



NEC3 Term Service

Short Contract (TSSC3)

A contract between Eskom Holdings SOC Ltd (Reg. No. 2002/015527/06)

and

for Institutionalised training

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Documentation prepared by: Getrude Rabyang

C1 Agreements & Contract Data

C1.1 Form of Offer and Acceptance

Offer

The Employer, identified in the Acceptance page signature block on the next page, has solicited offers to enter into a contract for the procurement of:

Institutionalised training

The tenderer, identified in the signature block below, having examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

The offered total of the Prices exclusive of VAT is	R[]
Value Added Tax @ 15% is	R[]
The offered total of the Prices inclusive of VAT is	R[]
(in words)	

This Offer may be accepted by the Employer by signing the form of Acceptance overleaf and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

N/A

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the Contract Data. Acceptance of the tenderer's Offer shall form an Agreement between the Employer and the tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the Contract, are contained in:

Part 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part 2 Pricing Data

Part 3 Scope of Work: Service Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

The tenderer shall within one week of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the tenderer receives one fully completed copy of this document, including the Schedule of Deviations (if any) together with all the terms of the contract as listed above.

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. _____'

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	Contract duration	This contract will expire and be nil and void inn case Eskom concludes a National or Distribution level contract for the same service.

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

	For the tenderer:	For the Employer
Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	(Insert name and address of organisation)	(Insert name and address of organisation)
Name & signature of witness	_____	_____
Date	_____	_____

C1.2 Contract Data

Data provided by the *Employer*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the NEC3 Term Service Short Contract (September 2008) (TSSC3)¹ before you enter data. The number of the principal clause is shown for most statements however other clauses may also use the same data.
2. Where the following symbol is used “[●]” - data is required to be inserted.]

Completion of the data in full is essential to create a complete contract.

Clause	Statement	Data
General		
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Limited (Reg. No: 2002/015527/06), a juristic person incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	
	Fax No.	N/A
	E-mail address	
If the <i>Employer</i> appoints an <i>Employer's Agent</i> , the <i>Employer's Agent</i> is:		
14.5	Name:	
	Address: Eskom,	
	Tel No.	
	Fax No.	N/A
	E-mail address	
	The authority of the <i>Employer's Agent</i> is	
11.2(5)	The <i>service</i> is	Institutionalised training
11.2(6)	The Service Information is in	the document called 'Service Information' in Part 3 of this contract.
30.1	The <i>starting date</i> is.	November 2021
30.1	The <i>service period</i> is.	3 Years Or when the funds allocated to this contract is depleted, whichever comes first.

¹ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009.

13.2	The <i>period for reply</i> is	14 days
50.1	The <i>assessment day</i> is the	.7 th day of each month
51.2	The interest rate on late payment is	[●]% per complete week of delay. [Insert a rate only if a rate less than 0.5% per week of delay has been agreed]
80.1	The <i>Contractor</i> is not liable to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in excess of	the amount of the deductibles relevant to the event described in the "Format TSSC3" insurance policy available on http://www.eskom.co.za/live/content.php?Item_ID=9248
82.1	The <i>Employer</i> provides this insurance	as stated for "Format TSSC3" available on http://www.eskom.co.za/live/content.php?Item_ID=9248 (See Annexure A for basic guidance)
82.1	The minimum amount of cover for the first insurance stated in the Insurance Table is:	the amount of the deductibles relevant to the event described in the "Format TSSC3" insurance policy available on http://www.eskom.co.za/live/content.php?Item_ID=9248
82.1	The minimum amount of cover for the third insurance stated in the Insurance Table is:	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i>.
82.1	The minimum amount of cover for the fourth insurance stated in the Insurance Table is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	No
93.1	The <i>Adjudicator</i> is (Name)	The person selected from the Eskom Panel of Adjudicators listed in Annexure B to this Contract Data by the Party intending to refer a dispute to him.
93.2(2)	The <i>Adjudicator nominating body</i> is:	the Chairman of the Joint Civils Division of the South African Institution of Civil Engineering. (See www.jointcivils.co.za)
93.4	The <i>tribunal</i> is:	arbitration.
	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Johannesburg, South Africa

The person or organisation who will choose an arbitrator

- if the Parties cannot agree a choice or
- if the arbitration procedure does not state who selects an arbitrator, is

the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.

The *conditions of contract* are the NEC3 Term Service Short Contract (September 2008)² and the following additional conditions Z1 to Z11 which always apply:

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry and the Electricity Distribution Industry.

Z2 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z2.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z2.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z2.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Service.
- Z2.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *service*.

Z3 Ethics

- Z3.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor's* obligation to Provide the Service or taking any other action as appropriate against the *Contractor* (including civil or criminal action).
- Z3.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Service if the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer*

² State whether attached as a 'PDF' file in terms of Eskom's licence, or to be obtained from either Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or SAICE.

or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

- Z3.3 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *service*.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to others except where required by this contract. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to others where required by this contract the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the *Employer's* property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to clause 12.2:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *service*; and
 - undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control,

likewise observe and comply with the foregoing.

- Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to clause 50

- Z7.1 The *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the correctly assessed amount due for payment.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

- Z8.1 Delete from the last sentence in clause 61.1, "unless the event arises from an instruction of the *Employer*."

Z9 *Employer's* limitation of liability; Add to clause 80.2

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand).

Z10 Termination: Add to clause 90.2, after the words "or its equivalent":

- Z10.1 or had a judicial management order granted against it.

Z11 Addition to Clause 50.4

- Z11.1 If the amount due for the *Contractor's* payment of *delay damages* reaches the limits stated in a Task Order (if any), the *Employer* may terminate the *Contractor's* obligation to Provide the Service.
- Z11.2 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *service*.
-

Annexure A: Insurance provided by the Employer N/A

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. Details of the insurance itself are available from the internet web link given below.

1. Services provided in a TSSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the *Employer's* "works" policy which may be in place for the *Employer's* portion of the property affected by the *service* or against the *Employer's* "assets" policy which may be in place for the *Employer's* portion of the property affected by the *service*, or both.
2. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the property affected by the *service* and the nature of the insurable event.
3. The *Contractor* is required in terms of Contract Data for clause 82 to provide cover for the deductibles in the insurance provided by the *Employer*. This can be provided from the *Contractor's* own resources on a 'self insured' basis or obtained by him from his own insurers. In order to assess the extent of this cover, tendering contractors and their brokers should consult the internet web link given below and scroll to '**Format TSSC3**' to establish both the cover and the deductibles in relation to the *service* provided in terms of this contract.
4. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor to cover his risks as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 82.1. In terms of clause 82.1 "the *Contractor* provides the insurances stated in the Insurance Table. The *Contractor* does not provide an insurance which the *Employer* is to provide as stated in the Contract Data". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
5. Part 2 of the contract will include a requirement for the tendering contractor to identify the cost of insurance which he has allowed for in his Prices, given the foregoing guidance, either as a separate priced item or
6. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

http://www.eskom.co.za/live/content.php?Item_ID=9248

Annexure B: The *Employer's* Panel of Adjudicators

The following persons listed in alphabetical order of their surname have indicated their willingness to be included in the Eskom Panel of Adjudicators. Their CV's may be obtained by using the contact details provided.

Name	Location	Contact details (phone & e mail)
Nigel ANDREWS	Gauteng	+27 11 836-6760 nigela@quoin.net
Andrew BAIRD	Gauteng	+27 11 803 3008 andrewbaird@ecsconsult.co.za
Christopher BINNINGTON	Gauteng	+27 11 888-6141 cdb@bca.co.za
Bruce LEECH	Gauteng	+27 11 290 4000 leech@counsel.co.za
Nigel NILEN	Gauteng	+27 11 465 3601; nilences@global.co.za
Peter THURLOW	Gauteng	+27 11 787 6226 info@thurlowassoc.com

Information about the Panel and appointment of the selected *Adjudicator* is available from Eskom Supply Chain Operations management, by contacting Leighton Itholeng on (+27 (0)11 800 4031 or (+27 (0) 86 668 0419; E-mail: Leighton.itholeng@eskom.co.za

Data provided by the *Contractor* (the *Contractor's Offer*)

The tendering contractor is advised to read both the NEC3 Term Service Short Contract (September 2008) and the relevant parts of its Guidance Notes (TSSC3-GN)³ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on page 22 of the TSSC3 Guidance Notes.

Completion of the data in full is essential to create a complete contract.

10.1	The <i>Contractor</i> is (Name):	[•]
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	E-mail address	[•]
63.2	The percentage for overheads and profit added to the Defined Cost for people is	[•]%
63.2	The percentage for overheads and profit added to other Defined Cost is	[•]%
11.2(4)	The Price List is in	the document called 'Price List' in Part 2 of this contract.
11.2(4)	The offered total of the Prices for part of the <i>service</i> in Part 1 of the Price List is [Enter the total of the Prices from the Price List]:	R[•] excluding VAT [in words] [•] excluding VAT
11.2(4)	The offered total of the Prices for part of the <i>service</i> in Part 2 of the Price List is [Enter the total of the Prices from the Price List]:	R[•] excluding VAT [in words] [•] excluding VAT

³ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009.

C2 Pricing Data

C2.1 Pricing assumptions

The Price List is in two parts. Part 1 is for work described in the Service Information not requiring the *Employer* to issue a Task Order. **Part 2** is for work to be carried out within a stated period of time on a task by Task basis and instructed by Task Order. The *service* may comprise work under Part 1 only or Part 2 only or a mix of both.

Entries in the first four columns of Part 1 of the Price List are made either by the *Employer* or the tenderer. Entries in the first four columns of Part 2 of the Price List would normally be made by the *Employer* as the Party most likely to know the kind of work which will be instructed by the issue of Task Orders. The tenderer then enters a rate for each item and multiplies it by the Expected quantity to produce the Price to be entered in the final column.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only, the Unit, Expected quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters a rate for each item and multiplies it by the Expected quantity to produce the Price, to be entered in the final column.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected quantity column.

The rates and Prices entered for each item includes for all work and other things necessary to complete the item.

C2.2 Price List

Part 2

The rates and Prices entered for each item includes all work and other things necessary to complete the item. Please quote per person for the course.

Level 1 - INSTITUTIONALISED - As per Registered Electrical Trade 671101			
Name	Business event name	Duration - days	Cost per person per day
INSTITUTIONALISED Level 1 BASIC WORKSHOP PRACTICE	Basic hand tools & Bench Work		
	* ID of Tools, filing, cutting, measuring squaring		
	* Power Tools, Selection & Identification of PT Drilling, Grinding & Tapping		
	Tools, Equipment & Materials		
	* Select, use, care for handtools		
	* Select, use, care for Powertool		
ELECTRONICS	* Measuring & Testing Instruments		
	Apply Soldering Techniques		
WIREWAYS & WIRING	Wireways & Wiring		
	* Wireways		
	* Wiring of installations		
	* Earthing & Bonding		
INSTITUTIONALISED Level 1 - ELECTRICAL SUPPLY SYSTEMS AND COMPONENTS	Concepts, Theories & Principles of Supply systems		
	Basic batteries		
	Theory/Practical on Battery Cells		
	Construction of Batteries		
	Charging of Batteries		
	Topping up and cleaning of batteries		
	Data Recording		
	Maintenance		
	Transformers		
	Switch Gears & Control Gears		
	Lighting Systems		
	Cables & Application		
	* Cable Transportation		
	* Laying Cables		
	* Joining Cables		
	* Terminating Cables		
	* Types of Cables		
	* Cable Sizes		
	* Selecting correct size Cable		
INSTITUTIONALISED Level 1 SIMPLE CIRCUITS	Flame Proofing		
	* ID & use of Flame Proof Light fittings		
	* Id & Use of Flameproof fume Extractor Fans		
	* ID & use of Flameproof Cable Glands		
	* Maintenance of Battery Rooms		
	Simple Circuits _Test Instruments		
	* ID & Use of:		
	* Multimeter (AVO)		
	* Line Tester (Probe)		
	* Insulation Tester		
	* Bell Ringer		
	* Tong Tester		
	* Earth Leakage Tester		
	* ID of Symbols - Measuring Instruments		
	* Test & Draw Connections of Resistance Bos		

	Simple Circuits _ Circuit Design		
	* ID of Symbols		
	* Draw Symbols		
	* Making up Wire Connections		
	* Designing of Circuits		
	* Wiring according to Standards		
	* Test & Wire 3 Heat Switch		
	* Wire Five Heat Switch		
	* Wire Simmerstat Switch		
	Simple Circuits -Heat Box & Load Balancing		
	* Manipulate Resistance		
	* Determine value of Resistance & Resistance position in box		
	* Making up 2 Heat Elements		
	* Connect Elements to 3Heat Switch		
	* Draw up a Schematic Diagram		
INSTITUTIONALISED Level 1 FAULT FINDING	Lighting - ID Connect & Fault Finding (Theory - Techniques & Principles)		
	* Filament Lamps		
	* Simulators		
	* Electric Discharge Lamps		
INSTITUTIONALISED Level 1 BASIC MOTORS	Rotating Machinery : Motors & Starters		
	* Ideal Storage conditions for motors		
	* inspection of motors in storage		
	Connection; Disconnecting & Test Running of a motor		
	* Obtain Isolation for Motors and Test for Supply		
	* Practice Skill for Disconnecting and Inspection, reconnecting a motor		
	Single Phase Motors		
	* Make up 15Amp Electrical Lead		
	* ID of Main components of a Single Ø Motor		
	* Ring out & Test Run A 1 Ø Motor		
	* Reverse Rotation of the Motor		
	* Ring out and Connect a Six Stud Forward and Reverse Box		
	* Connect a 12 Stud F & R Box		
	* Perform Mechanical & Electrical Test on a 1 Ø Motor		
	Three Phase Motor		
	* Test Positions		
	* Phase the Motor		
	* Connect Direct on Line		
	* Change Direction		
INSTITUTIONALISED Level 1 INSTALLATION WORK AND BASIC CABLES	Types of Cables and Applications		
	*Cutting Steel Conduit Clamping & Cutting Thread on Steel		
	* Establishing the Y Value		
	* Making off and Bending an Off-Set into DB		
	* Bending a Conduit over and Obstruction		
	* Making off PVC Cable		
	* Making off Surfex Cable		
	* Using Flexible Cable		
	* Calculating the Connected Load of a Domestic Dwelling		
	* Erecting Coactail Installation Work on a Table as per diagram		
	* Install & Wire an Electrical Installation		
	* Perform an Electrical Test on the Installation		

LOW VOLTAGE SWITCH GEAR	Low Voltage Protection		
LEVEL 1 SUMMATIVE TEST			
Level 2 - INSTITUTIONALISED			
Name	Business event name	Duration - days	Cost per person per day
PANEL WIRING WEEK 1	Load Balancing & KW/H Metering		
	* Safety		
	* Why 3Ø Load Balancing		
	* Method of Balancing 3Ø Loads		
	* Balancing of Wattage		
	* Λ and Δ connections		
	* Balancing load in Λ and Δ		
	* Balancing of Load Panels		
	* KW/H Metering panels Wiring		
	* Neutrals for Metering Panels		
	Transformers CT's & VT's & WH		
	* Safety		
	* Definition & Construction		
	* Transformer Configuration		
	* Transformer Calculations & Connections		
	* CT's Definition		
	* Ammeter & Voltmeter Selector Switches		
	* Wiring Exercise		
	Transformers		
	* CTVT & KWH		
Circuit Breakers WEEK 2	Circuit Designing & Sequence Starting		
	* Identification of Components		
	* Ringing Out of Components		
	* Circuit Designing		
	* Wiring of Panels		
	* Correct Functioning of Circuit		
CIRCUITRY & FAULT FINDING WEEK 3	Circuitry & Fault Finding		
	* Purpose of Diagram		
	* Schematic diagram		
	* Wiring Diagrams		
	* Cable of Interconnecting diagram		
	* Electrical Symbols		
	* AC Contactors		
	* Shading coils, Operating Principles & Air Gap		
	* DC Contactors		
	* Magnetic Structure & Contact Structure		
	* Pneumatic time-delay relay, electronic timers, general purpose relay, thermal o/l, dashpot or magnetic o/l, limit switches, flow switches, float switches		
	* Electrical interlocking		
	* Mechanical Interlocking		
	* Circuit design & Fault Finding on panels & compressor panels		
	Motors Automatic		
	* Design & Wire a Λ and Δ control & Power Circuits		
	* Determine & Set Overload		
	* Wire & Test run different types of starters from different manufactures		
	* Explain why use starters		
	Variable Speed Drivers		

	* Install & Connect variable speed drives		
	* Setting of present parameters		
	* Operating the Drive		
INSTITUTIONLISED LEVEL 2 ROTATING MACHINERY Week 5	Motors Manual - Ring Out & Test		
	* Resistance Starter & Motor		
	* Dual Speed Motor		
	* Auto- Transformer Starter & Motor		
	* Memota Star Delta		
	* Allen West SD2N Star Delta Starter		
	* Rotary Star-Delta Starter		
	Motor Maintenance		
	* Dismantle Motor		
	* Check Fault & Repaired		
	* Replacing of Bearing		
	* Use an oven for earing & drying motor		
	* Re-assemble motor & Test Run		
	* Mechanical Checks		
	* Electrical Checks		
	3 Φ MOTORS AND DC MACHINES : SAFETY		
	* Definition of Motor & Types		
	* Difference between Phase & Line Voltage		
	* Rotor Current, Torgue, Power, Calculation of full Load in 1 & 3 Φ		
	* Stator Connection & Construction		
	* Rotor Types & Construction		
	* Slip ring Motor & Operation		
	* Improving Power Factor		
	* Phasing Induction Motor		
	* DC Cummutorator		
	* Operating of DC Motors		
	* Types of DC Motors		
	* Armature Reaction		
	* Fault Finding on DC Motors		
	* Circuit protection		
	* NO Volt Protection		
	* Need for Motor Stators		
	* Soft Starting		
	* Mechanical Limitation		
	* Overload Relays		
	* Overload Settings		
	* Direct on Line o/l setting		
	* Star Delta o/l settubg		
	* Resistance Stator Method		
	* Auto Transformer Method		
	* Resistance Stator		
	* Dual Speed Motor Starting		
TRANSFORMER MAINTENANCE WEEK 6	Transformer Maintenance		
	* Safety		
	* Transformer Losses		
	* PT's & CT's		
	* 1 Φ trfr in 3 Φ circuits		
	* 3 Φ voltage & current transformation		
	* Parallel connections of 3 Φ trfr		
	* Transformer cores		

	* Auto-transformers & Tap Changers, tertiary windings, 3Φ neutral earth compensator		
	* Reactors, cooling of trfr, conservator, breather, explosion, vent & pressure relieve device		
	* Buchholts relay		
	* Trfr busings, winding indicators for oil-immersed transformers		
	* Design of small 1Φ trfr		
	* Oil Test on Transformer Oil		
	* Filling of TRFR Oil and oil Sampling		
	* General Maintenance		
POWER SYSTEM PROTECTION - WEEK 7	Safety & Electrical Faults		
	* Power Transformers		
	* Transmission Lines		
	* Under Frequency Protection		
	* Non- Unit Protection		
	* Transformer Protection		
	* Busbar Protection		
Circuit Breakers - Indoor & Outdoor Week 8	Circuit Breakers - Outdoor & Indoor		
	* Protection of Breakers & Scaffolding		
	* ARC Extinction in Oil		
	* ARC Extinction in Vacuum		
	* ARC Extinction in Compressed Air		
	* ARC Extinction in Atmospheric pressure		
	* ARC Extinction in SF6		
	Substation Construction		
	Cables HV		
	Cable Maintenance		
LEVEL 2 SUMMATIVE TEST			

Level 3 - INSTITUTIONALISED			
Name	Business event name	Duration - days	Cost per person per day
ELECTRONICS	Electronics		
	* Electronic Principles		
	* Electronics A		
	* Battery Charger		
	Trade Test Preparation		
	Trade Test		

2.1 Technician training (P1).				
ELECTRICAL ENGINEERING PUPIL TECH (P1) - TOTAL 75 DAYS				
NO	COURSE NAME	LEARNING FIELD	Duration	Cost per person per day
1	Low Voltage Cables	L50185200	5	
2	Health, Safety, Quality & Legislation	L50185200	5	
3	Motors and Starters	L50185200	10	
4	Panel Wiring	L50185200	10	

5	Design & Construct Single ø Circuit	L50185200	10	
6	Installation Work & Wiring Regulations	L50185200	10	
7	Circuit Breakers	L50185200	10	
8	Fault Finding	L50185200	10	
9	Transformers	L50185200	5	

SIGNATURE: _____

PRINT NAME: _____

DATE: _____

C3: Scope of Work

C3.1 Service Information

The following services to be provided on a “as and when required” basis;

Institutionalised training

1. Description of the service

SCOPE OF WORK - ELECTRICIAN LEARNER CURRICULUM		
Level 1 - INSTITUTIONALISED	Durations - Days	Price per person per day
INSTITUTIONALISED Level 1 BASIC WORKSHOP PRACTICE		
ELECTRONICS Level 1		
WIREWAYS & WIRING		
INSTITUTIONALISED Level 1 - ELECTRICAL SUPPLY SYSTEMS AND COMPONENTS		
INSTITUTIONALISED Level 1 Fault Finding		
INSTITUTIONALISED Level 1 Basic Motors		
INSTITUTIONALISED Level 1 INSTALLATION WORK AND BASIC CABLES		
LOW VOLTAGE SWITCH GEAR		
LEVEL 1 SUMMATIVE TEST		
Level 2 - INSTITUTIONALISED		
PANEL WIRING		
CIRCUIT BREAKERS		
CIRCUITRY & FAULT FINDING		
INSTITUTIONALISED LEVEL 2 ROTATING MACHINERY		
TRANSFORMER MAINTENANCE		
POWER SYSTEM PROTECTION		
Circuit Breakers - Indoor & Outdoor		
LEVEL 2 SUMMATIVE TEST		
Level 3 - INSTITUTIONALISED		
ELECTRONICS		
LEVEL 3 SUMMATIVE TEST		
Trade Test Preparation		
Trade Test		

2.1 Technician training (P1).

ELECTRICAL ENGINEERING PUPIL TECH (P1) - TOTAL 75 DAYS				
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4	Panel Wiring	L50185200	10	
5	Design & Construct Single ø Circuit	L50185200	10	
6	Installation Work & Wiring Regulations	L50185200	10	
7	Circuit Breakers	L50185200	10	
8	Fault Finding	L50185200	10	
9	Transformers	L50185200	5	

2. Specifications

Requirements for SDP (Skills Development Provider)

- Providers to be accredited by the EWSETA, QCTO and NAMB.(SDP_ Skills Development Provider-registration No)
- SDP (Skills Development Provider) accredited premises are to be utilised, evaluation at premises will be conducted(indicate footprint of training centre)***
- Quality Management System according to accreditation bodies (QCTO/NAMB and EWSETA)
- Provide accredited learning material and curriculum as per Electrical Trade
- Assessment Policy and procedure to be provided
- ARPL _Artisan Recognition of Prior learning Policy to be provided
- ARPL to be conducted for Eskom Permanent employees to identify Gaps
- Learning plans to be provided aligned with curriculum
- Learners to be assessed by accredited assessors as specified above
- All learner progress reports to be submitted monthly
- All absenteeism to be reported immediately to the supervisor of the learner.
- All training to be done according to accreditation body and Eskom's standards.
- An Eskom attendance list to be used for recording of attendance.
- Learner feedback as per Eskom format to be provided once a module completed
- Training and Trade Test is to be conducted at SDP Premises – proof of accreditation of the Training Centre and Trade Test centre to be provided. Evaluations and visit to the centre will be conducted***

Requirements of Artisan Facilitators and Trade Assessors

- Facilitators/Assessors to have the relevant qualification to provide the training (Electrical Trade)
- Facilitators / Assessors to be assessed and accredited by relevant SETA:
 - o ESWETA
 - o OCTO / NAMB
 - o ETDG – Assessor
 - o Minimum 3 years facilitation / Assessments of specific training to facilitate
 - o Have at least 3 years relevant industry experience working as a qualified artisan in the specific trade.
 - o Have at least 2 years relevant practical training experience in the specific trade (As per the Scope)
 - o Must be trained as an artisan Facilitator and assessor or deemed competent to conduct trade tests or recognized by NAMB as competent assessor





Requirements of Artisan Trade Moderators

- Must have at least 3 years' experience as registered artisan trade assessors in the relevant and related trade with the same trade family.
- Must be trained as moderators and deemed competent to conduct moderations of trade tests or recognized by NAMB as a competent moderator to conduct moderation of trade tests through RPL based on previous moderators qualification and or experience.

- The artisan trade test centre must be accredited by the QCTO to conduct trade tests or applied to be registered as a constituent moderator of the NAMB.

Health and Safety Requirements

- Training will be provided on SDP premises. Service provider shall ensure that requirements with regard to Facilities Regulations are met.
- Where accommodation is provided by the service provider, The service provider shall ensure that requirements with regard to Facilities regulations are met
- Where Transport is provided by the Service Provider, the Service Provider shall ensure that vehicles are roadworthy and comply to requirements of National Road Traffic Act. Driver of vehicle shall have a valid National driver's licence and PDP. No Eskom employee shall be transported at the back of an LDV / Bakkie. Below find requirements for Vehicle safety Procedure
- The Service Provider shall inform the Eskom representative of PPE requirements for attendees prior to training commencing. PPE requirements shall be specific to Eskom Representative. All Eskom trainees shall wear the required PPE for the relevant activity.
- All Incidents relating to Eskom trainees shall be reported to the Eskom representative telephonically and within 24hrs in writing.
- All Eskom trainees shall be Inducted by the Service Provider on their premises prior to Training commencing. Topics to be included: (1) Emergency procedure for workshop/venue, (2) Risk assessment for all activities, (3) Safe Work Procedure for all activities, (4) Name and Location of First aid attendant and First aid station etc. However, this list is not exhaustive and the Service Provider can add additional topics as deemed necessary.

Title	Date or revision	Tick if publicly available
Health and Safety requirements:		 240-62946386 Vehicle and driver saf
		 32-345 Eskom Vehicle safety specific
The Contractor shall before the commencement of any task perform a risk assessment on site. The Contractor shall adhere to the attached Eskom's Life Saving Rules; any violation thereof will lead to the Contractor being dismissed.		 Life-Saving A1 Poster-(FINAL).pdf
The contractor shall familiarize himself/herself with Eskom's SHEQ Policy.		 Safety Health Environment and Qua

Site regulations and access control		Contractor to report at Security and or Reception of the training site as per Task order
<u>Technical specifications:</u>		
As per Technical evaluation sheet attached		
Evaluation at site (Training centre)		

3. Constraints on how the *Contractor* Provides the Service

3.1 Purchase Order Number

The employer's representative to issue purchase order numbers to the supplier for the services required.

3.2 Intentions of the *Employer* before Completion

Contractor to submit

- Eskom signed attendance register,
- Statement of results – and or progress reports
- Completion certificates

3.3 Access to the training centre where the training is done.

3.3.1 Provider to provide access to premises if training is done at provider training centre

3.4 Use of standard forms

Eskom Standard forms to be utilised for submission of payments

- Signed attendance register by employees
- Learner Feedback forms
- Learner logbooks – will be supplied to provider for sign off of training completed
- Eskom Completion certificate for payment – will be part of the contract

3.3 Invoicing and payment

In terms of core clause 50 the *Contractor* assesses the amount due and applies to the *Employer* for payment. The *Contractor* applies for payment with a tax invoice addressed to the *Employer* as follows:

The *Contractor* includes the following information on each tax invoice:

- Name and address of the *Contractor*
- The contract number and title;
- Purchase order number
- *Contractor's* VAT registration number;
- **Contractor's Banking Details**
- The *Employer's* VAT registration number 4740101508;
- The total of
 - The Price for each lump sum item in the Price List or Task Order which the *Contractor* has completed;
 - Where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate,

- Other amounts to be paid to the *Contractor*;
- Less amounts to be paid by or retained from the *Contractor*;
- The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;
- (add other as required)

The *Contractor* attaches the detail assessment of all work done for each item in the Price List to each tax invoice showing

- the Price for each lump sum item in the Price List or Task Order which the *Contractor* has completed and
- where a quantity is stated for an item in the Price List or Task Order, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

The *Employer* only accepts original invoices.

3.4 Records of Defined Cost

N/A

3.5 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule stated below

[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Employer* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

3.6 BBBEE and preferencing scheme

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

4. Requirements for the programme

- EWSETA/ NAMB / QCTO approved Artisan Curriculum (Electrical Trade – 671101)
- Assessments and progress reports
- Lesson plans
- Competency Declaration

5. Services and other things provided by the *Employer*

Item	Date by which it will be provided
------	-----------------------------------

Venue for the training where applicable if training is to be done at Eskom site	
Task order containing order number, venue and attendance register	14 days prior to course start date
Logbooks	
Eskom Course Attendance registers as registered (unique Identifier)	
Eskom Learner Feedback forms	

6. Property affected by the *service*

Training to be provided at Accredited Training centre of Provider

Task Order

Task Order form for use when work within the service is instructed to be carried out within a stated period of time on a Task by Task basis

Task Order No. [●] service .[●]

To: [●].....
..... (Contractor)

Task Order No. [●] service .[●]

To: [●].....

..... (Contractor)

I propose to instruct you to carry out the following task:

Description	[•]
Starting date	[•]
Completion Date	[•]
Delay damages per week	[•]

Please submit your price and programme proposals below.

Signed: _____ Date _____

(for *Employer*)

Delay damages per week [●]

(for *Employer*)

(for *Contractor*)

(for *Employer*)