

# GEORGE MUNICIPALITY



**BID DOCUMENT NUMBER: ENG 026 OF 2016**

## **SUPPLY AND DELIVERY OF STOCK: OPTIC FIBRE, PROTECTION, MULTI-FUNCTION ENERGY METERS FOR A PERIOD OF THREE (3) YEARS**

ENQUIRIES: KOBUS WILLKEN  
YORK STREET  
GEORGE  
(044) 874 3917

ISSUED BY:  
THE CITY COUNCIL  
MUNICIPALITY OF GEORGE  
P O BOX 19  
GEORGE  
6530

### **SUMMARY FOR TENDER OPENING PURPOSES**

NAME OF TENDERER: .....

SUPPLIER DATABASE NO.: MAAA .....

TOTAL PRICE (INCLUDING VAT)	R
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#### **PREFERENCES CLAIMED FOR:**

B-BBEE Status Level of Contributor:	
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Preference Points Claimed:	
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**B-BBEE certificates submitted with the tender document MUST be VALID ORIGINAL B-BBEE CERTIFICATES or VALID CERTIFIED COPIES OF THE B-BBEE CERTIFICATES**

**TENDER CLOSES AT 12H00 ON FRIDAY,05 MAY 2017**

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## TENDERER CONTACT DETAILS

This information shall be used for any correspondence or contact with the tenderer.

Please indicate whether you want to receive any correspondence via e-mail or send to your postal address by registered mail.

Name of Bidding Company: .....	<b>Mark choice of correspon dence with X</b>
Postal Address: ..... ..... ..... ..... Postal Code: .....	
E-mail Address: .....	
Telephone Number: .....	
Cellular Number: .....	
Facsimile Number: .....	

**GEORGE MUNICIPALITY / GEORGE MUNISIPALITEIT**  
**TENDER NO. ENG026/2016 / TENDER NR. ENG026/2016**

Tenders are hereby invited for the supply and delivery of electrical stock:

**OPTIC FIBRE, PROTECTION & MULTI-FUNCTION ENERGY METERS**

Completed tenders in a sealed envelope, clearly marked:

**Tender No. ENG026/2016**, must be placed in the tender box at the George Municipality on the First Floor, Directorate: Financial Services, Supply Chain Management, York Street, George by no later than **12:00 on Friday, 05 May 2017**. Tenders are not allowed to be placed in the tender box after 12:00. Tenders will be opened on the same day in the 1st Floor Committee Room at 12:05. Late or unmarked tenders will not be considered. No posted tenders or tenders per fax or e-mail will be accepted.

Tender documents are available at a non refundable deposit of R185-00 each from the Supply Chain Management Unit, First Floor, Civic Centre, York Street, George.

Tender documents are available on the George Municipality's website: [www.george.org.za](http://www.george.org.za), free of charge

**Stage 1: Local content**

Only tenders scoring a minimum of 90% in stage 1 will be further considered for evaluation in stage 2.

The stipulated minimum threshold percentages for local production and content for the **Electrical and Telecom Cable**.

**Stage 2:**

Tenders will be evaluated and adjudication in terms of the Preferential Procurement Policy Framework Act (Act 5 of 2000) Regulations 2011 and the George Municipality's Supply Chain Management Policy, where 90 points will be scored for price and 10 points for B-BBEE status.

For more information, contact Mr Kobus Willken at (044) 8743917/ [kobusw@george.org.za](mailto:kobusw@george.org.za).

The Municipality reserves the right to withdraw any invitation to tender and/or to readvertise or to reject any tender or to accept a part of it. The Municipality is not bound to accept the highest or any tender.

**Important notice: a Valid original tax clearance certificate must be submitted with the documentation.**

**It will be required from all successful bidders to register on the Central Supplier Database (CSD).**

**T BOTHA  
MUNICIPAL MANAGER  
GEORGE MUNICIPALITY  
GEORGE  
6530**

Tenders word hiermee ingewag vir die verskaffing en aflewering van elektriese voorraad:

**OPTIESE VESEL, BEVEILIGING & MULTI-FUNKSIE ENERGIEMETERS**

Voltooide tenders in 'n verseëelde koevert, duidelik gemerk:

**Tender Nr. ENG026/2016**, moet voor **Vrydag, 05 Mei 2017** om **12:00** in die tender bus by die George Munisipaliteit op die Eerste Vloer, Direkoraat: Finansiële Dienste, Voorsieningskanaal Bestuurseenheid, Burgersentrum, Yorkstraat, George geplaas word. Geen tenders sal toegelaat word om in die tender bus geplaas te word na 12:00 nie. Tenders sal om 12:05 dieselfde dag in die Komiteekamer op 1ste Vloer oopgemaak word. Laat of ongemerkte tenders sal nie oorweeg word nie. Geen tenders per pos, faks of e-pos sal aanvaar word nie.

Tender dokumente is verkrygbaar teen 'n R185-00 nie-terugbetaalbare deposito elk by die Voorsieningskanaalbestuur Eenheid op die Eerste Vloer, Burgersentrum, Yorkstraat, George.

Tender dokumente is gratis op die George Munisipaliteit se webblad beskikbaar: [www.george.org.za](http://www.george.org.za)

**Fase 1: Plaaslike Inhoud**

Slegs tenderaars wat 'n minimum van 90% behaal in fase 1, sal verder vir evaluering in fase 2 oorweeg word.

Die vasgestelde minimum persentasies vir plaaslike produksie en inhoud vir die sektor **Elektriese & Telekom Kabels** is.

**Fase 2:**

Tenders sal ge-evalueer en toegeken word in terme van die Wet op die Raamwerk vir Voorkeurverkrigingsbeleid (Wet 5 van 2000) Regulasies 2011, asook George Munisipaliteit se Voorsieningskanaalbestuursbeleid, waar 90 punte ten opsigte van die prys en 10 punte ten opsigte van B-BBEE status toegeken sal word.

Vir verdere inligting, kontak Mr Kobus Willken by (044) 8743917/ [kobusw@george.org.za](mailto:kobusw@george.org.za).

Die Munisipaliteit behou hom die reg voor om enige versoek vir 'n tender terug te trek en/of te her-adverteer of enige tender te verwerp of gedeeltelik te aanvaar. Die Munisipaliteit is nie daartoe gebind om die hoogste of enige tender te aanvaar nie.

**Belangrike kennisgewing: 'n Oorspronklike belasting uitklaringsertifikaat moet ingesluit wees by dokumentasie.**

**Dit sal van alle suksesvolle bidders verwag word om op die Sentrale Verskaffersdatabasis (SVD) te registreer.**

**T BOTHA  
MUNISIPALE BESTUURDER  
GEORGE MUNISIPALITEIT  
GEORGE  
6530**

## INVITATION TO BID

### SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE, PROTECTION & MULTI FUNCTION ENERGY METERS

BID NUMBER: **ENG 026/2016**

CLOSING DATE: **05 May 2017**

CLOSING TIME: **12:00**

BID DOCUMENTS MUST BE DEPOSITED IN THE TENDER BOX SITUATED AT:

Supply Chain Management Unit  
The Civic Centre (1<sup>st</sup> Floor)  
York Street  
GEORGE

**Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.**

The bid box is open from 07:45 until 16:30, 5 days a week. Bids must be submitted on the Official Forms (NOT TO BE RE-TYPED).

**B-BBEE certificates submitted with the tender documents MUST be a VALID ORIGINAL B-BBEE CERTIFICATE or VALID CERTIFIED COPY OF THE B-BBEE CERTIFICATE.**

In the case of a Trust, Consortium or Joint Venture, they 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.

This Bid is subject to the General Conditions of Contract (GCC) and, if applicable, any other Special Conditions of Contract.

This Bid will be evaluated and Adjudicated according to the following criteria:

1. Relevant specifications;
2. Value for money;
3. Capacity to execute the contract;
4. PPPFA Regulations 2011.

**NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, PROVINCIAL GOVERNMENT OR MUNICIPALITY.**

## DETAILS OF TENDERER

Name of firm / entity / enterprise	
Trading as (if different from above)	
Postal address	Postal Code _____
Physical address	
<b>Contact Details of the Person Signing the Tender:</b>	Name: _____ Telephone: (____) _____ Fax: (____) _____ Cellular Number: _____ E-mail address: _____
<b>Contact Details of the Senior Manager Responsible for Overseeing Contract Performance:</b>	Name: _____ Telephone: (____) _____ Fax: (____) _____ Cellular Number: _____ E-mail address: _____
<b>Contact Details of Person Responsible for Accounts / Invoices:</b>	Name: _____ Telephone: (____) _____ Fax: (____) _____ Cellular Number: _____ E-mail address: _____
Company Income Tax Number	
VAT Registration Number	
Company Registration Number	
Any other Registration Applicable to this Industry	

## DETAILS OF TENDERING ENTITY'S BANK

I/We hereby authorize the Employer/Client to approach all or any of the following bank/s for the purposes of obtaining a financial reference:

DESCRIPTION OF BANK DETAIL	BANK DETAILS APPLICABLE TO TENDERER'S HEAD OFFICE
Name of bank	
Branch name	
Branch code	
Name of Account Holder	
Account number	
Type of Account	

Signature of Tenderer: \_\_\_\_\_

Date: \_\_\_\_\_

# THE RESOLUTION TAKEN BY THE BOARD OF DIRECTORS / MEMBERS / PARTNERS

**RESOLUTION** of a meeting of the Board of Directors / Members / Partners of

\_\_\_\_\_  
NAME OF TENDERER

Held at \_\_\_\_\_ on \_\_\_\_\_  
(Place) (Date)

**RESOLVED THAT:**

1. The enterprise submits a Tender to the George Municipality in respect of the following:

**TENDER NUMBER: ENG 026/2016**  
**SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE, PROTECTION & MULTI-FUNCTION ENERGY METERS**

2. Mr/Mrs/Ms \_\_\_\_\_

In his/her capacity as \_\_\_\_\_

and who will sign as follows: \_\_\_\_\_  
(SPECIMAN SIGNATURE)

be, and is hereby, authorized to sign the Tender and any and all other documents and/or correspondence in connection with and relating to the Tender, as well as to sign any contract, and or all documentation resulting from the award of the Tender to the enterprise mentioned above.

Note: The resolution **must be signed by all the directors or members / partners** of the bidding enterprise. Should the space provided below not be sufficient for all the directors to sign, please provide a separate sheet in the same format below.

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			



## THE RESOLUTION TAKEN BY THE BOARD OF DIRECTORS OF A CONSORTIUM OR JOINT VENTURE

**RESOLUTION** of a meeting of the Board of Directors / Members / Partners of

\_\_\_\_\_  
NAME OF TENDERER

Held at \_\_\_\_\_ on \_\_\_\_\_  
(Place) (Date)

**RESOLVED THAT:**

1. The enterprise submits a Tender to the George Municipality in respect of the following:

**TENDER NUMBER: ENG 026/2016**  
**SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE, PROTECTION &  
MULTI-FUNCTION ENERGY METERS**

(list all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium / Joint Venture):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ and  
\_\_\_\_\_ and  
\_\_\_\_\_

2. Mr/Mrs/Ms \_\_\_\_\_  
In his/her capacity as \_\_\_\_\_  
and who will sign as follows: \_\_\_\_\_  
(SPECIMAN SIGNATURE)

be, and is hereby, authorized to sign the Tender and any and all other documents and/or correspondence in connection with and relating to the Tender, as well as to sign any contract, and or all documentation resulting from the award of the Tender to the **Consortium / Joint Venture** enterprise mentioned above.

3. The enterprise in the form of a consortium or joint venture accept jointly and several liability with parties under item 1 above for the fulfillment of the obligations of the joint venture deriving from, and in any way connected with the contract to be entered into with the George Municipality in respect of the project described above under item 1.
4. The **Consortium / Joint Venture** enterprise chooses as its domicilium citandi et executandi for all purposes arising from this joint venture agreement and contract with the George Municipality in respect of the project under item 1:

(Physical Address) \_\_\_\_\_

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Note: The resolution **must be signed by all the directors or members / partners** of the bidding enterprise. Should the space provided below not be sufficient for all the directors to sign, please provide a separate sheet in the same format below.

**NB. COMPULSORY TO COMPLETED**

	Name	ID Number	Directors/Owners Personal Tax no	Signature
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

## JOINT VENTURE

Only to be completed if applicable

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<b>Name of Joint Venture:</b>	
<b>Names of Each Enterprise:</b>	
(1) Name and Address of Enterprise:	
(2) Name and Address of Enterprise:	
(3) Name and Address of Enterprise:	
Has an original valid Tax Clearance Certificate been submitted for each enterprise?	YES <input type="checkbox"/> NO <input type="checkbox"/>
CIDB Registration Number(s), if any:	

**Submit your Joint Venture Agreement together with this annexure. If no Joint Venture Agreement is submitted, your tender will be disqualified.**

**SIGNED ON BEHALF OF JOINT VENTURE \_\_\_\_\_**

**SPECIAL CONDITIONS RELEVANT TO  
SUPPLY AND DELIVERY OF ELECTRICAL STOCK:  
OPTIC FIBRE, PROTECTION, MULTI-FUNCTION ENERGY METERS**

The following Conditions shall be adopted as per the Municipal PPPFA Policy

<b>SPECIAL CONDITIONS OF TENDER</b>		
	Comply Y/N	Ref in propos al
<b>B. CONDITIONS APPLICABLE AFTER CLOSING OF TENDER BUT BEFORE A SELECTED SERVICE PROVIDER IS ANNOUNCED</b>		
Any additional information upon request must be submitted in writing within 48 hours of receipt.		
<b>C. CONDITIONS APPLICABLE AFTER AWARDING OF THE TENDER</b>		
Payments will be made as per agreed in the tender conditions. Invoices must be submitted before 12 noon on Wednesdays at George Creditors office, to ensure timeous payment Penalties of 10% for late delivery will be deducted for each late order		
1% CSI contribution per invoice		

**SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE,  
PROTECTION AND MULTI-FUNCTION ENERGY METERS,  
COMMUNICATIONS AND POWER FACTOR CORRECTION  
EQUIPMENT**

**SPECIAL TENDER CONDITIONS OF GEORGE MUNICIPALITY**

**1. GENERAL TENDER CONDITONS**

- 1.1 The conditions, specifications and schedules contained in this document form an integral part of the tender contract and must be returned with the tender submitted. Failure to comply herewith will invalidate a tender.
- 1.2 This document contains continuously numbered pages and is the copyright of the Municipality of George. It may not be used, copied or lent out except in the performance of this contract.
- 1.3 Tenderers should carefully inspect the document for completeness and legibility. Claims based on missing pages or illegible script will not be considered.
- 1.4 Telegraphic tenders will be considered, provided that the tender document is posted before the advertised closing time of tender. Proof of the date and time of posting shall be required. **FAX OFFERS WILL NOT BE VALID.**
- 1.5 Late, incomplete, open or unmarked tenders will not be considered.
- 1.6 Proof of posting will not be accepted as proof of delivery.
- 1.7 Tenders shall remain valid **for 120 days after closing date of tender.**
- 1.8 Written information only will be valid as amending or supplementing this contract. Verbal information will not be accepted as binding on Council or its officials.
- 1.9 **Each tender must be submitted in a sealed envelope clearly endorsed "TENDER NO ENG 026/16: THE SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE, PROTECTION AND MULTI-FUNCTION ENERGY METERS"** and addressed to The Municipal Manager, Municipality, PO Box 19, GEORGE, 6530, so as to reach him not later than the date and time advertised or be placed in the tender box situated at Supply Chain Management, The George Civic Centre (1<sup>st</sup> floor), York Street, George.
- Tenders shall be valid from date of appointment for a three (03) year period and items will be ordered from the successful tenderers as and when required.
- 1.10 All prices quoted and all deposits or payments made shall be in the currency of the Republic of South Africa.
- 1.11 Tenders must be submitted on the schedule provided and completed and signed in all respects.
- 1.12 The lowest or any tender will not necessarily be accepted and Council reserves the right to accept any tender in whole or in part.
- 1.13 Any deviation or omissions from or additions to the specifications or additional or alternate items shall be detailed in the variation schedule. Deviations or omissions not spechified shall not be accepted.

Any additional particulars should be furnished in a separate letter by tenderers.

- 1.14 Tenderers must submit: the prices of all optional equipment separately, the terms and conditions of guarantee, delivery time, availability and prices of and discounts on spare parts, full descriptive literature and specifications, and choices where applicable.
- 1.15 **Contract Price Adjustment:**
- 1.15.1 Prices should remain firm for the period of the tender. Should the successful Tenderer wish to alter any tendered price during the currency of this tender, Council reserves the right to:
- i) Accept the amended price
  - ii) Call new tenders for the affected items.
  - iii) Negotiate prices with alternate suppliers.
- 1.15.2 Where prices are not firm, a formula using the SEIFSA indexes is to be used and the following shall apply:-
- i) Tendered prices shall be based on the latest published index figures.
  - ii) The adjusted contract price shall be coupled to the tendered delivery times and not the actual delivery date (e.g. if the tendered delivery time is 6 months and the order is placed in August, contract adjustment shall be calculated with February as agreed completion month). The actual delivery time shall be used to adjust the contract price where delivery time is shorter than the tendered delivery time.
  - iii) Should Council be of the opinion that prices have risen out of proportion; Council reserves the right to negotiate on the open market for provision of the goods.
  - iv) Successful tenderers must submit on request all the applicable formulas, constants and factors required for calculating price adjustments.
- 1.16 All invoices submitted for payment shall be accompanied by a CPA calculation sheet clearly showing all calculations where prices are subject to adjustment.
- 1.17 **Test Certificates:**  
Where applicable, test certificates will be required and tenderers must state the additional cost for the submission thereof, if any.
- 1.18 **Brochures:**  
All additional information brochures etc. required or which the Contractor wishes to submit with or in support of his tender, shall be submitted in duplicate.
- 1.19 **Defective materials:**  
Should materials or equipment be found defective within one year after being supplied, or unsatisfactory in any way, the Council may order such defects or unsatisfactory materials to be replaced free of cost and that such replacements be subjected to one year guarantee.
- 1.20 **Value Added Tax:**

All prices must INCLUDE 14% V.A.T.
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- 1.21 **Quantities:**  
The minimum quantities given are the minimum quantities per any one order. More than the minimum amount may be ordered and more than one order may be placed during the year. Tenderers are free to specify discounts for large quantities.
- 1.22 **Samples:**  
If so required, samples MUST be submitted to the Director: Electro technical Services, Municipal Offices, Brick Road, George. If this clause is not complied with, tenders will not be considered. The samples of accepted tenders will be held for the whole of the contract period for reference.

Tenders must also clearly state whether samples are to be returned or whether they are FREE OR CHARGED. In the absence of an indication in this regard, samples will be retained without future responsibility.

1.23 Quality and Guarantee:

- 1.23.1 All goods supplied shall be equal in all respects to samples, patterns of specifications where such are provided and where no samples or patterns are exhibited, or specifications maintained, then the goods or materials shall be the best of their respective kinds.
- 1.23.2 Council reserves the right to inspect any goods at any time during the production, testing or commissioning stage and may accept or reject any goods in part or as a whole that do not comply with this specification.
- 1.23.3 Any deliveries not equal to samples and/or not in accordance with the Contract or otherwise unsatisfactory will be rejected, and such rejected goods will be held at the risk and experience of the Contractor and must, if required, be removed by him immediately on receipt of notification of rejection. The fact that no objection was made at the time goods were delivered shall not affect the Council's rights under this clause.
- 1.23.4 Council reserves the right to request test certificates for specified items. If the tested samples meet the specification, Council will pay all the cost of such test. If the tested samples fail to meet the specification, the supplier shall pay the costs of testing, as well as removing all defective articles that may have been delivered and replacing with acceptable items.
- 1.23.5 If any dispute arises between the Council and the Contractor in connection with the quality and guarantee of the goods, either party may give to the other notice, in writing, of the existence of such dispute, and the same shall there upon be referred to arbitration in South Africa to a person to be mutually agreed upon. The submission shall be deemed to be a submission to arbitration within the meaning of the arbitration within the meaning of the arbitration laws in force in the Republic of South Africa.
- 1.23.6 The risk on all goods purchased by the Council under the Contract shall remain with the Contractor until such goods have been delivered to the Council.
- 1.23.7 The Form of Tender, Variation Schedule and Price Adjustment Schedule shall be completed by the Tenderer, and shall be submitted with his Tender on the tender closing date.

1.24 Delay in completion:

Should the Contractor fail to complete the delivery to the satisfaction of the Engineer within the period stated the Contractor shall pay the Employer as and for agreed liquidated damages the sum of 1/14% (one fourteenth percent) of the total contract amount per calendar day which sum the contractor agrees to forfeit for each and every calendar day the delivery remains incomplete after the expiration of the given period, and it is hereby agreed that in the above event the Employer shall have the right to realize all or any of the securities and apply the proceeds towards the payment of any claim under this or any other clause of these conditions of the contract. When the total of the abovementioned penalties reaches 5% of the contract value and the delivery is still incomplete, the Employer shall exercise procedures as set out in the General Conditions of Contract.

1.25 Escalation fees:

In the event of prices being subject to adjustment, such escalation fees shall only be payable up to and including the last day stated in the delivery schedule for items being delivered late.

- 1.26. A successful tenderer shall be notified of the award of a tender in writing, signed by the Municipal Manager or the Head of Department responsible for the contract. A verbal notification of award shall not be accepted as binding on the City Council of George.

**ALL TENDERS THAT DO NOT COMPLY WITH THE ABOVEMENTIONED REQUIREMENTS WILL BE TAKEN AS INCOMPLETE AND MAY BE REJECTED WITHOUT FURTHER CONSIDERATION.**

# **TECHNICAL SPECIFICATIONS**

## **A. OPTICAL FIBRE CABLE**

### **1. STANDARDS**

The following standards/recommendations are applicable, all being the latest revision, except where otherwise noted: -

CCITT Recommendation G.65: Characteristics of a Single Mode Optical Fibre Cable (Blue Book)

IEC Standard 794-1: Optical Fibre Cables Part 1 : Generic Specification (1993-02)

IEC Standard 120: Dimensions of Ball and Socket Couplings of String Insulator Units.

IEC Standard 471: Dimensions of Clevis and Tongue - Couplings of String Insulator Unit

### **2. FIBRES**

2.1 Fibres shall have a cladding diameter of 125 micrometers and shall comply with CCITT Recommendation G.652 for single mode fibres. The fibre shall be capable of operation in both the 1300 and 1550 nm wavelength regions. Attenuation and dispersion characteristic of the fibre to be provided.

2.2 Full details of primary, secondary & tertiary coatings (if used), shall be supplied. If chemical stripping of the coatings is recommended, then the chemical composition of the coatings and of the recommended solvents shall be supplied.

2.3 If mechanical stripping is recommended, then a suitable stripping device shall be specified.

### **3. CABLE CONFIGURATION**

3.1 ADSS cable shall contain no metallic elements and shall have a circular cross section. ADSS Cables shall be resistant to both ultra violet radiation from the sun and electric field strengths as would be experienced on HV transmission lines. Details are to be provided as to the measures taken to attain the necessary immunity to ensure a guaranteed service life of at least 25 years.

3.2 Heavy duty duct optical fibre cable shall be of the compact duct type, polyethylene sheathed, with a high degree of reinforcement to protect the fibres from micro bending due to the rigours of handling and the environmental conditions experienced by fibre optic cable.

3.2.1 The diameter over the outer sheath of the cable shall be not less than 9mm,

3.2.2 The thickness of the outer sheath shall be not less than 2mm.

3.3 The corrugated steel tape (C.S.T) armoured cables shall be suitable for installation in harsh environments where mechanical impact on the cables is to be expected e.g., direct buried applications. They shall be suited for installation in open ducts where the C.S.T armour is a proven rodent resistant barrier.

3.4 Each fibre shall be uniquely identified in an approved manner. Details shall be provided.

3.5 All the interstices of the cable shall be completely filled with a suitable compound to prevent water penetration of the cable. Details of the measures taken shall be provided.

3.6 Full details of cable construction shall be provided, as shall the measures taken to minimize hydrogen absorption in the fibres.

3.7 Minimum bending radius for the cable shall be 250mm.



- 3.8 The cable shall have sufficient crush resistance capability to withstand a load of 2000N when tested.
- 3.9 The cable shall be designed to withstand a certain degree of twisting without any damage to either the component parts of the cable or change to the optical transmission properties of the fibres.
- 3.10 Full details of the construction of the cable offered shall be provided.

#### 4. MOUNTING AND SUSPENSION HARDWARE

- 4.1 The design and construction of all items of mounting and suspension hardware shall be such that no damage or deformation occurs to either the components of the cable or to transmission properties of the optic fibres.
- 4.2 The supplier shall be fully responsible for his designs and their satisfactory performance in service. Approval by George Municipality does not relieve the supplier of responsibility for the adequacy of the design, dimensions and details.
- 4.3 No hardware shall require holes to be drilled in the transmission towers, neither shall hardware damage the galvanizing of the towers.
- 4.4 Full details of all suspension and mounting hardware shall be supplied, for approval, before the cable and hardware are delivered.
- 4.5 Any "standard" transmission line hardware shall comply with the dimensions specified in IEC Recommendations 120 and 471.
- 4.6 The following information is to be provided:
- a list of specifications to which the hardware supplied has been designed;
  - results of all type testing performed;
  - All information relating to vibration control.

#### 5. ENVIRONMENTAL

The performance of the fibre optic cables shall not be degraded under the following ambient conditions:

- (a) Temperature: -10 degrees to 50 degrees C in the shade
- (b) Altitude: 0 to 2500 metres (ASL)
- (c) Relative Humidity: 100%
- (d) Barometric Pressure: 76 – 104 kPa

#### 6. TESTING

##### 6.1 Optical:

- 6.1.1 During manufacture each fibre shall be tested at both 1300 nm and 1550 nm for attenuation, refractive index and dispersion. The results are to be supplied to George Municipality.
- 6.1.2 During manufacture, or subsequent works testing, the entire length of each fibre shall be subject to a proof test of at least 1% elongation for 1 second.
- 6.1.3 Each fibre shall be measured for continuity and length once the cable has been placed on the drum prior to delivery. George Municipality may require an inspector to be present when these final measurements are performed. George Municipality's attendance shall not relieve the supplier of his responsibility for the satisfactory performance of the cable during subsequent testing at site and thereafter to the end of the warranty period.

##### 6.2 Mechanical:

The mechanical tests called for in this specification are considered as type tests, George municipality is prepared to review the results of similar tests which the supplier may have performed in the past and possibly waive the requirements for one or more of the tests specified in this document.

6.3 Tensile Strength

The cable shall be tested according to IEC Recommendation 794-1-E1 to prove compliance with clause 4.6 of this specification. The load shall be applied for 10 minutes and the strain of the fibre monitored.

6.4 Crush Resistance

The fibres and components parts of the cable shall not suffer permanent damage when subjected to the compression loads stated in this specification. The test is to be performed as described in IEC Recommendation 794-E3. The two flat plates shall have a dimension of 50mm x 50mm. The load shall be applied for 1 minute.

6.5 Impact Resistance

The cable shall be tested as per IEC Recommendation 794-1-E4. The anvil radius is to be 25mm. The cable is to withstand one impact of 20Nm without any change to the optical transmission performance of any fibre.

6.6 Cable Bending

The fibre and component parts of the cable must not suffer permanent damage when the complete cable is repeatedly wrapped and unwrapped four complete turns of ten complete cycles at room temperature, around a mandrel of 350 mm diameter.

6.7 Cable Twist

The fibre and component parts of the cable must not suffer permanent damage when a 10m length of cable is subjected to full clockwise twist, immediately followed by two anti-clockwise twists, tested as per IEC Recommendation 794-1-E7.

6.8 Tracking

No specific test is called for, but the supplier is required to provide detailed information on design tests to prove the capability of the cable to withstand the severe conditions of pollution and electric field stresses the cable can be expected to experience when installed in maritime/industrial environments on HV transmission lines operating at voltage of up to 132kV.

6.9 Water Penetration

The cable, when tested between the core and inner sheath, shall fulfill the criteria of the water penetration test detailed in IEC Recommendation 794-1-F5.

6.10 Environmental

No specific test is specified, but the supplier is required to provide detailed information on design tests to prove the capability of the cable to withstand temperature extremes, together with rapid temperature variations without causing deterioration effects on the transmission properties of the optical fibres.

## **B. PROTECTION AND COMMUNICATIONS**

### **B.1. PROTECTIVE RELAYS Overcurrent / Earth Fault**

**1. All offers to comply with the following minimum specifications intergrator and functional requirements.**

1.1 Certified to the International Standards Organization (ISO) 9001:2000 Quality System Standard.

1.2 Warrantee that Products are free from defects in material and workmanship for **five** years after shipment.

- 1.3 Relay self-checking functions shall be included.
- 1.4 The relay shall incorporate phase overcurrent elements for detection of phase faults.
- 1.5 The relay shall incorporate neutral ground overcurrent elements for detection of ground faults.
- 1.6 The relay shall be capable of automatically recording disturbance events with pre-fault and user-defined triggering. Events shall be stored in nonvolatile memory.
- 1.7 The relay shall include one EIA-232 serial port and one ethernet port.
- 1.8 The relay shall incorporate a three-shot re-closer. It shall include three independently set open time intervals, an independently set reset time from re-close cycle, and an independently set reset time from lockout.
- 1.9 The relay shall include > 5 status and trip target programmable LEDs.
- 1.10 The relay shall be capable of being set by Window's-based graphical software
- 1.11 The relay shall be capable of continuous operation over a temperature range of –25 to +50 C.
- 1.12 The relay shall incorporate 5 configurable inputs.
- 1.13 Phase, neutral, residual overcurrent elements.  
Phase, neutral, residual time-overcurrent elements.
- 1.14 LOGIC control equations with boolean and math equations capability for logic and control
- 1.15 The relay shall be capable of DNP3 communications. This include control, input status, trip targets and current.

**B.2 DIRECTIONAL OVER CURRENT AND EARTH FAULT RELAY WITH OPERATOR CONTROLS**

- 2.1 The relay shall incorporate directional ground and phase elements.
- 2.2 The relay shall incorporate undervoltage and overvoltage elements for creating protection and control schemes.
- 2.3 The relay shall incorporate a three-shot recloser.
- 2.4 The relay shall include programmable logic functions for a wide range of user- configurable protection, monitoring, and control schemes.
- 2.5 The relay shall include a breaker wear monitor and operation counter.
- 2.6 The relay shall include a fault locating algorithm to provide an accurate estimate of fault location without communications channels, special instrument transformers, or pre-fault information either standard or as an option.
- 2.7 The relay shall include >10 status and trip target LEDs.
- 2.8 The relay shall include one EIA-232 serial port and one 10/100 ethernet port for external communications.
- 2.10 The relay shall have the capability to display custom messages.
- 2.11 The relay shall include 4 selectable setting groups to permit easier adaptation to changes in application.

- 2.12 The relay shall be capable of DNP3 over Ethernet communications.
- 2.13 **IEC 61850.** The relay shall provide IEC 61850-compliant communications. The IEC 61850 capability shall include GOOSE messaging and defined logical node data points as an option
- 2.14 The relay shall include at least 3 operator control buttons.
- 2.15 The relay shall be capable of automatically recording disturbance events with pre-fault and user-defined triggering, sequence of event recorder and load profile.
- 2.16 The relay shall have a warranty of at least 5 years.

**B.3 LINE DIFFERENTIAL FEEDER PROTECTION:**

- 3.1 The relay shall compare local and remote phase and sequence currents to provide operation in less than one half cycle for bolted faults.
- 3.2 The relay shall operate for unbalanced faults with currents below line charging current.
- 3.3 Distortion caused by CT saturation at one or both ends of a feeder shall not cause maloperation.
- 3.4 The relay shall accept transfer trips from the remote relay with less than one cycle delay.
- 3.5 The relay shall include two transfer contacts. Delay from energizing the local input to closing the remote output shall be less than 80 ms. Both transfer contacts shall have direct tripping security.
- 3.6 Metallic output contacts shall be rated per IEEE C37.90. High-speed contacts shall make in less than 1 milliseconds and shall interrupt up to 10 A of trip or close current without damage to the contact.
- 3.7 The relay shall communicate to the remote relay via a single mode fiber-optic interface.
- 3.8 The relay shall be capable of automatically recording and storing of oscillography.
- 3.9 The relay shall also include a Sequential Events Recorder (SER) that stores the latest 50 entries.
- 3.10 Wave form capture and SER reports shall be stored in non volatile memory.
- 3.11 The relay shall include 8 or more status and trip target LEDs.
- 3.12 The relay shall include one EIA-232 port and one ethernet port as an option and shall be capable of communicating in DNP.
- 3.13 The relay shall include a method for external time synchronization, either by means of an input or software.
- 3.14 The line current differential protection shall not rely on this or any other external time synchronization.
- 3.15 The relay shall be capable of continuous operation over a temperature range of –25 to +50 C.
- 3.16 The relay must cater for different local and remote side ct ratios.

- 3.17 The relay shall be capable of providing communications compliant to the IEC 61850 protocol standard as standard

#### **B.4 TRANSFORMER PROTECTION WITH OPERATOR CONTROLS AND DISPLAY**

The microprocessor-based relay shall provide protection, monitoring and control. Relay self-checking functions shall be included. Specific requirements are as follows:

- 4.1 **Transformer Differential Protection.**  
The relay shall include a single, three phase low-impedance current differential element with adaptive restraint/operate slope characteristics.
- 4.2 **Negative-Sequence Differential Protection.**  
The relay shall include negative-sequence differential protection for turn-to-turn fault detection within the transformer. The negative-sequence differential element shall be capable of detecting turn-to-turn faults as low as 5% of the total winding.
- 4.3 **Harmonic Elements.**  
The relay shall incorporate 2nd, 4th, and 5th harmonic blocking. In addition, 2nd harmonic restraint shall be provided. These restraint and blocking elements may be used independently, or in combination to prevent restrained differential element operation during inrush or overexcitation conditions. An independent fifth-harmonic element shall be included to warn of transformer overexcitation conditions.
- 4.4 **Unrestrained Differential Protection.**  
The relay shall include unrestrained differential protection to provide rapid tripping for internal faults.
- 4.5 **Directional Element.**  
The relay shall include directional elements for phase and ground currents.
- 4.6 **CT Phase Angle Compensation.**  
The relay shall incorporate full “round-the-clock” current compensation, in 30-degree increments, to accommodate any type of transformer and CT winding connection.
- 4.7 **Restricted Earth Fault Protection.**  
The relay shall provide two separate restricted earth fault (REF) protection elements for the detection of ground faults in wye-connected windings.
- 4.8 **Analog Inputs.**  
The relay shall accept the following ac inputs:
- 6 transformer winding current inputs
  - 2 REF current inputs
  - 6 Voltage inputs
- 4.9 **Current Transformer Inputs.**  
The relay shall accept CTs from different classes and a ratio mismatch of 25:1. Measuring quantities shall be on a phase-segregated basis and not from summation CTs.
- 4.10 **Breaker Failure Protection.**  
The relay shall include internal breaker failure protection with retrip functions for each of the terminals, and be selectable to also accept external breaker failure protection.
- 4.11 **Overcurrent Protection.**  
The relay shall include phase, negative, and zero-sequence overcurrent for both instantaneous and time-overcurrent elements. Torque control capability shall be provided for the inverse time overcurrent elements. Adaptive time-overcurrent elements shall be provided that allow operate quantity selection and programmable time-delay and pickup settings.
- 4.12 **Voltage Elements.**  
The relay shall include phase over- and undervoltage elements.
- 4.13 **Auxiliary Relays.**  
The relay shall not need auxiliary relays to function.
- 4.14 **Event Reporting.**  
The relay shall store event data recorded in nonvolatile memory.
- 4.15 **Sequential Events Recorder.**  
The relay shall include an SER (Sequential Events Recorder) report that stores the latest 100 entries.

- 4.16 **Substation Battery Monitor.**  
The relay shall measure and record the substation battery voltage and provide ground and excess ripple detection. High- and low-voltage level settings shall be provided for alarm and control purposes.
- 4.17 **Transformer Thermal Monitor.**  
The relay shall incorporate a transformer thermal monitor.
- 4.18 **Through-Fault Event Monitor.**  
The relay shall provide for the capability of reporting fault current level, duration, and date/time for overcurrent events through the differential protection zone. Through-fault monitoring shall provide accumulated through-fault levels, number of through-faults and the total consumed through-fault capacity of the transformer.
- 4.19 **Automation.**  
The relay shall include at least 16 local control switches, 16 remote control switches, 16 latching switches, and programmable display messages in conjunction with a local display panel in the relay. The relay shall be capable of displaying custom messages.
- 4.20 **Relay Logic.**  
The relay shall include programmable logic functions for a wide range of user-configurable protection, monitoring, and control schemes. Logic shall have the ability to use relay elements, math functions, comparison functions, and Boolean logic functions.
- 4.21 The relay shall include an interface for time-synchronization.
- 4.22 **IEC 61850 Communications.**  
The relay shall be capable of providing communications compliant to the IEC 61850 protocol standard as an option.

## **B.5 TAP CHANGE CONTROLLER:**

- 5.1 Must be able to communicate with a SEL RTAC in a total integrated substation environment.
- 5.2 The Voltage Regulator to include the following features and functions:
- 5.3 Programs for parallel operation to be selectable and must include master follower, circulating current limitation with similar and dissimilar transformers and a power factor method for use when inter relay communication is not possible for any reason.
- 5.4 Regulator to regulate Voltage at set point & display the supply voltage and tap position.
- 5.5 Mode to display Voltage, Current and Power parameters for a balanced 3 phase system.
- 5.7 Mode to record the total number of tap changes and also indicate the number of times each tap position has switched.
- 5.8 A mode to displays the present switching positions of transformers in parallel. Automatically recognizes which transformers are operating in parallel mode on a busbar system.
- 5.9 External power supply AC 110/230V / DC 125V Total 16 binary inputs incl. BCD inputs for TC position indication (6 freely programmable), DC 125V.
- 5.10 Total 13 binary outputs including tap up, tap down, TC error, remote, local, under voltage, over voltage, over current, manual/auto, status NO/NC and 3 fully programmable, 250VAC/DC
- 5.11 Programming can easily be performed with key presses on the keypad of the regulator or via optional software
- 5.12 Selection of Local or Remote mode can be made on the regulator with the included push buttons or remotely via the binary inputs or SCADA.
- 5.13 Selection of Automatic or Manual (Hand) mode can be made on the regulator with the included push buttons or remotely via the binary inputs or SCADA.
- 5.14 Selection of Tap up or Tap down can be made on the regulator with the included push buttons (Manual mode) or remotely via the binary inputs or SCADA.
- 5.15 Tap position information to be supplied to the relay by either BCD (binary coded decimal) or a resistive input with resistance per tap to be stated on the order.

## **B.6 ARC FLASH PROTECTION**

- 6.1 Simple panel mounting for retrofit applications

- 6.2 Minimum three independent arc sensor inputs
- 6.3 Two high speed tripping duty arc sense output contacts
- 6.4 Integrated self supervision with fail alarm contact
- 6.5 30 and 110 Volt DC auxiliary versions

## **B.7 MANANGED ETHERNET SWITCH:**

- 7.1 1U 19" Rack Mountable
- 7.2 Conventional Cooling (no fans)
- 7.3 IEEE 1613 Class 2: IEEE Standard Environmental and Testing Requirements for Communications Networking Devices in Electric Power Substations
- 7.4 IEC 61850-3 Communications Systems and Networks in Substations (Section 5.7) V-LAN Capable
- 7.5 MAC Based port security
- 7.6 LC connectors on F/O ports
- 7.7 Capable to operate on Fibre optic ring on Single mode fibre 1310nm 15km
- 7.8 Power supply (125VDC) or (240VAC)
- 7.9 Support for RSTP (rapid spanning tree protocol) or similar
- 7.10 SNMP
- 7.11 Min Five Year Warranty
- 7.12 Switch should have 12 100Mb copper ports.
- 7.13 Switches should have 2 duplex single mode (LC) fibre optic ports for ring operation

## **B.8 SUBSTATION GATEWAY**

- 8.1 Provide secure engineering access connected devices.
- 8.2 Able to create a **comprehensive communications architecture** by means of protocol conversion, time synchronization and data management.
- 8.3 **Run any protocol on any port.** Built-in client and server protocols include DNP3 Serial, DNP3 LAN, Modbus® RTU, Modbus TCP, IEC 61850 GOOSE (as an option).
- 8.4 **Convert data points** between protocols for seamless system integration.
- 8.5 Designed, built, and tested with the same practices, processes, and standards as protection relay's. **Complies with IEEE and IEC standards** for electrostatic discharge, fast transients, adiated emissions, surge-withstand capability, dielectric strength, pulsed magnetic fields, and disturbances. **IEC performance rating —40° to +85°C**
- 8.6 **Programming Language.** Capable of implementing a wide variety of logic and control functions. Logic shall have the ability to use math functions, comparison functions, and Boolean logic functions. Boolean logic loop execution time shall be ≤ 5 ms.

### **Hardware Specifications**

- 8.7 **Ethernet Ports**  
At least two 10/100 Mbps copper ports RJ-45
- 8.8 **Serial Ports**  
Type EIA-232 Data Rate 2400 to 38400 bps  
Connector DB-9
- 8.9 **Onboard I/O**  
Minimum 12 inputs and 8 outputs
- 8.10 **Operating Temperature**  
**IEC performance rating —40° to +85°C**
- 8.11 **Power supply** input operating voltage range of 110 or 230 Vac / 24 or 125Vdc.
- 8.12 **Specification Compliance.** The substation gateway front panel shall meet NEMA 12/IP54. The processor shall be type tested to sections of C37.90, IEC 60255, IEC 60068, and IEC 61000 standards.

- 8.13 **Warranty.** The device shall have a minimum 5-year warranty.

#### **Protocols**

- 8.14 **IEC 61850 Ethernet Communications.** The device shall provide IEC 61850 compliant communications. The IEC 61850 capability shall include GOOSE messaging and defined logical node data points as an option.
- 8.15 **Server**  
DNP3 LAN, Modbus TCP
- 8.16 **Client**  
DNP3 Serial, DNP3 LAN, Modbus RTU, Modbus TCP
- 8.17 **Engineering Access**  
The device shall allow for engineering access to any serial or ethernet device connected.

#### **B.9 I/O CONTROLLER**

- 9.1 The microprocessor-based device shall provide inputs, outputs, and communications. Self-checking functions shall be included. Specific requirements are as follows:
- 9.2 **Inputs/Outputs.** The device shall support a total of 32 I/O, a combination of inputs and outputs. Device inputs shall be optoisolated, polarity independent, and support ac and dc control signals. Device outputs shall be rated for 10 A.
- 9.3 **Small Form Factor.** The device shall have a compact case with disconnect connectors for quick and efficient installation and replacement. Connectors shall have positive retention to ensure that connections are not lost due to sagging cables.
- 9.4 **DNP3.** The device shall be capable of operating as a DNP3 Slave Level 2 either serial or LAN.
- 9.5 **Modbus.** The device shall be capable of operating as a Modbus slave either through a serial connection or Modbus TCP via Ethernet.
- 9.6 **IEC 61850 Ethernet Communications (as an option).** The device shall provide IEC 61850 compliant communications. The IEC 61850 capability shall include GOOSE messaging and defined logical node data points.
- 9.7 **Operating Temperature.** The device shall have an operating temperature range of  $-40^{\circ}$  to  $+85^{\circ}$  and a power supply input operating voltage range of 110/230Vac or 32/110 Vdc.
- 9.8 **Specification Compliance.** The device shall be type tested to sections of C37.90, IEC 60255, IEC 60068, and IEC 61000 standards.
- 9.9 **Warranty.** The device shall have a minimum 5-year warranty.

#### **B.10 INPUT / OUTPUT PROCESSOR**

- 10.1 The microprocessor-based device shall provide monitoring, control, and automation. Self-checking functions shall be included.  
Specific requirements are as follows:
- 10.2 **Front-Panel Visualization.** The programmable automation controller shall be capable of displaying measured values, calculated values, I/O statuses, device status, and configuration parameters on a front-panel LCD display. The display shall have a rotating capability to display custom messages and data.. The front panel shall also have a minimum of six user-programmable LEDs and four user-programmable push button controls.
- 10.3 **Programming Language.** The programmable automation controller shall be capable of implementing a wide variety of logic and control functions. Logic shall have the ability to use math functions, comparison functions, and Boolean logic functions.
- 10.4 **Automation.** The programmable controller shall include various logics such as latch bits, timers, math variables etc..
- 10.5 **Small Form Factor.** The programmable automation controller shall have a compact case with quick-disconnect connectors for analog and digital I/O to simplify installation.
- 10.6 **Flexible I/O.** The programmable automation controller shall be configurable based upon end-user application requirements.
- 10.7 **Analog Inputs.** As an option the programmable automation controller shall have the ability to support 7 current or voltage analog inputs. The allowed signal input range is  $\pm 20$  mA,  $\pm 10$  volts, or  $\pm 110$  volts.



- 10.8 **Analog Outputs.** As an option the programmable automation controller shall have the ability to support 4 current or voltage (jumper selectable) analog outputs. The allowed signal output range is  $\pm 20$  mA.
- 10.9 **Voltage Inputs.** Optional voltage inputs shall accept 0–300 Vac.
- 10.10 **Current Inputs.** Optional current inputs shall accept 0–5 A or, 0–1 A nominal current inputs.
- 10.11 **DNP3.** The programmable automation controller shall be capable of operating as a DNP3 Slave Level 2 either serial or
- 10.12 **LAN.** The device shall allow configuration of any incoming data or data calculated within the device to be available through a DNP data map. All control points within the programmable automation controller shall be available as DNP3 control points using latch on/latch off, pulse on/pulse off, or trip/close control functions.
- 10.13 **PC Software.** The programmable automation controller shall include compatibility with a PC software program for use in programming control settings and logic functions, and retrieving event data. The PC software is available, but not required to use the programmable automation controller.
- 10.14 **Operating Temperature.** The programmable automation controller shall have an operating temperature range of  $-40^{\circ}$  to  $+85^{\circ}\text{C}$  and a power supply input operating voltage range of 110/230 Vac or 32/110 Vdc.
- 10.15 **Specification Compliance.** The programmable automation controller front panel shall meet NEMA 12/IP54. The programmable automation controller shall be type tested to sections of C37.90, IEC 60255, IEC 60068, and IEC 61000 standards.
- 10.16 **Warranty.** The programmable automation controller shall have a minimum 5-year warranty.
- 10.17 **IEC 61850 Ethernet Communications (as an option).** The device shall provide IEC 61850 compliant communications. The IEC 61850 capability shall include GOOSE messaging and defined logical node data points.

#### **B.11 UNMANAGED ETHERNET SWITCH**

- 11.1 **Speed.** Self configure 10/100 Mbps, cross/straight, half/full duplex.
- 11.2 **Ports.** The switch shall be equipped with at least **two** single mode small form factor LC fibre optic ports and three or more copper ports.
- 11.4 **Self-Check.** The Fiber-Optic Transfer Switch shall be microprocessor-based, have self-check diagnostics.
- 11.5 **Warranty.** The programmable automation controller shall have a minimum 5-year warranty.
- 11.6 **Power Supply.** 24Vdc and 125Vdc

#### **B.12 SWING FRAME PANEL ( to ESKOM specifications)**

- 12.1 The panel shall be able to house 3 modular schemes.
- 12.2 The panel shall consist of an independent, free standing, floor mounted unit with overall dimensions of approximately 2100 mm high, 600 mm depth and width of 800mm to accommodate a 19 inch rack.
- 12.3 The control panel shall be mounted on a folded steel channel base over the cable trenches.
- 12.4 The panel shall be painted in accordance with the requirements of this specification – the final interior color shall be white and the final exterior color shall be light grey high gloss enamel to color F48 of SANS 1091.
- 12.5 The panel shall be dustproof and adequately ventilated to prevent the overheating of the equipment.
- 12.6 The panel shall be of both bottom and top entry type and shall be provided with 3 mm thick cadmium plated gland plates for cable terminations.
- 12.7 All the gland plates shall be electrically bonded together by means of a 200 mm x 6 mm copper earth bar running continuously through the cubicles. The cubicles earth shall be bonded to the main substation earth by means of 70 mm<sup>2</sup> stranded copper earth wires

#### **B.13 PORT SERVER**

The microprocessor-based port server shall provide a function of extending the available serial ports on a communications device over an ethernet network. Specific requirements are listed below:

- 13.1 **1U/2U rack mountable.** The port server must be 1U or 2U high and 19 inch rack mountable.

- 13.2 **Ethernet.** The port server shall have at least 1 10/100MB/s ethernet ports available.
- 13.3 **Serial.** The port server shall have a minimum of 8 EIA-232 serial ports.
- 13.4 **Protocols.** Raw TCP IP and/or Telnet.
- 13.5 **Supply Voltage.** The supply voltage must be in the range: 32VDC / 110VDC.

#### **B.14 LONG RANGE WIRELESS MODEM**

The wireless modem must be capable of operating in a store and forward or repeater configuration mode.

- 14.1 **Power supply:** 12Vdc or 24Vdc
- 14.2 **Data Rates:** 4800/9600 at 12.5KHz
- 14.3 **Operation mode:** Half duplex, simplex, transparent, protocol routing.
- 14.4 **Tx Power:** up to 5 Watt adjustable
- 14.5 **Ports:** 1 Serial and 1 TCP/IP
- 14.6 **Protocols.** DNP, MODBUS
- 14.7 **Frequency.** 440 to 470 MHz

#### **B.15 GPRS MODEM / GATEWAY**

- 15.1 **Power supply:** 12Vdc or 24Vdc
- 15.2 **Data Rates:** up to 19200 on RS232
- 15.3 **Operation mode:** transparent, port forwarding
- 15.4 **Ports:** 4 Serial and 1 TCP/IP
- 15.5 **Protocols.** Raw TCP IP and/or Telnet.

#### **B.16 OVERHEAD LINE FAULT INDICATORS**

The overhead line fault indicators shall comply with the following minimum specifications:

- 16.1 The trip threshold shall be in the range of 60 to 1000A or better.
- 16.2 Maximum fault current shall be 25kA
- 16.3 LED indicator flashing between 4 and 8 Hours after a fault.
- 16.4 Must be installable with a single hotstick.

#### **B.17 11kV Capacitors**

The 50Hz Film-Var capacitors must be of the non-pcb type and must comply with the following specifications

- 17.1 **Rated Voltage:** 7 600V
- 17.2 **Rated Output:** 408 KVAR
- 17.3 **Insulation Level:** 23/95 kV
- 17.4 **Rated Capacitance.** 22.5 uF
- 17.5 **Discharge Resistance:** Less than 5 Mega ohm
- 17.6 **Weight.** Less than 55kg
- 17.7 **Temperature category:** -25 to +50 deg C
- 17.8 **Fuse Type:** External
- 17.9 **Specification:** IEC871-1
- 17.10 **Internal Connection :** S=4, P=5

### **C. MULTI – FUNCTION ENERGY METERS (1 & 3 PHASE)**

#### **1.1 STANDARDS**

The meters offered shall comply with the following standards and specifications. Departures from the requirements of this Specification shall be stated in the Non-Compliance Schedules and may be accepted at the Engineer's discretion:

**SANS 474:2006 CODE OF PRACTICE FOR ELECTRICITY METERING**

SANS 62052-11/IEC 62052-11  
Electricity metering equipment (a.c.) – General Requirements, Tests and test conditions –  
Part 11: Metering Equipment

SANS 62053-11/IEC 62053-11  
Electricity metering equipment (a.c.) – Particular Requirements  
Part 11: Electromechanical meters for active energy (classes 0.5, 1 and 2)

BS 5685 -	Class 0.5, 1 and 2 Single Phase and Polyphase Rate and Multi-Rate Watt-Hour Meters
BS 7400 -	Specification for Alternating Current Static Watt-Hour Meters for Active Energy
IEC 145 -	Var-Hour Meters (Reactive Energy Meters)
IEC 801 -	Electromagnetic and Control Equipment
IEC 1036 -	Alternating Current Static Watt-Hour Meters for Active Energy
IEC 1107 -	Data Exchange for Meter Reading, Tariff and Load Control. Direct Local

**1.2** Equipment used in the metering installation shall be certified as compliant with the relevant standards and approved by ESKOM or an Metro municipality.

**1.3** Equipment must be approved, type tested and certified for compliance with relevant standards and have met the quality assurance requirements of ESKOM or an Metro municipality.

**2. MANUFACTURER'S EXPERIENCE**

Tenderers must state how long the equipment offered has been in production, along with the names and addresses of at least three South African users, who can be contracted for comment on the equipment.

They must also state the following:

Number of units installed; length of time in use;

The life expectancy of the meters; and

Length of time the equipment is expected to remain in production.

Preference may be given to tenderers who can demonstrate an extensive, existing and reliable user base.

**3. CALIBRATION TESTS**

The successful tenderer shall supply with each delivery of meters the results of the calibration tests performed by him/her on the meters, to prove compliance with the relevant standard specification. The result shall be given for each meter as a  $\pm$  percentage.

**4. TECHNICAL SUPPORT**

Tenderers must guarantee technical support for the equipment offered (hardware and software) for a period of ten years from the date of delivery and indicate the services available at their South African head office/factory. An indication of the level of support which will be provided after the ten year period should be given.

**5. SOFTWARE COMPATIBILITY**

Meters must be compatible with PMAX software reading, tariff analysis and billing reports features. (Contact person is Mr PJ Newham Tel no. 012 - 348 3173). It is the tenderer's duty to prove compatibility.

**6. 69/120V to 240/415 Vac / 1A / 3 or 4 WIRE ELECTRONIC ENERGY & DEMAND METER WITH GSM / GPRS COMMUNICATION INTERFACE (Compatible with PMAX billing software)**

Accuracy: Active Power = 0,2 / Reactive Power = 0,5

Voltage range: 63.5 / 110 to 240 / 415 Vac

Equipped with multi-ranging capabilities for 3-Wire & 4-Wire Metering

It must be possible to extract the meter configuration directly from the meter without having a prior record of the configuration

The meter operating software must be capable of incorporating instrument transformer ratios in order to provide an internal multiplying factor. The Power readings which the meter displays shall therefore be the actual reading with no external multiplying constants required. Tenders must state whether there is an upper limit to the multiplying constant which the meter will accept and if so, what the figure is.

The meter display shall incorporate icons on the local display to indicate, or be programmable, to display the following without user intervention: (1) The presence of line or phase voltages. (2) Phase sequence (3) Energy direction for active and reactive energy (4) Error messages (5) Battery status indication.

The meter shall incorporate two red LED's, one each for indicating active and reactive energy. The pulse rate of these LED's must vary corresponding to the power applied. When no current is flowing, the test diodes shall be continuously illuminated.

The meter must be capable of accepting either single rate or time of use tariffs.

The meter must be capable of storing kVA demand and accumulated kWh values for at least six historical billing periods

The meter shall be capable of storing load profile data corresponding to the integrating period for the following programmable measured quantities: (1) kW (2) kvar (3) kVA (4) Phase or line voltages (5) Power factor

At least two pulse/control inputs must be provided. These inputs must be available at the meter. It must be possible to program the inputs to accept the following functions: (1) Half hour reset or clock sync. (2) Tariff control.

At least four pulse/control outputs must be provided. These outputs must be available at the meter terminal block and be suitable for the operation of re-transmitting relays. It must be possible to program the outputs to provide the following functions: (1) kW or kWh (2) kvar or kVA (3) End of billing period (4) Half hour reset.

Current range 5 A (CT driven)

Display: Liquid Crystal display

Internal Memory: Store 2 registers of 30 minute load profile data for at least 450 days Backup Time (Power reserve): Replacable Battery – 5 years. Battery must be replacable without the meter cover and /or seals broken to get to the battery

Communication Interfaces: Modular and exchangeable

GSM operation standard : ETS 300 607-1 / EN 301 / 419-1

GSM operation approvals : GSM Phase 2/2+, R&TFTE, GCF

GPRS operation standard : GSM 03.60, Vers. 7.8.0 (GPRS)

GPRS operation approvals : GPRS class 8 (85.6 kbps)

**7. 69/120V to 240/415 Vac / 5A / 3 or 4 WIRE ELECTRONIC ENERGY & DEMAND METER WITH GSM / GPRS COMMUNICATION INTERFACE (Compatible with PMAX billing software)**

Accuracy: Active Power = 0,5 / Reactive Power = 1,0

Voltage range: 63.5 / 110 to 240 / 415 Vac

Equipped with multi-ranging capabilities for 3-Wire & 4-Wire Metering

It must be possible to extract the meter configuration directly from the meter without having a prior record of the configuration

The meter operating software must be capable of incorporating instrument transformer ratios in order to provide an internal multiplying factor. The Power readings which the meter displays shall therefore be the actual reading with no external multiplying constants required. Tenders must state whether there is an upper limit to the multiplying constant which the meter will accept and if so, what the figure is.

The meter display shall incorporate icons on the local display to indicate, or be programmable, to display the following without user intervention: (1) The presence of line or phase voltages. (2) Phase sequence (3) Energy direction for active and reactive energy (4) Error messages (5) Battery status indication.

The meter shall incorporate two red LED's, one each for indicating active and reactive energy. The pulse rate of these LED's must vary corresponding to the power applied. When no current is flowing, the test diodes shall be continuously illuminated.

The meter must be capable of accepting either single rate or time of use tariffs.

The meter must be capable of storing kVA demand and accumulated kWh values for at least six historical billing periods

The meter shall be capable of storing load profile data corresponding to the integrating period for the following programmable measured quantities: (1) kW (2) kvar (3) kVA (4) Phase or line voltages (5) Power factor

At least two pulse/control inputs must be provided. These inputs must be available at the meter. It must be possible to program the inputs to accept the following functions: (1) Half hour reset or clock sync. (2) Tariff control.

At least four pulse/control outputs must be provided. These outputs must be available at the meter terminal block and be suitable for the operation of re-transmitting relays. It must be possible to program the outputs to provide the following functions: (1) kW or kWh (2) kvar or kVA (3) End of billing period (4) Half hour reset.

Current range 5 A (CT driven)

Display: Liquid Crystal display

Internal Memory: Store 2 registers of 30 minute load profile data for at least 450 days Backup Time (Power reserve): Replacable Battery – 5 years. Battery must be replacable without the meter cover and /or seals broken to get to the battery

Communication Interfaces: Modular and exchangeable

GSM operation standard : ETS 300 607-1 / EN 301 / 419-1

GSM operation approvals : GSM Phase 2/2+, R&TFTE, GCF

GPRS operation standard : GSM 03.60, Vers. 7.8.0 (GPRS)

GPRS operation approvals : GPRS class 8 (85.6 kbps)

## **8. RS 232/485 COMMUNICATION INTERFACE FOR ITEM 7**

- 8.1 RS 232: Asymmetric, serial, asynchronous, bi-directional interface for use with external modems with sufficient intelligence built in.
- 8.2 RS 485: Asymmetric, serial, asynchronous, bi-directional interface used as communication bus for multiple meter reading applications
- 8.3 SUPPLY: From energy meter

## **9. GPRS Communication Interface for Item 7**

- 9.1 GPRS operation standard : GSM 03.60, Vers. 7.8.0 (GPRS)
- 9.2 GPRS operation approvals : GPRS class 8 (85.6 kbps)

## **10. ETHERNET INTERFACE FOR ITEM 7**

- 10.1 DNP 3.0 Protocol over TCP/IP
- 10.2 Supply from energy meter

### **11.1 400 V / 125 A / 4 Wire Electronic Energy Meter**

- 11.1.1 Accuracy: Active Power = 1,0 / Reactive Power = 2,0
- 11.1.2 Voltage range: 240 / 415 Vac
- 11.1.3 Current range: 5 / 125 A
- 11.1.4 Display: Liquid Crystal Display

### **11.2 230 V / 100 A / 2 Wire Electronic Energy Meter**

- 11.2.1 Accuracy: Active Power = 1,0
- 11.2.2 Voltage range: 230 Vac
- 11.2.3 Current range: 20 / 100 A
- 11.2.4 Display: Liquid Crystal Display

### **11. 13 WAY TEST BLOCK**

- 11.1 The testblock must consist of 13 metal tracks, 4 for voltage and 9 for current use
- 11.2 The current tracks must have 2 links per phase (6 in total)
- 11.3 The front cover must be made from "see-through" material to prevent tampering

### **12. CURRENT TRANSFORMERS**

#### **12.1 TEST CERTIFICATES**

Each certification report shall, where relevant, include a calibration report that confirms compliance with the requirements of the relevant part of SANS 60044 and confirms that the component complies with the requirements of its accuracy class.

- 12.2 Where CT's are required for metering purposes they shall comply with the requirements of SANS 60044-1. Proof of compliance with SANS 60044-1 shall be provided by the supplier of current transformers.

- 12.3 Calibration reports for CT's shall be traceable to national standards and shall indicate the CT error at the current and burden values specified in SANS 60044-1. Multi ratio CT's shall be tested at all ratios.

- 12.4 The following ratio's are required:

- (1) 200 / 5
- (2) 300 / 5
- (3) 400 / 5
- (4) 500 / 5
- (5) 600 / 5
- (6) 800 / 5
- (7) 1000 / 5

MINIMUM QUANTITIES AND PRICE SCHEDULES (All Prices to Include 14% VAT)

**FIBRE OPTICS**

NOTES:

- a) State if bulk and/ or Settlement discount is applicable.
- b) **Tender price must include 14% VAT.**
- c) **Schedule of Non Compliance to be completed.**

A.	FIBRE OPTIC	PRICE INCL. 14% VAT OR ADDITIONAL COST	WEEKS DELIVERY	REMARKS / SPECIFICATION
<b>CABLE / ACCESSORIES</b>				
1)	ADSS longspan 24 (minimum 1000m)	R		
2)	ADSS short span 24 (minimum 1000m)	R		
3)	HDD 24 (minimum 1000m)	R		
4)	FOSC 400-B4-S12-2-Fiber joint kit (24F)	R		
5)	FOSC-400A4 Joint	R		
6)	FOSC-B-TRAY-S24-1	R		
7)	Cable joint chamber complete 720X concertina 380ext/480	R		Drawing to be supplied with Tender
8)	1 metre ST single mode 1300nm Fibre Pig tails	R		

A.	FIBRE OPTIC	PRICE INCL. 14% VAT OR ADDITIONAL COST	WEEKS DELIVERY	REMARKS / SPECIFICATION
9)	3 metres ST-ST Single Mode 1300nm Patch Lead	R		
10)	3 metres ST-FC Single Mode 1300nm Patch Lead	R		
11)	3 metres ST-LC SM Duplex Small form factor Patch Lead	R		
12)	3 metres ST-LC MM Duplex Small form factor Patch Lead	R		
13)	ST-ST Panel Connectors	R		
14)	19" 9U Wall mount rack	R		Drawing or picture to be supplied with tender
15)	19" Patch Panel 24 Fibre	R		Drawing or picture to be supplied with tender
16)	Wall Mount Patch Panel "Cabinet" for 12 Fibre	R		Drawing or picture to be supplied with tender
17)	45mm Smouvs /100	R		
18)	62mm Smouvs /100	R		
19)	Alcohol Spray per can	R		
20)	Compressed air per can	R		
21)	Low Lint Fibre Wipes per 100	R		
22)	N-caps per 100	R		
23)	<b>Optex</b> HDPE direct burial duct UV stabilized complete with permanent lubricant - OD/ID = 32/26mm	R		supplied in coils



A.	FIBRE OPTIC	PRICE INCL. 14% VAT OR ADDITIONAL COST	WEEKS DELIVERY	REMARKS / SPECIFICATION
24)	Galv. Steel dead ends for 13.8 to 14.7mm ADSS 24 fibre longspan	R		
25)	Galv. Steel MCI Thimble clevis with 70kn MFL	R		
26)	Alum alloy suspension units with reinforce rods for 14.34 longspan ADSS	R		
27)	PVC spiral vibration dampers for cond dia 14.32 to 19.6	R		
28)	Alum alloy downlead cushioned clamps longspan	R		
29)	Alum alloy downlead cushioned clamps shortspan	R		
30)	Dead end for 12/24 fibre shortspan	R		
31)	Suspension unit for 12/24 fiber shortspan	R		
32)	Single Hook (termination)	R		
33)	Double Hook (termination)	R		
34)	Eye Bolt	R		
35)	Eye Nut	R		
36)	Down lead cushion clamps	R		
37)	Splice cassettes per 12 fibre	R		
38)	Glands no. 0 and no. 1 (patch panel gland grey)	R		

## **PROTECTION**

### **NOTES:**

- a) Please tender for more than one Relay type if possible. (Copies of forms where applicable)
- b) State if bulk and/ or Settlement discount is applicable.
- c) **Tender price must include 14% VAT.**
- d) **Schedule of Non Compliance to be completed.**

<b>B1</b>	<b>OVER CURRENT / EARTH FAULT RELAY</b>			
<b>TYPE AND MODEL NAME OFFERED:</b>				
	<b>FEATURES / ACCESSORIES</b>	<b>PRICE INCL VAT OR ADDITIONAL. COST</b>	<b>DELIVERY</b>	<b>REMARKS / SPECIFICATION</b>
a)	<b>Basic relay (state number of input and outputs)</b>	R		In = ;Out =
<b>Tendered relay comply with Standard Specification B.1 <u>YES / NO</u> Signature: _____</b>				<b>SCHEDULE OF NON COMPLIANCE TO BE COMPLETED</b>
b)	Cost for additional input and outputs	R		
c)	Cost for Arch FLACH PROTECTION to specifications	R		
d)	Cost for ETHERNET	R		
e)	Cost for IEC61850	R		
f)	Cost for DNP3	R		
g)	Other	R		
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		

<b>B2</b>	<b>DIRECTIONAL OVER CURRENT AND EARTH FAULT RELAY WITH OPERATOR CONTROLS</b>			
<b>TYPE AND MODEL NAME OFFERED:</b>				
	<b>FEATURES / ACCESSORIES</b>	<b>PRICE INCL VAT OR ADDITIONAL COST</b>	<b>DELIVERY</b>	<b>REMARKS / SPECIFICATION</b>
a)	<b>Basic relay (state number of input and outputs)</b>	R		In = ;Out =
<b>Tendered relay comply with Standard Specification B1, B2 and B.3 <u>YES/NO</u></b>			<b>Signature: _____</b>	<b>SCHEDULE OF NON COMPLIANCE TO BE COMPLETED</b>
b)	Cost for additional input and outputs	R		In = ;Out =
c)	Additional cost for sensitive earth fault.	R		
d)	Cost for ETHERNET (copper) option	R		
e)	Cost for IEC61850	R		
f)	Cost for DNP3	R		
g)	Arc Flash	R		
h)	Other	R		
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		

<b>B3.</b>	<b>LINE DIFFERENTIAL FEEDER PROTECTION</b>			
<b>TYPE AND MODEL NAME OFFERED:</b>				
	<b>FEATURES / ACCESSORIES</b>	<b>PRICE INCL.VAT OR ADDITIONAL. COST</b>	<b>DELIVERY</b>	<b>REMARKS / SPECIFICATION</b>
a)	<b>Basic relay (state number of input and outputs)</b>	R		In = ;Out =
<b>Tendered relay comply with Standard Specification B1, B2, B3, B5 &amp; B6 <u>YES/NO</u> Signature: _____</b>				<b>SCHEDULE OF NON COMPLIANCE TO BE COMPLETED</b>
b)	Cost for additional input and outputs	R		
c)	1300nm Fibre Port	R		
d)	Cost for ETHERNET	R		
e)	Cost for IEC61850	R		
f)	Cost for DNP3	R		
g)	Other	R		
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		

B4.	TRANSFORMER PROTECTION	TYPE & MODEL NAME:		
	FEATURES / ACCESSORIES	PRICE INCL. 14% VAT OR ADDITIONAL. COST	DELIVERY	REMARKS / SPECIFICATION
a)	<b>Basic relay (state number of input and outputs)</b>	R		In = ;Out =
<b>Tendered relay comply with Standard Specification B1 &amp; B2 <u>YES/NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
b)	Cost for additional input and outputs	R		
c)	Cost for ETHERNET	R		
d)	Cost for IEC61850	R		
e)	Cost for DNP3	R		
f)	Other	R		
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		

B5	TAPCHANGER CONTROLLER	TYPE & MODEL NAME:		
		PRICE INCL VAT OR ADDITIONAL. COST	DELIVERY	REMARKS / SPECIFICATION
a)	<b>Basic relay (state number of input and outputs)</b>	R		In = ;Out =
<b>Tendered relay comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
b)	Cost for additional input and outputs	R		
c)	Cost for IEC61850	R		
d)	Cost for DNP3	R		
e)	Other	R		
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		

<b>B6.</b>	<b>ARC FLASH PROTECTION</b>	<b>PRICE INCL. 14% VAT</b>	<b>DELIVERY</b>	<b>REMARKS</b>
a)	ARC protection Master unit	R		
b)	ARC protection multiple zone card	R		
c)	ARC protection slave unit	R		
d)	ARC protection sensor	R		
e)	Other	R		

<b>B7</b>	<b>MANAGED ETHERNET SWITCH</b>	<b>TYPE &amp; MODEL NAME:</b>		
	<b>FEATURES / ACCESSORIES</b>	<b>PRICE INCL. 14% VAT OR ADDITIONAL. COST</b>	<b>DELIVERY</b>	<b>REMARKS / SPECIFICATION</b>
a)	<b>SWITCH</b>	R		
<b>Tendered relay comply with Standard Specification B <u>YES / NO</u></b>			<b>Signature: _____</b>	<b>SCHEDULE OF NON COMPLIANCE TO BE COMPLETED</b>
<b>TOTAL PRICE FOR RELAY TO SPECIFICATIONS</b>		R		
b)	Other	R		
c)	Other	R		
d)	Other	R		

B8	SUBSTATION GATEWAY	PRICE INCL. 14% VAT	DELIVERY	REMARKS / SPECIFICATION
<b>Tendered relay comply with Standard Specification B <u>YES / NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
a)	4 RS 232 and 2 Ethernet ports	R		
b)	16 RS 232 and 2 Ethernet ports	R		
c)	I/O Board 8 contact outputs, 12 contact inputs	R		
d)	Cost for IEC61850	R		
e)	Add-on Card/Option	R		
f)	Add-on Card/Option	R		
g)	Add-on Card/Option	R		
h)	Add-on Card/Option	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B9	IO CONTROLLER	R		
B9 (a)	ADDITIONAL I/O	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B10	IO PROCESSOR	R		
B10 (a)	ADDITIONAL I/O	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B11	UNMANAGED ETHERNET SWITCH (Fibre-Optic Transfer ETHERNET Switch)	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u>    Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED



B12	SWING FRAME PANEL (ESKOM specifications)	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B13	PORT SERVER (8 Port)	R		
B13 (a)	PORT SERVER (16 Port)	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B14	LONG RANGE WIRELESS MODEM	R		
B14 (a)	Option	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B15	GPRS MODEM / GATEWAY	R		
B15 (a)	Option	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B16	OH LINE FAULT INDICATOR for 11kV	R		
B16 (a)	OH LINE FAULT INDICATOR for 66kV	R		
<b>Tendered item comply with Standard Specification B <u>YES / NO</u> Signature: _____</b>				SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
B17	11kV CAPACITOR to specification	R		
B17 (a)	COMPLETE FUSE ASSEMBLY for CAPACITOR	R		

<b>D</b>	<b>ADDITIONAL / OPTIONAL DEVICES</b>	<b>PRICE INCL. 14% VAT</b>	<b>DELIVERY</b>	<b>REMARKS / SPECIFICATION</b>
a)	SERIAL TO ETHERNET CONVERTER	R		
b)	FO to RS232 Converter SINGLE MODE 50km	R		
c)	Single mode to multimode converter (110vdc)	R		

**C. MULTI – FUNCTION ENERGY METERS TO SANS 1799**

ITEM NR	DESCRIPTION	WEEKS DELIVERY	PRICE INCLUSIVE OF 14% VAT	UNIT
a)	Integratable substation meter to specifications C.6	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
b)	69/120V to 240/415 Vac / 5A / 3 or 4 Wire Electronic Energy & Demand Meter with GSM / GPRS Communication Module to specification C.7	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
c)	GPRS communications interface for above (Plug in)	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
d)	RS 232/485 communications interface "Bus system compatible"	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
e)	400V/ 125A/ 4 Wire Electronic Energy Meter (Specs C.10.1)	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
f)	400V/ 150A/ 4 Wire Electronic Energy Meter (Specs C.11)	R		each
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b>			<b>Signature: _____</b>	SCHEDULE OF NON COMPLIANCE TO BE COMPLETED
g)	230/ 100A / 2 Wire Electronic Energy Meter (Specs C.10.2)	R		each

ITEM NR	DESCRIPTION	WEEKS DELIVERY	PRICE INCLUSIVE OF 14% VAT	UNIT
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b> <b>Signature:</b> _____		SCHEDULE OF NON COMPLIANCE TO BE COMPLETED		
h)	Ring Type CT's; Class 0,5; Minimum VA rating = 7,5 With certification as required by NRS 057 to specification C.12  (1) 200 / 5 (2) 300 / 5 (3) 400 / 5 (4) 500 / 5 (5) 600 / 5 (6) 800 / 5 (7) 1000 / 5	R R R R R R R		
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b> <b>Signature:</b> _____		SCHEDULE OF NON COMPLIANCE TO BE COMPLETED		
i)	13 Way Test Block to specification C.11	R		
<b>Tendered item comply with Standard Specification C <u>YES / NO</u></b> <b>Signature:</b> _____		SCHEDULE OF NON COMPLIANCE TO BE COMPLETED		







## PAST EXPERIENCE

**This schedule is compulsory to complete!**

Tenderers must furnish hereunder details of similar works / services, which they have satisfactorily completed in the past. The information shall include a description of the Works / Services, the Contract value and name of Employer.

<b>Employer</b>	<b>Nature of Work</b>	<b>Value of Work</b>	<b>Duration and Completion Date</b>	<b>Employer Contact Number</b>

\_\_\_\_\_   
Date

\_\_\_\_\_   
Signature of Tenderer

## THE TENDER OFFER

I/We Mr/Mrs/Messrs \_\_\_\_\_  
duly assigned to represent the service provider for the purpose of this tender, hereby tender to supply all or any of the goods and/or render all or any of the services described in the attached documents to the George Municipality on terms and conditions stipulated in this tender and in accordance with the specifications stipulated in the tender documents (which shall be taken as part of, and incorporated into this tender) **at the price reflected on page 13-46 in the Pricing Schedule.**

I/we agree that this offer shall remain valid for a period of four (4) months commencing from the closing date and time of this tender.

I/we further agree that:

This tender and its acceptance shall be subject to the terms and conditions contained in the George Municipality's Supply Chain Management Policy;

If I/we withdraw my/our tender within the period for which I/we have agreed that the tender shall remain open for acceptance, or fail to fulfill the contract when called upon to do so, the George Municipality may, without prejudice to its other rights, agree to the withdrawal of my/our tender or cancel the contract that may have been entered into between me/us and the George Municipality and I/we will then pay to the George Municipality any additional expense incurred by the George Municipality having either to accept any less favorable tender or, if fresh tenders have to be invited, the additional expenditure incurred by the invitation by the invitation of fresh tenders and by the subsequent acceptance of any less favorable tender; the George Municipality shall also have the right to recover such additional expenditure by set-off against moneys which may be due or become due to me/us under this or any other tender or contract or against any guarantee or deposit that may have been furnished by me/us or on my/our behalf for the due fulfillment of this or any other tender or contract and pending the ascertainment of the amount of such additional expenditure or retain such moneys, guarantee or deposit as security for any loss the George Municipality may sustain by reason of my/our default;

If my/our tender is accepted the acceptance may be communicated to me/us by letter or order by certified mail or registered mail. Such posting shall be deemed to be proper service of such notice with effect from the date of posting/dispatch of such notice;

The law of the Republic of South Africa shall govern the contract created by the acceptance of my/our tender and that I/we choose domicilium citandi et executandi in the Republic of South Africa, where any and all legal notices may be served at (full street address on this place):

Physical Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I/we furthermore confirm that I/we have satisfied myself/ourselves as to the correctness and validity of my/our tender; that the price(s) and rate(s) tendered cover all the



work/item(s) specified in the tender 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 own risk.

I/we hereby accept full responsibility for the proper execution and fulfillment of all obligations and conditions devolving on me/us under this agreement as the Principal(s) liable for the due fulfillment of this contract.

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 or judgement which may be pronounced against me/us as a result of such action.

I/we declare that I/we have participation / no participation in the submission of any other offer for the supplies/services described in the attached documents. If in the affirmative, state name(s) of tenders involved.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**This form must be completed and signed to be considered provisionally responsive.**

## ACCEPTANCE

By signing this part of the form of offer and acceptance, the employer identified below accepts the supplier's offer. In consideration thereof, the employer shall pay the supplier the amount due in accordance with the conditions identified in the tender data. Acceptance of the supplier's offer shall form an agreement between the employer and the supplier upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the supplier receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the supplier within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Name: **MR TREVOR BOTHA**

Signature: \_\_\_\_\_

Capacity: **MUNICIPAL MANAGER**

Date: \_\_\_\_\_

For the Employer: **GEORGE MUNICIPALITY  
CIVIC CENTRE  
YORK STREET  
GEORGE**

## TAX CLEARANCE CERTIFICATE

**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. Proof of this arrangement must be submitted with this tender.**

- 1 In order to meet this requirement bidders are required to complete in full the 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 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](http://www.sars.gov.za).
- 3 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 eFilers through the website [www.sars.gov.za](http://www.sars.gov.za).
- 4 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.
- 5 The original Tax Clearance Certificate must be submitted together with the bid. Copies of the Tax Clearance Certificate will only be valid if the bidder is registered on the George Municipality's accredited supplier database, which will contain the original Tax Clearance Certificate.
- 6 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate original Tax Clearance Certificate.
- 7 Furthermore, the responsibility remains with each Contractor (successful Tenderer) to submit updated original Tax Clearance – Good Standing to the abovementioned Supplier Management Office (in the Supply Chain Management department on the 1<sup>st</sup> Floor, Civic Centre, George Municipality, York Street, George) should any current certificate expire during the tender or contract. Failure to do so may lead to the suspension of transactions with the contractor until a valid Tax Clearance Certificate is received by that office.

**DECLARATION OF INTEREST**

1.	No bid 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. 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 the service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.	
3.	In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.	
3.1	Full Name of bidder or his / her representative: .....	
3.2	Identity number: .....	
3.3	Position occupied in the Company (director, trustee, shareholder <sup>2</sup> ): .....	
3.4	Company Registration Number: .....	
3.5	Tax Reference Number: .....	
3.6	VAT Registration Number: .....	
3.7	The names of all directors / trustees / shareholders / members, their individual identity numbers and state employee numbers (where applicable) must be indicated in paragraph 4 below.	
3.8	Are you presently in the service of the state?*	<b>YES / NO</b>
3.8.1	If yes, furnish the following particulars:  Name of person / director / trustee / shareholder member: .....  Name of state institution at which you or the person connected to the bidder is employed: .....  Position occupied in the state institution: .....  Any other particulars: .....	

<p>3.9</p> <p>3.9.1</p>	<p>Have you been in the service of the state for the past twelve months?</p> <p>If so, furnish particulars.</p> <p>.....</p> <p>.....</p>	<p><b>YES / NO</b></p>
<p>3.10</p> <p>3.10.1</p>	<p>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 this bid?</p> <p>If yes, furnish the following particulars:</p> <p>Name of person: .....</p> <p>Name of state institution at which you or the person connected to the bidder is employed:</p> <p>.....</p> <p>Position occupied in the state institution:</p> <p>.....</p> <p>Any other particulars: .....</p> <p>.....</p>	<p><b>YES / NO</b></p>
<p>3.11</p> <p>3.11.1</p>	<p>Are you aware of any relationship (family, friend, other) between the bidder and any person in the service of the state who may be involved with the evaluation and or adjudication of this bid?</p> <p>If yes, furnish the following particulars:</p> <p>Name of person: .....</p> <p>Name of state institution at which you or the person connected to the bidder is employed:</p> <p>.....</p> <p>Position occupied in the state institution: .....</p> <p>Any other particulars: .....</p> <p>.....</p>	<p><b>YES / NO</b></p>
<p>3.12</p> <p>3.12.1</p>	<p>Are any of the company's directors, managers, principal shareholders or stakeholders in the service of the state?</p> <p>If yes, furnish the following particulars:</p>	<p><b>YES / NO</b></p>

	<p>Name of person / director / trustee / shareholder / member:  .....</p> <p>Name of state institution at which you or the person connected to the bidder is employed:  .....</p> <p>Position occupied in the state institution: .....</p> <p>Any other particulars: .....</p> <p>.....</p>	
<p>3.13</p> <p>3.13.1</p>	<p>Is any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in the service of the state?</p> <p>If yes, furnish the following particulars:</p> <p>Name of person / director / trustee / shareholder / member:  .....</p> <p>Name of state institution at which you or the person connected to the bidder is employed:  .....</p> <p>Position occupied in the state institution: .....</p> <p>Any other particulars: .....</p> <p>.....</p>	<p><b>YES / NO</b></p>
<p>3.14</p> <p>3.14.1</p>	<p>Do you or any of the directors, trustees, managers, principle 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?</p> <p>If yes, furnish particulars:  .....</p> <p>.....</p>	<p><b>YES / NO</b></p>
<p>4. Full details of directors / trustees / members / shareholders:</p>		

**THE FOLLOWING INFORMATION IS COMPULSORY TO COMPLETE:**

Full Name	Identity Number	Individual Tax Number for each Director	State Employee Number (where applicable)
<b>5.</b>	<b>The contract will be automatically cancelled if there is a conflict of interest which is not disclosed by the bidder.</b>		

.....  
Signature

.....  
Date

.....  
Capacity

.....  
Name of Bidder

<sup>1</sup>MSCM Regulations: "in the service of the state" means to be -

- (a) a member of –
  - (i) any municipal council;
  - (ii) any provincial legislature; or
  - (iii) the National Assembly or the National Council of Provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official or any Municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (e) a member of the accounting authority of any national or provincial entity; or
- (f) an employee of Parliament or a provincial legislature.

<sup>2</sup>"Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercise control over the company.

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011**

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.**

**1. GENERAL CONDITIONS**

- 1.1 The following preference point systems are applicable to all bids:
- the 80/20 system for requirements with a Rand value of up to R1 000 000 (all applicable taxes included); and
  - the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).

1.2 The value of this bid is estimated to exceed R1 000 000 (all applicable taxes included) and therefore the 90/10 preference point system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
<b>PRICE</b>	<b>90</b>
<b>B-BBEE STATUS LEVEL OF CONTRIBUTION</b>	<b>10</b>
<b>Total points for Price and B-BBEE must not exceed</b>	<b>100</b>

1.5 Failure on the part of a bidder to 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 a sworn affidavit confirming annual turnover and level of black ownership in case of an EME and QSE together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 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**

- (a) **“all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- (b) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;



- (c) “**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;
- (d) “**bid**” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- (e) “**Broad-Based Black Economic Empowerment Act**” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003) as amended by Act No 46 of 2013;
- (f) “**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;
- (g) “**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;
- (h) “**contract**” means the agreement that results from the acceptance of a bid by an organ of state;
- (i) “**EME**” means an Exempted Micro Enterprise as defines by Codes of Good Practice issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (j) “**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;
- (k) “**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;
- (l) “**non-firm prices**” means all prices other than “firm” prices;
- (m) “**person**” includes a juristic person;
- (n) “**QSE**” means a Qualifying Small Enterprise as defines by Codes of Good Practice issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 ( Act No. 53 of 2003);
- (o) “**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;
- (p) “**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;
- (q) “**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;

- (r) “**trust**” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- (s) “**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.
- 3.2 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.
- 3.4 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:

$$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

- P<sub>s</sub> = Points scored for comparative price of bid under consideration
- P<sub>t</sub> = Comparative price of bid under consideration
- P<sub>min</sub> = Comparative price of lowest acceptable bid

**5. 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 Contributor	Number of points (90/10 system)	Number of points (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 A bidder who qualifies as an EME in terms of the B-BBEE Act must submit a sworn affidavit confirming Annual Total Revenue and Level of Black Ownership.
- 5.3 A Bidder other than EME or QSE 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 unincorporated 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.
- 5.7 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 enterprise 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.
- 5.8 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 1.4 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 a sworn affidavit.

**8. SUB-CONTRACTING**

- 8.1 Will any portion of the contract be sub-contracted?

***(Tick applicable box)***

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

8.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub contractor.....
- iii) The BBBEE status level of the sub contractor.....
- iv) Whether the sub-contractor is an EME.

**(Tick applicable box)**

YES		NO	
-----	--	----	--

**9. DECLARATION WITH REGARD TO COMPANY/FIRM**

9.1 Name of company/firm:.....

9.2 VAT registration number:.....

9.3 Company registration number:.....

**9.4 TYPE OF COMPANY/ FIRM**

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

**9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

.....

.....

.....

.....

.....

.....

.....

**9.6 COMPANY CLASSIFICATION**

- Manufacturer
- Supplier
- Professional service provider
- Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

**9.7 MUNICIPAL INFORMATION**

**Municipality where business is situated:** .....

**Registered Account Number:** .....

**Stand Number:**.....

9.8 Total number of years the company/firm has been in business:.....

9.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

WITNESSES	
1.	.....
2.	.....

..... SIGNATURE(S) OF BIDDERS(S)	
DATE:	.....
ADDRESS	..... ..... .....

**SWORN AFFIDAVIT – B-BBEE EXEMPTED MICRO ENTERPRISE**

I, the undersigned,

<b>Full name &amp; Surname</b>	
<b>Identity number</b>	

Hereby declare under oath as follows:

- The contents of this statement are to the best of my knowledge a true reflection of the facts.
- I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf:

<b>Enterprise Name</b>	
<b>Trading Name</b>	
<b>Registration Number</b>	
<b>Enterprise Address</b>	

- I hereby declare under oath that:
  - The enterprise is \_\_\_\_\_% black owned;
  - The enterprise is \_\_\_\_\_% black woman owned;
  - Based on the management accounts and other information available on the \_\_\_\_\_ financial year, the income did not exceed R10,000,000.00 (ten million rands);
  - Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	<b>Level One</b> (135% B-BBEE procurement recognition)	
More than 51% black owned	<b>Level Two</b> (125% B-BBEE procurement recognition)	
Less than 51% black owned	<b>Level Four</b> (100% B-BBEE procurement recognition)	

- The entity is an empowering supplier in terms of **the dti** Codes of Good Practice.
- I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
- The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
 Commissioner of Oaths  
 Signature & stamp

## 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.

### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9.(1) and 9.(3) make provision for the promotion of local production and content.
- 1.2. 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.
- 1.3. 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.
- 1.4. 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.
- 1.5. 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.
- 1.6. 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:

$$LC = 1 - \left( \frac{x}{y} \right) \times 100$$

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.

1.7. 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.

## 2. Definitions

2.1. **“bid”** includes advertised competitive bids, written price quotations or proposals;

2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);

2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;

2.4. **“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;

2.5. **“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).

2.6. **“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;

2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;

2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **“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.

## 3. The stipulated minimum threshold(s) for local production and content for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
<b>Telecom Cable</b>	
Optical Fibre	90%
Copper Telecom Cables	90%

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](http://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.

<p><b>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)</b></p> <p><b>IN RESPECT OF BID No. ....</b></p> <p><b>ISSUED BY:</b> (Procurement Authority / Name of Municipality / Municipal Entity):            .....</p> <p>NB The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.</p> <p>I, the undersigned, ..... (full names),            do hereby declare, in my capacity as .....            of .....(name of bidder entity), the following:</p> <p>(a) The facts contained herein are within my own personal knowledge.</p> <p>(b) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286.</p> <p>(c) The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Bid price, excluding VAT (y)</td> <td style="padding: 2px;">R</td> </tr> <tr> <td style="padding: 2px;">Imported content (x)</td> <td style="padding: 2px;">R</td> </tr> <tr> <td style="padding: 2px;">Stipulated minimum threshold for Local content (paragraph 3 above)</td> <td style="padding: 2px;"><b>90%</b></td> </tr> <tr> <td style="padding: 2px;">Local content % as calculated in terms of SATS 1286</td> <td style="padding: 2px;"></td> </tr> </table>	Bid price, excluding VAT (y)	R	Imported content (x)	R	Stipulated minimum threshold for Local content (paragraph 3 above)	<b>90%</b>	Local content % as calculated in terms of SATS 1286	
Bid price, excluding VAT (y)	R							
Imported content (x)	R							
Stipulated minimum threshold for Local content (paragraph 3 above)	<b>90%</b>							
Local content % as calculated in terms of SATS 1286								

If the bid is for more than one product, a schedule of the local content by product shall be attached.

(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act (PPFA), 2000 (Act No. 5 of 2000).

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 1** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 2** \_\_\_\_\_

**DATE:** \_\_\_\_\_

## DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 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.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d. 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).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's database as a company or person prohibited from doing business with the public sector?  <b>(Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?  <b>(To access this Register enter the National Treasury's website, <a href="http://www.treasury.gov.za">www.treasury.gov.za</a>, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445).</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
<b>Item</b>	<b>Question</b>	<b>Yes</b>	<b>No</b>
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.5.1	If so, furnish particulars:		

**CERTIFICATION**

**I, THE UNDERSIGNED (FULL NAME) .....  
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION  
FORM IS TRUE AND CORRECT.**

**I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT,  
ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION  
PROVE TO BE FALSE.**

.....  
**Signature**

.....  
**Date**

.....  
**Position**

.....  
**Name of Bidder**

## CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> invited.
- 2 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).<sup>2</sup> Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
- 3 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:
  - a. 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.
- 4 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.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD9) 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:

**TENDER NUMBER: ENG 026/2016**  
**SUPPLY AND DELIVERY OF ELECTRICAL STOCK: OPTIC FIBRE, PROTECTION & MULTI-FUNCTION ENERGY METERS**

in response to the invitation for the bid made by:

**GEORGE MUNICIPALITY**

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: \_\_\_\_\_ that:  
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. 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;
5. 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.

6. 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 consortium<sup>3</sup> will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - (a) prices;
  - (b) geographical area where product or service will be rendered (market allocation)
  - (c) methods, factors or formulas used to calculate prices;
  - (d) the intention or decision to submit or not to submit, a bid;
  - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
  - (f) bidding with the intention not to win the bid.
8. 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.
9. 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

<sup>3</sup> Joint venture or Consortium 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.

**CERTIFICATE FOR MUNICIPAL SERVICES (COMPULSORY TO COMPLETE)**

Information required in terms of the Supply Chain Management Regulations, Regulation 28 (1) (c).

<p><b>Tender Number: ENG026/2016</b></p> <p><b>Name of the Bidder:</b></p> <p>_____</p>
---

**DETAILS OF THE BIDDER/S: Owner / Proprietor / Director(s) / Partner(s), etc:**

Physical Business address of the Bidder	Municipal Account Number(s)

If there is not enough space for all the names, please attach the additional details to the Tender document.

Name of Director / Member / Partner	Identity Number	Physical <b>residential</b> address of Director / Member / Partner	Municipal Account number(s)

I, \_\_\_\_\_, the undersigned,

(full name in block letters)

certify that the information furnished on this declaration form is correct and that I/we have no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days.

\_\_\_\_\_  
Signature

THUS DONE AND SIGNED for and on behalf of the Bidder / Contractor

at \_\_\_\_\_ on the \_\_\_\_\_ day of \_\_\_\_\_ 2017

**PLEASE NOTE:**

**MUNICIPAL ACCOUNTS FOR ALL PROPERTIES OWNED BY BIDDER/S MUST BE ATTACHED TO THE TENDER DOCUMENT!**

Even if the requested information is not applicable to the Bidder, the table above should be endorsed NOT APPLICABLE with a reason and THIS DECLARATION **MUST** STILL BE COMPLETED AND SIGNED. In the event of leasing, a lease agreement **MUST** be attached to the tender document.



# GEORGE MUNICIPALITY PROCUREMENT

## GENERAL CONDITIONS OF CONTRACT

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## **General Conditions of Contract**

1. **Definitions:**
  1. 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 labour, 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 service provider 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 supplies, 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 non-refundable 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 inspection:

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 provider 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 provider'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 provider 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 or municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality or 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 provider 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 analyses:

- 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, test and analyses, the bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or an 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 analysed 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 23 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 provider 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. Warranty:

- 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 provider 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 exceed 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 these 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 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 cancelling the contract, be entitled to purchase supplies 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 judgement 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.
- 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 of 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 such person's name be endorsed on the Register for Tender 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 a period not less than five years and not more than 10 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. Anti-Dumping and Counter-Vailing 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 favourable 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 supplies 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 to 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:
- 35.1 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 are contemplated in section 59 of the Competition Act No 89 of 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.