displayed within the Electricity Consumer's Premises so they can refer to this at any time.



The Utility will set default parameters so that it will trigger a series of alarms when the available credit reaches a set of threshold levels (kilowatt hours before credit runs out). This information will be displayed on the CIU. It is also possible to send SMS text alerts and emails to Electricity Consumers (assuming Electricity Consumers have registered their contact details with the Utility).

Based upon this, the Electricity Consumer should be fully aware of their consumption and level of credit, so they will be able to make an informed decision and plan:

- How to manage their remaining credit (i.e. reduce consumption if they do not have sufficient funds to reload credit immediately).
- When to reload credit onto their meter.

The Smart Meter Solution operating model therefore ensures that:

- The Electricity Consumer has multiple channels to select from to actuate payment.
- The Electricity Consumer will have real time information available to them on how much credit they have remaining.
- A system of alarms will advise Electricity Consumers if their credit has fallen below a threshold value (analogous to a "low fuel" warning light in car).

The Electricity Consumer can make an informed decision on when and how to make a payment ensuring an uninterrupted supply of electricity.

1.2 Protecting the Grid and Responding to Peak Power

The Smart Meter Solution should support several intelligent elements which gathers and analyses information in real-time in the grid in order to determine whether the grid is at risk by high demand at certain points (domestic consumer, industrial consumer, city, entire grid), if instability may affect the grid in the future (such as renewable energy and electric vehicle charging), or if there is shortage of supply.

The system should support load control devices installed in consumer premises to limit the use of auxiliary customer equipment (hot water heaters, air conditioners, swimming pool pump, etc.) during peak energy periods.

1.3 Under Frequency Based Distributed Intelligence

The smart meters should support under-frequency circuitry for rapid response to peak demand and dynamic pricing. The meter should have the option to disconnect and connect customers upon settable values in frequency pre-defined from the control centre.

1.4 Real time Solution

Provision for reliable and efficient bidirectional communication with the smart meter assets enabling real-time monitoring and control.

1.5 **Grid Compliance**

The solution must comply with all relevant local and international standards to assure full compatibility to the grid network.

1.6 Cyber Security

The solution must be fully secure, and designed with fail-safe systems to ensure the system's availability and zero loss of data.

1.7 Flexibility

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The smart meters should feature a hot swappable communications module enabling the use of PLC, GPRS or LAN, allowing the freedom of choice to the utility to incorporate new communications technologies as they become available.

1.8 Scalable Solution

The solution should be expandable to support additional applications such as demand response, energy forecasting, GIS, outage management, EV charging, etc.

The system should support high-volume meter data to scale-up as the Utility deploys increasing quantity of smart meters.

1.9 Energy Efficiency

Ability for the consumer to read metering data directly, frequently enough to enable the use of information to achieve energy savings.

1.10 Efficient Consumer Engagement

A self-service customer portal should provide the consumer with access to consumption and cost data (in user selected intervals and a variety of forms including export) to verify usage charges as well as provide analysis to justify energy savings projects.

1.11 Interoperable Solution

The system should feature open architecture/protocol standards allowing for integration of third-party manufactured equipment into the system and integration with ERP and billing software.

1.12 Integration of Renewable Generation

In consumer generated energy generation installations, the Smart Meters should support measuring and transmitting import and export of energy data.

1.13 Implementation of Advanced Tariff Structures

An essential task of the system is the application of remotely modifiable tariff structures such as Time of Use (TOU), and block/step tariffs, which may be assigned on an individual or customer type basis. The Utility should also has the ability to implement a combination of time of use (TOU) and block/step-incline tariffs.

2.0 Reference Architecture

This section describes a reference architecture for the Smart Meter Solution.

2.1 Reference Architecture

The reference architecture is described as a number of sub-systems which together form an integrated Smart Meter Solution.

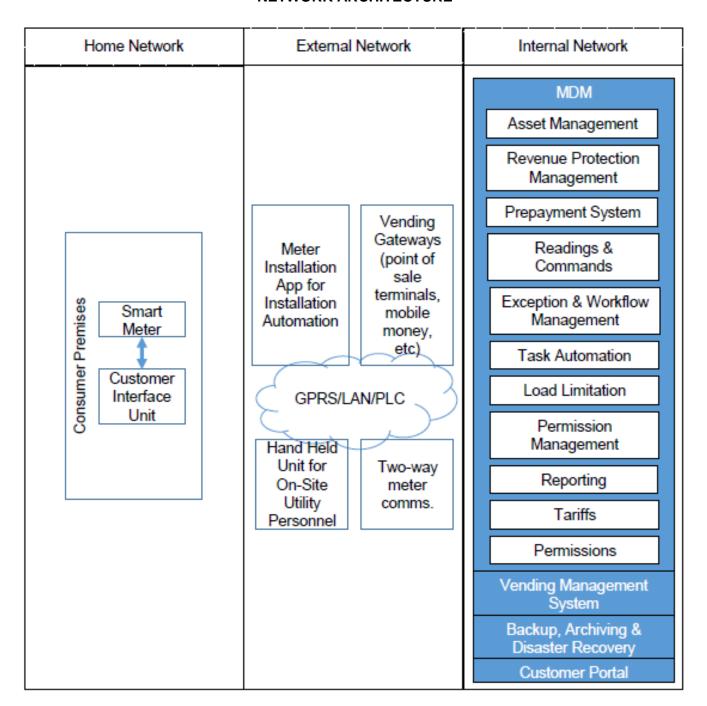
The Internal Network, which form part of the reference architecture are described as follows:

- Backup, Archiving & Disaster Recovery This system is to ensure a high level of business continuity in the case of system failures.
- Meter Data Management System (MDMS) The MDMS is responsible for processing and storing the data collected from the installed base of Smart Meters and provides centralised management data in respect of the Smart Meters and associated equipment.



 Vending Management System (VMS) - The vending software system manages the full vending process including STS token generation system. The vending should be capable of vending currency/units as per TOU or Step incline tariffs/fixed cost.

NETWORK ARCHITECTURE



2.2 Systems and equipment within the scope of this RFP

2.2.1 Smart Meters

There are many generic definitions for the term "Smart Meter". In the context of the Smart Meter Solution, at an overarching level the Smart Meters will include advanced functionality such as:

• The ability to record electricity consumption in defined intervals (as short as a few minutes), and to provide time-stamped meter readings.



- The ability for real-time two-way communication between the Smart Meter and the Back-End system.
- The ability to remotely disconnect and re-connect service.
- Collection of readings in multiple categories (e.g. to support Time-of-Use applications).
- Storage of meter data locally until its transfer to the MDMS.
- Support of ad-hoc requests from the MDMS for meter data.
- Enabling firmware upgrades by remote downloading from the MDMS.
- Support manual meter reading in case of loss of remote communication to the meter.
- Provide real time reporting of alarms/events (e.g. meter tampering, and power outages).
- In the future (or during the lifecycle of this project), it is likely that Electricity Consumers will have their own forms of power generation (e.g. solar). It will therefore be necessary to measure the power supplied to the Grid as well as power consumed. This capability must be provided in a single bi-directional meter.
- Support time/clock synchronisation.
- Local storage of pre-payment credit within the Smart Meter.
- The Smart Meters shall collect record and transmit energy profile data such as power quality, per phase voltage and current, average power factor, and line frequency etc.
- Smart Meters must be able to interface with CIUs.
- Smart Meters must allow the implementation of complex tariffs.
- Interoperable standards.
- Ability to supply emergency credits.
- Ability to support negative credit.

2.2.2 Communication Modules

Associated with the Smart Meters will be a range of interchangeable communications modules which shall support a range of communications modules, including but not limited to GPRS/3G, PLC, and LAN.

2.2.3 PLC Concentrator (Concentrator or DCU)

The Concentrators are typically installed near the low voltage side of low voltage distribution transformer. The Concentrator manages the meters via PLC and communicates with the utility server by GPRS or LAN. The unit is responsible for the acquisition, processing, storing, and transferring data between the meters and the MDMS. Each Concentrator need to communicate with at least 2000 meters through the power line communication.

The Concentrator should also be fitted with CT metering capabilities enabling unmetered consumption detection for identifying losses. By placing a "sum meter" at a node of the residential power grid and additional meters below it that measure the consumption of branches or specific loads in the tree below, the system performs a comparison between the sum meter and the branch/load meters sum. If the sum meter measurement is greater than the sum of the downstream meters measurements, it is a strong indication of an illegal load that consumes power.

2.2.4 Consumer Interface Unit (CIU)

The CIU is situated in the premises of the consumer and features a keypad with a display that can provide the Electricity Consumer with the ability to enter prepayment tokens as well as view a range of useful information relating to their energy usage. Communication between the CIU and the Smart Meter shall use PLC. The CIU need to communicate with the meters without the existence of power in the customer premises. The CIU must have the option to replace the battery externally.

Some of the key functions of the CIU are to:

- Enter prepayment token numbers
- Provide immediate display of the current credit available and the current level of consumption.
- Provide Electricity Consumer awareness of the current ToU period and tariff level.
- Provide advanced warnings to the Electricity Consumer when credit is near depleted and needs to be topped-up.
- Provide a mechanism upon power disconnection to ensure communication with the Electricity Consumer can be resumed.



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Provide a visible and audible alarm in the event of meter tampering.

2.2.5 Meter Data Management System (MDMS)

The MDMS software shall offer full capabilities for managing, controlling, monitoring and interfacing to smart metering/smart grid applications. It shall be a multi-channel, multi-protocol, multi-lingual system with robust database centres, and state of the art telecommunication network interfaces, which shall enable high data rate collection for large scale smart meter deployments.

It should providing multi-vendor management capable of integrating smart meters manufactured by various vendors, and designed with full authorization control of functional objects and users.

The system shall also support the integration of water and gas metering.

2.2.6 Meter Installation App (MIA)

The Bidder shall offer a comprehensive and advanced meter installation application for smart phones, which shall streamline the meter deployment and setup process. The application should automate installation process avoiding mistakes and ensuring minimal setup time. All installations must be done automatically (paperless) allowing project deployment progress and allowing GIS location with each meter installation.

2.2.7 Vending Gateway

The vending gateway includes the sales channels for prepayment of electricity between Electricity Consumers and the Utility. It includes Point of Sale (POS) mobile terminals, PC-based Point of Sale terminals, and mobile money integration.

2.2.8 Customer Portal

Each Electricity consumer is assigned a password-protected account accessible via internet to view consumption related data and graphs. In addition, the system supports the functionality of users to have password resets, export data, view past bills, receive messages from the utility.

2.2.9 Vending Management System

The vending management system handles the generation of STS tokens, reconciles transactions and produces reports.

2.2.10 Hand Held Unit (HHU)

The HHU is an infrared terminal, which allows communication with the Smart Meters and Concentrators via the infrared port. Running local software, the device can set, read and activate any function in the Concentrator and Smart Meter, with all functionality available for local on-site users. The device ensures security of the meter and system from the time of installation until configuration. It is mandatory that once the meter is installed in the field, the HHU should trigger all alerts to ensure storage of any tamper during the time the meter is still not connected to the MDMS.

3.0 Technical Proposal Requirements

3.1 Type Testing

3.1.1	The manufacturer shall have carried out the type tests to prove conformance to
Mandatory	requirements as specified by IEC 62052-11, IEC 62053-22, IEC 62053-23, IEC
Requirement	62053-21, at an accredited test facility.



	Certificate should be accepted only if performed and signed by an MID notified body from the list provided at NANDO website. (http://ec.europa.eu/enterprise/newapproach/nando/index.cfm?fuseaction=directive.nb&refe_cd=EPOS_434 37).
Bidder Response	
3.1.2 Mandatory Requirement	A copy of all test certificates and details of tests performed and the approval certificates should be submitted with the Bid response.
Bidder Response	
3.1.3 Mandatory Requirement	The accredited test facility, which carried out the type tests of the Smart Meters, shall prove conformance to ISO/IEC 17025:2005.
Bidder Response	
3.1.4 Respond	Meter type test certificates issued by an authority in the country of the Utility.
Bidder Response	

3.2 Generic Requirements

These requirements relate to the hardware, the software and the operational processes associated with the Smart Meter Solution.

3.2.1 Revenue Protection

3.2.1.1 Mandatory Requirement Bidder	The hardware and software should continuously monitor and calculate energy losses, looking for changes in power consumption behaviour of Electricity Consumers which show an un-normative consumption profile, set as a deviation (%) from average from the MDMS.
3.2.1.2 Mandatory Requirement	CT metering capability should be included in the DCU. The DCU located at the output of the low voltage transformer measures the total power consumption of this root. All the Smart Meters under the same root report total consumption. The
Bidder Response	MDMS should analyse the line loss analysis, and alert the system operators accordingly of suspected tampering within this network root.
3.2.1.3 Mandatory Requirement Bidder Response	Alert notifications should be programmed into the system to send an automatic SMS or email to the designated Utility personnel for each alarm type. The status of each alert should be managed within the MDMS.
3.2.1.4 Mandatory Requirement	The Smart Meters should create and transfer an automatic alarm to the MDMS for the following suspected tamper attempts: • Bypassing meter. • Bypassing neutral.



	 Inter-changing incoming and outgoing leads. Reversing the connections in one or two phases of 3 phase meters. Inter-changing phase and neutral and providing a local earth to act as neutral. Breaking of CT lead wires in one or two phases. Breaking seals and tampering with the recording mechanism, resetting the reading, etc. Tapping off from the incoming lead wire. Any cover open (even when not connected to power) should be detected and stored.
Bidder Response	
3.2.1.5 Mandatory Requirement Bidder Response	The Smart Meters alarm mechanisms should be primed from the time of leaving the manufacturing facility. Any suspected tamper events should be automatically notified to the MDMS upon first communications.

3.2.1.6	The Smart Meters should offer an option configurable in the MDMS to immediately
Mandatory	disconnect the power to the Electricity Consumer upon an illegal Smart Meter
Requirement	terminal cover open being detected.
Bidder	
Response	
3.2.1.7	It shall not possible to access any communication port without opening the
Mandatory	terminal cover or any other cover.
Requirement	
Bidder	
Response	

3.2.2 Security

3.2.2.1 Mandatory Requirement	The Bidder shall ensure that access to the configurable elements of the Smart Meter software is restricted through a secure user name and password system.
Bidder Response	
3.2.2.2 Mandatory Requirement	The Bidder is required to ensure that it is possible for administrators to restrict user permissions to match the jobs that individuals are required to do, and to create groups of users having the same set of user permissions. These permissions shall only allow users to access data and configurable items associated with their permission level. It shall be possible to create at least three permission levels (administrator plus two other levels).
Bidder Response	
3.2.2.3 Mandatory Requirement	The Bidder shall ensure that the system shall capture logs of user activities and user logins. The log shall specify the time the time of each activity.
Bidder Response	
3.2.2.4 Mandatory Requirement	The MDMS shall not all any manual modification of Smart Meter readings.
Bidder Response	
3.2.2.5 Mandatory Requirement	The MDMS user login password shall require a combination of upper and lower case letters as well as digits. The passwords shall be encrypted within the database, and require changing every 3 months. For the most critical operations, the MDMS shall require two-factor authentication.
Bidder Response	



3.2.2.6 Mandatory Requirement	Use of the MIA shall be username and password protected. The username and password shall be configured in the MDMS.
Bidder Response	
3.2.2.7 Mandatory Requirement Bidder	Each MIA license shall be restricted to a unique mobile phone identification number. Communication by the MIA to the MDMS using an unauthorized mobile phone shall be rejected.
Response	
3.2.2.8 Mandatory Requirement	Smart Meter software is updatable in a secure manner with only authorized software able to be loaded into the Meter.
Bidder Response	
3.2.2.9 Mandatory Requirement	Any write command to the Smart Meter such as date & time, sampling rate, etc. can be configurable to result in an alert to the MDMS. The Smart Meters have triggering devices which allows the operator to view all alerts. Once the alert events are closed, the Smart Meters are available to be triggered again.
Bidder Response	
3.2.2.10 Mandatory Requirement	Session checking is performed on each page of the MDMS every 20 minutes.
Bidder Response	
3.2.2.11 Mandatory Requirement	All SQL scripts in the MDMS are protected in stored procedures.
Bidder Response	
3.2.2.12 Mandatory Requirement	All communications interfaces support only the protocols and functionality required for communications with Smart Meter Assets. It does not allow extra capability which is not specified by the system elements.
Bidder Response	
3.2.2.13 Mandatory Requirement	The MDMS shall have the necessary security measures such as a changing entrance key preventing automatic "key" generation machines to break into the system.
Bidder Response	

3.2.2.14	The MDMS should be secured with SSL 128 bit certification by Verisign.
Mandatory	
Requirement	
Enter	
Compliance	
Code & Bidder	
Response	
3.2.2.15	The MDMS should be secured with a security hardware dongle and a license key.
Mandatory	
Requirement	
Bidder	
Response	

3.2.3 Standards

3.2.3.1 Desirable Requirement	The Bidder should ensure that industry standard hardware and software (COTS) shall be used wherever possible. The need for custom development shall be minimised.
Enter Compliance	
Code & Bidder Response	
3.2.3.2 Respond	The Bidder should identify any part of their proposed solution where custom development will be required.
Bidder Response	
3.2.3.3 Mandatory Requirement	The Bidder shall ensure that all communication protocols used in the Smart Meter Solution shall be freely available to all third party suppliers who may be required to support them in their products.
Bidder Response	

3.2.4 Prepayment and Vending

3.2.4.1 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meter Assets shall be capable of sending a reminder to Electricity Consumers when their credit is low. As the account balance approaches zero, the MDMS system initiates a message to the Electricity Consumer and sends it via a configurable communications method, as a minimum text message, and email.
Bidder Response	
3.2.4.2 Mandatory Requirement	When the Smart Meter accepts the prepayment token, the Smart Meter Back End System shall receive a confirmation from the Smart Meter via the two way communication that the prepayment token has been successfully loaded.
	The MDMS shall then read the credit balance in that Smart Meter. With every increase in the kilowatt hour balance reported by each Smart Meter, the MDMS shall automatically verify with the billing system and VMS that this increase in credit balance is supported by a legal transaction. The Back End system logs all activity with the Smart Meter so that records are maintained and available for authorized Utility personnel to verify the individual who loaded the credit, whether the loading of credit was performed automatically or manually, the time of the transaction and the amount.



	There should be an option to automatically send an SMS or email to the Electricity Consumer confirming that this process is complete.
Bidder	
Response	
3.2.4.3 Mandatory Requirement	The Smart Meter shall be able to store credit payment information within the local Smart Meter memory and continue to measure consumption and deduct the associated credit balance in real time, even in the event that communications to the MDMS is lost. Once communications to the MDMS is restored, the Smart Meter shall have the capability to update the MDMS with the latest consumption information and credit balance.
Bidder Response	
3.2.4.4 Mandatory Requirement	It shall be possible to remotely control essential elements via the Smart Meter Communication Platform, such as the ability to:
	 (i) Remotely credit a Smart Meter; (ii) Remotely switch a Smart Meter between credit and pre-payment mode; and (iii) Send immediate online tariff changes to the Smart Meter and Point of Sale terminals.
Bidder Response	
3.2.4.5 Mandatory Requirement	 The system shall offer the option to remotely configure the automatic disconnection policy when credit is exhausted. Option to set parameters according to each customer (or group) profile: Set friendly "over-draft" credit. A small amount of emergency credit, so that Electricity Consumers can avoid loss of service in the middle of the night. The "friendly" emergency over draft credit utilized shall be immediately subtracted from the next payment. Another option in the case that the Electricity Consumer did not pay on-time is to allow the Electricity Consumer to consume small amounts of energy (only for lights and refrigerator) before full disconnection. Not automatically dis-connect on weekends or holidays. Flagging of accounts for "critical need" or "lifeline" customers (who use, for
Bidder Response	instance, vital breathing equipment), so that disconnection does not endanger health and safety.



3.2.4.6 Mandatory Requirement	The Smart Meter shall offer at least 128 friendly credit dates can be stored in the Smart Meters. These dates can be updated locally via the optic port and via the Smart Meter Communication Platform.
Bidder Response	
3.2.4.7 Mandatory Requirement	The Smart Meters type specified within this RFP are split meter configurations. The Smart Meters communicate with the CIU via PLC. For Smart Meters communicating with GPRS or LAN rather than PLC, then the Smart Meter should offer an on-board PLC chip for communication between the Smart Meter and the CIU.
Bidder Response	
3.2.4.8 Mandatory Requirement	The Bidder shall ensure that the Smart Meters accept payment tokens on the basis of currency and not kWh.
Bidder Response	
3.2.4.9 Mandatory Requirement	The vending solution should incorporate various payment methods, at an unlimited number of points of sale locations. The vending solution should supports a number of vending channels including: Mobile money. Internet. Point of sale.
Bidder Response	
3.2.4.10 Mandatory Requirement	All prepayment commands must be encrypted according to the STS standard.
Bidder Response	
3.2.4.11 Mandatory Requirement Bidder	The Bidder shall ensure that the policy to disconnect or reconnect an Electricity Consumer whose credit balance falls below a particular threshold shall be configurable from the MDMS.
Response	
3.2.4.12 Mandatory Requirement	The Bidder shall ensure that communication between the Smart Meter and the MDMS shall be maintained indefinitely after the Electricity Consumer's power has been disconnected to ensure that power can be restored as soon as payment has been received.
Bidder Response	

3.2.4.12	The Smart Meter shall comply with the following standards:			
Mandatory				
Requirement	• IEC 62055-41.			
	• IEC 62055-51.			
	A copy of all approval certificates should be submitted with the bid response.			
Bidder				
Response				

3.2.5 Demand Response

3.2.5.1 Mandatory Requirement	For peak load management, the Smart Meter shall provide a facility to limit the Electricity Consumer's total load to a configurable current. Above this limit, support to the Electricity Consumer shall be interrupted after a pre-configurable deleperiod. This load limit should be able to be defined for each individual Smart Meter group of consumers.	
	The peak load limiting capability shall be configurable locally and via the Smart Meter Communication Platform. The time duration of restricted current/ disconnection should be set at varying levels for individual Smart Meters/group of Electricity Consumers.	
	The current limit and/or maximum load should be programmable locally at the Smart.	
Bidder Response		
3.2.5.2 Mandatory Requirement	Under-frequency circuitry should be built into the Smart Meters for rapid demand response and dynamic pricing. The closed loop Smart Meters with under-frequency circuitry installed should continuously monitor frequencies, and react within 120ms to frequency variations and execute demand response or dynamic pricing processes.	
	In demand response events, automatic reconnection should occur after a configurable period if frequency is within limits defined.	
Bidder Response		
3.2.5.3 Mandatory Requirement	Each Smart Meter shall have a remotely programmable normal load threshold limit, which can be set remotely from the MDMS. These settings in the Smart Meters, protect the circuit breakers belonging to the Utility. If demand exceeds a certain level (i.e. 100 amps) automatic disconnection occurs with automatic reconnection.	
Bidder Response		
3.2.5.4 Mandatory Requirement	Controlled load management shall be remotely settable for each Smart Meter individually, or for groups of Smart Meters. A single load limitation command sent to a certain Smart Meter or consumer group limits the load (each consumer or group can be a different pre-defined value).	



	For example, only those consumers specified as industrial with capacity over a certain amount, or only those consumers consuming an excessive amount.
Bidder Response	
3.2.5.5 Mandatory Requirement	It shall be possible to disable the peak load limiting capability for vulnerable Electricity Consumers such as patients on dialysis; frail/elderly and emergency services. This shall be a configuration option that can be changed locally or remotely by authorised personnel.
Bidder Response	
3.2.5.6 Mandatory Requirement	It shall be possible for Electricity Consumers to restore the supply locally following an interruption caused by exceeding the peak load limit.
Bidder Response	

3.3 Architecture

3.3.1 Respond	The Bidder is requested to provide a schematic drawing of their proposed solution architecture.
Bidder Response	
3.3.2 Respond	The Bidder is requested to clearly identify all areas where their proposed solution differs from the Reference Architecture detailed in Section 4 of this RFP.
Bidder Response	
3.3.3 Respond	The Bidder is requested to provide a detailed overview (narrative) of all the major components, systems and technologies used in their proposed solution.
Bidder Response	
3.3.4 Respond	The Bidder is requested to provide full details of where components are bespoke, and the degree to which COTS products will require configuration/update.
Bidder	

3.4 Smart Meters – Electrical Requirements

3.4.1 Common Requirements and Functionality

3.4.1.1 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meters shall include lightning and power surge protection to prevent against destruction such as a severe lightning strike.	
	The Bidder shall specify if the level of voltage impulse strength conforms to the requirements below:	
	 Single phase Smart Meters: at least 12kV with 1.2/50us. Three phase Smart Meters: at least 6kV with 1.2/50us. 	
Bidder		
Response		



3.4.1.2	The nominal voltage and current range of each Smart Meter shall be as specified			
Mandatory Requirement	here:			
	METER TYPE	CONFIGURATION	NOMINAL VOLTAGE	
	Single-phase, whole current (5A to 100A)	Single-phase, two wire	230	
	Three-phase, whole current (5A to 100A)	Three-phase, four wire	230/400	
	Three-phase, CT connected (1A to 5A)	Three-phase, three wire	110	
Bidder Response				
3.4.1.3 Mandatory Requirement	Smart Meters shall support a frequency of 50Hz with at least ±5% variation.			
Bidder Response				
3.4.1.4 Mandatory Requirement	All parts of a Smart Meter shall be fully functional over an operating temperature range of at least -40°C to 70°C.			
Bidder Response				
3.4.1.5 Mandatory Requirement	Smart Meters shall measur	e, record and totalise elect	tricity consumption in kWh.	
Bidder Response				
3.4.1.6 Mandatory Requirement	Three-phase meters shall rkVA and kVar to enable po		se electricity consumption in	
Bidder Response				

3.4.1.7 Mandatory Requirement	The Bidder shall specify the dimensions of their proposed Smart Meters which should not be greater than:		
	DIMENSION	SINGLE PHASE	THREE PHASE METER
	Width (mm)	METER <115	<175
	Height (mm)	<203	<295
	Depth (mm)	<75	<90
Bidder Response			
3.4.1.8 Mandatory Requirement		for transformer-connected	have a bore diameter of at Smart Meters shall have a
Bidder Response			
3.4.1.9 Mandatory Requirement	Smart Meters shall be capa	able of passing 120% of its	thermal rating continuously.
Bidder Response			
3.4.1.10 Mandatory Requirement	Voltage range of operation	at least: -40% to +30% Un	
Bidder Response			
3.4.1.11 Mandatory Requirement	The weight of each Smart Meter shall be no more than specified here: • Single phase: 0.95kg. • Three phase: 2.9kg.		
Bidder Response			
3.4.1.12 Mandatory Requirement	The Smart Meter Protection	n Class shall be at least IP:	54.
Bidder Response			
3.4.1.13 Mandatory	METER TYPE	VOLTAGE CIRCUIT	CURRENT CIRCUIT
Mandatory Requirement	Single-phase	<1.5W (10VA), <3W (12VA) including communication	<1.2VA
	Three-phase (per phase)	<1.5W (6VA), <8W when communication	<0.2VA
	Three-phase CT Operated (1 or 5 A)	<5mW (5mVA) and <125mW (125mVA)	<1VA
Bidder Response			
3.4.1.14 Mandatory Requirement		e diagrams shall also be	of the electrical termination mounted on the metering



Bidder Response	
3.4.1.15 Respond	The Bidder is requested to provide detailed specifications for each type of Smart Meter proposed for this solution. The specifications should cover the electrical performance of the Smart Meter, the Smart Meter functionality and the communications modules available for the Smart Meter.
Bidder Response	

3.4.2 Metrology Accuracy

3.4.2.1 Mandatory Requirement	The Sma	art Meter sha	all have a Metrology A	ccuracy of at	least Class 1.
Bidder Response					
3.4.2.2 Mandatory Requirement	Current Transformer and Voltage Transformer fed Smart Meters shall cater for the following International Standards:				
-	ACTIVE ENERGY (kwh) RE-ACTIVE ENERGY (kVarh)				
	ITEM	CLASS	SPECIFICATION	CLASS	SPECIFICATION
	1	0.5s	IEC 62052-11	0.5s	IEC 62053 part 24
	2	0.2s	IES 62053-22	0.5	IEC 62053 part 24
	3	0.5	XXX	2 & 3	IEC 62053-23
Bidder Response					
3.4.2.3 Mandatory Requirement	the Sma		en dispatched from the		tes shall be included with I a soft copy shall be sent

3.4.3 Pulse Outputs

3.4.3.1	The three phase Smart Meters shall have two verification impulse output LED's
Mandatory	i.e. an impulse for active energy and an active pulse for reactive energy. These
Requirement	impulses shall be fully configurable in terms of the energy value of each pulse.
	The single phase Smart Meters shall have one verification impulse output LED i.e.
	representing kWh. This impulse shall be fully configurable in terms of the energy
	value of each pulse.
Bidder	
Response	

3.4.4 Time Clock Synchronization

3.4.4.1	The date and time within Smart Meters shall be maintained within 0.5 seconds per
Mandatory	day of local time.
Requirement	
Bidder	
Response	
3.4.4.2	The clock in each Smart Meter shall be automatically synchronized through the
Mandatory	MDMS and locally through the optical interface. Synchronisation of the Smart
Requirement	Meter clock shall not be based on power system frequency.



Bidder Response	
3.4.4.3 Mandatory Requirement	Following loss of mains supply, battery backup must provide at least a capacity of 7 days of continuous operation of supply of RTC.
Bidder Response	
3.4.4.4 Mandatory Requirement	The time in the Smart Meters are to be checked by the server on a daily basis. Future time changes are remotely transferred and saved in the Smart Meters for immediate update to the meters' real-time clock at the scheduled date and time.
Bidder Response	

3.4.5 Smart Meter Contactor

3.4.5.1 Mandatory Requirement	The single phase and three phase (direct connected) Smart Meters must have an internal contactor for disconnecting the supply.
Bidder	
Response	
3.4.5.2	The internal contactor should comply with the EN 62054-21 standard.
Mandatory	
Requirement	
Bidder	
Response	
3.4.5.3	The load contactor for both the single phase and three phase (direct connected)
Mandatory	Smart Meters should be rated at a minimum of 100 A.
Requirement	
Bidder	
Response	
•	

3.4.5.4 Mandatory Requirement Bidder Response	The Bidder shall ensure that their proposed Smart Meters shall disconnect or reconnect the Electricity Consumer's power in response to commands from the MDMS or from a local handheld terminal (both single and three phase meters).
3.4.5.5 Mandatory Requirement	The Bidder shall ensure that their proposed Smart Meters shall be able to report whether the Electricity Consumer's power is currently connected or disconnected.
Bidder Response	
3.4.5.6 Mandatory Requirement	The Bidder shall ensure that all of the Smart Meter's functionality (apart from allowing electricity to pass) shall continue to operate as normal when an Electricity Consumer's power has been disconnected.
Bidder Response	
3.4.5.7 Mandatory Requirement	The Bidder shall ensure that when an Electricity Consumer's electricity supply has been disconnected using the Smart Meter, it shall not be possible for faults within the Smart Metering Systems to cause the restoration of the supply.
Bidder Response	
3.4.5.8 Mandatory Requirement	Where loss of supply has occurred for reasons outside of the control of the Smart Meter (e.g. network power failure or the removal of the house service fuse), the Bidder shall ensure that the Smart Meter shall retain the setting of the contactor prior to the supply loss when the supply is restored.
Bidder Response	

3.4.6 Back-up Batteries

3.4.6.1 Mandatory Requirement	Bidders should ensure that the batteries used to maintain vital Smart Metering functions during a power outage, are supported by a battery and super capacitor and have a minimum service life of 20 years.
Bidder Response	
3.4.6.2 Mandatory Requirement	The minimum battery self-power to maintain consumption recording operation per Smart Meter type during temporary power losses shall be 15 days.
Bidder Response	
3.4.6.3 Mandatory Requirement	Bidders shall ensure that where batteries are used to maintain vital metering functions during a power outage, then the batteries shall be leak resistant.
Bidder Response	
3.4.6.4 Mandatory Requirement	Any attempt to open the terminal/meter covers during outage, will be registered and transferred to the MDMS once power is restored.
Bidder Response	



3.4.7 EMC (Electromagnetic Compatibility)

3.4.7.1 Mandatory Requirement	Voltage dips and short interruptions: Smart Meters shall be tested in accordance with IEC62052-11 (or equivalent) as appropriate.
Bidder Response	
3.4.7.2 Mandatory Requirement	Voltage transients on supply lines and/or signal lines: Smart Meters shall be tested in accordance with IEC62052-11 (or equivalent) as appropriate.
Bidder Response	
3.4.7.3 Mandatory Requirement	Electrostatic discharges: Smart Meters shall be tested in accordance with IEC62052-11 (or equivalent) as appropriate.
Bidder Response	
3.4.7.4 Mandatory Requirement	Radio frequency electromagnetic fields: Smart Meters shall be tested in accordance with IEC62052-11 (or equivalent) as appropriate.
Bidder Response	
3.4.7.5 Mandatory Requirement	Conducted radio frequency electromagnetic fields on supply lines and/or signal lines: Smart Meters shall be tested in accordance with MID Annex D.
Bidder Response	
3.4.7.6 Mandatory Requirement	Voltage variation: Smart Meters shall be tested in accordance with MID Annex D.
Bidder Response	

Initial_____

3.4.7.7	The Smart Meter shall meet the radio interference suppression requirements of
Mandatory	EN 55022 (or equivalent).
Requirement	
Bidder	
Response	
•	

3.4.8 Meter Safety

3.4.8.1	Smart Meters shall have all electrical parts and terminal connectors (e.g. power
Mandatory	supply terminals, plugs and sockets etc.) inaccessible and/or insulated and
Requirement	protected such as to prevent inadvertent contact by the installer or Electricity
Requirement	Consumer.
Bidder	
Response	
3.4.8.2	Smart Meters shall be manufactured to conform to protective class II.
Mandatory	·
Requirement	
Bidder	
Response	

3.5 Smart Meters – Functional Requirements

3.5.1 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meters shall support a full range of time-of-use (TOU) tariff options. At a minimum: 4 tariffs, 2 sets of tariff and table structures. Each table includes at least 2 time zones per year, 8 possible tier switches per day, with holiday, weekend, Saturday and Sunday schedules.
3.5.2 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meters supports a combination of TOU and Step Inclined Tariff.
Bidder Response	
3.5.3 Mandatory Requirement	Smart Meters shall be capable of being remotely configured for maximum load, tariff tables, time and date synchronization.
Bidder Response	
3.5.4 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meters shall send load profile data including: positive and reverse active energy, current, voltage, frequency, and power factor to MDMS on a regular basis according to pre-defined configurable schedule.
Bidder Response	



3.5.5 Mandatory Requirement	The Bidder shall ensure that the proposed Smart Meters shall support on-demand ad hoc requests from the MDMS for Smart Meter data.
Bidder Response	
3.5.6 Mandatory Requirement	The Bidder shall ensure that their proposed Smart Meters shall provide an accurate time stamp for each Smart Meter reading.
Bidder Response	
3.5.7 Mandatory Requirement	The three phase Smart Meters shall record active and reactive energy in all four quadrants.
Bidder Response	
3.5.8 Mandatory Requirement	The Bidder shall ensure that manual Smart Meter reading shall be possible if communication is lost with the Smart Meter.
Bidder Response	
3.5.9 Mandatory Requirement	The Bidder shall ensure that their proposed Smart Meters shall detect and record Smart Meter alarms and events (including tampering, power quality, power outages, and phase failures, etc.) and shall provide near real time reporting of those alarms and events to the MDMS.
Bidder Response	
3.5.10 Mandatory Requirement	The Bidder shall ensure that their proposed Smart Meters shall collect and report basic power quality information, at a minimum: over-current, power outages, per phase voltage and current, average power factor, line frequency etc.
Bidder Response	

3.5.1 Data storage and memory

3.5.1.1	The Bidder shall ensure that the proposed Smart Meters shall store the last 200
Mandatory	days of readings at 15-minute intervals with:
Requirement	
	minimum of 14 data registers for single phase Smart Meters; and
	minimum of 26 data registers for three phase Smart Meters.
Bidder	
Response	



3.5.1.2 Mandatory Requirement	The Smart Meter shall be capable of storing the event and alarm data that would be generated in a typical period of 120 days.
Bidder Response	
3.5.1.3 Mandatory Requirement	All data and events shall be date and time stamped at the Smart Meter with a resolution of 1 minute or better.
Bidder Response	
3.5.1.4 Mandatory Requirement	During loss of power, the Smart Meter memory shall have a minimum retention time equal to the operational design life of the Smart Meter over the specified temperature range.
Bidder Response	
3.5.1.5 Mandatory Requirement	Where Smart Meter data is being continually updated, the data storage shall operate on an over-write First In First Out (FIFO) basis.
Bidder Response	
3.5.1.6 Mandatory Requirement	All data held in Smart Meter memory shall be accessible, both locally and remotely, by authorised personnel.
Bidder Response	

3.5.2 Power Export

Where the Electricity Consumer has a solar panel or some other form of power generation, it will be necessary to measure the power generated as well as the power consumed. This capability must be provided in a single bi-directional Smart Meter.

3.5.2.1	The Smart Meter shall support 48 Time of Use (TOU) export registers storing
Mandatory	measured exported energy in kWh. Each Energy value should be able to be
Requirement	measured with maximum 4 tariffs (T1, T2, T3 and T4).
Bidder	
Response	
3.5.2.2	The Smart Meter shall be capable of storing pricing information for exported
Mandatory	operav
wanuatory	energy.
Requirement	energy.
	energy.
Requirement	energy.



3.5.2.3 Mandatory Requirement Bidder Response	The Smart Meter shall be able to display total generation as a total exported value, and current rate of export.
Response	
3.5.2.4	The three phase Smart Meters shall measure and record Positive (Import) Active
Mandatory Requirement	Energy (+A) and Negative (Export) Active Energy (-A). They should also be able to set the Combined Active Energy with +A + -A or +A - -A . The Smart Meter should also record Combined Active Energy +A and -A. For Electricity Consumers with energy production installations, with both Import and Export of Active Energy, the Smart Meter should calculate and produce billing with +A and -A individually.
Bidder Response	

3.5.3 Communication with Smart Meters

Bi-directional communication is required between the MDMS and the installed base of Smart Meters. Furthermore, communications technologies tend to have a shorter working life than Smart Meters, so provision must be made for upgrading the communication technology during the life of the Smart Meters.

3.5.3.1 Mandatory Requirement Bidder Response	All Smart Meters shall support bi-directional communication with the MDMS.
3.5.3.2 Mandatory Requirement	Smart Meters shall respond to commands from the MDMS in near real time.
Bidder Response	
3.5.3.3 Mandatory Requirement	Smart Meters shall support a range of different communication options including, but not limited to: Power Line Communication, serial RS232, mobile data (dual standard GPRS/3G), and Ethernet. The Bidder shall detail which communications options are available for each type of Smart Meters proposed.
Bidder Response	
3.5.3.4 Mandatory Requirement	The RS485 communication interface should include at least 4 digital outputs, isolated from all other meter circuits with fail-safe circuitry able to withstand AC 230V for 2 minutes without damage.
Bidder Response	



3.5.3.11 Desirable Requirement Enter Compliance Code & Bidder	The Smart Meter Solution should make provision for the future incorporation of smart water and gas meters into the architecture.
Mandatory Requirement Bidder Response	Consumer Interface Units and Load Control Units via PLC, with a range of at least 500 meters.
Bidder Response	All Smart Meters should have the capability to communicate with devices such as
3.5.3.9 Mandatory Requirement	If GPRS/3G is being used for Smart Meter communication, the SIM card shall be installed inside the Smart Meter or communications module casing so that it is difficult to steal. The Bidder should explain how they propose to meet this requirement.
Bidder Response	onodia not take longer than o occordo.
3.5.3.8 Mandatory Requirement	The Bidder shall guarantee PLC communication reliability of at least 99% first time correct data reception over any Utility power line (<1% data packets requiring retransmission due to data corruption). In addition the Bidder shall guarantee PLC communication reliability of hourly readings with greater than 95% success and daily readings of at least 99% success. Response time to manual reading request should not take longer than 5 seconds.
Bidder Response	
3.5.3.7 Mandatory Requirement	The Bidder shall guarantee PLC communication achieves two-way communications between the Smart Meter and the concentrator over a distance of at least two kilometres through the electricity wires (aluminium / copper).
Bidder Response	
3.5.3.6 Mandatory Requirement	Communications modules (including mobile SIM cards) shall be physically protected against theft and unauthorised access.
Bidder Response	
3.5.3.5 Mandatory Requirement	The Smart Meters should feature a hot swappable, field replaceable, plug-in communications module inside the Smart Meter casing enabling plug-and-play flexibility with the options of PLC, GPRS and LAN communications, without dismantling the meter and without the need to upgrade the Smart Meter firmware. It should be possible for authorised personnel to remove and replace communications modules contained within the Smart Meter without de-energising the Smart Meter.

3.5.3.12 Mandatory Requirement	The Smart Meter must include an infrared communications port with a secure mechanism provided for local data collection or local configuration of the Smart Meter by authorised personnel.
Bidder Response	
3.5.3.13 Mandatory Requirement	The Smart Meters and DCU should communicate via PLC, in accordance to IEC1901-2.
Bidder Response	
3.5.3.14 Desirable Requirement	The Bidder shall ensure that the Smart Meter data using RS485 communications shall be uploaded in an open standard protocol that will enable easy integration between each type of Smart Meter and the MDMS.
Enter Compliance Code & Bidder Response	
3.5.3.15 Mandatory Requirement	The Bidder shall ensure that Smart Meter upgrades shall be possible by downloading new firmware from the MDMS as well as locally via the RS485 port.
Bidder Response	
3.5.3.16 Mandatory Requirement	The DCU shall gather and translate alarm/event messages from the Smart Meters and shall transmit them to the MDMS. These messages shall include power outage alarms. The Bidder shall explain how they propose to meet this requirement.
Bidder Response	
3.5.3.17 Desirable Requirement	It is desirable for the DCU to be able to broadcast to a pre-defined subset of Smart Meters, so that (for example) demand management could be implemented differently for business and residential Electricity Consumers. Bidders shall explain how they will meet this requirement.
Enter Compliance Code & Bidder Response	
3.5.3.18 Mandatory Requirement	Each DCU shall be provided with GPRS/3G and Ethernet for communications with the MDMS, and PLC communications for managing the Smart Meters. In addition each DCU shall include as a minimum: Serial Interface, USB, and Infrared ports.
Bidder Response	
3.5.3.19 Mandatory Requirement	Each DCU shall support a minimum of 2,000 Smart Meters.
Bidder Response	
3.5.3.20 Mandatory Requirement	Each DCU shall also include in-built metering capability (class 1).
Bidder Response	

Initial_____



3.5.3.21 Mandatory Requirement	In case of a phase loss, the DCU shall still function.
Bidder Response	
3.5.3.22 Mandatory Requirement	The concentrator should provide information on GPRS signal quality to the MDMS.
Bidder Response	
3.5.3.23 Mandatory Requirement	The Bidder shall provide a technical specification of the DCU and detailed narrative on the operation of the PLC platform proposed (from the Smart Meter to the DCU). This narrative should include any prerequisites on the quality of the LV network to ensure reliable communications that meet the reliability and availability parameters detailed earlier in this RFP.
Bidder Response	

3.5.4 Smart Meter Displays

3.5.4.1 Mandatory Requirement	All Smart Meter displays shall default to the English Language.
Bidder Response	
3.5.4.2 Mandatory Requirement	All displays shall be clear to read and easy to understand and: a) Have a display size of 2 lines, 8 characters per line minimum. b) Have a minimum main field digit size of 9mm.
Bidder Response	
3.5.4.3 Mandatory Requirement	If a backlight is used, the backlight shall be configurable to: a) Operate or not (i.e. remain on or off). b) Turn off after a set duration (to save energy / battery life).
Bidder Response	
3.5.4.4 Mandatory Requirement Bidder Response	Smart Meters and associated Electricity Consumer interface units shall incorporate a clear and unambiguous display that indicates cumulative consumption. This display shall be accessible without tools.
3.5.4.5 Mandatory Requirement	The Smart Meter reading shall have a resolution of at least 0.01kWh.
Bidder Response	



3.5.4.6	The display shall be certification sealed and access to the display shall not be
Mandatory	possible without breaking the seal. No other modules of the Smart Meter shall be
Requirement	behind this metrological seal.
Bidder Response	
3.5.4.7	It shall not be possible to reset metrological cumulative registers.
Mandatory	
Requirement	
Bidder	
Response	
3.5.4.8	Where the metrological display is also used for other purposes then its default
Mandatory	condition shall be showing the most recent cumulative consumption. Where an
Requirement	Electricity Consumer has ceased interacting with the Smart Meter, the display
	shall return to showing the default condition within 30 seconds of the last Electricity
	Consumer interaction.
Bidder Response	
3.5.4.9	The display shall incorporate a facility to check that it is working correctly.
Mandatory	
Requirement	
Bidder	
Response	
0.7.4.40	
3.5.4.10	The Smart Meter shall be capable of displaying the following information as a
Mandatory	minimum:
Requirement	
	a) Current value of active energy – total value and value for each tariff.
	b) Previous 1 month value of active energy – total value and value for each
	tariff.
	c) Previous 2 month value of active energy – total value and value for each
	tariff
	d) Current mode of operation;
	e) The status of the supply shut-off mechanism;
	f) The Electricity Consumer's tariff status;
	g) The time period for the Tariffs;
	h) Additional pre-payment information such as emergency credit threshold,
	alert that credit is low, token reading, token validation, token rejection,
	, and a sum of the sum
	duplicate token, and the current account balance (how much credit is
	duplicate token, and the current account balance (how much credit is
1	duplicate token, and the current account balance (how much credit is available).
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting;
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit:
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current. 5) Power factor.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current. 5) Power factor. a) Frequency.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current. 5) Power factor. a) Frequency. b) Current running status of Energy Consumption Step.
	duplicate token, and the current account balance (how much credit available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current. 5) Power factor. a) Frequency. b) Current running status of Energy Consumption Step. c) Communications status: PLC, RS485 and IR.
	duplicate token, and the current account balance (how much credit is available). i) An indication of whether the Smart Meter is importing or exporting; j) Current import rate or export rate k) The load limit: 1) Power Load Limit Value 1 for Normal conditions. 2) Power Load Limit Value 2 for On-Demand conditions 3) Frequency Limit Value. l) Meter running status: 1) Power. 2) Line Voltage. 3) Line Current. 4) Neutral Current. 5) Power factor. a) Frequency. b) Current running status of Energy Consumption Step.



	f) Alarm. g) Present date and time. h) Communication address. i) Customer identification number. j) Error message. 1) Control Circuit Error. 2) Battery Low Value. 3) RTC Error. 4) Authenticate Error. 5) Changer Key Error.
Bidder Response	

3.6 Consumer Interface Units (CIU)

The Consumer Interface Unit provides the ability for consumers to enter prepayment tokens. It can also provide the Electricity Consumer with a range of useful information relating to their current energy usage. More detailed Electricity Consumer information (e.g. usage variation by month, historical trends) shall be available via the Customer Portal web-based self-service facility.

3.6.1 Mandatory Requirement	CIUs shall incorporate a clear and unambiguous graphical display, as least 255 characters long that indicates as a minimum:
-	The current level of consumption in kilowatts per hour.
	Remaining Credit (in kilowatt hours).
	Total energy.
	Each tariff (start time, end time and price).
	Current kVA.
	Last credit token input date and time.
	Current consumption cost per hour in the local currency.
	Total monthly energy expressed as kW from the beginning of the calendar month.
	Accumulated electricity cost from the beginning of the monthly billing period as set in the meter, expressed in the local currency.
	Normal power limit to the maximum allowed kilowatt consumption from the beginning of the month.
	Critical power limit, when electricity shortage is in effect, and is the limit to the maximum allowed kilowatt consumption from the beginning of the month.
	Meter number.
	Software version number.

Bidder Response	
3.6.2 Mandatory Requirement	CIUs shall incorporate numeric keys for entering prepayment token numbers, and a backspace button.
Bidder Response	
3.6.3 Mandatory Requirement Bidder	The default screen should display the remaining credit in kilowatt hours. After consumer initiated interrogation, the default screen is resumed after a period of 1 hour in the absence of any further interrogation.
Response	
3.6.4 Mandatory Requirement	Entering the 20 digit prepayment token shall be possible from the main screen without the need to enter a different screen.
Bidder Response	
3.6.5 Mandatory Requirement	All CIU displays shall default to the English language.
Bidder Response	
3.6.6 Mandatory Requirement	A password protected technician screen should be available providing authorized Utility personnel as a minimum to: • Enable/disable auto polling of credit data available every 1/2/3/4/ times a day. • Set alarm credit threshold. Below this threshold alarm process occurs. • Display current MAC Address and enter new MAC address. • Enter new password. • Enter emergency credit alarm. • Enter Read Interval Time.
Bidder Response	
3.6.7 Mandatory Requirement Bidder Response	CIUs shall be mains-powered. The display shall support a power-saving mode to minimise power usage when the Electricity Consumer is not viewing the display. It must be able to communicate via PLC with the meter even in absence of power.
3.6.8 Mandatory Requirement Bidder	CIUs shall incorporate short keys providing immediate action, including as a minimum: read credit balance, read meter energy, read Meter ID, Technician key.
Response	



3.6.9 Mandatory Requirement	The CIU should communicate with the Smart Meter via PLC.
Bidder Response	
3.6.10 Mandatory Requirement	Any connection between a CIU and a Smart Meter shall be secured against logical attacks from neighbouring properties or public areas.
Bidder Response	
3.6.11 Mandatory Requirement	CIUs shall remain fully operational if the Electricity Consumer's power has been disconnected as a result of lack of credit to ensure that communication with the Electricity Consumer can be maintained.
Bidder Response	
3.6.12 Mandatory Requirement	The Smart Meter and the associated communications equipment shall remain fully functional if the CIU is damaged or disconnected.
Bidder Response	
3.6.13 Mandatory Requirement	The CIU should also include a low credit alarm indication that shall be triggered when credit breaches a minimum limit. The CIU should emit audible beeps 5 times every 30 minutes and the credit value line on the graphical display should flash. Consumers should be capable of cancelling the audible beeps by means of pressing a key on the CIU.
Bidder Response	

3.7 Meter Data Management System (MDMS)

This section describes the types of instruction and interaction that are required between the Smart Meter and the MDMS system. The Meter Data Management System (MDMS) is responsible for processing and storing the data collected from the installed base of Smart Meters. It also provides the primary engineering / operational interface to enable centralized management of the Smart Meters and associated equipment.

3.7.1 Mandatory Requirement	The Bidder shall ensure that the proposed products will support a Smart Meter Solution that will be sufficiently scalable to support at least 1 million Smart Meters and related data.
Bidder	
Response	
3.7.2	The Bidder shall ensure that the proposed MDMS supports multiple foreign
Mandatory	languages.
Requirement	The Bidder is required to list the languages supported by the MDMS.
Bidder	
Response	



3.7.3 Mandatory Requirement	It shall be possible to extract the metering point data to other systems in ASCII, XML, EXCEL file, CSV, etc. format or via APIs.
Bidder Response	
3.7.4 Mandatory Requirement	The MDMS shall be based on Microsoft .Net, Microsoft Windows Server, and Microsoft SQL 2012.
Bidder Response	
3.7.5 Mandatory Requirement	Fully customizable alert notifications of Smart Asset events shall be configured by the MDMS system users" to send an automatic SMS/ Email to the selected users. The status of each event shall be managed by the MDMS.
Bidder Response	
3.7.6 Desirable	The MDMS shall be built out of three main modules:
Requirement	1. Networking - responsible on meter reading, data transmission and
	manual commands to the infrastructure. 2. Management - responsible on evaluation reports, graphics, messages and
	commands, and archiving. 3. Database - includes data on measurement places, substations, tariff
	definitions, customers and measurement places results.
Enter Compliance Code & Bidder Response	
3.7.7 Mandatory Requirement	The MDMS shall support automatic data collection: storing, validating, controlling, reporting and archiving all meter data.
Bidder Response	
3.7.8 Mandatory Requirement	The MDMS shall support automation of tasks: Creating automatic task lists, and automatic alert notifications.
Bidder Response	
3.7.9 Mandatory Requirement	The MDMS shall automatically detect any problems in the Smart Meters and DCUs and shall create alarms and send such alarms to predefined recipients. The MDMS shall constantly monitors and detect at a minimum the following problems:
	Loss of Phase. Over Voltage. Current Unbalanced. Current Severely Unbalanced. Low Power Factor. Loss of Voltage. Loss of Current. Power Overload. Over Current. Under Voltage. Power Reverse.



	Reverse Power Overload. Low Voltage Battery.
Bidder Response	
3.7.10 Mandatory Requirement Bidder	The MDMS shall include remote meter management: The system shall allow the operator to manage any parameter within the Smart Meters, including application of complex tariff structure, setting maximum demand, remote disconnections, etc.
Response	
3.7.11 Mandatory Requirement	The MDMS shall support smart grid management – load management, assist with identification of outages and generate load profiles.
Bidder Response	
3.7.12 Mandatory Requirement	Internet/intranet based application that allows secure control from any computer with internet access.
Bidder Response	
3.7.13 Mandatory Requirement	Experience in integrating the MDMS with back office systems, including ERP and billing software.
D: III	The Bidder is required to list the ERP and Billing software integrated with the MDMS.
Bidder Response	
3.7.14 Mandatory Requirement	A report module shall enable implementation of various reports and analytics in many formats and graphic displays required by the Utility. It shall enable aggregation of individual meter/customer measurements, groups, and export of this data in different file types for analysis.
Bidder Response	
3.7.15 Mandatory Requirement	Once a DCU or Smart Meter with GPRS or LAN communications is powered on, the MDMS shall use internal software to open a new communication channel to the server. On first connection, the MDMS shall validate the unit and verify it is allowed to connect to the server and set the initial settings for future communication. From that point, the unit shall stay connected to the server and communication maintained by the MDMS system. Every couple of minutes the DCU or Smart Meter with GPRS or LAN communication sends a "keep alive" signal to the server, to update the MDMS that the unit is still connected. In case the DCU or Smart Meter with GPRS or LAN communication meter has not communicated with the server for several minutes, the MDMS shall detect the loss of connection and close the communication socket. A DCU or Smart Meter with GPRS or LAN communications that has lost connection with the server, or not yet connected to it, shall appear in red colour on the MDMS system tree.
Response	
3.7.16 Mandatory Requirement	The MDMS also manages system user connections, sending manual or automatic commands, and requests of data and control to the DCUs and Meters. It connects between a user command and a specific DCU or Meter, sending and retrieving the correct data requested. When a DCU successfully connects to the MDMS, and

Bidder Response 3.7.17 Mandatory Requirement	after Meters have been installed in the field, the user "links" the Meters to the DCU. This command is performed by the MDMS system. Once the command is sent, the DCU will begin to communicate with the Meters via PLC. Every couple of minutes the DCU shall send a "keep alive" signal to the MDMS, signalling the MDMS that the DCU is still connected. In case the DCU has not communicated with the MDMS for several minutes, the MDMS shall detect the loss of connection and close the communication socket. A DCU which has lost connection with the MDMS, or not yet connected to it, shall appear in red on the MDMS system tree.
Bidder Response	
3.7.18 Mandatory Requirement	The MDMS shall have the ability to capture and store the following minimum data set for all metering point: Meter point unique identifier (Supply Point). Customer: number, name, address, ID, type, date of birth, contact details, username and password, pictures, geographical coordinates, power contract. Meter number and meter configuration data. Telecommunication connection details (e.g. telephone number, IP address, GSM/GPRS signal power). Installation date. Transformation ratios. Tariff details. Meter seal data. Metering point status and history. Post payment or prepayment mode. LCD settings. Remarks. Meter manufacturer. Protocol type. Uplink communications type. Phase Type. PLC Address. Meter Type and features. Software Version. Hardware Version. Meter Status.



Bidder Response	
3.7.19 Respond	The Bidder is required to identify a list of Smart Meters from third party manufacturer's which their MDMS has been integrated with.
Bidder Response	
3.7.20 Desirable Requirement	The Bidder is required to ensure that all software where relevant should execute in a virtual server environment.
Enter Compliance Code & Bidder Response	
3.7.21 Mandatory Requirement	 It is a requirement that the MDMS shall support charges and tariffs for each metering site and customer type. As a minimum: Flat Rate; Time of Use, Step Tariff, Combination of Time of Use and Step tariff. Ability to use relevant consumption metrics (active energy, Reactive energy, apparent energy, Max Apparent Power) tariffs. Seasonal price changes relating to each rate structure employed in a particular tariff. Surcharges. Maximum Demand surcharge. Penalty charges applied to lowest power factor in a billing period (can be reconciled at the end of the month). Fixed Charges or Periodic Charges (i.e. service charge per day/billing period). Ability to add multiple consumption charges, 'maximum' charges, 'minimum' charges.
Enter Compliance Code & Bidder Response 3.7.22 Mandatory Requirement	The Smart Meter shall be able to execute remote disconnection / reconnection instructions from the MDMS.
Bidder Response	

3.8 Customer Portal

3.8.1	The Electricity Consumer shall have access to a website providing information of
Mandatory	their consumption and cost data (in user selected intervals and a variety of forms
Requirement	including export) and access to past bills as well as tariff prices.
Bidder	
Response	



3.8.2 Mandatory Requirement	The customer portal should support automatic messages be sent by the Utility to groups of Electricity Consumers.
Bidder Response	
3.8.3 Mandatory Requirement	Each Electricity Consumer is issued with a security protected username and password with a high level of security protection.
Bidder Response	

3.9 Vending Management Systems (VMS)

3.9.1 Mandatory Requirement	STS Token Generator (Engine).
Bidder Response	
3.9.2 Mandatory Requirement	Centralized point of sale management system.
Bidder Response	
3.9.3 Mandatory Requirement	Remote management of merchants dispensing electricity tokens with 24-hour reconciliation. Managing vending retailers with a credit line management.
Bidder Response	
3.9.4 Mandatory Requirement	Management, and maintenance tools - flexible and automated reporting structures.
Bidder Response	
3.9.5 Mandatory Requirement	The Bidder is required to have experience in integrating mobile money. Identify projects which the Bidder has integrated mobile money.
Bidder Response	

3.10 Meter Installation App (MIA)

3.10.1 Mandatory	Collects information about the existing meter to be replaced (if any) as well as new Smart Meter and transfers this information to the MDMS.
Requirement	
Bidder	
Response	
3.10.2	The MIA system shall:
Mandatory	
Requirement	Scan the Smart Meter bar code.



	 Record the Smart Meter readings. Capture an image of the existing meter to be replaced and the Smart Meter. Capture an image of the current readings of the existing meter to be replaced and the Smart Meter. Record the GIS coordinates using the smart phone GPS receivers of the location of the Smart Meters in the field. Identify the installer and the time stamp each action; and transfer this information to the MDMS.
Bidder Response	
3.10.3 Mandatory Requirement	MIA shall provide the data for the MDMS to monitor and report on the time expended for Smart Meter installation in order to analyse and troubleshoot, if necessary, installer efficiency.
Bidder Response	

3.11 Handheld Point of Sale Terminal

3.11.1 Mandatory Requirement	Hand-held portable, stand-alone STS token point of sale device.
Bidder Response	
3.11.2 Mandatory Requirement	Communications to the VMS via integrated 3G/GPRS modem.
Bidder Response	
3.11.3 Mandatory Requirement	External power supply, and internal rechargeable battery. Minimum of 1200mAh Ni-MH battery.
Bidder Response	
3.11.4 Mandatory Requirement	Thermal printer for printing the STS token number. Platen removal mechanism enabling easy loading of paper and maintenance. Printing head life minimum traveling distance 50KM.
Bidder Response	
3.11.5 Mandatory Requirement	LCD display minimum size 128mm x 64mm.
Bidder Response	
3.11.6 Mandatory Requirement	24 keys, easy menu operation interface.
Bidder Response	
3.11.7	Remotely updatable tariffs from the MDMS.

Mandatory Requirement	
Bidder	
Response	
3.11.8	Bidders shall provide technical specifications for each type of Handheld Point of
Mandatory	Sale Terminal proposed within their solution.
Requirement	
Bidder	
Response	

3.12 Hand Held Unit (HHU)

3.12.1 Mandatory Requirement Bidder Response	The HHU is an infrared terminal which allows communication with DCU and Smart Meter through the IR port. The HHU can set, read and activate any function in the DCU and Smart Meter, with all functionality available for local on-site users.
3.12.2 Mandatory Requirement	Full password and username protection avoids access to unauthorized personnel.
Bidder Response	
3.12.3 Mandatory Requirement	The HHU should feature a wide-angle infrared enabling the user to communicate at a distance, without standing directly in front of the Smart Meter or DCU.
Bidder Response	
3.12.4 Mandatory Requirement	The HHU should setup the DCU communication parameters.
Bidder Response	
3.12.5 Mandatory Requirement	LCD with minimum of 160 * 160 pixels (with backlight).
Bidder Response	

3.12.6 Mandatory Requirement	Keyboard with minimum of 26 rubber keys including numbers, letters, symbols and arithmetic operations.
Bidder Response	
3.12.7 Mandatory Requirement	Communications: serial port, high-speed infrared port, standard infrared communication port and optical port.
Bidder Response	
3.12.8 Mandatory Requirement	Rechargeable batteries, with charging cradle.
Bidder Response	
3.12.9 Mandatory Requirement	The operating environment is based on: MS C, BORLAND C, TURBO PASCAL, IBM Assembler, HTBASE.
Bidder Response	
3.12.10 Mandatory Requirement	Bidders shall provide technical specifications for each type of HHU proposed within their solution.
Bidder Response	

PRICES

Sub-Item Number	DESCRIPTION	Quantity	PRICE	VAT	PRICE INCL. VAT
46.A	Smart Meter – Single Phase				
46.B	Three-Phase Direct Connected				
46.C	Three-Phase CT Operated				
TOTAL PRICE Total price to be used on pricing schedule for Pricing evaluation					

Note: Prices quoted are inclusive of delivery to Estcourt, KwaZulu-Natal.

ESCALATION:

Fixed Price: YES / NO

If NO, please provide details for the calculation of Escalation i.e. SEIFSA including indices and weighting.



ADJUDICATION:
It is anticipated that the total value of goods to be procured over a three (3) Year period will be less than R50,000,000.00 hence the 80/20 rule will be applied.
80% - Price 20% - Preference
PROPOSED DELIVERY SCHEDULE:
For purposes of this section, the prospective Bidder is required to indicate to the Municipality the delivery time in respect of the item in question.
Delivery
By completion of this section, the Bidder understands and accepts that the time provided is the time for delivery to which it will be bound. Failure to comply with the time provided will result in penalties be instituted in accordance with Clause 22 of the General Conditions of Contract.
ITEM 47 – 52: PLEASE ATTACH A PRICING SCHEDULE ON THESE ITEMS



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INKOSI LANGALIBALELE MUNICIPALITY

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

FORM OF ACCEPTANCE



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR APERIOD OF THREE YEARS

FORM OF ACCEPTANCE

To: Municipal Manager
P O Box 15
ESTCOURT
3310

- 1. I/we hereby Bid to supply and deliver the goods as and when ordered by the Head of Department at prices quoted and/or to render all of any of the services described in the attached documents to the Inkosi Langalibalele Municipality on the terms and conditions and in accordance with the specifications stipulated in the Bid documents (and which shall be taken as part of, and incorporated into, this Bid) at prices and on the terms regarding time for delivery and/or execution inserted therein.
- 2. I/we agree that: the offer herein shall remain binding upon me/us and open for acceptance by the Inkosi Langalibalele Municipality during the validity period of 120 days indicated and calculated from the closing time of Bid;
 - 2.1 this Bid and its acceptance shall be subject to the terms and conditions contained in the Preference Points Claim Form;
 - 2.2 if I/we withdraw my/our Bid within the period for which I/we have agreed that the Bid shall remain open for acceptance, or fail to fulfill the contract when called upon to do so, the Council may, without prejudice to its other rights, agree to the withdrawal of my/our Bid or cancel the contract that may have been entered into between me/us and the Council and I/we will then pay to the Council any additional expense incurred by the Council having either to accept any less favorable Bid or, if fresh Bids have to be invited, the additional expenditure incurred by the invitation of fresh Bids and by the subsequent acceptance of any less favorable Bid. The Council shall also have the right to recover such additional expenditure by set-off against monies which may be due to become due to me/us under this or any other Bid or contract and pending the ascertainment of the amount of such additional expenditure to retain such monies, guarantee or deposit as security for any loss the Council may sustain by reasons of my/our default;
 - 2.3 If my/our Bid is accepted, the acceptance may be communicated to me/us by letter or order by ordinary post or registered post and that the SA Post Office Ltd shall be regarded as my/our agent, and delivery of such acceptance to SA Post Office Ltd shall be treated as delivery to me/us;
 - 2.4 I/we understand that the Council is not bound to accept the lowest or any Bid and also reserves the right to divide the contract between one or more Bids;
 - 2.5 this Bid, together with Council's written acceptance thereof, shall constitute a binding contract between us; that this contract or part thereof shall not be ceded;

2.6 the law of the Republic of South Africa shall govern the contract created by the acceptance of my/o
Bid and that I/we choose Domicilium citandi et executandi in the Republic at (full address of this place



- 3. I/we furthermore confirm that I/we have satisfied myself/ourselves as to the correctness and validity of my/our Bid, that the price(s) and rate(s) quoted cover all the work/item(s) specified in the Bid documents and that the price(s) and rate(s) cover all my/our obligations under a resulting contract and that I/we accept that any mistakes regarding price(s) and calculations will be at my/our risk.
- **4.** I/we hereby accept full responsibility for the proper execution and fulfillment of all obligations and conditions devolving on me/us under the agreement as the Principal(s) liable for the due fulfillment of this contract.
- **5.** I/we agree that any action arising from this contract may in all respects be instituted against me/us and I/we hereby undertake to satisfy fully any sentence of judgment which may be pronounced against me/us as a result of such action.

6. Are you duly authorized to	sign the Bid? Yes/ No	
7. Has the Declaration of Inte	rest been duly completed and included with the other Bid forms?	*Yes/ No
*Delete whichever is not applic	cable	
SIGNATURE:		
DATE:		
CAPACITY AND PARTICULAR	RS OF THE AUTHORITY UNDER WHICH THIS BID IS SIGNED:	
NAME OF BIDDER:		_
POSTAL ADDRESS:		_
		_
TELEPHONE NUMBERS:		_
FACSIMILE NUMBERS:		_
BID NUMBER:		_
NAME OF CONTACT PERSO	N:	_
Refer to the important Condition	ons on the following page:	

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IMPORTANT CONDITIONS

- 1. Failure on the part of the Bidder to sign this Bid form and thus to acknowledge and accept the conditions in writing or to complete the attached forms, questionnaire and specifications in all respects, may invalidate the Bid.
- 2. Bids should be submitted on the official forms and should not be qualified by the Bidders own conditions of Bid. Failure to comply with these requirements or to renounce specifically the Bidders own conditions of Bid, when called upon to do so, may invalidate the Bid.
- 3. If any of the conditions of this Bid form are in conflict with any special conditions, stipulations or provisions incorporated in the Bid, such special conditions, stipulations or provisions shall apply.

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INKOSI LANGALIBALELE MUNICIPALITY

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

MBD FORMS



TAX CLEARANCE CERTFICATE REQUIREMENTS

It is a condition of Bid that the taxes of the successful Bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the Bidder's tax obligations.

- 1. In order to meet this requirement Bidders are required to complete in full the attached form TCC 001"Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign Bidders / individuals who wish to submit Bids.
- 2. SARS will then furnish the Bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3. The valid Tax Clearance Certificate must be submitted together with the Bid. Failure to submit the valid Tax Clearance Certificate will result in the invalidation of the Bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4. In Bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za
- 6. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFiling through the website www.sars.gov.za

*Delete if not applicable



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^{** &}quot;all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund and skills development levies.

SUPPLIER'S DECLARATION OF INTEREST

- 1. No bid or quotation will be accepted from persons in the service of the state.
- 2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid or quote. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluation/adjudicating authority and/or take an oath declaring his/her interest.

3.	IN ORDER	TO GIVE EFF	ECT TO THE A	ABOVE, THE	FOLLOWING	QUESTIONNAIRE	SHALL BE
C	OMPLETED	:					

3.1. Full Name of Bidder or his or her representative:				
3.2. Identity Number:				
3.3. Position o	ccupied in the Company (Director, Trustee, Shareholder):			
3.4. Company	Registration Number:			
3.5. Tax Refer	ence Number:			
3.6. VAT Regis	stration Number:			
3.7. The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.				
¹"State" means –				
(a) meaning of the Pu	any national or provincial department, national or provincial public entity or constitutional institution within the ublic Finance Management Act, 1999 (Act No. 1 of 1999);			
(b)	any municipality or municipal entity;			
(c)	provincial legislature;			
(d)	national Assembly or the national Council of provinces; or			
(e) Parliament.				
² "Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.				
3.8. Are you presently in the service of the state? YES / NO				
3.8.1. If "YES", furnish particulars				

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3.9. Have you been in the service of the state for the past twelve months? YES / NO	
3.9.1.If "YES", furnish particulars	
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3.10. Do you, have any relationship (family, friend, other) with	
persons in the service of the state and who may be involved	
with the evaluation and/or adjudication of bids YES / NO	
3.10.1. If "YES", furnish particulars	
3.11. Are you aware of any relationship (family, friend, other)	
between a bidder and any person in the service of the	
state who may be involved with the evaluation and or	
adjudication of bids? YES/NO	
3.11.1. If "YES", furnish particulars	
3.12. Are any of the company's directors, managers, principal	
shareholders or stakeholders in service of the state? YES/NO	
3.12.1 If "YES", furnish particulars	
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3.13. Are any spouse, child or parent of the company's directors,	
managers, principal shareholders or stakeholders in service	
of state?	YES/NO
2.12.1 If an furnish particulars	
3.13.1. If so, furnish particulars	
3.14. Do you or any of the directors, trustees, managers,	
principal shareholders, or stakeholders of this company	
have any interest in any other related companies or	
business whether or not they are bidding for this contract	YES/NO
0.44.4 15 (5) (5.0) (5.1)	
3.14.1. If "YES", furnish particulars	

4. Full details of directors/trustees/members/shareholders.

Full Name	Identity Number	State Employee Number
01		
Signature	Date	
Capacity	Name of Bide	der



PREFERENCE POINTS CLAIM FORM

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.

GENERAL CONDITIONS

- The following preference point systems are applicable to all bids:
 the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 The value of this bid is estimated to exceed/not exceed R50 000 000 (all applicable taxes included) and therefore the **80/20** system shall be applicable.
- 1.2.1 Preference points for this bid shall be awarded for:
 - 9.3. Price: and
 - 9.4. B-BBEE Status Level of Contribution.
- 1.3.1 The maximum points for this bid are allocated as follows:

		POINTS
1.3.1.1	PRICE	80
1.3.1.2	B-BBBE STATUS LEVEL OF CONTRIBUTION	20
Total po	ints for Price and B-BBEE must not exceed	100

- 1.4 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.5. The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.



2. **DEFINITIONS**

- 2.1 "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies:
- 2.2 **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 **"B-BBEE status level of contributor"** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 "bid" means a written offer in a prescribed or stipulated form in response to an invitation by anorgan of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **"consortium or joint venture"** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 2.8 "contract" means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 "EME" means any enterprise with an annual total revenue of R5 million or less.
- 2.10 **"Firm price"** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 "functionality" means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 "non-firm prices" means all prices other than "firm" prices;
- 2.13 "person" includes a juristic person;
- 2.14 **"rand value"** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 **"sub-contract"** means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **"total revenue"** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;



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- 2.17 **"trust"** means the arrangement through which the property of one person is made over orbequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 **"trustee"** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

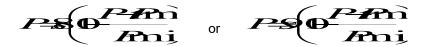
- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
 - 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
 - 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or 90/10



Where

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid

Points awarded for B-BBEE Status Level of Contribution

5.1 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	Number of points	Number of points
Contributor	(90/10 system)	(80/20 system)



1	10	20
2	9	18
3	8	16
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincoporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 6.1. A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enteprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub- contractor is an EME that has the capability and ability to execute the sub-contract.
- **6.2.** A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

- 6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:
- 7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1
- 7.1 B-BBEE Status Level of Contribution: = (Maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).



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8	SU	B-CONTRACTING
8.1	Wil	any portion of the contract be sub-contracted? YES / NO (delete which is not applicable)
8.1.1	If yes	s, indicate:
	(i)	what percentage of the contract will be subcontracted?%
	(ii)	the name of the sub-contractor?
	(iii)	the B-BBEE status level of the sub-contractor?
	(iv)	whether the sub-contractor is an EME? YES / NO (delete which is not applicable)
9.	DE	CLARATION WITH REGARD TO COMPANY/FIRM
9.1	Nar	ne of company/firm :
9.2	VAT	registration number :
9.3	Cor	npany registration number
9.4	TYF	PE OF COMPANY/ FIRM
	Par	nership/Joint Venture / Consortium
	One	person business/sole propriety
	Clo	se corporation
	Cor	npany
	(Pty) Limited
[TICK	APPLIC	ABLE BOX]
9.5	DES	SCRIBE PRINCIPAL BUSINESS ACTIVITIES
9.6	CO	MPANY CLASSIFICATION
	Mar	nufacturer
	Sup	plier
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	Profession	onal serv	rice provider											
	Other se	rvice pro	oviders, e.g. transporter, etc.											
	[TICK APF	PLICABLE	BOX]											
9.7	Total nur	nber of y	vears the company/firm has been in	business?										
9.8	the poin	ts claime	ed, based on the B-BBE status lev	any/firm has been in business?										
	(i) The information furnished is true and correct;													
	(ii) The preference points claimed are in accordance with the General Conditions as indicated paragraph 1 of this form.													
	(iii)													
	(iv)	or any			apany/firm, certify that in paragraph 7 of the d I / we acknowledge ditions as indicated in a shown in paragraph he satisfaction of the lon a fraudulent basis ser may, in addition to a d as a result of having n; ers and directors who iod not exceeding 10 forward the matter for the long matter for long long long long.									
		(a)	disqualify the person from the bide	ding process;										
		(b)	recover costs, losses or damage person's conduct;	s it has incurred or suffered as a result of that										
		(c)	-	<u> </u>										
acted years	on a fraud	dulent ba audi alte	asis, from obtaining business from	any organ of state for a period not exceeding 10										
	WITN	ESSES:												
1.				SIGNATURE(S) OF BIDDER(S)										
2.				DATE:										
				ADDRESS:										



DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

This Municipal Bidding Document (MBD) must form part of all Bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, Bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

2. General Conditions

- I. Preferential Procurement Regulations, 2011 (Regulation 9.(1) and 9.(3) make provision for the promotion of local production and content.
- II. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of Bids local production and content is of critical importance, such Bids must be advertised with the specific Bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- III. Regulation 9.(3) prescribes that where there is no designated sector, a specific Bidding condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.
- IV. Where necessary, for Bids referred to in paragraphs 1.2 and 1.3 above, a two stage Bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- V. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- VI. The local content (LC) as a percentage of the Bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 201x as follows:

$$LC = 1 - {\begin{array}{c} \\ \\ \\ \end{array}} x 100$$

Where

- x imported content
- y Bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the Bid as required in paragraph 4.1 below

- VII. A Bid will be disqualified if:
- the Bidder fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and.
- this declaration certificate is not submitted as part of the Bid documentation.



3. **Definitions**

- a) "Bid" includes advertised competitive Bids, written price quotations or proposals;
- b) "Bid price" price offered by the Bidder, excluding value added tax (VAT);
- c) "contract" means the agreement that results from the acceptance of a Bid by an organ of state:
- d) "designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content:
- e) "duly sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- f) "imported content" means that portion of the Bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- g) "local content" means that portion of the Bid price which is not included in the imported content, provided that local manufacture does take place;
- h) "stipulated minimum threshold" means that portion of local production and content as determined by the Department of Trade and Industry; and
- i) "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
- 4. The stipulated minimum threshold(s) for local production and content for this Bid is/are as follows:

<u>Description of goods</u>	BOQ Ref	Stipulated minimum threshold
HV Joint Kits	Item 8 (Section 1)	100%
Overhead Steel Hardware	Item 19 (Section 1)	50%-100%
Low Voltage Resin Joint Kits	Item 23 (Section 1)	100%
Low Voltage Heat Shrink Joint Kits	Item 24 (Section 1)	100%
Heat Shrink Joint Kits	Item 25 (Section 1)	100%
Tubular Steel Street Light Poles	Item 6B (Section 2)	100%
Transformers	Item 8 (Section 2)	90%
Prepaid Meters	Item 10 (Section 2)	70%
Smart Metering	Item 46 (Section 2)	50%

4. Does any portion of the services, works or goods offered have any imported content?

YES / NO

4.1 If yes, the rate(s) of exchange to be used in this Bid to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the Bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za. Indicate the rate(s) of exchange against the appropriate currency in the table below:



Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

Initial_

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

	(CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)	
IN RESPECT	OF BID No.: ILM 15/22/23	

ISSUED BY: (Procurement Authority / Name of INKOSI LANGALIBALELE LOC			ity):	
NB The obligation to complete, duly sign and to an external authorized representative, audito the Bidder.				
I, the undersigned,			. (full name	es),
do hereby declare, in my capacity as				ŕ
ofentity), the following:		(1	iame oi	bludei
(a) The facts contained herein are within my o	wn personal k	nowledge.		
(b) I have satisfied myself that the goods/se above-specified Bid comply with the minimum Bid, and as measured in terms of SATS 1286.				
(c) The local content has been calculated using the rates of exchange indicated in paragraph 4	•	,		S 1286,
Bid price, excluding VAT (y)		R		
Imported content (x)		R		
Stipulated minimum threshold for Local conter 3 above)	nt (paragraph			
Local content % as calculated in terms of SAT	S 1286			
If the Bid is for more than one product, Schedattached.	ule C of the lo	cal content by	product s	hall be
(d) I accept that the Procurement Authority / request that the local content be verified in term				right to
(e) I understand that the awarding of the Bid is furnished in this application. I also understand that are not verifiable as described in S Authority / Municipal / Municipal Entity imposing Regulation 13 of the Preferential Procuremer Policy Framework Act (PPPFA), 2000 (Act No.	that the submi SATS 1286, m g any or all of nt Regulations	ission of incor nay result in the remedies	rect data, o the Procui as provide	or data rement d for in
SIGNATURE:	DA	TE:		
WITNESS No. 1	DA	TE:		
WITNESS No. 2	DA	TE:		



Initial_____

SATS 1286.2011			ded from all												Total Imported	content		(C19)																
SA			Note: VAT to be excluded from all	calculations									Tender summary		Totalovomoral		negroom pariodini	(C18)													(C23) Total Imported content	(C24) Total local content	ntent % of tender	
													Tende		Total tondor			(C17)											(C21) Total Exempt imported content	(C22) Total Tender value net of exempt imported content	(C23) Total	(C24) T	(C25) Average local content % of tender	
															Topoor	à è	ŝ	(C16)										nder value	otal Exempt i	t of exempt i			(C3	
		Schedule													Local	content %	(ber item)	(C15)										(C20) Total tender value	(C21) To	der value net				
	ပ	Summary									GBP					Local value		(C14)))		C22) Total Ten				
	Annex C	laration -											cal content		potroum	nalion red	A a la	(C13)												٦				
		Local Content Declaration - Summary Schedule						uo			EU		Calculation of local content	Tender value	net of	exempted	imported	content (C12)																
		Local C		Material				for Constructi					S		Exempted	imported	value	(C11)																
				y of Electrical	soms cables		city Meter	Components	agement	e Municipality	Pula	(minimum)			Tender price	- each	(exd VAT)	(C10)																
			ILM 15/22/23	Supply and Delivery of Electrical Material	Electrical and telecoms cables	Transformers	Residential Electricity Meter	Steel Products and Components for Construction	Supply Chain Management	Inkosi Langalibalele Municipality	As per Attached				•	List of items		(63)	HV Joint Kits	OH Steel Hardware	LV Resin Joint Kits	LV Heat Shrink Joint Kits	Heat Shrink Joint Kits	l street light poles	Transformers	Prepaid meters	Smart metering		Annex B					
			Tender No.	Tender description:	::				Tender Authority:	Tendering Entity name:	Tender Exchange Rate:	Specified local content %			Tondoritom		6	(83)	n 1)	19 (section 1) OH Stee	23 (section 1) LV Resi	24 (section 1) LV Heat Sh	25 (section 1) Heat Shr	6B (section 2) Tubular steel street light poles	8 (section 2)	10 (section 2)			Signature of tenderer from Annex B				Date:	
			(C1) Te	(C2) Te	(C3)				(C4) Te	(C5) Te	(CG) Te	(C2) S b							L	1	2	2.	2	9	~	1	4		S				۵	

													CATC 4300 22:
					Α	nnex D							SATS 1286.2011
			ı	mported Co	ntent Declaratio	n - Sunnoi	rting Sche	dule to An	nex C				
				nporteu co	ntent Beclaratio	п - Зарро	ting sene	duic to All	lick C				
- 1	Tender No. Tender descrip	tion:	ILM 15/22/23 Supply and Delive	any of Electrical I	Material				Note: VAT to be				
	Designated pro		Electrical and tele		viateriai				from all calculat	tions			
Ţ			Transformers										
+			Residential Election Steel Products an		or Construction								
	Tender Authori		Supply Chain Ma	nagement									
- 1	Tendering Entit Tender Exchang		Inkosi Langalibale As per Attached		EU	ı	GBP						
			.,										
_	A. Exempt	ed imported co	ontent	1			C	alculation of	imported cont	ent			Summary
	Tender item no's	Description of im	ported content	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
	(D7)	(D8	3)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
-													
										(D19)	Total exempt in		R 0
													nex C - C 21
	B. Importe	d directly by th	ne Tenderer				C	alculation of	imported cont	ent			Summary
	Tender item no's	Description of im	ported content	Unit of measure	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
	(D20)	(D2.	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
+													
1													
-		•											
1										(D32) Tota	l imported valu	e by tendere	r R O
-	C. Importe	d by a 3rd part	y and supplie	ed to the Te	nderer	Forign		alculation of	imported cont	ent			Summary
		f imported content	Unit of measure		Overseas Supplier	Forign currency value as per Commercial Invoice	of Exchange	Local value of imports	port of entry	landing costs & duties	Total landed cost excl VAT	Quantity	
+		(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
+													
t													
	`									(0.45) 7.1.			200
										(D45) Tota	l imported valu	e by 3rd part	y R O
	D. Other fo	oreign currency			Calculation of forei payment								Summary of payments
		of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange							Local value of payments
+		(D46)	(D47)	(D48)	(D49)	(D50)							(D51)
ļ													
+													
Ì							(D52)	Total of foreig	gn currency paym	ents declared	by tenderer an	d/or 3rd part	/
	Signature of te	nderer from Annex B	l .			/ni	53) Total of in	norted contar	nt & foreign curre	ncy navments	- (D32) (D45) s	8 (D52) ahou	R O
						(De	~, IOLAI UI III	iporteu conter	it or roreign curre	cy payments	(1032), (1043)		
ł	Datos												ust correspond with nex C - C 23
	Date:												
				Thic Form m	ust be kept by the	a niddar fo	r a minimu	m neriad af	TIVA VASTS				

							SATS 1286.2011	
				Anne	v F			
				AIIIIC	A L			
		Local	Content Decla	ration - S	Supporting Sc	hedule to Annex C		
(E1)	Tender No.		ILM 15/22/23			Note: VAT to be excluded	from all	
(E2)	Tender descri	ption:	Supply and Delivery		al Material	calculations	1	
(E3)	Designated pr	oducts:	Electrical and teleco	oms cables				
			Transformers					
			Residential Electric					
(54)	Tondon Autho	ui 4n. s.	Steel Products and Supply Chain Mana		s for Construction			
(E4) (E5)	Tender Autho Tendering Ent		Inkosi Langalibalele		tv			
(LJ)	rendering Line	ity manne.	IIIKOSI Langambalele	i widilicipali	ty			
		Local Products (Goods, Services and Works)	Descriptio	n of items p	urchased	Local suppliers	Value	
		and works,		(E6)		(E7)	(E8)	
				(20)		(=-/	(20)	
				(F9) Tota	al local products (G	oods, Services and Works)	R O	
				(10)				
	(E10)	Manpower costs	(Tenderer's manpo	wer cost)			R O	
	(E11)	Factory overheads	(Rental, depreciation	on & amortis	sation, utility costs	, consumables etc.)	R O	
	(E12)	Administration ove	rheads and mark-up	(Marketing	, insurance, financi	ing, interest etc.)	R O	
						(======================================	_	
						(E13) Total local content		
						This total must correspon C24	d with Annex C -	
	Signature of to	enderer from Annex	В					
	5 .							
	Date:							
			This Form must be !	cont by the	hiddar far a minim	um period of five years		
			Timo Form must be i	cept by tile	viuuti ivi a lillillill	um penou or live years		

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

	PART 1 (TO I	BE FILLED IN BY	THE SERVICE PROVIDER)					
(i)	I hereby undertake to render services described in the attached bidding documents to (name of institution)							
(ii)	The following documents shall be deemed to form and be read and construed as part of this agreement:							
	Bidding documents, <i>viz</i>							
	Invitation to bid;							
	Tax clearance certificate;							
	Pricing schedule(s);							
	Filled in task directive/proposal;							
	Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurment Regulations 2011;							
	Declaration of interest;							
	Declaration of Bidder's past SCM practices;							
	Certificate of Independent Bid Determination;							
	Special Conditions of Contract;							
	General Conditions of Contract; and							
	Other (specify)							
(iii)	I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk							
(iv)	I accept full responsibility for the pr	oper execution ar	nd fulfilment of all obligations and conditions	s devolving on				
(v)	me under this agreement as the pr I declare that I have no participation or any other bid.		e due fulfillment of this contract. ractices with any bidder or any other person	regarding this				
(vi)	I confirm that I am duly authorised to sign this contract.							
	NAME (PRINT)		WITNESSES]				
	CAPACITY		WITNESSES					
	SIGNATURE							
	NAME OF FIRM							
	DATE		DATE:					
			1	Î.				



CONTRACT FORM - RENDERING OF SERVICES PART 2 (TO BE FILLED IN BY THE PURCHASER)

	PART 2 (TO BE FI		L FUNCHASEK)		
	in my capac	city as			
ccept your bid under referer ereunder and/or further spec			for th	e rendering of servic	es indic
n official order indicating ser	vice delivery instruction	ns is forthcoming			
undertake to make paymen vithin 30 (thirty) days after re		ered in accordar	nce with the term	s and conditions of t	he cont
DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)	
confirm that I am duly autho	rised to sign this contra	act.			
IGNED AT	01	N			
IAME (PRINT)					
SIGNATURE		Г			
DFFICIAL STAMP			WITNESSES		



DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- (i) This Municipal Bidding Document must form part of all bids invited.
- (ii) It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- (iii) The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - 3.1 abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - 3.2 been convicted for fraud or corruption during the past five years;
 - 3.3 willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - 3.4 been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- (iv) In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with		No			
	the public sector?					
	(Companies or persons who are listed on this Database were					
	informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after					
	the <i>audi alteram partem</i> rule was applied).					
	The Database of Restricted Suppliers now resides on the					
	National Treasury's website(<u>www.treasury.gov.za</u>) and can be					
	accessed by clicking on its link at the bottom of the home page.					
4.1.1	If an furnish particulars					
4.1.1	If so, furnish particulars:					
4.2	Is the bidder or any of its directors listed on the Register for Tender	Yes	No			
	Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?					
	The Register for Tender Defaulters can be accessed on the National					
	Treasury's website (<u>www.treasury.gov.za</u>) by clicking on its link at the					
	bottom of the home page.					
4.2.1	If so, furnish particulars:					



4.3	Was the bidder or any of its directors convicted by a court of law court of law outside the Republic of South Africa) for fraud or coduring the past five years?	,	Yes	No 🗌	
4.3.1	If so, furnish particulars:		1		
4.4.1	Does the bidder or any of its directors owe any municipal rates a municipal charges to the municipality / municipal entity, or to an municipality / municipal entity, that is in arrears for more than the months? If so, furnish particulars:	ny other	Yes	No	
4.5	Was any contract between the bidder and the municipality / mur or any other organ of state terminated during the past five years of failure to perform on or comply with the contract?		Yes	No 🗆	
4.7.1	If so, furnish particulars:				
	CERTIFICATION				
	UNDERSIGNED (FULL NAME) CORMATION FURNISHED ON THIS DECLARATION FORM				THAT THE
	EPT THAT, IN ADDITION TO CANCELLATION OF A C ST ME SHOULD THIS DECLARATION PROVE TO BE FA	•	ACTIO	N MAY E	BE TAKEN
Signa	ature Date				
Posit	tion Name o	of Bidder			



CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 22. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 23. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:
- ¹ Includes price quotations, advertised competitive bids, limited bids and proposals.
- ² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.



CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:	
(Bid Number and Description)	
in response to the invitation for the bid made by:	
(Name of Municipality / Municipal Entity)	
do hereby make the following statements that I certify to be true and complete in e	every respect:
I certify, on behalf of:	that:
(Name of Bidder)	

- 7. I have read and I understand the contents of this Certificate;
- 8. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- 9. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
- 10. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
- 11. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
- 12. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 13. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding: prices; geographical area where product or service will be rendered (market allocation)
 - (a) methods, factors or formulas used to calculate prices;



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- (b) the intention or decision to submit or not to submit, a bid;
- (c) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (d) bidding with the intention not to win the bid.
- 14. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
 - 15. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature	Date	
Position	Name of Bidder	

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

PARTICULARS OF THE BIDDER



PARTICULARS OF BIDDER

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)

Name of Bidder:	
Postal Address	
Street Address	- -
Telephone Number Code Number	_
Cellphone NumberNumberNumber	
Contact Person Company / Enterprise Income Tax Reference Number:	
Has an original Tax Clearance Certificate been attached (MBD2) NO / YES Vat Registration_Number	_
Company Registration No	
Is the Firm registered or does it have a Business License(s): (Tick one box) YES NO	
If YES, give details and quote relevant Reference numbers and dates	
Are you the accredited Representative in South Africa for the Goods / services offered by you?	
YES/NO (If YES enclose proof)	
AN ORIGINAL TAX CLEARANCE CERTIFICATE MUST BE ATTACHED TO YOUR BID.	

Inkosi Langalibalele

The undersigned, who warrants that h information furnished is true and corre	norised to do so o	n behalf of the firr	n, affirms that the
Signature:			
Date:			
Duly authorized to sign on behalf of: _			
Address:			_
Telephone Number:			

DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

FUNCTIONALITY



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR APERIOD OF THREE YEARS

FUNCTIONALITY TABLE

Functionality Points Table: Please note that bidders must score a minimum of 70% to be considered for further evaluation.

No	Key aspect of criterion	Points allocated	Verification Method.
1	Company previous completed projects in the relevant field 10 points per project	50	Please supply the proof in the form of appointment letter/Official Purchase Order
2	 50 Points for Branch Office Within Inkosi Langalibalele 30 Points for Branch Office Within Uthukela District 20 Points for Branch Office Within KwaZulu Natal 10 Points for Branch Office Within South Africa 		Provide the proof of office site in the form of rates and taxes statement/valid lease agreement
	Total Points	100	



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

ENQUIRY CONTACT DETAILS



INKOSI LANGALIBALELE LOCAL MUNICIPALITY DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

ILM 15/22/23: PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR APERIOD OF THREE YEARS

ENQUIRY CONTACT DETAILS

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

MUNICIPALITY: INKOSI LANGALIBALELE MUNICIPALITY

DEPARTMENT: BUDGET AND TREASURY OFFICE

CONTACT PERSON: MR S MEMELA

TEL: 036 342 7827

E-MAIL: majiki@ilm.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

DEPARTMENT: PUBLIC WORKS AND BASIC SERVICES: ELECTRICITY

CONTACT PERSON: MR. C MOODLEY

TEL: 071 474 5074

EMAIL: <u>cyril@ilm.gov.za</u>



DEPARTMENT OF PUBLIC WORKS AND BASIC SERVICES

BID DOCUMENT

BID NO: ILM 15/22/23

PANEL OF SERVICE PROVIDERS FOR THE SUPPLY AND DELIVERY OF ELECTRICAL MATERIAL FOR A PERIOD OF THREE YEARS

CHECK LIST



CHECK LIST

NO	DESCRIPTION	TICKED BY BIDDER	TICKED BY MUNICIPAL REPRESENTATIVE
1	Initial/ Sign of all pages		
2	Closing/ Bid Submitted by 24/02/2023 at 10h00		
3	Returnable documents completed		
4	Form of Bid completed		
5	Valid Tax Clearance Certificate attached		
6	Original valid B-BBEE Status Level Verification Certificates or certified copies		
7	Pricing Schedule completed		
8	Preferential Points Claimed		
9	Pre-Qualifications completed		
10	All witnesses signed where it required		
11	Bid Declaration with regard to Equity completed		
12	Particulars of Bidders Completed		
13	Bid Declaration of interest Completed		
14	Contract Form MBD Form 7.2 completed		
15	Declaration of Bidders Past SCM Practice MBD Form 8 completed		
16	Certificate of Independent Bid Determination MBD Form 9 completed		

