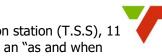


KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when

required" basis for a period of two (2) years



TRANSNET

# **Transnet Freight Rail**

an Operating Division TRANSNET SOC LTD

[Registration Number 1990/000900/30]

# **REQUEST FOR QUOTATION (RFQ)**

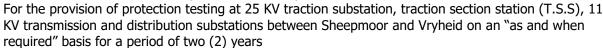
FOR THE PROVISION OF PROTECTION TESTING AT 25 KV TRACTION SUBSTATION, TRACTION SECTION STATION (T.S.S), 11 KV TRANSMISSION AND DISTRIBUTION SUBSTATIONS BETWEEN SHEEPMOOR AND VRYHEID ON AN AS AND WHEN REQUIRED BASIS FOR A PERIOD OF TWO (2) YEARS

RFQ NUMBER : SIM22028CIDB (ERAC-VYG-40124)

ISSUE DATE : 18 April 2023
COMPULSORY BRIEFING : 25 April 2023
CLOSING DATE : 9 MAY 2023
CLOSING TIME : 10:00AM

TENDER VALIDITY PERIOD : Twelve (12) business weeks from closing date

Tender Number: SIM22020CIDD (ERAC-VIG-40124)





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TENDER NUMBER: SIM22028CIDB (ERAC-VYG-40124)

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# **T1.1 TENDER NOTICE AND INVITATION TO TENDER**

# **SECTION 1: NOTICE TO TENDERERS**

# 1. INVITATION TO TENDER

Responses to this Tender [hereinafter referred to as a **Tender**] are requested from persons, companies, close corporations or enterprises [hereinafter referred to as a Tenderer].

DESCRIPTION	For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years
TENDER DOWNLOADING	This Tender may be downloaded directly from the National Treasury e-Tender Publication Portal at <a href="https://transnetetenders.gov.za">www.etenders.gov.za</a> and the Transnet website at <a href="https://transnetetenders.azurewebsites.net">https://transnetetenders.azurewebsites.net</a> (Please use Google Chrome to access Transnet link) FREE OF CHARGE.
	NOTE:  It is the responsibility of the tenderer to ensure downloading or receipt of a complete RFP all specifications, drawings and annexures.

	A Canandan Tandan Christian Machine will be any district deliberal
	A Compulsory Tender Clarification Meeting will be conducted at Vryheid
	depot, Sikame Traction Substation 26°45′24.62"S 30°49′32.54"E and
	Work inspector distribution Substation $\underline{27^{\circ}48'3"S}$ $\underline{30^{\circ}49'33"E}$ <b>25 April 2023</b> at <b>10:00am [10 O'clock]</b> for a period of $\pm$ 6 (six) hours. [Tenderers to provide own transportation and accommodation]. The Compulsory Tender Clarification Meeting will start punctually and
	information will not be repeated for the benefit of Tenderers arriving late.
COMPULSORY TENDER CLARIFICATION MEETING	<ul> <li>A Site visit/walk will take place, tenderers are to note:</li> <li>Tenderers are required to wear safety shoes, goggles, long sleeve shirts, high visibility vests and hard hats.</li> <li>Tenderers without the recommended PPE will not be allowed on the site walk.</li> <li>Tenderers and their employees, visitors, clients and customers entering Transnet Offices, Depots, Workshops and Stores will have to undergo breathalyser testing.</li> <li>All forms of firearms are prohibited on Transnet properties and premises.</li> </ul>
	• The relevant persons attending the meeting must ensure that their identity documents, passports or drivers licences are on them for inspection at the access control gates.

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DESCRIPTION OF THE SERVICE: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

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	Certificate of Attendance in the form set out in the <b>Returnable Schedule T2.2-1</b> hereto must be completed and submitted with your Tender, as proof of attendance is required for a <b>compulsory</b> site meeting and/or tender briefing.
	Tenderers are required to bring this Returnable Schedule T2.2-1 to the Compulsory Tender Clarification Meeting to be signed by the <i>Employer's</i> Representative.
	Tenderers failing to attend the compulsory tender briefing will be disqualified.
CLOSING DATE	10:00am on Tuesday, 9 May 2023 Tenderers must ensure that tenders are uploaded timeously onto the system. If a tender is late, it will not be accepted for consideration.

#### 2. TENDER SUBMISSION

Transnet has implemented a new electronic tender submission system, the e-Tender Submission Portal, in line with the overall Transnet digitalization strategy where suppliers can view advertised tenders, register their information, log their intent to respond to bids and upload their bid proposals/responses on to the system.

- a) The Transnet e-Tender Submission Portal can be accessed as follows:
  - Log on to the Transnet e-Tenders management platform website (<a href="https://transnetetenders.azurewebsites.net">https://transnetetenders.azurewebsites.net</a>);
  - Click on "ADVERTISED TENDERS" to view advertised tenders;
  - Click on "SIGN IN/REGISTER for bidder to register their information (must fill in all mandatory information);
  - Click on "SIGN IN/REGISTER" to sign in if already registered;
  - Toggle (click to switch) the "Log an Intent" button to submit a bid;
  - Submit bid documents by uploading them into the system against each tender selected.
  - Tenderers are required to ensure that electronic bid submissions are done at least a day before the closing date to prevent issues which they may encounter due to their internet speed, bandwidth or the size of the number of uploads they are submitting. Transnet will not be held liable for any challenges experienced by bidders as a result of the technical challenges. Please do not

Part T1: Tendering procedures T 1.1: Tender Notice and Invitation TENDER NUMBER: SIM22028CIDB (ERAC-VYG-40124)

DESCRIPTION OF THE SERVICE: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# wait for the last hour to submit. A Tenderer can upload 30mb per upload and multiple uploads are permitted.

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- b) The tender offers to this tender will be opened as soon as possible after the closing date and time. Transnet shall not, at the opening of tenders, disclose to any other company any confidential details pertaining to the Tender Offers / information received, i.e. pricing, delivery, etc. The names and locations of the Tenderers will be divulged to other Tenderers upon request.
- c) Submissions must not contain documents relating to any Tender other than that shown on the submission.

#### 3. CONFIDENTIALITY

All information related to this RFP is to be treated with strict confidentiality. In this regard Tenderers are required to certify that they have acquainted themselves with the Non-Disclosure Agreement. All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Works, which is either directly or indirectly related to Transnet's business, written approval to divulge such information must be obtained from Transnet.

# 4. DISCLAIMERS

Tenderers are hereby advised that Transnet is not committed to any course of action as a result of its issuance of this Tender and/or its receipt of a tender offer. In particular, please note that Transnet reserves the right to:

- 4.1. Award the business to the highest scoring Tenderer/s unless objective criteria justify the award to another tenderer.
- 4.2. Not necessarily accept the lowest priced tender or an alternative Tender;
- 4.3. Go to the open market if the quoted rates (for award of work) are deemed unreasonable;
- 4.4. Should the Tenderers be awarded business on strength of information furnished by the Tenderer, which after conclusion of the contract is proved to have been incorrect, Transnet reserves the right to terminate the contract;
- 4.5. Request audited financial statements or other documentation for the purposes of a due diligence exercise;

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DESCRIPTION OF THE SERVICE: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

4.6. Not accept any changes or purported changes by the Tenderer to the tender rates after the closing date;

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- 4.7. Verify any information supplied by a Tenderer by submitting a tender, the Tenderer/s hereby irrevocably grant the necessary consent to the Transnet to do so;
- 4.8. Conduct the evaluation process in parallel. The evaluation of Tenderers at any given stage must therefore not be interpreted to mean that Tenderers have necessarily passed any previous stage(s);
- 4.9. Unless otherwise expressly stated, each tender lodged in response to the invitation to tender shall be deemed to be an offer by the Tenderer. The Employer has the right in its sole and unfettered discretion not to accept any offer.
- 4.10. Not be held liable if tenderers do not provide the correct contact details during the clarification session and do not receive the latest information regarding this RFP with the possible consequence of being disadvantaged or disqualified as a result thereof.
- 4.11. Transnet reserves the right to exclude any Tenderers from the tender process who has been convicted of a serious breach of law during the preceding 5 [five] years including but not limited to breaches of the Competition Act 89 of 1998, as amended. Tenderers are required to indicate in tender returnable **T2.2-20** [**Breach of Law**] whether or not they have been found guilty of a serious breach of law during the past 5 [five] years.
- 4.12. Transnet reserves the right to perform a risk analysis on the preferred tenderer to ascertain if any of the following might present an unacceptable commercial risk to the employer:
  - unduly high or unduly low tendered rates or amounts in the tender offer;
  - contract data of contract provided by the tenderer; or
  - the contents of the tender returnables which are to be included in the contract.
- **5.** Transnet will not reimburse any Tenderer for any preparatory costs or other work performed in connection with this Tender, whether or not the Tenderer is awarded a contract.

#### 6. NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE

CPM 2020 Rev05

Tenderer are required to self-register on National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. The CSD can be accessed at

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TRANSNET FREIGHT RAIL

TENDER NUMBER: SIM22028CIDB (ERAC-VYG-40124)

DESCRIPTION OF THE SERVICE: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

https://secure.csd.gov.za/. Tenderer are required to provide the following to Transnet in order to enable it to verify information on the CSD:

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Supplier	Number	and	Unique	registration	reference
number	(Tender Data)				

Transnet urges its clients, suppliers and the general public to report any fraud or corruption to

TIP-OFFS ANONYMOUS: 0800 003 056 OR Transnet@tip-offs.com

CPM 2020 Rev05 Part T1: Tendering procedures T 1.1: Tender Notice and Invitation Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

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# **T1.2 TENDER DATA**

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Engineering and Construction Works Contracts. The Standard for Uniformity in Construction Procurement was first published in Board Notice 62 of 2004 in Government Gazette No 26427 of 9 June 2004. It was subsequently amended in Board Notice 67 of 2005 in Government Gazette No 28127 of 14 October 2005, Board Notice 93 of 2006 in Government Gazette No 29138 of 18 August 2006, Board Notice No 9 of 2008 in Government Gazette No 31823 of 30 January 2009, Board Notice 86 of 2010 in Government Gazette No 33239 of 28 May 2010, Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015 and Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019.

This edition incorporates the amendments made in Board Notice 423 of 2019 in Government Gazette 42622 of 8 August 2019. (see <a href="https://www.cidb.org.za">www.cidb.org.za</a>).

The Standard Conditions of Tender make several references to Tender data for detail that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced in the left-hand column to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause		Data
C.1.1	The <i>Employer</i> is	Transnet SOC Ltd (Reg No. 1990/000900/30)
C.1.2	The tender documents issued by the Emp	ployer comprise:
	Part T: The Tender	
	Part T1: Tendering procedures	T1.1 Tender notice and invitation to tender T1.2 Tender data
	Part T2: Returnable documents	T2.1 List of returnable documents T2.2 Returnable schedules
	Part C: The contract	
	Part C1: Agreements and contract data	C1.1 Form of offer and acceptance C1.2 Contract data (Part 1 & 2) C1.3 Form of Securities
	Part C2: Pricing data	C2.1 Pricing instructions

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

		C2.2 Price List
	Part C3: Scope of work	C3.1 Service Information
	Part C4: Affected Property	C4.1 Affected Property
C.1.4	The Employer's agent is:	Procurement Officer
	Name:	Kgaugelo Makgate
	Address:	15 Girton Road, Inyanda House 2, Parktown, 2193
	Tel No.	011 584 1174
	E – mail	Kgaugelo.Makgate@transnet.net

C.2.1 Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:

# 1. Stage One - Eligibility with regards to attendance at the compulsory clarification meeting:

An authorised representative of the tendering entity or a representative of a tenderering entity that intends to form a Joint Venture (JV) must attend the compulsory clarification meeting in terms C2.7

Any tenderer that fails to meet the stipulated eligibility criteria will be regarded as an unacceptable tender.

# 2. Stage Two - Eligibility in terms of the Construction Industry Development Board:

- a) Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, designation of 2EP or higher class of construction work, are eligible to have their tenders evaluated.
- b) Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

- 1. every member of the joint venture is registered with the CIDB;
- 2. the lead partner has a contractor grading designation of not lower than one level below the required class of construction works under consideration and possesses the required recognition status; (Not applicable)
- 3. the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a

Part 1: Tendering Procedures T1.2: Tender Data

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

Contractor grading designation determined in accordance with the sum tendered for a 2EP or higher class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations

The tenderer shall provide a certified copy of its signed joint venture agreement.

# 3. Stage Three- Functionality:

Only those tenderers who obtain the minimum qualifying score for functionality will be evaluated further in terms of price and the applicable preference point system. The minimum qualifying for score for functionality is 70 points.

The evaluation criteria for measuring functionality and the points for each criteria and, if any, each sub-criterion are as stated in C.3.11.3 below.

Any tenderer that fails to meet the stipulated eligibility criteria will be regarded as an unacceptable tender.

C.2.7 The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. **Tenderers must complete and sign the attendance register.** Addenda will be issued to and tenders will only be received from those tendering entities including those entities that intends forming a joint venture appearing on the attendance register.

Tenderers are also **required to bring their RFP document to the briefing session and have their returnable document T2.2-1 certificate of attendance** signed off by the Employer's authorised representative.

- C.2.12 No alternative tender offers will be considered.
- C.2.13.3 Each tender offer shall be in the **English Language.**
- C.2.13.5 The *Employer's* details and identification details that are to be shown on each tender C2.15.1 offer package are as follows:

Identification details:

The tender documents must be uploaded with:

- Name of Tenderer:
- Contact person and details:
- The Tender Number: SIM22028CIDB (ERAC-VYG-40124)
- The Tender Description: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

# Documents must be marked for the attention of: **Employer's Agent:**

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C.2.13.9 Telephonic, telegraphic, facsimile or e-mailed tender offers will not be accepted.

C.2.15 The closing time for submission of tender offers is:

Time: **10:00am** on Tuesday 9 May 2023

Location: The Transnet e-Tender Submission Portal:

(https://transnetetenders.azurewebsites.net);

# **NO LATE TENDERS WILL BE ACCEPTED**

- C.2.16 The tender offer validity period is **12 weeks (1 August 2023)** after the closing date. Tenderers are to note that they may be requested to extend the validity period of their tender, on the same terms and conditions, if Transnet's internal evaluation and governance approval processes has not been finalised within the validity period.
- C.2.23 The tenderer is required to submit with his tender:
  - A valid Tax Clearance Certificate issued by the South African Revenue Services.
     <u>Tenderers also to provide Transnet with a TCS PIN to verify Tenderers compliance status</u>.
  - A valid B-BBEE Certificate from a Verification Agency accredited by the South African Accreditation System [SANAS], or a sworn affidavit confirming annual turnover and level of black ownership in case of all EMEs and QSEs with 51% black ownership or more together with the tender;
  - 3. A valid CIDB certificate in the correct designated grading;
  - 4. Proof of registration on the Central Supplier Database;
  - 5. Letter of Good Standing with the Workmen's compensation fund by the tendering entity or separate Letters of Good Standing from all members of a newly constituted JV.

Note: Refer to Section T2.1 for List of Returnable Documents

C3.11 The minimum number of evaluation points for functionality is: **70** 

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations

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between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

The procedure for the evaluation of responsive tenders is Functionality, Price and Preference:

Only those tenderers who attain the minimum number of evaluation points for Functionality will be eligible for further evaluation, failure to meet the minimum threshold will result in the tender being disqualified and removed from any further consideration.

# **Functionality Criteria**

The functionality criteria and maximum score in respect of each of the criteria are as follows:

# (Please see CIDB Compiler guidance note T1.2 – Tender Data).

Functionality criteria	Sub-criteria		Maximum number of points
1. T2.2-3	Points Score	Programme	-
Programme	No Response (score 0)	The tenderer did not submit a programme	
Works program indicating: start date,	Poor (score 40)	> 5 days to complete traction substation tests	40
end date, key milestones and duration of the work.	Satisfactory (score 70)	> 3 ≤ 5 days to complete traction substation tests	
	Good (score 90)	> 2 ≤ 3 days to complete traction substation test	
	Very Good (score 100)	≤ 2 days to complete traction substation tests	
T2.2-4 Method statement (Technical approach and methodology):	No Response (score 0)	The tenderer has submitted no information or inadequate information to determine a score.	

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

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The tenderers must sufficiently demonstrate the approach/methodology that will be employed to cover the scope of the project.	Poor (score 40)	The contractor did not understand or include certain aspects of the scope and submitted one to three (1-3) criteria's as per the project requirements.	20
A detailed method statement is required for the testing and calibration of Railway Protection equipment between Ermelo and	Satisfactory (score 70)	The approach only covered four (4) criteria's and approach is generic and not tailored to cover all project objectives.	
Vryheid to enable the Employer to assess the impact to the following:  a) practicality; b) quality;  In addition to general methodology for the project please provide specific information for the following points:	Good (score 90)	The approach is specifically tailored to address the specific project objectives and requirements and is sufficient flexible to accommodate changes that may occur during execution and has covered five (5) of the above requirements.	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

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Installation of electrical equipment     Testing of electrical equipment     Commissioning procedure	Very Good (score 100)	The six (6) items have been covered in detail on the methodology.	
T2.2-5 Experience and Related work	No Response (score 0)	Tenderer has submitted no information	
completed (Previous work done) Previous experience	Poor (score 40)	Submitted at least 1-3 completion certificates/purchase orders involving Protection testing of substations	
for similar work and letter of award/purchase order/and/or completion certificates	Satisfactory (score 70)	Submitted at least 4 completion certificates/purchase orders involving Protection testing of substations	40
must be submitted	Good (score 90)	Submitted at least 5 completion certificates/purchase orders involving Protection testing of substations	
	Very Good (score 100)	Submitted at least 6 completion certificates/purchase orders involving Protection testing of substations	
Maximum possible so	core for Functionality		100

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Functionality shall be scored independently by not less than 3 (three) evaluators and averaged in accordance with the following schedules:

- T2.2-3 Programme
- T2.2- 4 Method statement (Technical approach and methodology)
- T2.2- 5 Experience and Related work completed (Previous work done)

Each evaluation criteria will be assessed in terms of scores of 0, 40, 70, 90 or 100. The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for functionality, unless scored collectively. (See CIDB Inform Practice Note #9).

Note: Any tender not complying with the above mentioned requirements, will be regarded as non-responsive and will therefore <u>not</u> be considered for further evaluation. This note must be read in conjunction with Clause C.2.1.

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

C.3.11. Only tenders that achieve the minimum qualifying score for functionality will be evaluated. Further in accordance with the 80/20 preference points systems as described in Preferential Procurement Regulations.

80 where the financial value of one or more responsive tenders received have a value equal to or below R50 million, inclusive of all applicable taxes,

Up to 100 minus  $W_1$  tender evaluation points will be awarded to tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed. Should the B-BBEE rating not be provided, tenderers with no verification will score zero points for preferencing.

**Note:** Transnet reserves the right to carry out an independent audit of the tenderers scorecard components at any stage from the date of close of the tenders until completion of the contract.

# C.3.13 Tender offers will only be accepted if:

- The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- 2. the tenderer does not appear on Transnet's list for restricted tenderers and National Treasury's list of Tender Defaulters;
- the tenderer has fully and properly completed the Compulsory Enterprise
   Questionnaire and there are no conflicts of interest which may impact on the
   tenderer's ability to perform the contract in the best interests of the Employer
   or potentially compromise the tender process and persons in the employ of
   the state.
- 4. Transnet reserves the right to award the tender to the tenderer who scores the highest number of points overall, unless there are **objective criteria** which will justify the award of the tender to another tenderer. Objective criteria include but are not limited to the outcome of a due diligence exercise to be conducted. The due diligence exercise may take the following factors into account inter alia;

# the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional

Part 1: Tendering Procedures T1.2: Tender Data

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when required" basis for a period of two (2) years

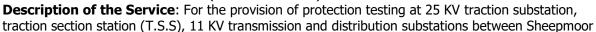
and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,

- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data and
- f) is able, in the option of the employer to perform the contract free of conflicts of interest.
- C.3.17 The number of paper copies of the signed contract to be provided by the Employer is 1 (one).

Part 1: Tendering Procedures

T1.2: Tender Data

**Tender Number**: SIM22028CIDB (ERAC-VYG-40124)



and Vryheid on an "as and when" required basis for a period of two (2) years



TRANSNET

# **STAATSKOERANT, 8 AUGUSTUS 2019**

# DEPARTMENT OF PUBLIC WORKS NOTICE 423 OF 2019

# STANDARD FOR UNIFORMITY IN ENGINEERING AND CONSTRUCTION WORKS CONTRACTS AUGUST 2019

# **Annex C**

# **Standard Conditions of Tender**

#### C.1 General

#### C.1.1 Actions

- C.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
- C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender Process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.
- Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
  - 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any

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**Description of the Service**: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor

and Vryheid on an "as and when" required basis for a period of two (2) years

decisions taken.

C.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

#### **C.1.2 Tender Documents**

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

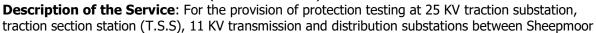
# C.1.3 Interpretation

- C.1.3.1 The tender data and additional requirements contained in the tender schedules that are Included in the returnable documents are deemed to be part of these conditions of tender.
- C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for Tender evaluation purposes, shall form part of any contract arising from the invitation to tender.
- C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:
  - a) **conflict of interest** means any situation in which:
    - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
    - ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
    - iii) incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
  - b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
  - c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
  - d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

#### C.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

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#### C.1.5 Cancellation and Re-Invitation of Tenders

- C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if
  - a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;
  - b) funds are no longer available to cover the total envisaged expenditure; or
  - c) no acceptable tenders are received.
  - d) there is a material irregularity in the tender process.
- C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised
- C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender Invitation for the second time.

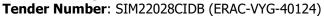
# **C.1.6 Procurement procedures**

#### C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

# C.1.6.2 Competitive negotiation procedure

- C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.
- C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.
  Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, Specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or





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distort competition or have a discriminatory effect.

C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

#### C.1.6.3 Proposal procedure using the two stage-system

# C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

# C.1.6.3.2 Option 2

- C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

# C.2 Tenderer's obligations

# C.2.1 Eligibility

- C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

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#### C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

#### C.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

# C.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

#### C.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

# C.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

#### C.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

#### C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5)

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working days before the closing time stated in the tender data.

#### C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

# **C.2.10** Pricing the tender offer

- C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes Except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.
- C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

#### C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

# **C.2.12 Alternative tender offers**

- C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
- C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

# C.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint

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venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

- C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- C.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number Of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the Packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- C.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

# C.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

# C.2.15 Closing time

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- C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

# **C.2.16 Tender offer validity**

- C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
- C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
- C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

## C.2.17 Clarification of tender offer after submission

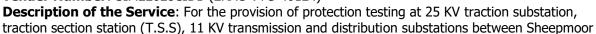
Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

**Note:** Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

## C.2.18 Provide other material

C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer

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for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

# C.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

## C.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

# C.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

#### C.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

#### C.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

# C.3 The employer's undertakings

# **C.3.1** Respond to requests from the tenderer

- C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up

  To five (5) working days before the tender closing time stated in the Tender Data and notify
  all tenderers who collected tender documents.
- C.3.1.2 Consider any request to make a material change in the capabilities or formation of the Tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

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- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the pregualification process.

#### C.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

# C.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

# C.3.4 Opening of tender submissions

- C.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.
- C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.
- C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

# C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

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C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

# C.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

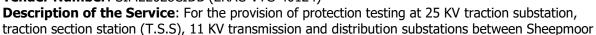
# C.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

# C.3.8 Test for responsiveness

- C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:
  - a) complies with the requirements of these Conditions of Tender,
  - b) has been properly and fully completed and signed, and
  - c) is responsive to the other requirements of the tender documents.
- C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:
  - a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
  - b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
  - c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified. Reject a non-responsive tender offer, and not allow it to be subsequently

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made responsive by correction or withdrawal of the non-conforming deviation or reservation.

## C.3.9 Arithmetical errors, omissions and discrepancies

- C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.
- C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:
  - a) the gross misplacement of the decimal point in any unit rate;
  - b) omissions made in completing the pricing schedule or bills of quantities; or
  - c) arithmetic errors in:
    - (i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
    - (ii) the summation of the prices.
- C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.
- C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:
  - a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
  - b) Where there is an error in the total of the prices either as a result of other corrections Required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

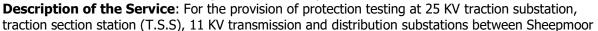
## C.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

#### C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures

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from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project. Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:

# **Requirement Qualitative interpretation of goal**

Fair The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.

Equitable Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.

Transparent The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.

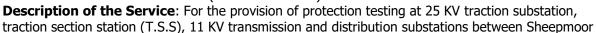
Competitive The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.

Cost effective The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

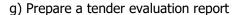
#### The activities associated with evaluating tender offers are as follows:

- a) Open and record tender offers received
- b) Determine whether or not tender offers are complete
- c) Determine whether or not tender offers are responsive
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification
- f) Determine acceptability of preferred tenderer

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h) Confirm the recommendation contained in the tender evaluation report

#### **C.3.11.1** General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

# **C.3.12 Insurance provided by the employer**

If requested by the proposed successful tenderer, submit for the tenderer 's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

# C.3.13 Acceptance of tender offer

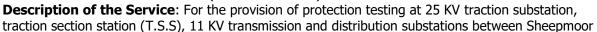
Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

# **C.3.14 Prepare contract documents**

C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by The employer as part of the tender documents to take account of:

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and Vryheid on an "as and when" required basis for a period of two (2) years

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents and
- c) other revisions agreed between the employer and the successful tenderer.

C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

# C.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

## C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects.

#### C.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

# C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **T2.1 List of Returnable Documents**

# 2.1.1 These schedules are required for eligibility and functionality purposes

- T2.2-1 **Stage One as per CIDB: Eligibility Criteria Schedule -** Certificate of attendance at Compulsory Tender Clarification Meeting
- T2.2-2 Stage Two as per CIDB: Eligibility Criteria Schedule CIDB Registration

# **Returnable Schedules:**

# 2.1.2 Stage Three as per CIDB: these schedules will be utilised for Functionality evaluation purposes:

- T2.2-3 **Evaluation Schedule:** Programme
- T2.2-4 **Evaluation Schedule:** Method statement (Technical approach and methodology)
- T2.2-5 **Evaluation Schedule:** Experience and Related work completed (Previous work done)

#### **Returnable Schedules:**

#### 2.1.3 **General**:

- **T2.2-6** Health and Safety Management
- **T2.2-6a** Tender Safety, Environmental and Risk Objective Questionnaire
- **T2.2-6b** Health and Safety Cost Breakdown
- **T2.2-6c** Letter of Good Standing
- **T2.2-7** Risk Elements
- **T2.2-8** Changes to tender document
- **T2.2-9** Authority to submit tender
- **T2.2-10** Record of addenda to tender documents
- **T2.2-11** Storage Capacity
- **T2.2-12** Availability of Equipment and Other Resources

# **Agreement and Commitment by Tenderer:**

- **T2.2-13** Compulsory Enterprise Questionnaire
- **T2.2-14** Supplier Code of Conduct
- **T2.2-15** Unilateral Non-Disclosure Agreement
- **T2.2-16** Supplier declaration form
- **T2.2-17** RFQ Declaration Form
- **T2.2-18** Certificate of Acquaintance with Tender Document Pact
- **T2.2-19** Service Provider Integrity Pact

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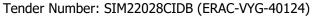
Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

\_\_\_\_\_

- T2.2-20 Request for Quotation Breach of law
- T2.2-21 Agreement in terms of Protection of Personal Information Act, 4 of 2013 ("POPIA")

# 2.1.4 Bonds/Guarantees/Financial/Insurance:

- **T2.2-22** Insurance provided by the Contractor
- **T2.2-23** Three (3) years audited financial statements
- **T2.2-24** Form of Intent to Provide a Performance Guarantee
- 2.2 C1.1 Offer portion of Form of Offer & Acceptance
- 2.3 C1.2 Contract Data Part Two (Data by Contractor)
- 2.4 C1.3 Forms of Securities
- 2.5 C2.1 Pricing Instructions Price List
- 2.6 C2.2 Price List





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **Part T2.2: Returnable Schedules**

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **T2.2-1: Eligibility Criteria Schedule:**

# **Certificate of Attendance at Tender Clarification Meeting**

This is to certify	' that		
			(Company Name)
Represented by:			(Name and Surname)
Was represente	d at the compulsory tender clarifica	tion meeting	
Held at:			
On (date)		Starting time:	
Name	person(s) attending the meeting	Signature	
Capacity  Attendance of	the above company at the mee	eting was confirmed:	
		_	
Name		Signature	
	For and on Behalf of the <i>Employers Agent.</i>	Date	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **T2.2-2: CIDB Grading Designation (Eligibility Criteria Schedule)**

#### **Note to tenderers:**

Tenderers are to indicate their CIDB Grading by filling in the table below. **Attach a copy of the CIDB Grading Designation or evidence of being capable of being so registered.** 

CRS Number	Status	Grading	Expiry Date

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 2EP or higher class of construction work, are eligible to have their tenders evaluated.

### 2. Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

- every member of the joint venture is registered with the CIDB;
- the lead partner has a contractor grading designation of not lower than one level below the required grading designation in the class of construction works under consideration and possesses the required recognition status; (Not applicable).
- combined Contractor grading designation calculated in accordance with the Construction Industry
  Development Regulations is equal to or higher than a Contractor grading designation determined in
  accordance with the sum tendered for a 2EP or higher class of construction work or a value determined
  in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations

The tenderer shall provide a certified copy of its signed joint venture agreement.

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### T2.2-6: Health and Safety Requirements [Assessment Schedule]

Submit the following documents as a minimum with your tender:

- 1. The Tenderers must provide their own project specific health and safety Plan.
- 2. Health and safety cost breakdown (Bill of Quantities)
- 3. Safety, Policy signed by the Chief Executive Officer, must include or cover the following five elements
  - · Commitment to Safety, prevention of pollution,
  - Continual improvement,
  - Compliance to legal requirements, appropriate to the nature of contractor's activities,
  - Hold management accountable for development of the safety systems
  - Include objectives and targets.
- 4. Table or outline the Roles & Responsibilities, such as S16.2 CEO, CR8.1 Construction manager, CR8.2 Assistant Construction manager, CR8.5 Safety officer, CR8.7 Construction Supervisor, CR8.8 Construction assistant supervisor, CR9.1 Risk Assessor, 17.1 SHE Reps, etc. as per the Occupational health and safety Act 85 of 1993
- 5. List of job categories for project and competencies required per category and develop a training Matrix for all employees who will be working on the project. This matrix must include Management and highlight training planned dates.
- 6. Overview of the project specific Baseline Risk Assessment (RA), indicating major activities of the project
- 7. **Three years** synopsis of SHE incidents, description, type and action taken to prevent re-occurrence.
- 8. Complete and return with tender documentation the Contractor Safety Questionnaire included as an Annexure B.

Attached submissions to this schedule:

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



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### **T2.2-6a: Health and Safety Questionnaire**

4	CAEE WORK DED	EODMANCE					
1.	SAFE WORK PERFORMANCE						
1A.	Injury Experience / Historical Performance - Alberta						
	he previous three years in	njury and illness r	ecords	to complete the	following:	1	
Year							
	per of medical treatment						
	per of restricted work day						
	per of lost time injury cas	es					
	per of fatal injuries						
	recordable frequency						
	time injury frequency						
Numb	per of worker man-hours						
		I					
	dical Treatment Case	provided under the	direction	n of a physician	nent provided by a phys		
	stricted Work Day Case	craft jurisdiction dut	ties	·	worker from performing		
	st Time injury Cases	day	•		from performing any w		
4 – To	tal Recordable Frequency	Total number of Med by 200,000 then div			ork and Lost Time Inju	ry cases multiplied	
5- Lost	Time Injury Frequency	Total number of Los hours	t Time I	injury cases multiplied	by 200,000 then divid	e by total man-	
1B.	Workers' Compensatio	n Experience					
Use t	he previous three years in	njury and illness r	ecords	to complete the	following (if applic	able):	
	Industry Code:			stry Classification			
				T	T	ı	
Year							
	try Rate						
	actor Rate						
	scount or Surcharge						
	ur Workers' Compensation	n account in good	l	∐ Yes			
	tanding?			☐ No			
(Please	e provide letter of confirmation)						
2	CITATIONS						
2.	CITATIONS						
2A.	2A. Has your company been cited, charged or prosecuted under Health, Safety and/or Environmental						
	Legislation in the last 5 years?						
	Yes No						
	If yes, provide details:						
2B.	Has your company been	cited charged o	r nroce	ocuted under the	ahove Legislation i	n another	
20.	Country, Region or State		prose	cuted under the	above Legislation	iii aiiotiici	
	Yes No						
	If yes, provide details:						

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



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3. CERTIFICATE OF RECOGNITION						
Does your company have a Certificate of Recognition?						
☐ Yes ☐ No If Yes, what	is the Ce	ertificate	e No Issue Date	e		
4. SAFETY PROGRAM						
Do you have a written safety p If Yes, provide a copy for review	Do you have a written safety program manual?  If Yes provide a copy for review  No					
Do you have a pocket safety bo If Yes, provide a copy for review	ooklet fo	r field d	listribution?	es.	☐ No	
Does your safety program cont	ain the f	ollowing	g elements:			
	YES	No		YES	No	
CORPORATE SAFETY POLICY			EQUIPMENT MAINTENANCE			
INCIDENT NOTIFICATION POLICY			EMERGENCY RESPONSE			
RECORDKEEPING & STATISTICS			HAZARD ASSESSMENT			
REFERENCE TO LEGISLATION			SAFE WORK PRACTICES			
GENERAL RULES & REGULATIONS			SAFE WORK PROCEDURES			
PROGRESSIVE DISCIPLINE POLICY			WORKPLACE INSPECTIONS			
RESPONSIBILITIES			Investigation Process			
PPE STANDARDS			TRAINING POLICY & PROGRAM			
ENVIRONMENTAL STANDARDS			COMMUNICATION PROCESSES			
MODIFIED WORK PROGRAM						
5. TRAINING PROGRAM						
5A. Do you have an orientation progr	am for r	new hire	e employees?	☐ No		
If Yes, include a course outline. Does it in	iclude any YES	of the fol	lowing:	YES	No	
GENERAL RULES & REGULATIONS			CONFINED SPACE ENTRY			
EMERGENCY REPORTING			TRENCHING & EXCAVATION			
INJURY REPORTING			SIGNS & BARRICADES			
LEGISLATION			Dangerous Holes & Openings			
RIGHT TO REFUSE WORK			RIGGING & CRANES			
PERSONAL PROTECTIVE EQUIPMENT			MOBILE VEHICLES			
EMERGENCY PROCEDURES			PREVENTATIVE MAINTENANCE			
PROJECT SAFETY COMMITTEE			HAND & POWER TOOLS			
Housekeeping			FIRE PREVENTION & PROTECTION			
LADDERS & SCAFFOLDS			ELECTRICAL SAFETY			

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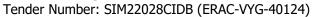


Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

FALL ARREST STANDARDS		Ш	COMPRESSED GAS CYLINDERS	
AERIAL WORK PLATFORMS			WEATHER EXTREMES	
5B. Do you have a program for trainin (If Yes, submit an outline for evaluation. D			•	☐ No
	Yes	No		Yes No
EMPLOYER RESPONSIBILITIES			SAFETY COMMUNICATION	
EMPLOYEE RESPONSIBILITIES			FIRST AID/MEDICAL PROCEDURES	
DUE DILIGENCE			NEW WORKER TRAINING	
SAFETY LEADERSHIP			ENVIRONMENTAL REQUIREMENTS	
WORK REFUSALS			HAZARD ASSESSMENT	
Inspection Processes			PRE-JOB SAFETY INSTRUCTION	
EMERGENCY PROCEDURES			DRUG & ALCOHOL POLICY	
INCIDENT INVESTIGATION			PROGRESSIVE DISCIPLINARY POLICY	
SAFE WORK PROCEDURES SAFE WORK PRACTICES		SAFE WORK PRACTICES		
SAFETY MEETINGS			NOTIFICATION REQUIREMENTS	
6. SAFETY ACTIVITIES				
Do you conduct safety inspections	s?		Yes No Weekly Mont	thly Quarterly
Describe your actaty increation of	rooon (i	inaluda	participation decumentation requirem	
follow-up, report distribution).	100625 (1	iriciude	participation, documentation requiren	nents,
Who follows up on inspection	action i	tems?		
Do you hold site safety meetings			ees? If Yes, how often?	
, , ,		, ,	Yes No Daily Wee	ekly Biweekly
Do you hold site meetings where	safety is	addres	ssed with management and field supe	
			Yes No Weekly Biwe y	eekl Monthly
Is pre-job safety instruction provid	led befor	re to ea	ach new task?	□ No
Is the process documented?			☐ Yes ☐ No	
Who leads the discussion?				
Do you have a hazard assessmer	nt proces	ss?	☐ Yes ☐ No	

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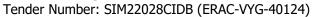
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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

	<ul> <li>Are hazard assessments documented? If yes and implemented on each project? Who is r process?</li> </ul>					
	Does your company have policies and procedures reporting, waste disposal, and recycling as part of					clean-up,
	reporting, waste disposal, and recycling as part of	Yes		arcty i rogi	am.	
	How does your company measure its H&S success?		<u>.                                     </u>			
	Attach separate sheet to explain					
7.	SAFETY STEWARDSHIP					
7A	Are incident reports and report summaries sent to the	following	and h	ow often?		
		Yes	No	Monthly	Quarterly	Annually
	Project/Site Manager					
	Managing Director					
	Safety Director/Manager					
	/Chief Executive Officer					
7B	How are incident records and summaries kept? How of	often are t	hey re	ported inte	ernally?	
		Yes	No	Monthly	Quarterly	Annually
	Incidents totalled for the entire company					
	Incidents totalled by project					
	<ul> <li>Subtotalled by superintendent</li> </ul>					
	<ul> <li>Subtotalled by foreman</li> </ul>					
7C	How are the costs of individual incidents kept? How of		-			بالمييمة
	Costs totalled for the entire company	Yes	No □	Monthly	Quarterly	Annually
	Costs totalled by project					
	Subtotalled by superintendent					
	Subtotalled by foreman/general foreman					
7D	Does your company track non-injury incidents?					
		Yes	No	Monthly	Quarterly	Annually
	Near Miss					
	Property Damage					
	Fire					
	Security					





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	Environmental						
	DEDOONNEL						
8	PERSONNEL						
	List key health and safety officers planned for Name	this project. Positio			e. 	Dociar	action
	Name	Positio	)	<del>U</del>		Desigr	ialion
	Supply name, address and phone number	er of your	com	oany's c	orporate	health	and safety
	representative. Does this individual ha						
	environment? Name	٨	ddres	<b>.</b>	1 -	olonbone	e Number
	inaille	^	uures	5	1	elepriorie	e indilibei
	Other responsibilities:						
9	REFERENCES						
	List the last three company's your form has w			uld verify	the qua	lity and r	management
	commitment to your occupational Health &						
	Name and Company	A	ddres	S		Phone N	Number

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



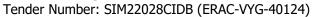
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### **T2.2-6b: Health and Safety Cost Breakdown**

Tenderer (Company) Responsible Person		on	Designation		Date
Project/Tender Title		Projec		Project Location / Description	
For the provision of protection traction substation, traction se (T.S.S), 11 KV transmission an substations between Sheepmo an "as and when" required bas two (2) years	ction station d distribution or and Vryheid on	SIM22 VYG-4	028CIDB (ERAC- 0124)	Betw	ern Region, een Sheepmoor Vryheid

#	Cost element	Unit Cost (R)	# of Units	Total Cost (R)
1.	Human Resources			
2.	Systems Documentation			
3.	Meetings & Administration			
4.	H&S Training			
5.	PPE & Safety Equipment			
6.	Signage & Barricading			
7.	Workplace Facilities			
8.	Emergency & Rescue Measures			
9.	Hygiene Surveys & Monitoring			
10.	Medical Surveillance			
11.	Safe Transport of Workers			
12.	HazMat Management (e.g. asbestos /silica)			
13.	Substance Abuse Testing (3 kits @R500 pm)			
14.	H&S Reward & Recognition			

Total Health and Safety Estimate (R)	
Total Estimate Value (R)	



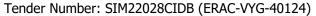


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H&S Cost as % of Tender value

# T2.2-6c Letter/s of Good Standing with the Workmen's Compensation Fund

Attached to this schedule is the Letter/s of Good Standing.  1.  2.  3.  4.
Name of Company/Members of Joint Venture:





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### T2.2-7: Risk Management [Assessment Schedule]

Tenderers to identify and evaluate the potential risk elements associated with the Works and possible mitigation thereof. The risk elements and the mitigation as identified thereof by the Tenderer are to be submitted.

If No Risks are identified "No Risks" must be stated on this schedule.

Tenderers are also to evaluate any risk/s stated by the Employer in Contract Data Part C1 and				
provide possible mitigation thereof.				
Signed	Date			
Name	Position			
Tenderer				

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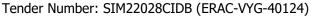
### Tenderer's Risk Management Plan will be as follows:

1. Due Diligence: Risk Management and Business Continuity Management

### **Company Name:**

**Tender Description**: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

1.1 Business Impact Analysis	Assessment Criteria
The following elements of the Business Impact Analysis will be assessed:  1.1.1. Identification of critical processes within the project / service:  (a) Demonstrate that the critical activities and/ or processes are identified and the critical activities and/ or processes if disrupted prevent project completion/ service delivery.  1.1.2. Recovery Time Objective (RTO) in case of any interruption that may arise:  (a) Detail acceptable RTO for the continuation of identified critical activities and/ or processes after a disruptive event. (Consider any SLA or regulatory requirements applicable to the activity and/or process).  1.1.3. Recovery Strategy: How will the service provider/ supplier recover.  (a) Detail step by step process as to how the critical activities and/or processes will be recovered;  (b) In what order the critical activities and/or processes will be recovered and by Whom.	All elements for the BIA are required.  All elements will be assessed as per the guide provided, for adequacy and relevance to the project / service offering etc. and a due diligence report provided.
<ul><li>1.1.4. Operational dependencies:</li><li>(a) List applicable internal and external dependencies for the recovery of the listed critical activities and/ or processes</li></ul>	





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- e.g.: Operational equipment, telephones etc. needed for continuity.
- 1.1.5. Alternative supply of equipment and/ or supply of extra staff:
- (a) Provide adequate information on how alternate equipment or additional experienced staff will be secured/ sourced in the event that a BCM incident negatively impacts these resources. (Consider the original requirements for completion of a project and/or delivery of a service).
- 1.1.6. Battle Box: The battle box may amongst other things include a physical collection or an electronic repository of recovery plans, work instructions, manual documented processes, standard operating procedures, templates, letterheads etc. required for continuity of business critical systems. In some instance this can also include off-site stores of certain equipment or electronic devices etc.
- (a) Detail the contents of a battle box for continuation of the critical activities and/ or processes after a disruptive event

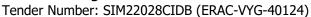
### 1.2. Business Continuity Plan (BCP)

- The following elements of Business Continuity Management and the BCP will be assessed:
- 1.2.1. Emergency operating procedure: (a) Detail the steps to be followed, after an emergency incident on the site/location of impact, is experienced.
- 1.2.2. Business Continuity Invocation Action: Once the incident is under control and its impact determined and assessed.
- (a) Detail the process on when, how and by Whom, the BCP will be invoked.
- 1.2.3. Project Recovery Resources: These are additional resources or the re-arrangements of existing resources,

#### **Assessment Criteria**

All elements for the BCP are required.

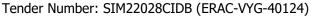
All elements will be assessed as per the guide provided, for adequacy and relevance to the project / service offering etc. and a due diligence report provided.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

required to support the recovery of critical activities and/ or processes as per the BCP, within the RTO. (a) Identify and list the recovery resources 1.2.4. Business / Supplier Contact List: Internal / external service providers, etc. on whom a reliance for operational continuity is required. (a) Provide a list of the identified business / supplier contact list. 1.2.5. Emergency Contacts (BCP): Aligned to the BCP invocation process (1.2.2)(a) Include a list of BCM recovery team members, their names and contact details, i.e. the BCM Common Data. 1.3. Risk Management Plan - For project / Operational Risks, the **Assessment Criteria** identified Risks should be based on the scope of works - The following elements of Risk Management will be assessed: 1.3.1. Identification of Risks of Service Interruption during the project: The provided risk register: (a) Name the identified risks to service interruption and / or non-delivery of services etc. during the project. (b) List/ align the causes giving raise to the risks and 1.3.2. Risk Analysis Methodology: How is the identified risks analysed and rated: (a) Provide risk consequence/ impact and risk likelihood/ probability rating table/ categories. (b) Clearly show how the risk rating/ score is calculated (e.g. Impact x Likelihood = Risk Rating/ Score), for All elements for the Risk Assessment are required. plotting of risk from High to Low, and/or similar. All elements will be assessed as per the guide provided, for adequacy and relevance to the project / service offering etc. 1.3.3. Ranking of the Risks: and a due diligence report provided.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

(a) Provide a listing of the risks by its name from Highest to Lowest ranked risks.
<ul><li>1.3.4. Mitigation of the identified risks:</li><li>In the risk register:</li><li>(c) List/ align the risk controls in place to manage the identified risks.</li><li>(d) If applicable, additional risk tasks over controls already in place, to further mitigate the risk be provided.</li></ul>
<ul><li>1.3.5. Responsible person: In the risk register:</li><li>(a) Risks be assigned to named, risk owners and named owners for controls or any additional risk task</li></ul>

#### Due Diligence

- 1. Be fair and objective in your due diligence process.
- 2. Complete the due diligence in full and provide comments to support findings/ areas of improvement where necessary.
- 3. The document should be completed in a neat and tidy manner due to the fact that it will become an official document.
- 4. Be transparent and share your observations with the company representative (applicable where site visit was conducted to verify information supplied) and assessment team.
- 5. No copies of the completed due diligence document must be provided to the company representative.
- 6. On completion of the due diligence the results to be discussed with the contractor via SCM.
- 7. After the tender award the tenderers representative may be advised of their shortcomings in terms of their SHE submission.

Name of	
Evaluator/s	
Signature	
Date	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **T2.2-8: Changes to Tender Document**

Changes to the tender documents are only allowed if a main tender complying fully with the tender documents has also been provided.

Do not return this schedule if no alternative tender is submitted.

The Conditions of Tender state that the tenderer may:

- **C.2.12.1** Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.
- **C.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

Having examined the criteria stated in the Tender Data for this tender the proposed changes to the tender documents are:

Document No.	Subject of the proposed change	Propose to change to:
Signed	Date	
Name	Positio	n
Tenderer		

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



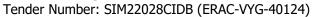
Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **T2.2-9: Authority to submit a Tender**

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for his category of organisation or alternatively attach a certified copy of a company / organisation document which provides the same information for the relevant category as requested here.

A - COMPANY	B - PARTNERSHIP	C - JOINT VENTURE	D - SOLE PROPRIETOR

A. Certificate	e for Company		
I,		chairperson o	of the board of directors
		, hereby confirm that	by resolution of the board taken on
	(date), Mr/Ms		, acting in the capacity of
		, was authorised to si	gn all documents in connection with this tender
offer and any o	contract resulting from i	it on behalf of the compa	nny.
Signed		Date	
Name		Position	Chairman of the Board of Directors

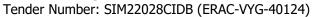




Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

B. Certificate for Partne	ership					
We, the undersigned, being	g the <b>key partners</b> in the	business trading as	·			
h	ereby authorise Mr/Ms			_ acting	in	the
capacity of		, to sign all doc	uments in conne	ection with	n the te	nder
offer for Contract		and any contra	ct resulting from	it on our	behalf.	
Name	Address		Signature	Da	ate	

**NOTE**: This certificate is to be completed and signed by the full number of Partners necessary to commit the Partnership. Attach additional pages if more space is required.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as

and when" required basis for a period of two (2) years

Name of firm	Address	Authorising signature, name (in caps) and capacity
the contract for and on behalf of any	and all the partners.	
authorised to incur liabilities, receive i	nstructions and payments and be	e responsible for the entire execution
that all partners are liable jointly and	severally for the execution of the	ne contract and that the lead partner
Furthermore we attach to this Schedu	le a copy of the joint venture agr	eement which incorporates a stateme
the partners to the Joint Venture.		
This authorisation is evidenced by the	attached power of attorney signe	ed by legally authorised signatories of a
our behalf.		
connection with the tender offer for Co	ontract	and any contract resulting from it o
	, acting in the capacity of l	ead partner, to sign all documents
	, an authorised signatory of tr	ne company
We, the undersigned, are submitting t	his tender offer in Joint Venture	and hereby authorise Mr/Ms
C. Certificate for Joint Venture		

Name of firm	Address	Authorising signature, name (in caps) and capacity



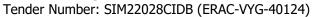
TRANSNET

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

D. Certifica	te for Sole Proprietor		
I,		, hereby co	onfirm that I am the sole owner of the business
trading as			
Signed		Date	
Name		Position	Sole Proprietor

Tenderer





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **T2.2-10: Record of Addenda to Tender Documents**

This schedule as submitted confirms that the following communications received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this specific tender offer:

_	Date	Title or Details	
1			
2			
3			
4			
5			
6			
7			
8			
9			
Attach	additional pages if n	ore space is required.	
Signe	ed	Date	
Name	e	Position	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



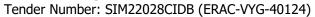
Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### T2.2-11: Storage Capacity

### Note to tenderers:

The Tenderer is required to demonstrate to the Purchaser that he has sufficient current and/or future storage capacity to accommodate Transnet Limited's requirements as detailed in the Pricing Data and Goods Information, (Proof of Ownership or Rental/Lease Agreement of premises)

Index of documentation attached to this	s schedule:
Signed	Date
Name	Position
Tenderer	





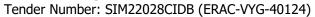
Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

on an as and when required basis for a period of the (2) years

### **T2.2-12: Availability of Equipment and Other Resources**

The Tenderer to submit a list of all Equipment and other resources that will be used to execute the *services* as described in the Service Information.

Equipment Type and Availability – Description	Hourly Rate	Number of Equipment	Details of Ownership
Signed	Date		
lame	Position		
enderer			





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid

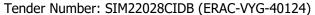
on an "as and when" required basis for a period of two (2) years

### **T2.2-13: Compulsory Enterprise Questionnaire**

The following particulars hereunder must be furnished.

In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner/member must be completed and submitted.

Section 1:	Name of enterp	rise:	
Section 2:	VAT registration	n number, if any:	
Section 3:	CIDB registration	on number, if any:	
Section 4:	CSD number:		
Section 5:	Particulars of se	ole proprietors and partne	rs in partnerships
Name		Identity number	Personal income tax number
* Complete	only if sole propriet	or or partnership and attach s	eparate page if more than 3 partners
Section 6: I	Particulars of cor	npanies and close corpora	tions
Company reg	gistration number _		
Close corpor	ation number		
Tax referenc	e number:		
Section 7: tender requ		D4 must be completed for	r each tender and be attached as a
Section 8: requirement		O 6 must be completed for	each tender and be attached as a





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed	Date	
Name	Position	
Enterprise name		

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

SBD 6.1

#### PREFERENCE POINTS CLAIM FORM

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

Transnet will award preference points to companies who provide valid proof of their B-BBEE status using either the latest version of the generic Codes of Good Practice or Sector Specific Codes (if applicable).

#### 1. GENERAL CONDITIONS

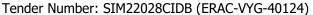
- 1.1 The following preference point systems are applicable to all bids:
  - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
  - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable. Despite the stipulated preference point system, Transnet shall use the lowest acceptable bid to determine the applicable preference point system in a situation where all received acceptable bids are received outside the stated preference point system.
- 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
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTION	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE status level of contributor 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;





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- (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 supply/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);
- (f) **"EME"** means an Exempted Micro Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (g) **"functionality"** means the ability of a bidder to provide goods or services in accordance with specification as set out in the bid documents
- (h) "Price" includes all applicable taxes less all unconditional discounts.
- (i) "Proof of B-BBEE Status Level of Contributor"
  - i) the B-BBBEE status level certificate issued by an authorised body or person;
  - ii) a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or
  - iii) any other requirement prescribed in terms of the B-BBEE Act.
- (j) "QSE" means a Qualifying Small EEnterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (k) **"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.

### 3. POINTS AWARDED FOR PRICE

### 3.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis: 80/20

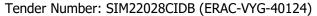
$$Ps = 80 \left( 1 - \frac{Pt - P\min}{P\min} \right)$$

Where

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

#### 4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

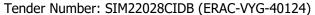
4.1 preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

4.2 The table below indicates the required proof of B-BBEE status depending on the category of enterprises:

Enterprise	B-BBEE Certificate & Sworn Affidavit
Large	Certificate issued by SANAS accredited verification agency
QSE	Certificate issued by SANAS accredited verification agency Sworn Affidavit signed by the authorised QSE representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership (only black-owned QSEs - 51% to 100% Black owned) [Sworn affidavits must substantially comply with the format that can be obtained on the DTI's website at <a href="https://www.dti.gov.za/economic empowerment/bee codes.jsp.">www.dti.gov.za/economic empowerment/bee codes.jsp.</a> ]
ЕМЕ	Sworn Affidavit signed by the authorised EME representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership Certificate issued by CIPC (formerly CIPRO) confirming annual turnover and black ownership Certificate issued by SANAS accredited verification agency only if the EME is being measured on the QSE scorecard

- 4.3 A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE Status Level verification certificate for every separate bid.
- 4.4 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.





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- 4.5 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.
- 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.
- 4.7 Bidders are to note that the rules pertaining to B-BBEE verification and other B-BBEE requirements may be changed from time to time by regulatory bodies such as National Treasury or the DTI. It is the Bidder's responsibility to ensure that his/her bid complies fully with all B-BBEE requirements at the time of the submission of the bid.

#### 5. BID DECLARATION

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

## 6. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 6.1

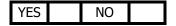
6.1 B-BBEE Status Level of Contribution: . = ......(maximum of 20 points)

(Points claimed in respect of paragraph 6.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

### 7. SUB-CONTRACTING

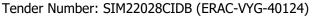
7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)



- 7.1.1 If yes, indicate:
  - i) What percentage of the contract will be subcontracted.......................%
  - ii) The name of the sub-contractor......
  - iii) The B-BBEE status level of the sub-contractor.....
  - iv) Whether the sub-contractor is an EME or QSE.

(Tick applicable box)
YES NO





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

8.	DECLARATION WITH REGARD TO COMPANY/FIRM
8.1	Name of company/firm:
8.2	VAT registration number:
8.3	Company registration number:
8.4	TYPE OF COMPANY/ FIRM
	□ Partnership/Joint Venture / Consortium
	One person business/sole propriety
	<ul><li>☐ Close corporation</li><li>☐ Company</li></ul>
	□ (Pty) Limited
	[TICK APPLICABLE BOX]
8.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES
8.6	COMPANY CLASSIFICATION
	□ Manufacturer
	□ Supplier

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

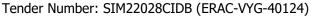
Other Suppliers/Service providers, e.g. transporter, etc.

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 paragraphs 1.4 and 6.1 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;

Professional Supplier/Service provider

[ TICK APPLICABLE BOX]





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- 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 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If a bidder submitted false information regarding its B-BBEE status level of contributor,, which will affect or has affected the evaluation of a bid, or where a bidder has failed to declare any subcontracting arrangements 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) if the successful bidder subcontracted a portion of the bid to another person without disclosing it, Transnet reserves the right to penalise the bidder up to 10 percent of the value of the contract;
  - (e) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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
  - (f) forward the matter for criminal prosecution.

WITNESSES 1	SIGNATURE(S) OF BIDDERS(S) DATE:
2	ADDRESS

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

#### **BIDDER'S DISCLOSURE**

### 1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

### 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state?

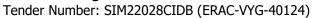
YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Identity Number	Name of State institution
	Identity Number

2.2	Do you, or any person connected with the bidder, have a relationship with a employed by the procuring institution? <b>YES/NO</b>	any person who is
2.2.1	If so, furnish particulars:	
2.3	Does the bidder or any of its directors / trustees / shareholders / members / part having a controlling interest in the enterprise have any interest in any other	
	whether or not they are bidding for this contract?	YES/NO

<sup>&</sup>lt;sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

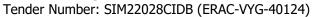




Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

2.3.1	If so, furnish particulars:	
3 D	ECLARATION	
		) in submitting the make the following statements that I certify to be true and complete
3.1 3.2	I understand that the accomp	the contents of this disclosure; panying bid will be disqualified if this disclosure is found not to be true
3.3	communication, agreement of	ne accompanying bid independently from, and without consultation, rarrangement with any competitor. However, communication between
3.4	In addition, there have been any competitor regarding the formulas used to calculate properties submit the bid, bidding with the bid.	consortium2 will not be construed as collusive bidding. no consultations, communications, agreements or arrangements with quality, quantity, specifications, prices, including methods, factors or rices, market allocation, the intention or decision to submit or not to he intention not to win the bid and conditions or delivery particulars of hich this bid invitation relates.
3.4	The terms of the accompanyi	ng bid have not been, and will not be, disclosed by the bidder, directly tor, prior to the date and time of the official bid opening or of the
3.5	bidder with any official of the and during the bidding proces	ations, communications, agreements or arrangements made by the procuring institution in relation to this procurement process prior to s except to provide clarification on the bid submitted where so required dder was not involved in the drafting of the specifications or terms of
3.6	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 Co	impetition 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	or for a period not exceeding ten (10) years in terms of the Prevention
	and Combating of Corrupt Act	tivities Act No 12 of 2004 or any other applicable legislation.
	I ACCEPT THAT THE STATE N 6 OF PFMA SCM INSTRUCTION	MATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT. MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH ON 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE T SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.
	Signature	Date

<sup>&</sup>lt;sup>2</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.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

Position	Name of bidder	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **T2.2-14: Supplier Code of Conduct**

Transnet SOC Limited aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:

- The Transnet Procurement Policy A guide for Tenderers.
- Section 217 of the Constitution the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE)
- The Prevention and Combating of Corrupt Activities Act (PRECCA); and
- The Construction Industry Development Board Act (CIDB Act).

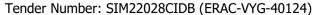
This code of conduct has been included in this contract to formally appraise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

### Prohibition of Bribes, Kickbacks, Unlawful Payments, and Other Corrupt Practices

Transnet is in the process of transforming itself into a self-sustaining State Owned Enterprise, actively competing in the logistics industry. Our aim is to become a world class, profitable, logistics organisation. As such, our transformation is focused on adopting a performance culture and to adopt behaviours that will enable this transformation.

## 1. Transnet SOC Limited will not participate in corrupt practices. Therefore, it expects its suppliers to act in a similar manner.

- Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with, and payments to, our suppliers.
- Employees must not accept or request money or anything of value, directly or indirectly, from suppliers.
- Employees may not receive anything that is calculated to:
  - Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity;





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- Win or retain business or to influence any act or decision of any person involved in sourcing decisions; or
- Gain an improper advantage.
- There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).

### 2. Transnet SOC Limited is firmly committed to the ideas of free and competitive enterprise.

- Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust practices.
- Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting).

## 3. Transnet's relationship with suppliers requires us to clearly define requirements, to exchange information and share mutual benefits.

- Generally, suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
  - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc.);
  - Collusion;
  - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc.);
  - Corrupt activities listed above; and
  - Harassment, intimidation or other aggressive actions towards Transnet employees.
- Suppliers must be evaluated and approved before any materials, components, products or services are purchased from them. Rigorous due diligence is conducted and the supplier is expected to participate in an honest and straight forward manner.
- Suppliers must record and report facts accurately, honestly and objectively. Financial records must be accurate in all material respects.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

#### **Conflicts of Interest**

A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet SOC Limited.

- Doing business with family members.
- Having a financial interest in another company in our industry

Where possible, contracts will be negotiated to include the above in the terms of such contracts. To the extent such terms are not included in contractual obligations and any of the above code is breached, then Transnet reserves its right to review doing business with these suppliers.

Ι,	of
(insert name of Director or as per Author	rity (insert name of Company)
Resolution from Board of Directors)	
hereby acknowledge having read, understood and a	agree to the terms and conditions set out in the "Transnet
Supplier Code of Conduct."	
Signed this on day	_ at
Signature	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

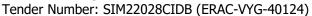


Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as

and when" required basis for a period of two (2) years

# **T2.2-15: Unilateral Non-Disclosure Agreement**

Note to tenderers: This Non-Disclosure Agreement is to be completed and signed by an authorised signatory:
THIS AGREEMENT is made effective as of day of
TRANSNET SOC LTD
(Registration No. 1990/000900/30), a company incorporated and existing under the laws of South Africa, having its principal place of business at 138 Eloff Street, Braamfontein, Johannesburg, 2000, South Africa and
diu
(Registration No),a private company incorporated and existing under the laws of South Africa having its principal place of business at
WHEREAS  Transnet and the Company wish to exchange Information [as defined below] and it is envisaged that each party may from time to time receive Information relating to the other in respect thereof. In consideration of each party making available to the other such Information, the parties jointly agree that any dealings between them shall be subject to the terms and conditions of this Agreement which themselves will be subject to the parameters of the Tender Document.
IT IS HEREBY AGREED
1. INTERPRETATION In this Agreement:
1.1 <b>Agents</b> mean directors, officers, employees, agents, professional advisers, contractors or sub-contractors, or any Group member;
Bid or Bid Document (hereinafter Tender) means Transnet's Request for Information [RFI] Request for Proposal [RFP] or Request for Quotation [RFQ], as the case may be;



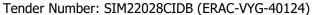


Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- Confidential Information means any information or other data relating to one party [the Disclosing Party] and/or the business carried on or proposed or intended to be carried on by that party and which is made available for the purposes of the Bid to the other party [the Receiving Party] or its Agents by the Disclosing Party or its Agents or recorded in agreed minutes following oral disclosure and any other information otherwise made available by the Disclosing Party or its Agents to the Receiving Party or its Agents, whether before, on or after the date of this Agreement, and whether in writing or otherwise, including any information, analysis or specifications derived from, containing or reflecting such information but excluding information which:
- 1.3.1 is publicly available at the time of its disclosure or becomes publicly available [other than as a result of disclosure by the Receiving Party or any of its Agents contrary to the terms of this Agreement]; or
- 1.3.2 was lawfully in the possession of the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] free of any restriction as to its use or disclosure prior to its being so disclosed; or
- 1.3.3 following such disclosure, becomes available to the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] from a source other than the Disclosing Party or its Agents, which source is not bound by any duty of confidentiality owed, directly or indirectly, to the Disclosing Party in relation to such information;
- 1.4 **Group** means any subsidiary, any holding company and any subsidiary of any holding company of either party; and
- 1.5 **Information** means all information in whatever form including, without limitation, any information relating to systems, operations, plans, intentions, market opportunities, know-how, trade secrets and business affairs whether in writing, conveyed orally or by machine-readable medium.

#### 2. CONFIDENTIAL INFORMATION

- 2.1 All Confidential Information given by one party to this Agreement [the **Disclosing Party**] to the other party [the **Receiving Party**] will be treated by the Receiving Party as secret and confidential and will not, without the Disclosing Party's written consent, directly or indirectly communicate or disclose [whether in writing or orally or in any other manner] Confidential Information to any other person other than in accordance with the terms of this Agreement.
- 2.2 The Receiving Party will only use the Confidential Information for the sole purpose of technical and commercial discussions between the parties in relation to the Tender or for the subsequent performance of any contract between the parties in relation to the Tender.



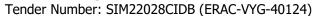


Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- 2.3 Notwithstanding clause 2.1 above, the Receiving Party may disclose Confidential Information:
- 2.3.1 to those of its Agents who strictly need to know the Confidential Information for the sole purpose set out in clause 2.2 above, provided that the Receiving Party shall ensure that such Agents are made aware prior to the disclosure of any part of the Confidential Information that the same is confidential and that they owe a duty of confidence to the Disclosing Party. The Receiving Party shall at all times remain liable for any actions of such Agents that would constitute a breach of this Agreement; or
- 2.3.2 to the extent required by law or the rules of any applicable regulatory authority, subject to clause 2.4 below.
- 2.4 In the event that the Receiving Party is required to disclose any Confidential Information in accordance with clause 2.3.2 above, it shall promptly notify the Disclosing Party and cooperate with the Disclosing Party regarding the form, nature, content and purpose of such disclosure or any action which the Disclosing Party may reasonably take to challenge the validity of such requirement.
- In the event that any Confidential Information shall be copied, disclosed or used otherwise than as permitted under this Agreement then, upon becoming aware of the same, without prejudice to any rights or remedies of the Disclosing Party, the Receiving Party shall as soon as practicable notify the Disclosing Party of such event and if requested take such steps [including the institution of legal proceedings] as shall be necessary to remedy [if capable of remedy] the default and/or to prevent further unauthorised copying, disclosure or use.
- 2.6 All Confidential Information shall remain the property of the Disclosing Party and its disclosure shall not confer on the Receiving Party any rights, including intellectual property rights over the Confidential Information whatsoever, beyond those contained in this Agreement.

# 3. RECORDS AND RETURN OF INFORMATION

- 3.1 The Receiving Party agrees to ensure proper and secure storage of all Information and any copies thereof.
- 3.2 The Receiving Party shall keep a written record, to be supplied to the Disclosing Party upon request, of the Confidential Information provided and any copies made thereof and, so far as is reasonably practicable, of the location of such Confidential Information and any copies thereof.
- 3.3 The Company shall, within 7 [seven] days of receipt of a written demand from Transnet:
- 3.3.1 return all written Confidential Information [including all copies]; and
- 3.3.2 expunge or destroy any Confidential Information from any computer, word processor or other device whatsoever into which it was copied, read or programmed by the Company or on its behalf.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

3.4 The Company shall on request supply a certificate signed by a director as to its full compliance with the requirements of clause 3.3.2 above.

#### 4. ANNOUNCEMENTS

- 4.1 Neither party will make or permit to be made any announcement or disclosure of its prospective interest in the Tender without the prior written consent of the other party.
- 4.2 Neither party shall make use of the other party's name or any information acquired through its dealings with the other party for publicity or marketing purposes without the prior written consent of the other party.

#### 5. DURATION

The obligations of each party and its Agents under this Agreement shall survive the termination of any discussions or negotiations between the parties regarding the Tender and continue thereafter for a period of 5 [five] years.

## 6. PRINCIPAL

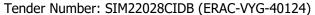
Each party confirms that it is acting as principal and not as nominee, agent or broker for any other person and that it will be responsible for any costs incurred by it or its advisers in considering or pursuing the Tender and in complying with the terms of this Agreement.

# 7. ADEQUACY OF DAMAGES

Nothing contained in this Agreement shall be construed as prohibiting the Disclosing Party from pursuing any other remedies available to it, either at law or in equity, for any such threatened or actual breach of this Agreement, including specific performance, recovery of damages or otherwise.

# 8. PRIVACY AND DATA PROTECTION

- 8.1 The Receiving Party undertakes to comply with South Africa's general privacy protection in terms Section 14 of the Bill of Rights in connection with this Tender and shall procure that its personnel shall observe the provisions of such Act [as applicable] or any amendments and re-enactments thereof and any regulations made pursuant thereto.
- 8.2 The Receiving Party warrants that it and its Agents have the appropriate technical and organisational measures in place against unauthorised or unlawful processing of data relating to the Tender and against accidental loss or destruction of, or damage to such data held or processed by them.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# 9. GENERAL

- 9.1 Neither party may assign the benefit of this Agreement, or any interest hereunder, except with the prior written consent of the other, save that Transnet may assign this Agreement at any time to any member of the Transnet Group.
- 9.2 No failure or delay in exercising any right, power or privilege under this Agreement will operate as a waiver of it, nor will any single or partial exercise of it preclude any further exercise or the exercise of any right, power or privilege under this Agreement or otherwise.
- 9.3 The provisions of this Agreement shall be severable in the event that any of its provisions are held by a court of competent jurisdiction or other applicable authority to be invalid, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law.
- 9.4 This Agreement may only be modified by a written agreement duly signed by persons authorised on behalf of each party.
- 9.5 Nothing in this Agreement shall constitute the creation of a partnership, joint venture or agency between the parties.
- 9.6 This Agreement will be governed by and construed in accordance with South African law and the parties irrevocably submit to the exclusive jurisdiction of the South African courts.

Signed	Date	
Name	Position	
Tenderer		

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# T2.2-16: Supplier declaration form

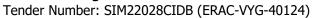
Respondents are to furnish the following documentation and complete the Supplier Declaration Form below:

- 1. **Original or certified** cancelled cheque **OR** letter from the Respondent's bank verifying banking details [with bank stamp]
- 2. **Certified copy** of Identity Document(s) of Shareholders/Directors/Members [where applicable]
- 3. **Certified copy** of Certificate of Incorporation, CM29 / CM9 [name change]
- 4. **Certified copy** of Share Certificates [CK1/CK2 if CC]
- 5. Original or certified letterhead confirm physical and postal addresses
- 6. **Original or certified** valid SARS Tax Clearance Certificate [RSA entities only]
- **7. Certified copy** of VAT Registration Certificate [RSA entities only]
- 8. A signed letter from your entity's auditor or accountant confirming most recent annual turnover figures or certified BBBEE certificate
- 9. **Certified copy** of valid Company Registration Certificate *[if applicable]*

Note: No contract shall be awarded to any South African Respondent whose tax matters have not been declared by SARS to be in order.

Note: No agreement shall be awarded to any Respondent whose tax matters have not been declared by SARS to be in order.

Company Trading	Name								
Company Registe									
Company Registra	ation Number	Or ID Number	If A Sc	ole Prop	rietor				
Form of entity	CC	Trust	Pty I	_td	Limite	d	Partnership	Sole	Proprietor
VAT number (if re									
Company Telepho	one Number								
Company Fax Nur	mber								
Company E-Mail A	Address								
Company Website									
Bank Name				Bank	Account	t			
				Numb	er				
Doctal Address									
Postal Address							(	Code	
Physical								Code	
Address								Code	
Contact Person									
Designation									





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

•	·		. , ,					
Telephone								
Email								
Annual Turnover Year)	Range (Las	t Financial	< R5 Millio	n R5-35 million		n	> R35 million	
Does Your Compar	ny Provide		Products		Services		Both	
Area Of Delivery	National		Provincial		Local			
Is Your Company A Public Or Private Entity					Public		Private	
Does Your Company Have A Tax Directive Or IRP30 Certificate					Yes		No	
Main Product Or Se	ervice Suppli	ed (E.G.: Sta	ntionery/Cons	sulting)				
BEE Ownership Details								
% Black women Ownership ownership			% Disabled person/s ownership					
Does your company have a BEE certificate Ye			Yes		No			
What is your broad	d based BEE	status (Leve	el 1 to 9 / Un	known)				
How many person	nel does the	firm employ	<i>r</i> Perr	nanent		Part time		
Transnet Contact I	Person							
Contact number								
Transnet operating	g division							
Duly Authorised To	ο Sign For Λ	nd On Behal	f Of Firm / O	raanicat	tion			
•	Jagirrar	iu On Denai	1 01 1 11111 / 0	rgariisat				
Name					Designation			
Signature					Date			
Stamp And Signate	ire Of Comr	nissioner Of	Ωath					
Name			Catr		Date			
Signature					Telephone No.			

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# T2.2-17: RFQ declaration form

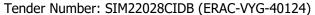
1.	Transnet has supplied and we have received appropriate tender offers to any/all questions which were submitted by ourselves for tender clarification purposes;	(as applicable)
2.	we have received all information we deemed necessary for the completion of this Tender;	
3.	at no stage have we received additional information relating to the subject matter of the Transnet sources, other than information formally received from the designated Transnet nominated in the tender documents;	
4.	we are satisfied, insofar as our company is concerned, that the processes and procedure Transnet in issuing this tender and the requirements requested from tenderers in respectender have been conducted in a fair and transparent manner; and	
5.	furthermore, we acknowledge that a direct relationship exists between a family member at / member / director / partner / shareholder (unlisted companies) of our company and a board member of the Transnet Group as indicated below: [Respondent to indicate if this applicable]  FULL NAME OF OWNER/MEMBER/DIRECTOR/	n employee or
	PARTNER/SHAREHOLDER: ADDRESS:	

[Failure to furnish complete and accurate information in this regard may lead to the disqualification of your response and may preclude a Respondent from doing future business with Transnet]

We declare, to the extent that we are aware or become aware of any relationship between ourselves and Transnet (other than any existing and appropriate business relationship with Transnet) which could unfairly advantage our company in the forthcoming adjudication process, we shall notify Transnet immediately in writing of such circumstances.

6. We accept that any dispute pertaining to this tender will be resolved through the Ombudsman process and will be subject to the Terms of Reference of the Ombudsman. The

CPM 2020 Rev 01 Part T2: Returnable Schedules





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

Ombudsman process must first be exhausted before judicial review of a decision is sought. (Refer "Important Notice to respondents" below).

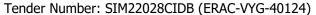
- 7. We further accept that Transnet reserves the right to reverse a tender award or decision based on the recommendations of the Ombudsman without having to follow a formal court process to have such award or decision set aside.
- 8. We have acquainted ourselves and agree with the content of T2.2-39 "Service Provider Integrity Pact".

For and on behalf of
duly authorised thereto
Name:
Signature:
Date
Date:

#### **IMPORTANT NOTICE TO TENDERERS**

- Transnet has appointed a Procurement Ombudsman to investigate any <u>material complaint</u> in respect of tenders exceeding R5,000,000.00 (five million S.A. Rand) in value. Should a Tenderer have any material concern regarding an tender process which meets this value threshold, a complaint may be lodged with Transnet's Procurement Ombudsman for further investigation.
- It is incumbent on the Tenderer to familiarise himself/herself with the Terms of Reference for the Transnet Procurement Ombudsman, details of which are available for review at Transnet's website <a href="https://www.transnet.net">www.transnet.net</a>.
- An official complaint form may be downloaded from this website and submitted, together with any supporting documentation, within the prescribed period, to procurement.ombud@transnet.net
- For transactions below the R5,000,000.00 (five million S.A. Rand) threshold, a complaint may be lodged with the Chief Procurement Officer of the relevant Transnet Operating Division.
- All Tenderers should note that a complaint must be made in good faith. If a complaint is made in bad faith, Transnet reserves the right to place such a tenderer on its List of Excluded Bidders.

CPM 2020 Rev 01 Part T2: Returnable Schedules



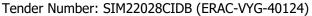


Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **T2.2-18: Certificate of Acquaintance with Tender Documents**

NAME OF TENDERING ENTITY	N	AME	OF	TEN	DERIN	NG EI	YTITY	<b>/</b> :
--------------------------	---	-----	----	-----	-------	-------	-------	------------

- 1. By signing this certificate I/we acknowledge that I/we have made myself/ourselves thoroughly familiar with, and agree with all the conditions governing this RFP. This includes those terms and conditions of the Contract, the Supplier Integrity Pact, Non-Disclosure Agreement etc. contained in any printed form stated to form part of the documents thereof, but not limited to those listed in this clause.
- 2. I/we furthermore agree that Transnet SOC Ltd shall recognise no claim from me/us for relief based on an allegation that I/we overlooked any tender/contract condition or failed to take it into account for the purpose of calculating my/our offered prices or otherwise.
- 3. I/we understand that the accompanying Tender will be disqualified if this Certificate is found not to be true and complete in every respect.
- 4. For the purposes of this Certificate and the accompanying Tender, I/we understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:
  - a) has been requested to submit a Tender in response to this Tender invitation;
  - b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
  - c) provides the same Services as the Tenderer and/or is in the same line of business as the Tenderer
- 5. The Tenderer has arrived at the accompanying Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive Tendering.
- 6. In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - a) prices;
  - b) geographical area where Services will be rendered [market allocation]
  - c) methods, factors or formulas used to calculate prices;





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- d) the intention or decision to submit or not to submit, a Tender;
- e) the submission of a tender which does not meet the specifications and conditions of the tender; or
- f) Tendering with the intention not winning the tender.
- 7. 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 Services to which this tender relates.
- 8. The terms of the accompanying tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
- 9. I/We am/are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders 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. In addition, Tenderers that submit suspicious tenders may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed on this		day of	 	20
SIGNATURE OF	TENDE	RFR		

CPM 2020 Rev 01 Part T2: Returnable Schedules

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **T2.2-19: Service Provider Integrity Pact**

Important Note: All potential tenderers must read this document and certify in the RFP Declaration Form that that have acquainted themselves with, and agree with the content.

The contract with the successful tenderer will automatically incorporate this Integrity Pact and shall be deemed as part of the final concluded contract.

#### **INTEGRITY PACT**

Between

#### TRANSNET SOC LTD

Registration Number: 1990/000900/30

("Transnet")

and

The Contractor (hereinafter referred to as the "Tenderer/Service Providers/Contractor")

CPM 2020 Rev 01 Part T2: Returnable Schedules

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

#### **PREAMBLE**

Transnet values full compliance with all relevant laws and regulations, ethical standards and the principles of economical use of resources, fairness and transparency in its relations with its Tenderers / Service Providers/Contractors.

In order to achieve these goals, Transnet and the Tenderer / Service Provider hereby enter into this agreement hereinafter referred to as the "Integrity Pact" which will form part of the Tenderer's / Service Provider's / Contractor's application for registration with Transnet as a vendor.

The general purpose of this Integrity Pact is to agree on avoiding all forms of dishonesty, fraud and corruption by following a system that is fair, transparent and free from any undue influence prior to, during and subsequent to the currency of any procurement and / or reverse logistics event and any further contract to be entered into between the Parties, relating to such event.

All Tenderers / Service Providers / Contractor's will be required to sign and comply with undertakings contained in this Integrity Pact, should they want to be registered as a Transnet vendor.

#### **OBJECTIVES**

Transnet and the Tenderer / Service Provider / Contractor agree to enter into this Integrity Pact, to avoid all forms of dishonesty, fraud and corruption including practices that are anti-competitive in nature, negotiations made in bad faith and under-pricing by following a system that is fair, transparent and free from any influence / unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

- a) Enable Transnet to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services; and
- b) Enable Tenderers / Service Providers / Contractors to abstain from bribing or participating in any corrupt practice in order to secure the contract.

# **COMMITMENTS OF TRANSNET**

Transnet commits to take all measures necessary to prevent dishonesty, fraud and corruption and to observe the following principles:

Transnet hereby undertakes that no employee of Transnet connected directly or indirectly with the sourcing event and ensuing contract, will demand, take a promise for or accept directly or through intermediaries any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Tenderer, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the tendering process, Tender evaluation, contracting or implementation process related to any contract.

Transnet will, during the registration and tendering process treat all Tenderers / Service Providers with equity, transparency and fairness. Transnet will in particular, before and during the registration process, provide to all Tenderers / Service Providers the same information and will not provide to any Tenderers / Service Providers / Contractors confidential / additional information through which the Tenderers / Service Providers / Contractors could obtain an advantage in relation to any tendering process. Transnet further confirms that its employees will not favour any prospective Tenderer in any form that could afford an undue advantage to a particular Tenderer during the tendering stage, and will further treat all Tenderers / Service Providers / Contractors participating in the tendering process. Transnet will exclude from the tender process such employees who have any personal interest in the

Tenderers / Service Providers / Contractors participating in the tendering process.

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **OBLIGATIONS OF THE TENDERER / SERVICE PROVIDER**

The Tenderer / Service Provider / Contractor commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its Tender or during any ensuing contract stage in order to secure the contract or in furtherance to secure it and in particular the Tenderer / Service Provider / Contractor commits to the following:

- a) The Tenderer / Service Provider / Contractor will not, directly or through any other person or firm, offer, promise or give to Transnet or to any of Transnet's employees involved in the tendering process or to any third person any material or other benefit or payment, in order to obtain in exchange an advantage during the tendering process; and
- b) The Tenderer / Service Provider / Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any employee of Transnet, connected directly or indirectly with the tendering process, or to any person, organisation or third party related to the contract in exchange for any advantage in the tendering, evaluation, contracting and implementation of the contract.

The acceptance and giving of gifts may be permitted provided that:

- a) the gift does not exceed R1 000 (one thousand Rand) in retail value;
- b) many low retail value gifts do not exceed R 1 000 within a 12 month period;
- c) hospitality packages do not exceed R5 000 in value or many low value hospitality packages do not cumulatively exceed R5 000;
- d) a Tenderer / Service Provider does not give a Transnet employee more than 2 (two) gifts within a 12 (twelve) month period, irrespective of value;
- e) a Tenderer / Service Provider does not accept more than 1 (one) gift in excess of R750 (seven hundred and fifty Rand) from a Transnet employee within a 12 (twelve) month period, irrespective of value;
- f) a Tenderer / Service Provider may under no circumstances, accept from or give to, a Transnet employee any gift, business courtesy, including an invitation to a business meal and /or drinks, or hospitality package, irrespective of value, during any Tender evaluation process, including a period of 12 (twelve) months after such tender has been awarded, as it may be perceived as undue and improper influence on the evaluation process or reward for the contract that has been awarded; and
- g) a Tenderer / Service Provider may not offer gifts, goods or services to a Transnet employee at artificially low prices, which are not available to the public at those prices.

The Tenderer / Service Provider / Contractor will not collude with other parties interested in the contract to preclude a competitive Tender price, impair the transparency, fairness and progress of the tendering process, Tender evaluation, contracting and implementation of the contract. The Tenderer / Service Provider further commits itself to delivering against all agreed upon conditions as stipulated within the contract.

The Tenderer / Service Provider / Contractor will not enter into any illegal or dishonest agreement or understanding, whether formal or informal with other Tenderers / Service Providers / Contractors. This applies in particular to certifications, submissions or non-submission of documents or actions that are restrictive or to introduce cartels into the tendering process.

The Tenderer / Service Provider / Contractor will not commit any criminal offence under the relevant anticorruption laws of South Africa or any other country. Furthermore, the Tenderer /Service Provider will not use for illegitimate purposes or for restrictive purposes or personal gain, or pass on to others, any information provided by Transnet as part of the business relationship, regarding plans, technical proposals

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



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and business details, including information contained or transmitted electronically.

A Tenderer / Service Provider / Contractor of foreign origin shall disclose the name and address of its agents or representatives in South Africa, if any, involved directly or indirectly in the registration or tendering process. Similarly, the Tenderer / Service Provider / Contractor of South African nationality shall furnish the name and address of the foreign principals, if any, involved directly or indirectly in the registration or tendering process.

The Tenderer / Service Provider / Contractor will not misrepresent facts or furnish false or forged documents or information in order to influence the tendering process to the advantage of the Tenderer / Service Provider or detriment of Transnet or other competitors.

The Tenderer / Service Provider / Contractor shall furnish Transnet with a copy of its code of conduct, which code of conduct shall reject the use of bribes and other dishonest and unethical conduct, as well as compliance programme for the implementation of the code of conduct.

The Tenderer / Service Provider / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

#### INDEPENDENT TENDERING

For the purposes of that Certificate in relation to any submitted Tender, the Tenderer declares to fully understand that the word "competitor" shall include any individual or organisation, other than the

Tenderer, whether or not affiliated with the Tenderer, who:

- a) has been requested to submit a Tender in response to this Tender invitation;
- b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
- c) provides the same Goods and Services as the Tenderer and/or is in the same line of business as the Tenderer.

The Tenderer has arrived at his submitted Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive tendering.

In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

- a) prices
- b) geographical area where Goods or Services 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 Tender;
- e) the submission of a Tender which does not meet the specifications and conditions of the RFP; or
- f) tendering with the intention of not winning the Tender.

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 Goods or Services to which his/her tender relates.

The terms of the Tender as submitted have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.

Tenderers are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

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 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Should the Tenderer find any terms or conditions stipulated in any of the relevant documents quoted in the Tender unacceptable, it should indicate which conditions are unacceptable and offer alternatives by written submission on its company letterhead, attached to its submitted Tender. Any such submission shall be subject to review by Transnet's Legal Counsel who shall determine whether the proposed alternative(s) are acceptable or otherwise, as the case may be.

Disqualification from Tendering Process

If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3 of this Integrity Pact or in any other form such as to put its reliability or credibility as a Tenderer / Service Provider into question, Transnet may reject the Tenderer's / Service Provider's / Contractor's application from the registration or tendering process and remove the Tenderer / Service Provider from its database, if already registered.

If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3, or any material violation, such as to put its reliability or credibility into question. Transnet may after following due procedures and at its own discretion also exclude the Tenderer / Service Provider / Contractor from future tendering processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, which will include amongst others the number of transgressions, the position of the transgressors within the company hierarchy of the Tenderer / Service Provider /Contractor and the amount of the damage. The exclusion will be imposed for up to a maximum of 10 (ten) years. However, Transnet reserves the right to impose a longer period of exclusion, depending on the gravity of the

If the Tenderer / Service Provider / Contractor can prove that it has restored the damage caused by it and has installed a suitable corruption prevention system, or taken other remedial measures as the circumstances of the case may require, Transnet may at its own discretion revoke the exclusion or suspend the imposed penalty.

# TRANSNET'S LIST OF EXCLUDED TENDERERS (BLACKLIST)

All the stipulations around Transnet's blacklisting process as laid down in Transnet's Supply Chain Policy and Procurement Procedures Manual are included herein by way of reference. Below follows a condensed summary of this blacklisting procedure.

Blacklisting is a mechanism used to exclude a company/person from future business with Transnet for a specified period. The decision to blacklist is based on one of the grounds for blacklisting. The standard of proof to commence the blacklisting process is whether a "prima facie" (i.e. on the face of it) case has been established.

Depending on the seriousness of the misconduct and the strategic importance of the Goods/Services, in addition to blacklisting a company/person from future business, Transnet may decide to terminate some or all existing contracts with the company/person as well.

A Service Provider or Contractor to Transnet may not subcontract any portion of the contract to a blacklisted company.

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

Grounds for blacklisting include: If any person/Enterprise which has submitted a Tender, concluded a contract, or, in the capacity of agent or subcontractor, has been associated with such Tender or contract:

- a) Has, in bad faith, withdrawn such Tender after the advertised closing date and time for the receipt of Tenders;
- b) has, after being notified of the acceptance of his Tender, failed or refused to sign a contract when called upon to do so in terms of any condition forming part of the Tender documents;
- c) has carried out any contract resulting from such Tender in an unsatisfactory manner or has breached any condition of the contract;
- d) has offered, promised or given a bribe in relation to the obtaining or execution of the contract;
- e) has acted in a fraudulent or improper manner or in bad faith towards Transnet or any Government Department or towards any public body, Enterprise or person;
- f) has made any incorrect statement in a certificate or other communication with regard to the Local Content of his Goods or his B-BBEE status and is unable to prove to the satisfaction of Transnet that:
  - (i) he made the statement in good faith honestly believing it to be correct; and
  - (ii) before making such statement he took all reasonable steps to satisfy himself of its correctness;
- g) caused Transnet damage, or to incur costs in order to meet the contractor's requirements and which could not be recovered from the contractor;
- h) has litigated against Transnet in bad faith.

Grounds for blacklisting include a company/person recorded as being a company or person prohibited from doing business with the public sector on National Treasury's database of Restricted Service Providers or Register of Tender Defaulters.

Companies associated with the person/s guilty of misconduct (i.e. entities owned, controlled or managed by such persons), any companies subsequently formed by the person(s) guilty of the misconduct and/or an existing company where such person(s) acquires a controlling stake may be considered for blacklisting. The decision to extend the blacklist to associated companies will be at the sole discretion of Transnet.

#### **PREVIOUS TRANSGRESSIONS**

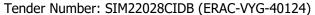
The Tenderer / Service Provider /Contractor hereby declares that no previous transgressions resulting in a serious breach of any law, including but not limited to, corruption, fraud, theft, extortion and contraventions of the Competition Act 89 of 1998, which occurred in the last 5 (five) years with any other public sector undertaking, government department or private sector company that could justify its exclusion from its registration on the Tenderer's / Service Provider's / Contractor's database or any tendering process.

If it is found to be that the Tenderer / Service Provider /Contractor made an incorrect statement on this subject, the Tenderer / Service Provider / Contractor can be rejected from the registration process or removed from the Tenderer / Service Provider / Contractor database, if already registered, for such reason (refer to the Breach of Law Form contained in the applicable RFX document.)

# **SANCTIONS FOR VIOLATIONS**

Transnet shall also take all or any one of the following actions, wherever required to:

a) Immediately exclude the Tenderer / Service Provider / Contractor from the tendering process or call off the pre-contract negotiations without giving any compensation the Tenderer / Service





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Provider / Contractor. However, the proceedings with the other Tenderer / Service Provider / Contractor may continue;

- b) Immediately cancel the contract, if already awarded or signed, without giving any compensation to the Tenderer / Service Provider / Contractor;
- c) Recover all sums already paid by Transnet;
- d) Encash the advance bank guarantee and performance bond or warranty bond, if furnished by the Tenderer / Service Provider / Contractor, in order to recover the payments, already made by Transnet, along with interest;
- e) Cancel all or any other contracts with the Tenderer / Service Provider; and
- Exclude the Tenderer / Service Provider / Contractor from entering into any Tender with Transnet in future.

# **CONFLICTS OF INTEREST**

A conflict of interest includes, inter alia, a situation in which:

- a) A Transnet employee has a personal financial interest in a tendering / supplying entity; and
- b) A Transnet employee has private interests or personal considerations or has an affiliation or a relationship which affects, or may affect, or may be perceived to affect his / her judgment in action in the best interest of Transnet, or could affect the employee's motivations for acting in a particular manner, or which could result in, or be perceived as favouritism or nepotism.
- A Transnet employee uses his / her position, or privileges or information obtained while acting in the capacity as an employee for:
  - a) Private gain or advancement; or
  - b) The expectation of private gain, or advancement, or any other advantage accruing to the employee must be declared in a prescribed form.
    - Thus, conflicts of interest of any Tender committee member or any person involved in the sourcing process must be declared in a prescribed form.

If a Tenderer / Service Provider / Contractor has or becomes aware of a conflict of interest i.e. a family, business and / or social relationship between its owner(s) / member(s) / director(s) / partner(s) / shareholder(s) and a Transnet employee / member of Transnet's Board of Directors in respect of a Tender which will be considered for the Tender process, the Tenderer / Service Provider / Contractor:

- a) must disclose the interest and its general nature, in the Request for Proposal ("RFX") declaration form; or
- b) must notify Transnet immediately in writing once the circumstances has arisen.

The Tenderer / Service Provider / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any committee member or any person involved in the sourcing process, where this is done, Transnet shall be entitled forthwith to rescind the contract and all other contracts with the Tenderer / Service Provider / Contractor.

# **MONITORING**

Transnet will be responsible for appointing an independent Monitor to:

- a) Conduct random monitoring of compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for less than R100,000.000 (one hundred million Rand) in value;
- b) Monitor compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for greater than R100,000.000 (one hundred million Rand) in value; and
- c) Investigate any allegation of violation of any provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor, irrespective of value.

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

The Monitor will be subjected to Transnet's Terms of Conditions of Contract for the Provision of Services to Transnet, as well as to Transnet's Service Provider Code of Conduct.

## **EXAMINATION OF FINANCIAL RECORDS, DOCUMENTATION AND/OR ELECTRONIC DATA**

For the purpose of Monitoring, as stipulated above, the Monitor shall be entitled to:

a) Examine the financial records, documentation and or electronic date of Tenderer / Service Provider / Contractor / Transnet. The Tenderer / Service Provider / Transnet shall provide all requested information / documentation / data to the Monitor and shall extend all help possible for the purpose of such examination.

## **DISPUTE RESOLUTION**

Transnet recognises that trust and good faith are pivotal to its relationship with its Tenderer / Service Provider / Contractor. When a dispute arises between Transnet and its Tenderer / Service Provider / Contractor, the parties should use their best endeavours to resolve the dispute in an amicable manner, whenever possible. Litigation in bad faith negates the principles of trust and good faith on which commercial relationships are based. Accordingly, following a blacklisting process as mentioned in paragraph 0 above, Transnet will not do business with a company that litigates against it in bad faith or is involved in any action that reflects bad faith on its part. Litigation in bad faith includes, but is not limited to the following instances:

- a) **Vexatious proceedings**: these are frivolous proceedings which have been instituted without proper grounds;
- b) **Perjury:** where a Tenderer / Service Provider / Contractor make a false statement either in giving evidence or on an affidavit;
- Scurrilous allegations: where a Tenderer / Service Provider / Contractor makes allegations regarding a senior Transnet employee which are without proper foundation, scandalous, abusive or defamatory; and
- d) **Abuse of court process:** when a Tenderer / Service Provider / Contractor abuses the court process in order to gain a competitive advantage during a Tender process.

#### **GENERAL**

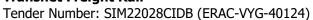
This Integrity Pact is governed by and interpreted in accordance with the laws of the Republic of South Africa.

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the law relating to any civil or criminal proceedings.

The validity of this Integrity Pact shall cover all the tendering processes and will be valid for an indefinite period unless cancelled by either Party.

Should one or several provisions of this Integrity Pact turn out to be invalid the remainder of this Integrity Pact remains valid.

Should a Tenderer / Service Provider / Contractor be confronted with dishonest, fraudulent or corruptive behaviour of one or more Transnet employees, Transnet expects its Tenderer / Service Provider / Contractor to report this behaviour directly to a senior Transnet official / employee or alternatively by using Transnet's "Tip-Off Anonymous" hotline number 0800 003 056, whereby your confidentiality is guaranteed.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

The Parties hereby declare that each of them has read and understood the clauses of this Integrity Pact and shall a Tenderer by it. To the best of the Parties' knowledge and belief, the information

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# T2.2-20: Request for Quotation – Breach of law

NAME OF COMPANY:
I / We do hereby certify that <i>I/we</i>
have/have not been found guilty during the preceding 5 (five) years of a serious breach of law, including
but not limited to a breach of the Competition Act, 89 of 1998, by a court of law, tribunal or other
administrative body. The type of breach that the Tenderer is required to disclose excludes relatively minor
offences or misdemeanours, e.g. traffic offences.
Where found guilty of such a serious breach, please disclose:
NATURE OF BREACH:
DATE OF BREACH:
Furthermore, I/we acknowledge that Transnet SOC Ltd reserves the right to exclude any Tenderer from the
tendering process, should that person or company have been found guilty of a serious breach of law, tribunal
or regulatory obligation.
Signed on this day of 20
SIGNATURE OF TENDER

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# T2.2-21: Agreement in terms of Protection of Personal Information Act, 4 of 2013 ("POPIA")

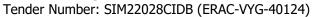
# 1. PREAMBLE AND INTRODUCTION

1.1. The rights and obligation of the Parties in terms of the Protection of Personal Information Act, 4 of 2013 ("POPIA") are included as forming part of the terms and conditions of this contract.

# 2. PROTECTION OF PERSONAL INFORMATION

- 2.1. The following terms shall bear the same meaning as contemplated in Section 1 of the Protection of Person information act, No. of 2013 "(POPIA"):
  - consent; data subject; electronic communication; information officer; operator; person; personal information; processing; record; Regulator; responsible party; special information; as well as any terms derived from these terms.
- 2.2. The Operator will process all information by the Transnet in terms of the requirements contemplated in Section 4(1) of the POPIA:
  - Accountability; Processing limitation; Purpose specification; Further processing limitation; Information quality; Openness; Security safeguards and Data subject participation.
- 2.4. Transnet reserves all the rights afforded to it by the POPIA in the processing of any of its information as contained in this Agreement and the Operator is required to comply with all prescripts as detailed in the POPIA relating to all information concerning Transnet.
- 2.5. In terms of this Agreement, the Operator acknowledges that it will obtain and have access to personal information of Transnet and the information of a third party and agrees that it shall only process the information disclosed by Transnet in terms of this Agreement and only for the purposes as detailed in this Agreement and in accordance with any applicable law.

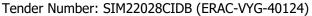
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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- 2.6. Should there be a need for the Operator to process the personal information and the information of a third party in a way that is not agreed to in this Agreement, the Operator must request consent from Transnet to the processing of its personal information or and the information of a third party in a manner other than that it was collected for, which consent cannot be unreasonably withheld.
- 2.7. Furthermore, the Operator will not otherwise modify, amend or alter any personal information and the information of a third party submitted by Transnet or disclose or permit the disclosure of any personal information and the information of a third party to any third party without prior written consent from Transnet.
- 2.8. The Operator shall, at all times, ensure compliance with any applicable laws put in place and maintain sufficient measures, policies and systems to manage and secure against all forms of risks to any information that may be shared or accessed pursuant to the services offered to Transnet in terms of this Agreement (physically, through a computer or any other form of electronic communication).
- 2.9. The Operator shall notify Transnet in writing of any unauthorised access to personal information and the information of a third party , cybercrimes or suspected cybercrimes, in its knowledge and report such crimes or suspected crimes to the relevant authorities in accordance with applicable laws, after becoming aware of such crimes or suspected crime. The Operator must inform Transnet of the breach as soon as it has occurred to allow Transnet to take all necessary remedial steps to mitigate the extent of the loss or compromise of personal information and the information of a third party and to restore the integrity of the affected personal information as quickly as is possible.
- 2.10. Transnet may, in writing, request the Operator to confirm and/or make available any personal information and the information of a third party in its possession in relation to Transnet and if such personal information has been accessed by third parties and the identity thereof in terms of the POPIA.
- 2.11. Transnet may further request that the Operator correct, delete, destroy, withdraw consent or object to the processing of any personal information and the information of a third party relating to the Transnet or a third party in the Operator's s possession in terms of the provision of the POPIA and utilizing Form 2 of the POPIA Regulations .
- 2.12. In signing this addendum that is in terms of the POPIA, the Operator hereby agrees that it has adequate measures in place to provide protection of the personal information and the information of a third party given to it by Transnet in line with the 8 conditions of the POPIA and that it will provide to Transnet satisfactory evidence of these measures whenever called upon to do so by Transnet.





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

The Operator is required to provide confirmation that all measures in terms of the POPIA are in place when processing personal information and the information of a third party received from Transnet:

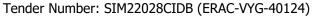
YES		NO	
. 25		.10	

- 2.13. Further, the Operator acknowledges that it will be held liable by Transnet should it fail to process personal information in line with the requirements of the POPIA. The Operator will be subject to any civil or criminal action, administrative fines or other penalty or loss that may arise as a result of the processing of any personal information that Transnet submitted to it.
- 2.14. Should a Tenderer have any complaints or objections to processing of its personal information, by Transnet, the Tenderer can submit a complaint to the Information Regulator on https://www.justice.gov.za/inforeq/, click on contact us, click on complaints.IR@justice.gov.za

# 3. SOLE AGREEMENT

The Agreement, constitute the sole agreement between the parties relating to the subject matter referred to in paragraph 1.1 of this and no amendment/variation/change shall be of any force and effect unless reduced to writing and signed by or on behalf of both parties.

Signed at		on this	day of		2021
Name: _					
Title: _					
Signature	:				
				(Name of company)	1
(Operator	)				
Authorised	d signatory for and on be	ehalf of		( <i>Name</i>	of company) who warrants
that he/sh	ne is duly authorised to si	ign this Agre	ement.		
AS WITNE	ESSES:				
1. N	ame:		Sig	nature:	
2. N	ame:		Sig	nature:	





Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **T2.2-22: Insurance provided by the** *Contractor*

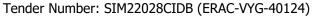
Clause 83.1 in NEC3 Term Service Contract (June 2005)(amended June 2006 and April 2013) requires that the *Contractor* provides the insurance stated in the insurance table except any insurance which the *Employer* is to provide as stated in the Contract Data.

Please provide the following details for insurance which the *Contractor* is still to provide. Notwithstanding this information all costs related to insurance are deemed included in the tenderer's rates and prices.

Insurance against (See clause 83.2 of the TSC)	Name of Insurance Company	Cover	Premium
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract			
Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger and Unauthorised Passenger Liability indemnity with a minimum indemnity limit of R 5 000 000			
Insurance in respect of loss of or damage to own property and equipment.  (Other)			

Signed	Date	
Name	Posit	on
Tenderer		

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Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# T2.2-23: Three (3) years audited financial statements

Attached to this schedule is the last three (3) years audited financial statements of the single tenderer/members of the Joint Venture. NAME OF COMPANY/IES and INDEX OF ATTACHMENTS: T2.2-24: Form of Intent to Provide a Performance Guarantee It is hereby agreed by the Tenderer that a Performance Guarantee drafted **exactly** as provided in the tender documents will be provided by the Guarantor named below, which is a bank or insurer registered in South Africa: Name of Guarantor (Bank/Insurer) Address The Performance Guarantee shall be provided within 2 (Two) weeks after the Contract Date defined in the contract unless otherwise agreed to by the parties. Signed Name Capacity

On behalf of (name of tenderer)



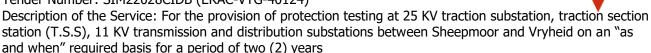
TRANSNET

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

and which required basis for a peri-	od of two (2) years
Date	
Confirmed by Guarantor's Auth	orised Representative
Signature(s)	
Name (print)	
Capacity	
On behalf of Guarantor (Bank/insurer)	
Date	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



TRANSNET

# C1.1 Form of Offer & Acceptance

#### Offer

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

FOR THE PROVISION OF PROTECTION TESTING AT 25 KV TRACTION SUBSTATION, TRACTION SECTION STATION (T.S.S), 11 KV TRANSMISSION AND DISTRIBUTION SUBSTATIONS BETWEEN SHEEPMOOR AND VRYHEID ON AN "AS AND WHEN" REQUIRED BASIS FOR A PERIOD OF TWO (2) YEARS

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable 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 *currency of this contract* is the South African Rand.

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 Acceptance part of this Form of Offer and Acceptance 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:			
Name & signature of witness	(Insert name and address of organisation)	Date	
Tenderer's CID	B registration number:		

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Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as

and when" required basis for a period of two (2) years

# **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 C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work: Service Information

Part C4 Site 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 Returnable 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.

The tenderer shall within two weeks 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 original copy of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) 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.

Signature(s)			
Name(s)			
Capacity			
for the Employer	Transnet SOC Ltd		
Name & signature of	(Insert name and address of organisation)	Date	
-			

#### TRANSNET

# **Transnet Freight Rail**

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

witness	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# **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		
2		
3		
4		
5		
6		
7		

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)	Transnet SOC Ltd
Name & signature of witness		
Date		

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S.\$) Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2)

Years

# C1.2 Contract Data

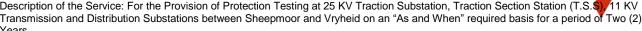
# Part one - Data provided by the *Employer*

Clause	Statement	Data	
1	General		
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:		
		A:	Priced contract with price list
	dispute resolution Option	<b>W1</b> :	Dispute resolution procedure
	and secondary Options		
		X2:	Changes in the law
		X18:	Limitation of liability
		X19:	Task Order
		Z:	Additional conditions of contract
	of the NEC3 Term Service Contract (June 2005) (and amended June 2006 and April 2013)		
10.1	The <i>Employer</i> is:	Trans	net SOC Ltd
	Address	Trans 138 E Braan	ered address: net Corporate Centre loff Street nfontein nnesburg
	Having elected its Contractual Address for the purposes of this contract as:	15 Gi Parkt	net Freight Rail rton Road own nnesburg
10.1	The Service Manager is (name):	Gcoba	ani Hintsa
	Address	Netw	net Freight Rail ork Building, Room11 Iark Street iid

TRANSNET

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S.S) 11 KV Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2) Years

6	Compensation events	No additional data is required for this section of the <i>conditions of contract</i> .
51.4	The <i>interest rate</i> is	The prime lending rate of the Standard Bank South Africa.
51.2	The period within which payments are made is	Payment will be effected on or before the last day of the month following the month during which a valid Tax Invoice and Statement were received.
51.1	The currency of this contract is the	South African Rand.
50.1	The assessment interval is	25 <sup>th</sup> (twenty fifth) day of each successive month.
5	Payment	
4	Testing and defects	No additional data is required for this section of the <i>conditions of contract</i> .
30.1	The service period is	Two (2) years
30.1	The starting date is.	ТВА
3	Time	
21.1	The <i>Contractor</i> submits a first plan for acceptance within	2 weeks of the Contract Date
2	The <i>Contractor'</i> s main responsibilities	No additional data is required for this section of the <i>conditions of contract</i> .
13.3	The <i>period for reply</i> is	2 weeks
13.1	The language of this contract is	English
12.2	The <i>law of the contract</i> is the law of	The Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
11.2(15)	The Service Information is in	The Scope of Services
11.2(14)	The following matters will be included in the Risk Register	Working under High voltage permit with the risk of electrocution, head injuries from overhead equipment and falling object and risk of falling from height.
11.2(13)	The service is	Provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11KV transmission and distribution substation between Sheepmoor and Vryheid
11.2(2)	The Affected Property is	Vryheid
	e-mail	Gcobani.Hintsa@transnet.net
	Tel	035 906 7669



Enquiry Number: SIM22028CIDB (ERAC-VYG-40124)
Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S.S) 11 KV
Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2)
Years

7	Use of Equipment Plant and Materials	No additional data is required for this section of the <i>conditions of contract</i> .
8	Risks and insurance	
83.1		Whatever <i>Contractor</i> deems necessary as the <i>Employer</i> is not carrying this indemnity.
83.1	insurance in respect of death of or bodily injury to employees of the <i>Contractor</i>	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.
83.1	Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger and Unauthorised Passenger Liability indemnity with a minimum indemnity limit of R 5 000 000	
83.1	The <i>Contractor</i> liability to the <i>Employer</i> for indirect or consequential loss including loss of profit, revenue and goodwill, is limited to:	The Total of the Prices.
83.1	For any one event, the <i>Contractor</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employers</i> property is limited to:	The Total of the Prices.
83.1	The <i>Contractor</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to:	The Total of the Prices.
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i> .
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	2 weeks.
11	Data for Option W1	

Enquiry Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S.\$1,11 KV Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2) Years

X19	Task Order	
X18.5	The <i>end of liability date</i> is	5 years after the end of the <i>service period</i> .
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	Total of the Prices.
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to	The cost of correcting the defect.
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	The deductible of the relevant insurance policy
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	Nil.
X18	Limitation of liability	
X2	Changes in the law	No additional data is required for this Option
12	Data for secondary Option clauses	
	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 of the Association of Arbitrators (Southern Africa)
	The place where arbitration is to be held is	Johannesburg, South Africa
W1.4(5)	The arbitration procedure is	The Rules for the Conduct of Arbitrations of the Association of Arbitrators (Southern Africa)
W1.4(2)	The <i>tribunal</i> is:	Arbitration
	If no <i>Adjudicator nominating body</i> is entered, it is	The Association of Arbitrators (Southern Africa)
W1.2(3)	The Adjudicator nominating body is:	The Chairman of the Association of Arbitrators (Southern Africa)
W1.1	The <i>Adjudicator</i> is (Name)	Both parties will agree as and when a dispute arises. If the parties cannot reach an agreement on the <i>Adjudicator</i> , the chairman of the Association of Arbitrators will appoint an <i>Adjudicator</i> .

Enquiry Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S. 11 KV Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2) Years

Additional conditions of contract	
Obligations in respect of Termination	
	The following will be included under core clause 91.1:
	In the second main bullet, after the word 'partnership' add 'joint venture whethe incorporated or otherwise (including any constituent of the joint venture)'; and
	Under the second main bullet, insert the following additional bullets after the last sub-bullet:  • commenced business rescue proceedings (R22)  • repudiated this Contract (R23)
Termination Table	The following will be included under core clause 90.2 Termination Table as follows:
	Amend "A reason other than R1 $-$ R21" to "A reason other than R1 $-$ R23"
	Amend "R1 – R15 or R18" to "R1 – R15, R18, R22 or R23."
	Termination Table

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S.S) 11 KV Transmission and Distribution Substations between Sheepmoor and Vryheid on an "As and When" required basis for a period of Two (2) Years

Z2.1		Transnet reserves the right to conduct vetting through State Security Agency (SSA) for security clearances of any Contractor who has access to National Key Points for the following without limitations:		
		<ol> <li>Confidential – this clearance is based on any information which may be used by malicious, opposing or hostile elements to harm the objectives and functions of an organ of state.</li> </ol>		
		<ol> <li>Secret – clearance is based on any information which may be used by malicious, opposing or hostile elements to disrupt the objectives and functions of an organ of state.</li> </ol>		
		<ol> <li>Top Secret – this clearance is based on information which may be used by malicious, opposing or hostile elements to neutralise the objectives and functions of an organ of state.</li> </ol>		
<b>Z3</b>	Additional clause relating to Collusion in the Construction Industry			
Z3.1		The contract award is made without prejudice t any rights Transnet may have to take appropriat action later with regard to any declared bid riggin including blacklisting.		
<b>Z4</b>	Protection of Personal Information Act			
Z4.1		The <i>Employer</i> and the <i>Contractor</i> are required to process information obtained for the duration of the		

Agreement in a manner that is aligned to the

Protection of Personal Information Act

Enquiry Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the Provision of Protection Testing at 25 KV Traction Substation, Traction Section Station (T.S. 1, 11 KV Transmission and Distribution Substations between Sheepmore and Vryheid on an "As and When" required basis for a period of Two (2) Years

# C1.2 Contract Data

# Part two - Data provided by the Contractor

The tendering contractor is advised to read both the NEC3 Term Service Contract (June 2005) and the relevant parts of its Guidance Notes (TSC3-GN) in order to understand the implications of this Data which the tenderer is required to complete.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	%
	The <i>subcontracted fee percentage</i> is	%
24.1	The key persons are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
		CV's (and further key person's data including CVs) are in
A	Priced contract with price list	
11.2(12)	The <i>price list</i> is in	
11.2(19)	The tendered total of the Prices is	R

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

# C1.3 Forms of Securities

#### **Pro forma Performance Guarantee**

For use with the NEC3 Term Service Contract - June 2005 (with amendments June 2006 and April 2013)

The conditions of contract stated in the Contract Data Part 1 include the following Secondary Option:

Option X13: Performance bond

The pro forma document for this Guarantee is provided here for convenience but is to be treated as part of the *Service Information*.

The organisation providing the Guarantee does so by copying the pro forma document onto its letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

The Performance Bond needs to be issued by an institution that are reasonably acceptable to the Employer.

Transnet may choose to not to accept an Issuer. Should the issuer not being accepted, the performance bond needs to be replaced by an issuer that are acceptable to Transnet. Issuers need to be verified for acceptance by Transnet before a performance bond is issued.

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

#### **Pro-forma Performance Bond (for use with Option X13)**

(to be reproduced exactly as shown below on the letterhead of the Surety)

Transnet SOC Ltd C/o Transnet Freight Rail Transnet Corporate Centre 138 Eloff Street Braamfontein Johannesburg 2000		Date:	
Dear Sirs,			
Performance Bond	for Contract No		
With reference to the abov	ve numbered contract made or to be made betwe	en	
Transnet SOC Limited	d, Registration No. 1990/000900/30		(the <i>Employer</i> ) and
{Insert registered name a	and address of the Contractor}		(the <i>Contractor</i> ), for
{Insert details of the serv	rice from the Contract Data}		(the service).
I/We the undersigned			
on behalf of the Guarantor			
of physical address			

and duly authorised thereto do hereby bind ourselves as Guarantor and co-principal debtors in solidum for the due and faithful performance of all the terms and conditions of the Contract by the Contractor and for all losses, damages and expenses that may be suffered or incurred by the Employer as a result of nonperformance of the Contract by the *Contractor*, subject to the following conditions:

- The terms Employer, Contractor, Service Manager, service have the meaning as assigned to them by 1. the conditions of contract stated in the Contract Data for the aforesaid Contract.
- We renounce all benefits from the legal exceptions "Benefit of Excussion and Division", "No value 2. received" and all other exceptions which might or could be pleaded against the validity of this bond, with the meaning and effect of which exceptions we declare ourselves to be fully acquainted.
- 3. The Employer has the absolute right to arrange his affairs with the Contractor in any manner which the Employer deems fit and without being advised thereof the Guarantor shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the Guarantor. Without derogating from the foregoing compromise, extension of the service period, indulgence, release or variation of the Contractor's obligation shall not affect the validity of this performance bond.

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

- 4. This bond will lapse on the earlier of
  - the date that the Guarantor receives a notice from the *Service Manager* stating that the Completion Certificate for the whole of the *service* has been issued, that all amounts due from the *Contractor* as certified in terms of the contract have been received by the *Employer* and that the *Contractor* has fulfilled all his obligations under the Contract, or
  - the date that the Surety issues a replacement Performance Bond for such lesser or higher amount as may be required by the *Service Manager*.
- 5. Always provided that this bond will not lapse in the event the Guarantor is notified by the *Service Manager*, (before the dates above), of the *Employer's* intention to institute claims and the particulars thereof, in which event this bond shall remain in force until all such claims are paid and settled.
- 6. The amount of the bond shall be payable to the *Employer* upon the *Employer's* demand and no later than 7 days following the submission to the Guarantor of a certificate signed by the *Service Manager* stating the amount of the *Employer's* losses, damages and expenses incurred as a result of the non-performance aforesaid. The signed certificate shall be deemed to be conclusive proof of the extent of the *Employer's* loss, damage and expense.

7.	Our total liability hereunde	er shall not exceed the	sum of:	
	(say)			
	R			
8.			transferable and is governed by to on of the courts of the Republic o	
Signed	at	on this	day of	201_
Signat	ure(s)			
Name(	s) (printed)			
Positio	n in Guarantor company			
Signat	ure of Witness(s)			
Name(	s) (printed)			

Page 3 of 3 Part C1
Part C1.3 : Contract Data

# **PART C2: PRICING DATA**

Document reference	Title	No of pages
C2.1	Pricing instructions: Option A	
C2.2	Price List	

## **C2.1 Pricing instructions: Option A**

#### 1.1 The conditions of contract

#### 1.2 How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Term Services Contract (TSC), June 2005 (with amendments June 2006 and April 2013) Option A states:

**Identified** 11 and defined terms 11.2

two (2) years

- (17) The Price for Services Provided to Date is the total of
  - the Price for each lump sum item in the Price List which the Contractor has completed and
  - where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.
- (19) The Prices are the amounts stated in the Price column of the Price List, where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

#### 1.3 **Measurement and Payment**

- The Price List provides the basis of all valuations of the Price for Services Provided to Date, 1.3.1 payments in multiple currencies and general progress monitoring.
- 1.3.2 The amount due at each assessment date is based on activities and/or milestones completed as indicated on the Price List.
- 1.3.3 The Price List work breakdown structure is compiled to the satisfaction of the Employer with any additions and/or amendments deemed necessary.
- 1.3.4 The Contractor's detailed Price List summates back to the activity/milestone provided by the Employer and is sufficient detail to monitor completion of activities related to the operations on the Accepted Plan in order that payment of completed activities may be assessed.
- 1.3.5 The Prices are obtained from the Price List. The Prices includes for all direct and indirect costs, overheads, profits, risks, liabilities, obligations, etc. relative to the contract.

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### **DOUBLE UNIT SUBSTATIONS**

### **HLUNGWANA 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [9 Breakers. 3 protecta relays 2 CDG O/C, 2 P125 relays, 1 O/l, 1 O/V 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	each	1		

The total of the Prices	

# **DUMBE 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [6 Breakers. 1 KCGG 122 O/C. 1 differential relay. 2 restr. E/F. 2 transf. Flag trip. Micom P122 & P125. 1 Siemens duobias & 1 argus. 2 Protecta. 2 SF 6 trip and gas analyses. Earth reading & integrity.]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	each	1		

The total of the Prices	

# **MQWABE 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [9 Breakers. 4 Protecta relays. 2 CDG O/C, 2 P125 relays, 1 O/L, 1 O/V 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	each	1		

The total of the Prices	

## **SIKAME 88/25kV SUBSTATION**

two (2) years

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [4 Protecta relays. 2 CDG O/C, 2 P125 relays, 1 O/L, 1 O/V, 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	each	1		

The total of the Prices	

### **ISWEPE 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [9 Breakers. 4 Protecta relays. 2 CDG O/C, 2 P125 relays, 1 O/L, 1 O/V 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	Each	1		

The total of the Prices	

### **WILDRAND 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [9 Breakers. 4 Protecta relays. 2 CDG O/C, 2 P125 relays, 1 O/L, 1 O/V 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	Each	1		

The total of the Prices	

### **MOOLMAN 88/25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at traction substation); [9 Breakers. 4 Protecta relays. 2 CDG O/C, 2 P125 relays, 1 O/L, 1 O/V 4 restr. E/F, 2 Transformer Flag-trip relays, 2 CDG. O/C. 2 SF 6 trip and gas analyses. Earth reading & integrity.	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of both units Transformer Oil	each	1		
7	Dew point testing for SF6 PCB	each	1		

The total of the Prices	

two (2) years

TRANSNET Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of

# **DOUBLE UNIT TRACK SECTIONING SUBSTATIONS (TSS)**

#### **VRYHEID EAST 25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (All relays and other related protection equipment's at TSS); [8 breakers. 7 protecta relays. Earth reading & integrity]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
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#### **SHEEPMOOR 25kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (All relays and other related protection equipment's at TSS); [8 breakers. 4 protecta relays. Earth reading & integrity]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	

two (2) years

TRANSNET Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S.), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of

# **SINGLE BREAKER TRACK SECTIONING STATIONS (TSS)**

#### PIET RERETIEF TRACK SECTIONING STATION

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the TSS (1 Breaker. 1 thermal. 1 CAG instantaneous O/L Earth reading & integrity and other related protection equipment's at TSS)	each	1		
2	Do minor repair when required (TSS protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	

#### **HLELO RIVER TRACK SECTIONING STATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the TSS (1 Breaker. 1 Micom P122 O/L Earth reading & integrity and other related protection equipment's at TSS)	each	1		
2	Do minor repair when required (TSS protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
-	

#### 11KV DISTRIBUTION SUBSTATIONS

#### **ISWEPE 88/11kV SUBSTATION**

two (2) years

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at the substation); [4 Breakers. 3 Siemens relays. 1 ABB O/C. E/F. 1 SF 6 gas analyses 1 Transformer flag trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of Transformer Oil	each	1		

The total of the Prices	

### **HLUNGWANA 88/11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at the substation); [4 Breakers. 1 Asea O/C. E/F. 1 SF 6 gas analyses. 1 Transformer flag trip. 3 Siemens relays.]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		
6	Testing of Transformer Oil	each	1		

The total of the Prices	
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### 11 KV RINGFEED SUBSTATIONS

#### **VRYHEID MAIN 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (PCBs, CTs, VTs, all relays and other related protection equipment's at the substation); [8 Breakers. 7 Siemens relays. 1 Frame leakage 2 Solkor. 2 Transformer flag trip relays.]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	

#### **VRYHEID WORKS INSP 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (Breakers, CTs, VTs, all relays and other related protection equipment's at the substation); [5 Breakers. 2 Solkor. 4 Siemens. 1 Frame leakage. 2 Transf. trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
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#### **VRYHEID YARD 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (Breakers, CTs, VTs, all relays and other related protection equipment's at the substation); [5 Breakers. 2 Solkor. 4 Siemens. 1 Frame leakage. 2 Transf. trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	

#### **VRYHEID ADMIN 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (Breakers, CTs, VTs, all relays and other related protection equipment's at the substation); [5 Breakers. 2 Solkor. 4 Siemens. 1 Frame leakage. 2 Transf. trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
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#### **VRYHEID CTC 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (Breakers, CTs, VTs, all relays and other related protection equipment's at the substation); [6 Breakers. 2 Solkor. 4 Siemens. 1 Frame leakage. 2 Transf. trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
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#### **VRYHEID DIESEL DEPOT 11kV SUBSTATION**

Item no	Description	Unit	Quantity	Rate	Price
1	Do complete protection testing of the substation (Breakers, CTs, VTs, all relays and other related protection equipment's at the substation); [5 Breakers. 2 Solkor. 4 Siemens. 1 Frame leakage. 2 Transf. trip]	each	1		
2	Do minor repair when required (Substation protection related defects) Rate per Hour per Team.	hour	1		
3	Material Mark Up	%	1	15%	
4	Accommodation cost per night per team	each	1		
5	Travel rate cost per kilometre	Km	1		

The total of the Prices	
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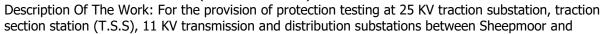
#### **POLE MOUNTED RECLOSERS**

#### **MOOLMAN INFEED**

Item no	Description	Unit	Quantity	Rate	Price
1	Moolman infeed	each	1		
2	Paul Pietersburg infeed	each	1		
3	Kemp infeed	each	1		
4	Iswepe infeed	each	1		
5	Do minor repair when required (Reclosers protection related defects) Rate per Hour per Team.	hour	1		
6	Material Mark Up	%	1	15%	
7	Accommodation cost per night per team	each	1		
8	Travel rate cost per kilometre	Km	1		

The total of the Prices	

Tender Number: SIM22028CIDB (ERAC-VYG-40124)







# **PART C3: SERVICE INFORMATION**

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Tender Number: SIM22028CIDB (ERAC-VYG-40124)
Description Of The Work: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and



TRANSNET

Vryheid on an "as and when" required basis for a period of two (2) years

### **C3.1 EMPLOYER'S SERVICE INFORMATION**

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	1.3	Interpretation and terminology	
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Description Of The Work: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and

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#### 1 Description of the Service

#### 1.1 Executive overview

The Service that the Contractor is to perform involves the testing and commissioning of Substation Protection equipment on an as and when basis over a period of 24 months. This contract also caters for emergency breakdowns, where equipment is to be tested within 24 hours of activation.

The area this tender covers is between Sheepmoor and Vryheid. There is a total of 9 x 25kV Traction Substation (7 Double Units and 2 Track Sectioning Station (TSS)), 2 Single breaker Track Section Station (TSS). There is also  $2 \times 88/11$ KV Distribution Substation,  $6 \times 11$ kV Distribution Ring Substations and 4 Pole mounted auto reclose.

#### 1.2 Employer's objectives

The *Employer*'s objectives is to ensure that our electrical systems are properly protected and safe for the operation and the safety of the employees is adhered with the provision of the Occupational Health and Safety Act (Act 85 of 1993).

#### 1.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
AIA	Authorised Inspection Authority
BBBEE	Broad Based Black Economic Empowerment
CEMP	Construction Environmental Management Plan
CD	Compact Disc
CDR	Contractor Documentation Register
CDS	Contractor Documentation Schedule
CRL	Contractor Review Label
CSHEO	Contractor's Safety, Health and Environmental Officer
CM	Construction Manager
DTI	Department of Trade and Industry
DGN	
DWG	Drawings
EDMS	
EO	Environmental Officer
HAW	Hazard Assessment Service hop
HAZOP	Hazard and Operability Study
HSSP	Health and Safety Surveillance Plan
INC	Independent Nominated Consultant
IP	Industrial Participation
IR	Industrial Relations
IPP	Industrial Participation Policy
IPO	Industrial Participation Obligation
IPS	Industrial Participation Secretariat

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Vryheid on an "as and when" required basis for a period of two (2) years



IRCC	Industrial Relations Co-ordinating Committee	
JSA	Job Safety Analysis	
CIRP	Contractor's Industrial Relations Practitioner	
Native	Original electronic file format of documentation	
PES	Project Environmental Specifications	
PHA	Preliminary Hazard Assessment	
PIRM	Project Industrial Relations Manager	
PIRPMP	Project Industrial Relations Policy and Management Plan	
PLA	Project Labour Agreements	
PSIRM	Project Site Industrial Relations Manager	
PSPM	Project Safety Program Manager	
PSSM	Project Site Safety Manager	
ProgEM	Programme Environmental Manager	
ProjEM	Project Environmental Manager	
QA	Quality Assurance	
R&D	Research and Development	
SANS	South African National Standards	
SASRIA	South African Special Risks Insurance Association	
SES	Standard Environmental Specification	
SHE	Safety, Health and Environment	
SHEC	Safety, Health and Environment Co-ordinator	
SIP	Site Induction Programme	
SMP	Safety Management Plan	
SSRC	Site Safety Review Committee	

#### 2 Engineering and the Contractor's design

#### 2.1 Employer's design

The *Employer*'s specification to which the contractor is to comply when performing the tests for the Service is contained in Transnet Specification BBF8128.

#### 2.2 Parts of the Service which the Contractor is to design

- 2.2.1 The *Contractor*s design where necessary for the Service shall be in accordance with Transnet Specification BBF8128 and shall take every clause into consideration.
- 2.2.2 The *Contractor* is responsible in his design for the overall integration of the design of the *Service* with the design of the *Employer* as stated under 2.1 *Employer's* design and specification above for the protection testing Service.
- 2.2.3 Unless expressly stated to form part of the design responsibility of the *Employer* as stated under 2.1 *Employer's* design above and whether or not specifically stated to form part of the design responsibility of the *Contractor* under this paragraph 2.2, all residual design responsibility and overall responsibility for the total design solution for the *Service* rests with the *Contractor*.

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description Of The Work: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and

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- 2.3.1 The *Contractor* must submit all designs to the Service Manager and/or to TFR Technical Office (JHB) for approval prior to any construction taking place.
- 2.3.2 The Contractor undertakes design safety reviews [with the Service Manager and/or TFR Technical Office representative.
- 2.3.3 Documentation Submission

In undertaking the 'Service' (including all incidental services required), the *Contractor* shall conform and adhere to the requirements of Transnet Specification BBF8128.

#### 2.4 Review and Acceptance of *Contractor* Documentation

The *Contractor* submits documentation as the '*Service* Information' requires to the *Service Manager* for review and acceptance.

In undertaking the 'Service' (including all incidental services required), the Supplier shall conform and adhere to the requirements in Transnet Specification BBF8128.

#### 2.5 Use of Contractor's design

- 2.5.1 The Contractor grants the Employer a licence to use the copyright in all design data presented to the Employer in relation to the Service for any purpose in connection with the construction, re-construction, refurbishment, repair, maintenance and extension of the Service with such licence being capable of transfer to any third party without the consent of the Contractor.
- 2.5.2 The Contractor vests in the Employer full title guarantee in the intellectual property and copyright in the design data created in relation to the Service as follows:

#### 2.6 Design of Equipment

2.6.1 The *Contractor* submits his design details of his proposed principal Equipment to the *Service Manager* for his information and approval. This must be in accordance to Transnet Specification BBF8128.

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#### 3 Construction

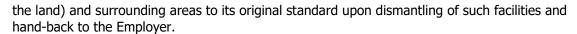
#### 3.1 Temporary *Service*, Site services & construction constraints

- 3.1.1 *Employer's* Site entry and security control, permits, and Site regulations
- 3.1.2 The *Contractor* shall comply with the following requirements of the *Employer*:
  - Access to site is only permissible after receiving a valid site access certificate from the Service Manager.
  - A site access certificate will only be issued once the Contractors safety file has been approved by the Transnet Safety representative.
  - The Service will only be executed under a work permit.
- 3.1.3 Only People who have attended the safety induction and have conformed to the requirements on the safety file are allowed on site. The working hours during normal operation is from 08H00 to 15H00, during the Coal line Shutdown from 07H00 to 17H00 and no set time during emergency conditions.
- 3.1.4 The *Contractor* keeps daily records of his people engaged on the Site and Working Areas (including Subcontractors) with access to such daily records available for inspection by the *Service Manager* at all reasonable times.
- 3.1.5 Transnet Freight Rail will not be held responsible for any loss, damage or injury to workmen while working on Transnet Freight Rail property.
- 3.1.6 The Contractor shall comply with the provision of the Occupational Health and Safety Act (Act 85 of 1993). For the purpose of this Act, the sites occupied by the Contractor is transferred, for the duration of the Contract to the control of the Contractor, as if it is his/her property. As employer, he/she is in every respect responsible for compliance with the provisions of this Act.
- 3.1.7 The Contractor shall, in particular, comply with the Compensation for Occupational injuries and Diseases Act (Act 30 of 1993). The Contractor shall produce proof of his/her registration and good standing with the Compensation Commissioner of the Act. This proof shall be submitted with the return of these documents during the tender stage.
- 3.1.8 The Contractor must at all times ensure that his/her staff working next to the railway track wears reflective clothing and does not enter nor interfere with the railway track.
- 3.1.9 No making of fires for whatever reason will be permitted on site. Any claims arising from the making or burning of farmer's property from such fires will be for the account of the Contractor.
- 3.1.10 The *Contractor* complies with the CEMP, SES and PES in the construction of the *Service*, all as described under paragraph 2.4 of C3.1 *Employer's* Service Information.
- 3.1.11 The Contractor has no title to all Materials arising from excavation and demolition in the performance of the Service.
- 3.1.12 The Contractor does not advertise the contract or the project to any third party, nor communicate directly with the media (in any jurisdiction) whatsoever without the express written notification and consent of the Service Manager.
- 3.1.13 The Contractor keeps daily records of his Equipment used on Site and the Working Areas (distinguishing between owned and hired Equipment) with access to such daily records available for inspection by the Project Manager at all reasonable times.
- 3.1.14 Wherever the Employer provides facilities (including, inter alia, temporary power, water, waste disposal, telecommunications, etc.) for the Contractor's use within the Working Areas and the Contractor adapts such facilities for use, the Contractor makes good and provides full reinstatement to the land (including all apparatus of the Employer and Others in, on or under

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- 3.1.15 Wherever the Contractor provides facilities (either his own or for the Service Manager and/or Supervisor) and all items of Equipment, involving, inter alia, offices, accommodation, laboratories, Material storage, compound areas etc., within the working Areas, the Contractor makes good and provides full reinstatement to the land (including all apparatus of the Employer and Others in, on or under the land) and surrounding areas to its original standard, upon dismantling of such facilities and items of Equipment.
- 3.1.16 Unless expressly stated as a responsibility of the Employer as stated site services and facilities, all residual requirements for the provision of the facilities and all items of Equipment necessary for the Contractor to Provide the Service remains the responsibility of the Contractor.
- 3.1.17 Any cable damaged during trenching, etc. will be for the cost of the Contractor. No cable joints will be acceptable. A new cable is to be installed. Damage to any Transnet assets on site will be for the cost of the Contractor.
- 3.1.18 The Contractor to ensure that the noise levels, dust, water and waste are controlled.
- 3.1.19 The Electrician/responsible person from Transnet Freight Rail will provide access to the substation and will isolate all equipment before handing it over for testing purposes. No work shall be done in any substation with the presence of a Transnet Freight Rail representative.

#### 3.2 Completion, testing, commissioning and correction of Defects

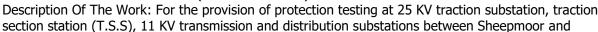
3.2.1 The contract ends 24 months after signing the contract. The Service will be carried out on an as and when basis.

On or before the Completion Date the Contractor shall have done everything required to Provide the Service including the work listed below which is to be done before the Completion Date and in any case before the dates stated. The Service Manager cannot certify Completion until all the work listed below has been done and is also free of Defects, which would have, in his opinion, prevented the Employer from using the Service and Others from doing their work.

The Contractor is to supply latest copy of Calibration Certificates of testing equipment being used. Only Omnicron, Megger SMRT1 or approved Electronic test sets can be used for the testing of all electronic protection relays. Reports drawn from the test set must accompany all test sheets.

Description of work – Refer to BBF8128	To be completed by
The complete testing of all electrical protection relays, CT's, VT's, speed tests of breakers, SF6 Dew Point test, transformer oil testing, substation earthing and other related protection equipment at traction substations between Sheepmoor and Vryheid	On the day the outage is planned for.
Perform minor repairs and re-testing where faulty equipment is identified during the above testing period. The Contractor will supply all material required for these repairs including Protection Relays at market related cost.	On the day the outage is planned for.
Commissioning of new Protection Panels, Transformers and other new installations as and when required.	On the day the outage is planned for.
Testing and minor repair work (as and when required) at any substation between Sheepmoor	On the day the outage is planned for.

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and Vryheid for the next 12 months whenever protection equipment is found to be faulty or suspected faulty.	
Transformer Oil Testing Drawing of an Oil sample and having the Oil Analysed is to be carried out whenever the Substation is being test but this is also required during Emergency Breakdown conditions on a as and when basis. The Following Tests needs to be performed: Acidity, Dielectric Strength Test, Dissolved Gas Analysis, polychlorinated biphenyl (PCB) and Furan.	On the day the outage is planned for.
The Contractor must be able to respond to breakdowns or Emergency call outs within 12 hours of receiving such a call or activation.	On the day the outage is planned for.
The Contractor to provide a two day training session to Transnet Engineers and Technicians on Substation Protection Testing. (1 day in an office and 1 day at a Substation) based on Transnet Specification BBF8128.	Within six months of signing the Contract.

- 3.2.2 The *Contractor* is permitted to carry out the following *Service* after Completion: Minor defects as seem fit to do so by the Service Manager.
- 3.2.3 The Contractor ensures that the documentation as described under paragraph 3.2.5 of the Service Information is presented to the Service Manager before Completion.
- 3.2.4 The Contractor ensures that the Service Manager has a full and accurate dossier of As-built documents that represent the state combination of Mechanical, Electrical, General layout status of the completed Service.
- 3.2.5 Some of the test include the following but not limited to it. Refer to Transnet Specification for BBF8128 for more detail.

#### 88/25KV Traction Substations the following routine testing must be performed.

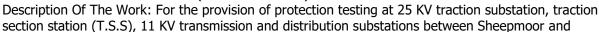
- BBF8995: Current transformers: Ratio and Magnetisation curves. Protection Relays Main Overload and Restricted/Duo Biased Earth Fault Protection. Buchholz, Over-temperature, PRD, Battery Under voltage Relay and Earth Resistance measurement.
- BBF8996: Current transformer: Ratio and Magnetisation curves. Battery Under voltage Relays. Protection Relays: IDMT, Reverse power, Thermal Overload and Distance Protection.
- BBF8998: Primary Circuit Breakers: Contact Resistance and Operational Timing tests.
   Secondary Circuit Breakers (VCB's): Contact Resistance and Operational Timing tests.
- BBB0347: Substation Defect Report.
- Dew Point Test once off

#### Track Sectionalising Station (TSS) the following routine testing must be performed.

- BBF8996: Current transformer: Ratio and Magnetisation curves. Battery Under voltage Relay. Protection Relays: Overcurrent.
- BBF8998: Circuit Breakers: Contact Resistance and Operational Timing tests.
- BBB0347: TSS Defect Report.

#### 88/11KV Distribution Substations the following routine testing must be performed.

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- BBF9297: Current Transformers: Ratio, Magnetisation curves and Polarity tests. Protection Relays: Overload, Earth fault, Sensitive Earth Fault and Cable Protection. Transformer Protection.
- BBB0344: Transformer protection Trafogaurd T100.
- BBB0348: Transformer Insulation & Ratio tests.
- BBB0347: Substation Defect Report.

### **11KV Distribution Ring Substation**

- BBF9296: Frame Leakage Protection: Current Transformer Ratio and Mag Curves. Zone Relay inter-tripping. Insulation Resistance and Pressure Tests. Voltage Transformer and Indication tests. Battery Under voltage protection. Earth Resistance Measurement.
- BBF9297: Current Transformers: Ratio, Magnetisation curves and Polarity tests. Protection Relays: Overload, Earth fault, Sensitive Earth Fault and Cable Protection. Transformer Protection.
- BBB0344: Transformer protection Trafogaurd T100.
- BBB0346: Electrical Light and Power.
- BBB0347: Substation Defect Report.
- BBB0348: Transformer Insulation & Ratio tests.

### **Earthing Test**

• Earth spike readings at transmission line terminations and stepdown points.

# 4 Schedule of Requirements – Equipment to be Tested in various Substations

### 4.1 Equipment to be tested and Test Sheets

- 4.1.1 The *Contractor* must ensure that all equipment is tested or commissioning in accordance to Transnet Specification BBF8128 and the correct Test Sheets is made use off.
- 4.1.2 For the testing of Protecta Relays (25kV Distance Protection Relay), print outs from the test equipment must be provided.
- 4.1.3 Two copies of all the Test Sheets must be printed out. One copy to be placed at the Substation Test book and the second copy handed to the Service Manager.

### 5 Plant and Materials Standards and Workmanship

### 5.1 Investigation, Survey and Site Clearance

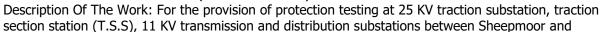
5.1.1 During the site briefing session, the Contractor is to conduct all necessary investigation regarding the Service.

### 5.2 Cabling and Wiring

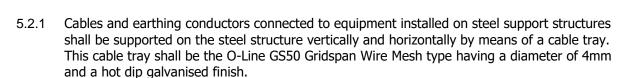




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- 5.2.2 The cables shall be fixed to the cable trays using UV stabilised cable ties.
- 5.2.3 All dissimilar connections (Cu to Al) shall be made using bi-metallic clamps that are specifically designed and manufactured to make that particular connection (ad hoc fabricated clamps are not acceptable).
- 5.2.4 All Cu connections to steel shall be tinned and connected to the Earth mat.
- 5.2.5 Cabling and wiring shall be in accordance to Transnet Specification CEE 0111 ISS 2019.
- 5.2.6 In doing any cabling, the ballast stone shall be removed, trenching and laying of the cables, the soil compacted back and the ballast washed and placed back neatly.
- 5.2.7 No joining of cables or busbar is accepted. The contractor shall provide cables or busbar that are long enough for the application. No junction boxes underground shall be used.
- 5.2.8 The contractor shall install new cables to connect between all the outdoor yard and the indoor equipment. He shall also do all the connection and interconnections.

### 5.3 Clearances

The following safety clearances shall be maintained between any live conductor and earthed metal.

Highest phase to phase r.m.s. voltage	72KV	100KV	145KV
Safety clearance	770mm	1000mm	1450mm

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### **SECTION 2**

### 6 Management and start up

### 6.1 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Service Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Weekly – every Friday at 11H00	Teleconference	Employer, Service Manager, Contractor and as necessary an appropriate delegate.
Overall contract progress and feedback	Weekly – every Friday at 11H00	Teleconference	Employer, Service Manager, Contractor and as necessary an appropriate delegate.

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *Service*. Records of these meetings are to be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

All meetings are to be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register are not to be used for the purpose of confirming actions or instructions under the contract as these are to be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

### **6.2 Documentation Control**

In undertaking the 'Service' (including all incidental services required), the Contractor shall conform and adhere to the requirements of the 'Contractor Documentation Submittal Requirements'

During the execution of the Service the Contractor is to keep a daily site diary with two carbon copy pages. This diary will be signed by the Contractor and Service Manager on a daily basis.

### 6.3 Safety risk management

- 6.3.1 The *Contractor* complies with the following SMP: Site cardinal rules, Project site induction, Hazard management on site, Risk assessment, Daily safe task instructions, Occupational health and hygiene, Safe systems of work, Incident management, Site management (as a minimum)
- 6.3.2 *Contractor* ensures that its Subcontractors comply with the requirements of the SMP.
- 6.3.3 The Contractor makes the SMP available to its employees and subcontractors in the language of this contract and the other local languages as required.

### 6.4 Environmental constraints and management

6.4.1 The *Contractor* complies with the following ENV-STD-001 Rev01 (CEMP):

The *Contractor* performs the *Service* and all construction activities within the Site and Working Areas having due regard to the environment and to environmental management practices as more particularly described within the SES and PES.

The SES describes the minimal acceptable standard for environmental management for a range of environmental aspects commonly encountered on construction projects and sets environmental objectives and targets, which the *Contractor* observes and complies.

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The PES may require higher minimal standards than those described in the SES as may be required by the *Service Manager* or Others.

The overarching obligations of the *Contractor* under the CEMP before construction activities commence on the Site and/or Working Areas is to provide an environmental method statement for a particular construction operation at the Site and/or Working Area by the *Contractor* and where requested by the CM and to comply with the following:

Where relevant, method statements, as detailed in the SES and PES, shall be provided by the *Contractor*. These include, but are not limited to, the following where applicable:

- Establishment of construction lay down area
- Hazardous and non-hazardous solid waste management
- Storm water management
- Contaminated water management
- Prevention of marine pollution
- Hydrocarbon spills
- Diesel tanks and refuelling procedures
- Dust control
- Spoil dumping
- · Sourcing, excavating, transporting and dumping of fill material
- Noise and vibration control
- Removal of rare, endemic or endangered species
- Removal and stockpiling of topsoil
- · Rodent and pest control
- Environmental awareness training
- Site division
- Emergency procedures for environmental incidents
- Contractor's SHE Officer
- Closure of construction lavdown area

The *Contractor* shall ensure that his management, foremen and the general workforce, as well as all suppliers and visitors to Site have attended the Induction Programme prior to commencing any *work* on Site. If new personnel commence work on the Site during construction, the *Contractor* shall ensure that these personnel undergo the Induction Programme and are made aware of the environmental specifications on Site.

The *Contractor* must appoint a sufficient number of named assistants to the CSHEO to monitor environmental issues e.g. litter, spills, illegal activities, fence patrol, dust etc. These appointments, along with details of the individuals being appointed and job descriptions, must be sent to the *Service Manager* for his approval.

During the construction period, the *Contractor* complies with the following:

A copy of the SES, and the relevant PES shall be available on Site, and the *Contractor* shall ensure that all the personnel on Site (including Subcontractors and their staff) as well as suppliers are familiar with and understand the specifications contained in the SES (as amended by the PES).

Method statements that are required during construction must be submitted to the *Service Manager* for approval at least 20 days prior to the proposed commencement of the activity. Emergency construction activity method statements may also be required. The activities requiring method statements cannot commence if they have not been approved by the *Service Manager*.

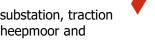
Where applicable, the *Contractor* shall provide job-specific training on an *ad hoc* basis when workers are engaged in activities, which require method statements.

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The *Contractor* shall ensure that any Materials delivery drivers are informed of all procedures and restrictions (e.g. which access roads to use, no go areas, speed limits, noise, etc) required by the CEMP before they arrive at Site and off load any Materials.

The *Contractor* shall be responsible for rehabilitating and re-vegetating all areas to the satisfaction of the *Service Manager* as detailed in the SES and PES.

The *Contractor* shall clear and clean the Site and Working Areas and ensure that everything not forming part of the *Service* is removed from the Site and Working Areas and that all rehabilitation has taken place in accordance with the PES.

The Contractor complies with environmental inspections and audits as contained within Annexure ENV-STD-001 Rev01

The *Contractor* makes copies of the CEMP, SES and PES available at the offices of the *Contractor* on Site. The *Contractor* ensures that all personnel on Site (including Subcontractors) are familiar with and understand the requirements of the CEMP.

6.4.2 The *Contractor* complies with the following SES:

The *Contractor* shall identify the kinds of environmental impacts that will occur as a result of his activities and then prepare separate method statements describing how each of those impacts will be prevented or managed so that the standards set out in this document are achieved. These method statements will be prepared in accordance with the requirements set out in the CEMP.

To ensure that environmental issues are taken into account in the establishment of the Site offices and all other facilities on Site.

- 6.4.3 The *Contractor* must comply with the PES, CEMP and SES. The Contractor abides by the instructions of the Service Manager regarding the implementation of the CEMP.
- 6.4.4 The lines of communication of the various personnel acting on behalf of the *Service Manager* who communicate to the *Contractor* and his keys persons with respect to the CEMP are contained within Annexure , see ENV-STD-001 Rev01

### 6.5 Quality assurance requirements

- 6.5.1 The *Contractor* shall have, maintain and demonstrate its use to the *Service Manager* (and/or the *Supervisor* to satisfy the requirements of the documented Quality Management System to be used in the performance of the *Service*. The *Contractor's* Quality Management System shall conform to International Standard ISO 9001 (or an equivalent standard acceptable to the *Service Manager*).
- 6.5.2 The *Contractor* submits his Quality Management System documents to the *Service Manager* as part of his programme under ECC Clause 31.2 to include details of:
  - Quality Plan for the contract;
  - Quality Policy
  - Index of Procedures to be used; and
  - A schedule of internal and external audits during the contract
- 6.5.3 The *Contractor* develops and maintains a comprehensive register of documents that will be generated throughout the contract including all quality related documents as part of its Quality Plan.
- 6.5.4 The *Service Manager* indicates those documents required to be submitted for either information, review or acceptance and the *Contractor* indicates such requirements within his register of documents. The register shall indicate the dates of issue of the documents with the *Service Manager* responding to documents submitted by the *Contractor* for review or acceptance within the *period for reply* prior to such documents being used by the *Contractor*.
- 6.5.5 The Quality Plan means the *Contractor's* statement, which outlines strategy, methodology, resources allocation, QA and Quality Control co-ordination activities to ensure that the *Service* meet the standards stated in the *Service* Information.

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- 6.6.1 The *Contractor* shows on each programme he submits to the *Service Manager*, the requirements of the [CEMP, SES, PES and SMP] as described under paragraph 2.4 of the Service Information, together with the associated environmental method statements.
- 6.6.2 The *Contractor* shows on each programme he submits to the *Service Manager*, the requirements of Health and Safety issues, design issues, construction operations and procurement issues.
- 6.6.3 The Contractor uses MS Projects or Primavera for his programme submissions or a similar programme software package subject to prior written notification and acceptance by the Service Manager.
- 6.6.4 The *Contractor* shows on his Accepted Programme and all subsequently revised programmes schedules showing the critical path or paths and all necessary logic diagrams demonstrating sequence of operations.
- 6.6.5 The *Contractor's* programme shows duration of operations in working days.
- 6.6.6 The *Contractor's* programme shows the following levels:
  - Level 1 Master Schedule defines the major operations and interfaces between engineering design, procurement, fabrication and assembly of Plant and Materials, transportation, construction, testing and pre-commissioning, commissioning and Completion.
  - Level 2 Project Schedule summary schedules 'rolled up' from Level 3 Project Schedule described below
  - Level 3 Project Schedule detailed schedules generated to demonstrate all operations identified on the programme from the starting date to Completion. Individual operations will be assigned a code. The Service Manager notifies any subsequent layouts and corresponding filters on revised programmes
  - Level 4 Project Schedule detailed discipline speciality level developed and maintained by the
     Contractor relating to all operations identified on the programme representing the daily
     activities by each discipline
- 6.6.7 The *Contractor* shows on each revised programme he submits to the *Service Manager* a resource histogram showing planned progress versus actual, deviations from the Accepted Programme and any remedial actions proposed by the *Contractor*.
- 6.6.8 The *Contractor* submits programme report information to the *Service Manager on weekly* intervals in addition to the intervals for submission of revised programmes stated under Contract Data Part One.
- 6.6.9 The *Contractor's* weekly programme narrative report includes:
  - Level 4 Project Schedule showing two separate bars for each task i.e. the primary bar must reflect the current forecast dates and the secondary bar the latest Accepted programme.
  - 3-week Look ahead Schedule showing two separate bars for each task i.e. the primary bar must reflect the current forecast dates and the secondary bar the latest Accepted programme.
  - Manpower Histogram reflecting actual, forecasted and planned activities
  - S-curves reflecting the actual percentage complete versus the planned percentage for the overall contract utilising the earned values as calculated by the detailed progress report.

### 6.7 The Contractor's Invoices

- 6.7.1 When the *Service Manager* certifies payment (see ECC Clause 51.1) following an assessment date, the *Contractor* complies with the *Employer's* procedure for invoice submission.
- 6.7.2 The invoice must correspond to the *Service Manager's* assessment of the amount due to the *Contractor* as stated in the payment certificate.
- 6.7.3 The invoice states the following:



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Invoice addressed to Transnet SOC Ltd;

Transnet SOC Limited's VAT No: 4720103177;

Invoice number;

The Contractor's VAT Number; and

The Contract number.

Purchase Order number

The invoice contains the supporting details.

- 6.7.4 The invoice is presented either by post or by hand delivery.
- 6.7.5 Invoices submitted by post are addressed to:

Transnet SOC Ltd P O Box 8621

Johannesburg

2000

For the attention of Central Accounting

A copy of the Invoice must also be submitted to the Service Manager either by email or by hand.

The invoice is presented as an original.

### 6.8 People

6.8.1 Minimum requirements of people employed on the Site.

Safety File approved by Transnet safety officers.

People on site must have a valid medical certificate and they must appear on the organogram on the safety file.

Attend the compulsory Transnet Freight Rail safety induction.

Have all appropriate Personal Protective Equipment (PPE)

6.8.2 The *Contractor* complies with the following PIRPMP

### a) CONTRACTOR LIABILITY

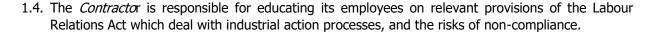
- 1.1. The *Contractor* warrants that it will be liable to Transnet for any loss or damage caused by strikes, riots, lockouts or any labour disputes by and/or confined to the *Contractor's* employees, which loss will include any indirect or consequential damages;
- 1.2. The *Contractor* warrants that no negotiations or feedback meetings by the *Contractor's* employees shall take place on Transnet premises, whether owned or rented by Transnet.
- 1.3. *The* Contractor shall give notice to Transnet of any industrial action by the *Contractor's* employees immediately upon becoming aware of any actual or contemplated action that is or may be carried out on Transnet's premises, whether owned or rented, and shall notify Transnet of all matters associated with such action that may potentially affect Transnet.



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1.5. The *Contractor* is required to develop a Contingency Strike Handling Plan, which plan the *Contractor* is obliged to update on a three monthly basis. The *Contractor* must provide Transnet with this plan and all updates to the Plan. The *Contractor* is responsible to communicate with its employees on site details of the plan.

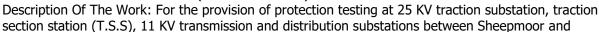
### b) INDUSTRIAL ACTION BY CONTRACTOR EMPLOYEES

- 1.6. In the event of any industrial action by the Contractor's employees, the Contractor is required to provide competent contingency resources permitted in law to carry out any of the duties that are or could potentially be interrupted by industrial action in delivering the Service.
- 1.7. The Contractor warrants that it will compensate Transnet for any costs Transnet incurs in providing additional security to deal with any industrial action by the Contractor's employees.
- 1.8. In the event of any industrial action by the Contractor's employees, the Contractor is obliged:
  - 1.8.1. To prepare and deliver to Transnet, within two (2) hours of the commencement of industrial action an Industrial Action Report. If the industrial action persists the Contractor is required to deliver the report at 8h30 each day.
  - 1.8.2. The Industrial Action Report must provide at least the following information:
    - 1.8.2.1. Industrial incident report,
    - 1.8.2.2. Attendance register,
    - 1.8.2.3. Productivity / progress to schedule reports,
    - 1.8.2.4. Operational contingency plan,
    - 1.8.2.5. Site security report,
    - 1.8.2.6. Industrial action intelligence gathered.
  - 1.8.3. The final Industrial Action Report is to be delivered 24 hours after finalisation of the industrial action.
  - 1.8.4. The management of the Contractor is required to hold a daily industrial action teleconference with personnel identified by Transnet to discuss the industrial action, settlement of the industrial action, security issues and the impact on delivery under the contract.
- 1.9. The resolution of any disputes or industrial action by the Contractor's employees is the sole responsibility of the Contractor.
- 1.10. Access to Transnet premises by the Contractor and its employees is only provided for purposes of the Contractor delivering its services to Transnet. Should the Contractor and its employees not, for any reason, be capable of delivering its services Transnet is entitled to restrict or deny access onto its premises and unless otherwise authorized; such person will deemed to be trespassing.

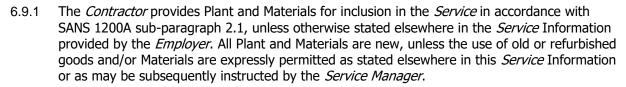
### 6.9 Plant and Materials

TRANSNET

Tender Number: SIM22028CIDB (ERAC-VYG-40124)



Vryheid on an "as and when" required basis for a period of two (2) years



- 6.9.2 Where Plant and Materials for inclusion in the *Service* originate from outside the Republic of South Africa, all such Plant and Materials are new and of merchantable quality, to a recognised national standard, with all proprietary products installed to manufacturers' instructions.
- 6.9.3 The *Contractor* replaces any Plant and Materials subject to breakages (whether in the Working Areas or not) or any Plant and Materials not conforming to standards or specifications stated and notifies the *Service Manager* and the *Supervisor* on each occasion where replacement is required.
- 6.9.4 The Plant and Materials provided by the *Employer* are solely at the risk of the *Contractor* for inclusion in the *Service*. The *Contractor* takes responsibility for ensuring the Plant and Materials do not contain a Defect(s) and are in compliance with the standards stated elsewhere in the *Service* Information.
- 6.9.5 All Equipment used for the testing and commissioning must carry a valid calibration certificate. Tenderers are to provide a copy of the latest calibration certificate for all testing equipment in their tender response.

### 6.10 Tests and inspections before delivery

6.10.1 The *Contractor* submits to the Supervisor details to certify that tests and inspections have been carried out on Plant and Materials by others. Provide a copy of the latest calibration certificate for all testing equipment to be used during the Service.

### 6.11 Preparation of post Completion contracts

6.11.1 The *Contractor* provides the following:

On completion of a test, the contractor will be required to fill out the test sheets as supplied in the annexures and stick it in the test book and also email the test sheets to the Service Manager.

Any uncertainties will be discussed at the site meting and all technical related queries must be referred to the Service Manager of the contract.

TRANSNET

Contract Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### **PART 4: AFFECTED PROPERTY**

Core clause 11.2(2) states

"Affected Property is property which

- Is affected by the work of the Contractor or used by the Contractor in Providing the Service
- is in the documents which the Contract Data states it is in."

In Contract Data, reference has been made to this Part 4 of the contract for the location of the Affected Property .

### 1. Description of the Affected Property and its surroundings

### 1.1. General description

Vryheid East, Sikame, Maqwabe, Dumbe, Hlungwana Substation and T.S.S are situated in KwaZulu-Natal. Moolman, Piet Retief, Wildrand, Hlelo, Iswepe, Sheepmoor Substations and T.S.S are situated in Mpumalanga.

From Vryheid Depot to Vryheid East T.S.S is about 6km.

From Vryheid Depot to Sikame Sub is about a 10 km.

From Vryheid Depot to Magwabe Sub is about a 35 km.

From Vryheid Depot to Dumbe Sub is about a 46 km.

From Vryheid Depot to Hlungwana Sub is about a 65 km.

From Vryheid Depot to Moolman Sub is about 89 km.

From Vryheid Depot to Piet Retief T.S.S is about a 106 km.

From Vryheid Depot to Wildrand Sub is about a 122 km.

From Vryheid Depot to Hlelo Sub is about 144 km.

From Vryheid Depot to Iswepe Sub is about a 141 km.

From Vryheid Depot to Sheepmoor Sub is about a 170 km.

All Substations have Voltage levels of 11KV, 25KV and 88KV. During the Coalline Shutdown, the substation will be isolated by a Transnet representative and the Contractor must sign the Work permit before any work may commence.



Contract Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

2,000

Traction Substation		
or TSS	<u>Latitude</u>	<u>Longitude</u>
Antra	26°34'30.66"S	30° 1'48.09"E
Overvaal	26°41'13.37"S	30° 7'56.13"E
Sheepmoor	26°42'53.64"S	30°18'30.14"E
Iswepe	26°49'15.60"S	30°28'59.26"E
Hlelo	26°52'2.73"S	30°35'30.84"E
Wildrand	26°54'30.18"S	30°43'46.58"E
Piet Retief	27° 1'44.67"S	30°47'22.76"E
Moolman	27° 8'2.22"S	30°51'34.45"E
Hlungwana	27°21'48.81"S	30°52'1.09"E
Dumbe	27°25'8.41"S	30°52'27.05"E
Mqwabe	27°32'29.55"S	30°47'14.32"E
Sikame	27°45'24.62"S	30°51'16.82"E
Vryheid East	27°48'24.24"S	30°49'32.54"E

### 1.2. Existing buildings, structures, and plant & machinery on the Affected Property

The site is easily accessible with a crane truck.

### 1.3. Subsoil information

No information available.

Contract Number: SIM22028CIDB (ERAC-VYG-40124)



Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### 1.4. Hidden services

Earth Mat and electrical cables

### 1.5. Other reports and publicly available information

From past experience, the site can be a hotspot for the local community to invade and demand employment. It is therefore advisable to employ the local community where possible

Tender Number: SIM22028CIDB (ERAC-VYG-40124)

Description of the Service: For the provision of protection testing at 25 KV traction substation, traction section station (T.S.S), 11 KV transmission and distribution substations between Sheepmoor and Vryheid on an "as and when" required basis for a period of two (2) years

### TRANSNET

TRANSNET



(REGISTRATION NO.1990/000900/30)

## TRADING AS TRANSNET FREIGHT RAIL

### **ADDENDUM NO. 1**

# TO THE SECONDARY AND GENERAL SPECIFICATIONS OF THE CONTRACT

- 1) Where ever the word "South African Transport Services" or "Spoornet" appears in these specifications, please replace it with "Transnet Freight Rail".
- 2) Where ever the words "Technical Officer" appear in these specifications, please replace with "Supervisor".



### **Mandatary Agreement**

OCCUPATIONAL HEALTH AND SAFETY ACT 85 of 1993 (AS AMENDED)

### **AGREEMENT WITH MANDATORY**

In terms of Section 37(1) & (2)

### WRITTEN AGREEMENT ENTERED INTO AND BETWEEN

### **Transnet SOC Ltd**

(Hereinafter referred to as the Employer)

	AND
(He	ereinafter referred to as Mandatory (Principal Contractor)
Compensation Fund Number	:
Project Name	:





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### 28. HEADING

### **PREAMBLE**

**WHEREAS** section 37(1) & (2) of the Occupational Health and Safety Act No 85 of 1993 ("the Act") requires that parties have an agreement in writing to ensure compliance by a mandatory in line with the provisions of the Act.

**AND WHEREAS** Transnet SOC Ltd requires the services of the Contractors to execute certain projects within its workshops.

**AND WHEREAS** TRANSNET SOC LTD can be better served by Contractors who have the infrastructure, specialist employees and expertise to execute such projects at the highest level of efficiency on short notice.

### NOW THEREFORE the parties agree as follows;

### 1. DEFINITIONS

For the purpose of this agreement, unless the context indicates otherwise, the following definitions are set out for the terms indicated:

- "Act" means the Occupational Health and Safety Act No 85 of 1993;
- 1.2 "Agreement" means this Mandatary agreement;
- 1.3 **"Contractor"** means the Mandatory;
- 1.4 **"COID Act"** means the Compensation for Occupational Injuries and Diseases Act No 130 of 1993.
- 1.5 **"Effective Date"** means the date of signature of this Agreement by the last party signing hereto;
- 1.6 "Employer" refers to TRANSNET SOC LTD;
- 1.7 **"Mandatary**" means an agent, Contractor or sub-contractor for work, but without derogating from the status in his own right as an employer or user;
- 1.8 "Parties" means TRANSNET SOC LTD and the Contractor, and "Party" shall mean either one of them, as the context indicates;
- 1.9 "Principal Contract" means the appointed contractor whereby such contractor has to provide goods and or services to TRANSNET SOC LTD.
- 1.10 **"Regulations**" means regulations promulgated in terms of the relevant legislation.
- 1.11 "Section" means the relevant section of the Occupational Health and Safety Act No 85 of 1993
- 1.12 "Services" means the services to be provided by the Contractor to TRANSNET SOC LTD.
- 1.13 "TRANSNET SOC LTD" means Transnet Group and all its operating divisions and Specialist units with (Registration No. 1990/000900/06), a public company incorporated in accordance with the company laws of the Republic of South Africa;

### 2. INTERPRETATION



- 2.1 Clause headings in this Agreement are included for ease of reference only and do not form part of this Agreement for the purposes of interpretation or for any other purpose. No provision shall be construed against or interpreted to the disadvantage of either Party hereto by reason of such Party having or being deemed to have structured or drafted such provision.
- 2.2 Any term, word or phrase used in this Agreement, other than those defined under the clause heading "Definitions" shall be given its plain English meaning, and those terms, words, acronyms, and phrases used in this Agreement will be interpreted in accordance with the generally accepted meanings accorded thereto.
- 2.3 A reference to the singular incorporates a reference to the plural and vice versa.
- 2.4 A reference to natural persons incorporates a reference to legal persons and vice versa.
- 2.5 A reference to a particular gender incorporates a reference to the other gender.

### 3. REPORTING

3.1 The Mandatary and/or his designated person appointed in terms of Section 16(2) of the Occupational Health and Safety Act 85 of 1993 ("the OHS Act") shall report to the Risk Manager and/or a Project Manager and/or a representative designated by the Employer prior to commencing the work at the premises of the Employer.

### 4. WARRANTY OF COMPLIANCE

- 4.1 In terms of this Agreement the Mandatary warrants that he agrees to any of the arrangements and procedures as prescribed by the Employer and as provided for in terms of Section 37(2) of the OHS Act for the purposes of compliance with the OHS Act.
- 4.2 The Mandatary further warrants that he and/or his employees undertake to maintain such compliance with the OHS Act. Without derogating from the generality of the above, nor from the provisions of the said Agreement, the Mandatary shall ensure that the clauses as hereunder described are at all times adhered to by himself and his employees.
- 4.3 The Mandatary hereby undertakes to ensure that the health and safety of any other person on the premises is not endangered by the conduct of his activities and that of his employees.

### 5. APPOINTMENTS AND TRAINING

- 5.1 The Mandatary shall appoint competent persons as per Section 16(2) of the OHS Act. Any such appointed person shall be trained on any occupational health and safety matter and the OHS Act provisions pertinent to the work is to be performed under his responsibility. Copies of any appointments made by the Mandatary shall immediately be provided to the Employer.
- 5.2 The Mandatary shall further ensure that all his employees are trained on the health and safety aspects relating to the work to be done on the premises of the Employer and that they understand the hazards associated with such work being carried out on the premises. Without derogating from the foregoing, the Mandatary shall, in particular, ensure that all his users or operators of any materials, machinery or equipment are properly trained in the use of such materials, machinery or equipment.
- 5.3 Notwithstanding the provisions of the above, the Mandatary shall ensure that he, his appointed responsible persons and his employees are at all times familiar with the provisions of the OHS Act, and that they comply with the provisions of the Act.



### 6. SUPERVISION, DISCIPLINE AND REPORTING

- 6.1 The Mandatary shall ensure that all work performed on the Employer's a premise is done under strict supervision and that no unsafe or unhealthy work practices are permitted. Discipline regarding health and safety matters shall be strictly enforced against any of his employees regarding non-compliance by such employee with any health and safety matters.
- 6.2 The Mandatary shall further ensure that his employees report to him all unsafe or unhealthy work situations immediately after they become aware of such conditions and that he in turn immediately reports these to the Employer and/or his representative.

### 7. ACCESS TO THE OHS ACT

7.1 The Mandatary shall ensure that he has an updated copy of the OHS Act on site at all times and that this is accessible to his appointed responsible persons and employees, save that the parties may make arrangements for the Mandatary and his appointed responsible persons and employees to have access to the Employer's updated copy/copies of the Act.

### 8. COOPERATION

- 8.1 The Mandatary and/or his responsible persons and employees shall provide full co-operation and information if and when the Employer or his representative inquires into any occupational health and safety issues concerning the Mandatary. It is hereby recorded that the Employer and his representative shall at all times be entitled to make such inquiry.
- 8.2 Without derogating from the generality of the above, the Mandatary and his responsible persons shall make available to the Employer and his representative, on request, all and/or any checklists and inspection registers required to be kept by him in respect of any of his materials, machinery or equipment.

### 9. WORK PROCEDURES

- 9.1 The Mandatary shall, after having established the dangers associated with the work performed, develop and implement mitigation measures to minimize or eliminate such dangers for the purpose of ensuring a healthy and safe working environment. The Mandatary shall then ensure that his responsible persons and employees are familiar with such mitigation measures.
- 9.2 The Mandatary shall implement any other safe work practices as prescribed by the Employer and shall ensure that his responsible persons and employees are made conversant with such other safe work practices as prescribed by the Employer and that his responsible persons and employees adhere to such safe work practices.
- 9.3 The Mandatary shall ensure that work for which any permit is required by the Employer is not performed by his employees prior to the Employer obtaining such permit from the Mandatary.

### 10. HEALTH AND SAFETY MEETINGS

10.1 If required in terms of the OHS Act, the Mandatary shall establish his own health and safety committee(s) and ensure that his employees, being the committee members, provide health and safety representatives to attend the Employer's health and safety committee meetings.

### 11. COMPENSATION REGISTRATION

11.1 The Mandatary shall ensure that he has a valid proof of registration with the Compensation Commissioner, as required in terms of **COID Act**, and that all payments owing to the Commissioner are discharged. The Mandatary shall further ensure that the cover remain in force while any such employee is present on the premises.



### 12. MEDICAL EXAMINATIONS

12.1 The Mandatary shall ensure that all his employees undergo routine medical examinations and that they are medically fit for the purposes of the work they are to perform.

### 13. INCIDENT REPORTING AND INVESTIGATION

- 13.1 All incidents referred to in Section 24 of the OHS Act shall be reported by the Mandatary to the Department of Labour and to the Employer. The Employer shall further be provided with copies of any written documentation relating to any incident.
- The Employer retains an interest in the reporting of any incident as described above as well as in any formal investigation and/or inquiry conducted in terms of section 32 of the OHS-Act into such incident.

### 14. SUBCONTRACTORS

- 14.1 The Mandatary shall notify the Employer of any subcontractor he may wish to perform work on his behalf on the Employer's premises. It is hereby recorded that all the terms and provisions contained in this clause shall be equally binding upon the subcontractor prior to the subcontractor commencing with the work. Without derogating from the generality of this paragraph:
  - 14.1.1 The Mandatary shall ensure that training as discussed under appointments and training, is provided prior to the subcontractor commencing work on the Employer's premises.
  - 14.1.2 The Mandatary shall ensure that work performed by the subcontractor is done under his strict supervision, discipline and reporting.
  - 14.1.3 The Mandatary shall inform the Employer of any health and safety hazards and/or issue that the subcontractor may have brought to his attention.
  - 14.1.4 The Mandatary shall inform the Employer of any difficulty encountered regarding compliance by the subcontractor with any health and safety instruction, procedure and/or legal provision applicable to the work the subcontractor performs on the Employer's premises.

### 15. SECURITY AND ACCESS

- 15.1 The Mandatary and his employees shall enter and leave the premises only through the main gate(s) and/or checkpoint(s) designated by the Employer. The Mandatary shall ensure that employees observe the security rules of the Employer at all times and shall not permit any person who is not directly associated with the work from entering the premises.
- 15.2 The Mandatary and his employees shall not enter any area of the premises that is not directly associated with their work.
- 15.3 The Mandatary shall ensure that all materials, machinery or equipment brought by him onto the premises are recorded at the main gate(s) and/or checkpoint(s). Failure to do this may result in a refusal by the Employer to allow the materials, machinery or equipment to be removed from the Employer's premises.

### 16. FIRE PRECAUTIONS AND FACILITIES

16.1 The Mandatary shall ensure that an adequate supply of fire-protection and first-aid facilities are provided for the work to be performed on the Employer's premises, save that the Parties may mutually make arrangements for the provision of such facilities.



16.2 The Mandatary shall further ensure that all his employees are familiar with fire precautions at the premises, which includes fire-alarm signals and emergency exits, and that such precautions are adhered to.

### 17. ABLUTION FACILITIES

17.1 The Mandatary shall ensure that an adequate supply of ablution facilities are provided for his employees performing work on the Employer's premises, save that the parties may mutually make arrangements for the provision of such facilities.

### 18. HYGIENE AND CLEANLINESS

18.1 The Mandatary shall ensure that the work site and surround area is at all times maintained to the reasonably practicable level of hygiene and cleanliness. In this regard, no loose materials shall be left lying about unnecessarily and the work site shall be cleared of waste material regularly and on completion of the work.

### 19. NO NUISANCE

- 19.1 The Mandatary shall ensure that neither he nor his employees undertake any activity that may cause environmental impairment or constitute any form of nuisance to the Employer and/or his surroundings.
- 19.2 The Mandatary shall ensure that no hindrance, hazard, annoyance or inconvenience is inflicted on the Employer, another Mandatary or any tenants. Where such situations are unavoidable, the Mandatary shall give prior notice to the Employer.

### 20. INTOXICATION NOT ALLOWED

20.1 No intoxicating substance of any form shall be allowed on site. Any person suspected of being intoxicated shall not be allowed on the site. Any person required to take medication shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.

### 21. PERSONAL PROTECTIVE EQUIPMENT

21.1 The Mandatary shall ensure that his responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform and in accordance with the requirements of General Safety Regulation 2 (1) of the OHS Act. The Mandatary shall further ensure that his responsible persons and employees wear the PPE issued to them at all material times.

### 22. PLANT, MACHINERY AND EQUIPMENT

- The Mandatary shall ensure that all the plant, machinery, equipment and/or vehicles he may wish to utilize on the Employer's premises is/are at all times of sound order and fit for the purpose for which it/they is/are attended to, and that it/they complies/comply with the requirements of Section 10 of the OHS Act.
- 22.2 In accordance with the provisions of Section 10(4) of the OHS Act, the Mandatary hereby assumes the liability for taking the necessary steps to ensure that any article or substance that it erects or installs at the premises, or manufactures, sells or supplies to or for the Employer, complies with all the prescribed requirements and will be safe and without risks in terms of health and safety when properly used.



### 23. NO USAGE OF THE EMPLOYER'S EQUIPMENT

23.1 The Mandatary hereby acknowledges that his employees are not permitted to use any materials, machinery or equipment of the Employer unless the prior written consent of the Employer has been obtained, in which case the Mandatary shall ensure that only those persons authorized to make use of such materials, machinery or equipment, have access thereto.

### 24. TRANSPORT

- 24.1 The Mandatary shall ensure that all road vehicles used on the premises are in a roadworthy condition and are licensed and insured. The Mandatary shall ensure that all drivers shall have relevant and valid driving licenses and the Mandatary shall ensure that no vehicle/s shall carry passengers unless it is specifically designed to do and that all drivers shall adhere to the speed limits and road signs on the premises at all times.
- 24.2 In the event that any hazardous substances are to be transported on the premises, the Mandatary shall ensure that the requirements of the Hazardous Substances Act 15 of 1973 are complied with fully all times.

### 25. CLARIFICATION

25.1 In the event that the Mandatary requires clarification of any of the terms or provisions of this Agreement, he should take the necessary steps to contact the Risk Manager of the Employer to obtain such clarification.

### 26. DURATION OF AGREEMENT

26.1 This Agreement shall remain in force for the duration of the work to be performed by the Mandatary and/or while any of the Mandatary's employees are present on the Employer's premises.

### 27. NON COMPLIANCE WITH THE AGREEMENT

- 27.1 If the Mandatory fails to comply with any provisions of this Agreement, the Employer shall be entitled to give the mandatory 7 (seven) days written notice to remedy such non-compliance and if the Mandatory fails to comply with such notice, then the Employer shall forthwith be entitled but not obliged, without prejudice to any other rights or remedies which the mandatory may have in law,
  - 271.1 to suspend the main Agreement; or
  - 27.1.2 To claim immediate performance and/or payment of such obligations.
- 27.2 Should mandatory continue to breach the contract on three occasions, then the Employer is authorised to suspend the main contract without complying with the condition stated in the clause above.

### 28. HEADINGS

The headings as contained in this Agreement are for reference purposes only and shall not be construed as having any interpretative value in them or as giving any indication as to the meaning of the contents of the paragraphs contained in this Agreement.



# Thus done and signed at \_\_\_\_\_\_\_on the \_\_\_\_\_ day of \_\_\_\_\_\_ 201\_\_ For and on behalf of the Employer Witnesses: 1. \_\_\_\_\_\_ 2. \_\_\_\_\_ at \_\_\_\_\_ on the \_\_\_\_\_ day of \_\_\_\_\_\_ 201\_\_ for and on behalf of the Mandatary Witnesses: 3. \_\_\_\_\_\_



# TRANSNET FREIGHT RAIL SAFETY HEALTH AND ENVIRONMENTAL (SHE) SPECIFICATIONS FOR CONTRACTORS

CONRACT NAME:	For the Provision of Protection Testing at 25KV Traction Substation, Traction Section Station (T.S.S), 11kv Transmission and Distribution Substations		
CONTRACT NUMBER:	SIM22028CIDB		
CONTRACT SCOPE:	Testing of all electrical protection relays, CT's, VT's, breakers, SF6 Dew Point, transformer oil, substation earthing, acidity, dielectric strength, dissolved gas analysis, polychlorinated biphenyl and furan and other related protection equipment.  Perform minor repairs and re-testing where faulty equipment is identified during the above testing period.  Commissioning of new Protection Panels, Transformers, and other new installations as and when required.  Testing and minor repairs work at any substation whenever protection equipment is found to be faulty or suspected faulty.  Drawing of an Oil sample and having the Oil Analysed is to be carried out whenever the Substation is being tested.  Provide a two-day training session to Transnet Engineers and Technicians on Substation Protection Testing 1 day in an office and 1 day at a Substation based on Transnet Specification BBF8128.		
CONTRACT LOCATION:	Sheepmoor and Vryheid		
CONTRACT DURATION:	Two years ( on an as and when required basis)		
CONTRACT MANAGER:			
TFR CONTRACT REPRESENTATIVE/ TECHNICAL OFFICER:			
AGENT:			
SHE SPECIFICATION APPROVA	<b>AL</b>		
TITLE:	NAME:	SIGNATURE:	
CONTRACT MANAGER / TE CONTRACT REPRESENTATIVE TER AGENT		DATE:	
RISK/ENVIRONMENTAL SPECIALIST	Ramatsobane Lekwane	DATE:	
SAFETY SPECIALIST MANAGER	/ Phuti Rankapole	DATE:	

Contractor Signature	Date
----------------------	------



### 1. Introduction

- 1.1 This Safety, Health and Environmental (SHE) specification is Transnet Freight Rail (TFR) minimum requirements to be met by contractors when performing work for or on behalf of TFR. They set out the requirements to be followed by the Contractor and other contractors so that the health and safety of all person's potentially at risk may receive the same priority as other facets of the project.
- 1.2 The Contractor shall **develop a SHE plan and prepare a SHE file** based on these requirements, risk assessment as well as all the relevant applicable legislation. The contractor shall remain accountable for the quality and execution of his health and safety programme for his employees and sub-contractor employees. This specification in no way releases the contractors from compliance with the relevant legislation.

### 2 Purpose

- 2.1 The purpose of this specification is to ensure that the Contractor provides and maintains, as far as reasonably practicable a safe working environment for all employees and the public whilst performing work for or on behalf of TFR.
- 2.2 This specification form an integral part of the contract, and the Contractor shall forward this specification to all subcontractors at the bidding stage so that they can in turn prepare health and safety plans relating to their operations

### 3 Scope and Application

- 3.1 This specification is applicable to all contractors, suppliers and all activities and processes carried out for or on behalf of Transnet Freight Rail. The Specification defines the strategies to manage Health and Safety and is a compliance document drawn up in terms of the Occupational Health and Safety Act 85 of 1993 and Electrical Machinery Regulations and National Railway Safety Regulator Act (Act no 16 of 2002) requirements as applicable.
- This specification shall also apply to any subcontractors as employers in their own right. The Contractor shall furnish the TFR Contract Representative/Technical Officer with full particulars of such subcontractors and shall ensure that they comply with the OHS Act and Regulations and Transnet's safety requirements and procedures.
- 3.3 Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the TFR Contract Representative/Technical Officer or Client Agent.

Contractor Signature	Date



### 4 General

- 4.1 The Contractor and Transnet Freight Rail are individual employers, each in its own right, with their respective duties and obligations set out in the Occupational Health and Safety Act, Act 85 of 1993 (herein referred as the OHS Act) and applicable Regulations.
- 4.2 The Contractor accepts, in terms of the General Conditions of Contract and in terms of the OHS Act, his obligations as an employer in respect of all persons in his employ, other persons on the premises or the Site or place of work or on the work to be executed by him, and under his control. The Contractor shall, before commencement with the execution of the contract work, comply with the provisions set out in the OHS Act, and shall implement and maintain a SHE Plan approved by Transnet Freight Rail, on the Site and place of work for the duration of the contract.
- 4.3 The Contractor accepts his obligation to complying with the OHS Act and applicable Regulations notwithstanding the omission of some of the provisions of the OHS Act and the Regulations from this document.
- 4.4 Transnet Freight Rail accepts, in terms of the OHS Act, its obligations as an employer of its own employees working on or associated with the site or place of work, and the Contractor and TFR Contract Representative/Technical Officer or his deputy shall at all times, co-operate in respect of the health and safety management of the site, and shall agree on the practical arrangements and procedures to be implemented and maintained during execution of the works
- 4.5 In the event of any discrepancies between any legislation and this specification, the applicable legislation will take precedence.

### 5. Section 37(2) Agreements

- 5.1 Transnet Freight Rail and the Contractor shall enter into an agreement in terms of section 37(2) of the Occupational Health and Safety Act to the arrangements and procedures between them to ensure compliance by the Contractor with the provisions of the OHS Act.
- 5.2 The agreement shall be completed and signed by the Contractor mandated representative as soon as possible and returned to the relevant TFR Project Manager / TFR Contract Representative for his/her signature on behalf of TFR.
- 5.3 The Contractor shall enter into a Section 37(2) Agreement with their respective subcontractors. Signed copy of such agreement must be kept on the Contractor's SHE file.

<b>б.</b>	Definitions	
Contra	octor Signature	Date



6.1. In this Specification the definitions as listed in the Occupational Health and Safety Act 85 of 1993 and Construction Regulations, 2014 shall apply, unless the context otherwise indicates: -

### 6.1.1 "Certificate of compliance" means—

- a) a certificate with a unique number obtainable from the chief inspector, or a person appointed by the chief inspector, and issued by a registered person in respect of an electrical installation or part of an electrical installation; or
- b) a certificate of compliance issued under the Electrical Installation Regulations, 1992.
- 6.1.2 "Competent person" means a person who
  - a) has in respect of the work or task to be performed the required knowledge, training, and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
  - b) is familiar with the Act and with the applicable regulations made under the Act.
- 6.1.3 "Contractor" means an employer (organisation) or a person who performs ANY work and has entered into a legal binding business agreement contract to supply a product or provide services to Transnet. This applies to the Suppliers, Vendors, Consultants, Service Providers or Contractors. NB: A contractor is an employer in his/her own right (includes Principal Contractor and subcontractor).
- 6.1.4 **"Construction work"** means any work in connection with the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to building or any similar structure.

The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or the moving of land, the making of excavation, piling, any similar civil engineering structure, or type of work

- 6.1.5 **"Environment"** means the surroundings within which humans exist and that are made up of
  - a) the land, water and atmosphere of the earth
  - b) micro-organisms, plant, and animal life
  - c) any part or combination of (a) and (b) and the interrelationships among and between them and
  - d) The physical. chemical, aesthetic, and cultural properties and conditions of the foregoing that influence human health and well-being.

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- 6.1.6 **"Electrical contractor"** means a person who undertakes to perform electrical installation work on behalf of any other person but excludes an employee of such first mentioned person.
- 6.1.7 **"Electrical installation"** means any machinery, in or on any premises, used for the transmission of electricity from a point of control to a point of consumption anywhere on the premises, including any article forming part of such an electrical installation irrespective of whether it is part of the electrical circuit, but excluding
  - a) any machinery of the supplier related to the supply of electricity on the premises.
  - b) any machinery which transmits electrical energy in communication, control circuits, television, or radio circuits.
  - c) an electrical installation on a vehicle, vessel, train, or aircraft; and
  - d) control circuits of 50 V or less between different parts of machinery or system components, forming a unit, that are separately installed and derived from an independent source or an isolating transformer.
- 6.1.8 **"Electrical Installation Regulations, 1992"** means the Electrical Installation Regulations, 1992, promulgated by Government Notice R.2920 of 23 October 1992.
- 6.1.9 **"Electrical tester for single phase"** means a person who has been registered as an electrical tester for single phase in terms of regulation 11(2) for the verification and certification of the construction, testing and inspection of electrical installations supplied by a single-phase electricity supply at the point of control, excluding specialised electrical installations.
- 6.1.10 **"Excavation work"** means the making of any man-made cavity, trench, pit, or depression formed by cutting, digging, or scooping.
- 6.1.11 "Fall protection plan" means a documented plan, which includes and provides for
  - a) all risks relating to working from a fall risk position, considering the nature of work undertaken and
  - b) the procedures and methods to be applied to eliminate the risk of fall rescue plan and procedures.
- 6.1.12 **"Health and safety (SHE) plan"** means a site, activity, or project specific documented plan in accordance with the client's health and safety specification.
- 6.1.13 "Installation work" means
  - a) the installation, extension, modification, or repair of an electrical installation.

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- b) the connection of machinery at the supply terminals of such machinery; or
- c) the inspection, testing and verification of electrical installations for the purpose of issuing a certificate of compliance.
- 6.1.14 "Point of consumption" means any point of outlet or the supply terminals of machinery which is not connected to a point of outlet, and which converts electrical energy to another form of energy: Provided that in the case of machinery which has been installed for any specific purpose as a complete unit, the point of consumption shall be the supply terminals which have been provided on the unit of machinery for that purpose.
- 6.1.15 **"Point of control"** means the point at which an electrical installation on or in any premises can be switched off by a user or lessor from the electricity supplied from the point of supply, or the point at which a particular part of an electrical installation on or in any premises can be switched off where different users occupy different portions of such premises.
- 6.1.16 **"Point of outlet"** means any termination of an electrical installation which has been provided for connecting any electrical machinery without the use of tools.
- 6.1.17 **"Point of supply"** means the point at which electricity is supplied to any premises by a supplier.
- 6.1.18 "Registered person" means a person registered in terms of
  - a) regulation 11 or
  - b) regulation 9 of the Electrical Installation Regulations, 1992, as an electrical tester for single phase, an installation electrician, or a master installation electrician.
- 6.1.19 "Specialised electrical installations" means electrical installations in
  - a) explosive atmospheres as contemplated in SANS10086-1
  - b) the petroleum industry as contemplated in SANS10089-2
  - c) hazardous locations as contemplated in SANS10108
  - (d) medical locations as contemplated in SANS10142-1.
- 6.1.20 **"Respiratory protective equipment"** means a device that is worn over at least the mouth and nose to prevent the inhalation of an airborne HCA and that is of a type, or conforms to a standard, approved by the Minister.
- 6.1.21 **"Risk assessment"** means a programme to determine any risk associated with any hazard at a work site, to identify the steps needed to be taken to remove, reduce or control such hazard.

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- 6.1.22 **"Safety, Health and Environmental (SHE) File"** means a file or other record in permanent form, containing the information required to be kept on site in accordance with the OHS Act and applicable Regulations.
- 6.1.23 **"Supply terminals"** in relation to machinery installed as a complete unit, means the terminals or connection clamps on such machinery where the external conductors supplying the machinery with electricity are terminated or connected.
- 6.1.24 **"TFR"** means Transnet Freight Rail, a division of Transnet SOC Ltd (Registration No. 1990/000900/30), a public company incorporated in accordance with the company laws of the Republic of South Africa.
- 6.1.25 **"TFR Contract Manager"** means a TFR employee appointed to liaise with the contractor to ensure that the specifications of the contract are met (with special emphasis on safety, technical specifications, inspection of quality and quantity of work). It includes a Technical Officer, Depot Engineering Manager, Engineering Technician, Maintenance Supervisor's, Security Inspector, Depot Security Manager, Real Estate Manager, Facilities Manager etc.

### 7 Welfare Facilities

- 7.1 The Contractor must ensure that all workplace facilities meet health, safety and welfare needs of all employees, including disabled persons where applicable.
- 7.2 The Contractor must in addition to Facilities Regulations 2004, provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:
  - (a) shower facilities, at least one shower facility per 15 persons
  - (b) at least one sanitary facility for each sex and for every 30 workers
  - (c) changing facilities for each sex; and
  - (d) sheltered eating areas
- 7.3 The Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes or other suitable living accommodation, is not available.

### 8. Letter of Good standing

8.1 The Contractor shall submit proof of registration and Letter of Good Standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Diseases Act , 1993 (Act No. 130 of 1993) for his company and each of his sub-contractors'.

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- 8.2 No contractor may do any work for TFR without a valid letter of good standing. The Contractor must ensure that the Letter of Good Standing remains valid for the duration of the contract period.
- 8.3 The letter of good standing must reflect the name of the Contractor and/or Subcontractor, registration number and, expiry date.

### 9. Management and Supervision

- 9.1 The Contractor and all subcontractors shall submit a SHE organogram outlining the site SHE management structure including the relevant appointments/competent persons or the intended appointments where such appointments have not been made.
- 9.2 The Contractor shall, in accordance with the OHS Act and applicable Regulations, make all the necessary appointments of competent persons in writing such as designer, safety and so on.
- 9.3 Copies should also be retained on the SHE file.

### 10. Hand Tools and Pneumatic Tools

- 10.1 All hand tools (hammers, chisels, spanners, etc) must be recorded on a register and inspected by a competent person on a monthly basis as well as by users prior to use.
- 10.2 All pneumatic tools should be numbered, recorded and inspected at least monthly as well as by users prior to use. And the revolutions per minutes measured in accordance with the manufacturer specifications
- 10.3 Tools with sharp points in tool boxes must be protected with a cover.
- 10.4 All files and similar tools must be fitted with handles.
- 10.5 The Contractor must have a policy on private and make shift tools on site.
- 10.6 No pneumatic tool shall be operated by using a compressed gas cylinder. Pneumatic equipment shall only draw supply from mobile air compressors or from compressed air lines installed within the premises.

### 11. SHE Audits and Contractor Monthly Reports

- 11.1 The TFR Contract Representative/Technical Officer or his deputy shall ensure that the Contractor's SHE Plan is audited at intervals mutually agreed to between them, but at least once every month to ensure that the SHE Plan is implemented and maintained on site.
- 11.2 TFR Safety Officers / Specialists shall at all reasonable times be allowed access to the work sites, the Contractor site offices and tool-sheds to inspect the Contractor's and its subcontractor's tools, equipment, registers and workplace.

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- 11.3 Should any non-compliances or contraventions to the TFR safety requirements, legal requirements, this specification or the Contractor's SHE Plan be identified, such non-compliances or contraventions shall be rectified by the contractor at its cost immediately or within a period specified by the TFR Contract Representative/Technical Officer, his deputy, or TFR Safety Officers / Specialists.
- 11.4 Should the Contractor refuse or fail to rectify such non-compliances or contraventions, TFR may take remedial action at the Contractor's cost as it may deem necessary to ensure safety at the TFR sites at all times.
- 11.5 TFR reserves the right to conduct safety audits without prior warning.
- 11.6 The Contractor on all contracts of more than 1 month shall provide a monthly safety performance report as required by TFR.
- 11.7 The Monthly safety performance report shall be compiled in terms of Annexure 1 or in any format that the Contractor has as long as it includes all items listed in Annexure 1.

### 12. Training, Competence and Awareness

### **12.1 Induction Training**

- 12.1.1 The Contractor shall ensure that all his employees and subcontractors employees undergo a TFR SHE Induction with regard to the general hazards prevalent on the site, rules and regulations, and other related aspects before commencing work. It is the responsibility of the contractor to inform TFR whenever new employees are appointed after the initial induction was conducted.
- 12.1.2 In addition to the TFR SHE induction, it is the responsibility of the Contractor to develop and implement a site specific SHE Induction programme, a job specific induction programme and a general employee SHE awareness programme, to develop awareness amongst employees on the generic SHE issues associated with the scope of work and the specific environmental issues in question.
- 12.1.3 The Contractor shall ensure that all visitors and suppliers to the site undergo and comply with Contractors' site-specific safety induction requirement prior to being allowed access to site. All visitors and suppliers shall sign the attendance register.
- 12.1.4 All visitors and suppliers shall wear the necessary personal protective equipment whilst on site and shall remain in the care of the host who understand the scope of work and associated risks.
- 12.1.5 The Contractor shall maintain comprehensive attendance records of SHE induction training on the SHE file

### 12.2 Competency / Training

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- 12.2.1 The Contractor must ensure that all his employees are adequately trained to perform the tasks allocated to them and that there is the requisite amount of supervision at all times to maintain safe work practices and standards.
- 12.2.2 The Contractor shall identify training requirements of employees whose work may have a significant impact on their health and safety or that might create a significant impact upon the environment and ensure that these employees will receive appropriate training. A Training matrix shall be used as a mechanism to manage and control the training of employees.
- 12.2.3 The Contractor shall identify all training needs and incorporate the site specific training into the SHE plan.
- 12.2.4 Each Contractor shall be required to ensure that before an employee commences work on the project that the supervisor in control with responsibility for the employee has informed the employee of his scope of authority and any hazards associated with the work performed. This will include man-job specifications, the discussion of any standard task procedures or hazardous operational procedures to be performed by the employee
- 12.2.5 The Contractor is to ensure that the supervisor has satisfied himself that the employee is conversant with all hazards associated with any work to be performed by conducting task observations.
- 12.2.6 The Contractor must ensure that certificate/s of competence where applicable is/are provided in the SHE File.

### 12.3 Awareness Training

- 12.3.1 Awareness training required shall be identified for all employees on the project using the SHE Policy, the SHE Plan, the SHE programmes and procedures.
- 12.3.2 The Contractor shall have a daily safety talk. This talk shall include subcontractor employees.
- 12.3.3 The talk must be brief and concise. Subject topics should be applicable to the job at hand, incidents, accidents and up-and-coming work will be discussed along with suggestions and comments. These meetings can be used as a training meeting with the central idea of educating employees.

### 13. Health and Safety Plan (SHE Plan)

13.1 Potential Contractor submitting tenders shall submit with their tender, a Health and Safety Plan setting out the practical arrangements and procedures to be implemented by him to ensure compliance by him with the OHS Act and Regulations, this SHE specification and particularly in respect of: -

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- (a) The provision, as far as is reasonably practical, of a working environment that is safe and without risk to the health of his employees and subcontractors in terms of section 8 of the OHS Act;
- (b) the execution of the contract work in such a manner as to ensure in terms of section 9 of the OHS Act that persons other than those in the Contractor's employment, who may be directly affected by the contract work are not thereby exposed to hazards to their health and safety;
- (c) ensuring, as far as is reasonably practical, in terms of section 37 of the OHS Act that no employee or subcontractor of the Contractor does or omits to do any act which would be an offence for the Contractor to do or omit to do.
- 13.2 The Contractor's Health and Safety Plan shall be based on a risk assessment in respect of the hazards to health and safety of his employees and other persons under his control that are associated with or directly affected by the Contractor's activities in performing the contract work and shall establish precautionary measures as are reasonable and practical in protecting the safety and health of such employees and persons.
- 13.3 The SHE Plan shall include full particulars in respect of: -
  - (a) Safety Management Structure arrangements i.e. Appointments to be done and how;
  - (b) SHE Organisation arrangements i.e. SHE Committees, SHE Audits, Findings and Corrective Actions
  - (c) Risk Management i.e. Risk Assessment frequencies, methodology
  - (d) Education and Training i.e. safety induction, site / job specific training arrangements
  - (e) Emergency Planning
  - (f) Health and Safety Communication i.e. Toolbox talks, incident recall
  - (g) Safe working methods and procedures to be implemented i.e. safe work procedures, task observation
  - (h) Fall Protection Plan i.e. documented plan, training/competency, medical surveillance, rescue plan
  - (i) Personal protective Equipment and Clothing
  - (j) Project Security i.e. site access control and security

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- (k) SHE Costs
- (I) Occupational Health i.e Medical Surveillance, First Aid, Welfare Facilities, Substance Abuse testing, Noise, Vibration, Manual Handling etc
- (m) Environmental management
- (n) Incident Management i.e. reporting and investigation
- (o) Operational Control
- (p) Covid 19 requirements and
- (q) Review plan of the SHE Plan
- 13.4 The Contractor shall submit a final SHE Plan after awarding of the contract which shall be subject to the TFR Contract Representative/Technical Officer's approval and he may, in consultation with the Contractor, order that additional and/or supplementary practical arrangements and procedures be implemented and maintained by the Contractor or that different working methods or safety equipment be used or safety clothes be issued which, in the TFR Contract Representative/Technical Officer's opinion, are necessary to ensure full compliance by the Contractor with his obligations as an employer in terms of the OHS Act and Regulations.
- 13.5 The Contractor shall approve the SHE Plan of the subcontractor and further take reasonable steps to ensure that each subcontractor's SHE Plan is implemented and maintained on the site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed to between them, but at least once every month.
- 13.6 The Contractor shall stop any subcontractor from executing any construction work, which is not in accordance with the Contractor's, and/or subcontractor's SHE Plan for the site or which poses a threat to the health and safety of persons.
- 13.7 The Contractor shall ensure that a copy of the SHE Plan is available on site for inspection by an inspector, TFR Contract Representative/Technical Officer, agent, subcontractor, employee, registered employee organisation, health and safety representative or any member of the health and safety committee.

### 14. Hazards Identification and Potential Hazardous Situations

- 14.1 The Contractor shall ensure a risk assessment is carried out by a competent person, appointed in writing, before commencement of any work and reviewed during the duration of the contract period. The Risk Assessments shall form part of the Health and Safety Plan to be applied on the site and shall include at least the following:
  - (e) The identification of the risks and hazards (including ergonomic risks) that persons may be exposed to;

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- (b) The analysis and evaluation of the hazards identified;
- (c) A documented plan, including safe work procedures to mitigate, reduce or control the; risks identified; and
- (d) A monitoring and review plan.
- 14.2 Risk assessments shall be conducted by a competent person and such person shall use a documented method to analyse and evaluate identified risk and hazards.
- 14.3 The Contractor shall consult with the health and safety committee or, if no health and safety committee exists, with a representative group of employees, on the development, monitoring and review of the risk assessment
- 14.4 The risk assessment shall be reviewed when there are changes that affect the design of the structure that may affect the health, safety and environment on site or after an incident.
- 14.5 The Contractor shall ensure that all employees are to be informed, instructed and trained regarding any risks, hazard and related SHE procedures by a competent person as outlined in the risk assessment prior to commencement of work and thereafter at predetermined intervals as outlined in the monitoring plan.
- 14.6 The Contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such intervals as may be determined in the risk assessment.
- 14.7 The risk assessment shall be available on site for review. Where a risk assessment is not readily available or not communicated to contractor employees, the construction activities shall be stopped until such time the contractor complies.
- 14.8 The Contractor and the TFR Contract Representative/Technical Officer shall immediately notify one another of any hazardous or potentially hazardous situations which may arise during performance of the contract or any subcontractor and, in particular, of such hazards as may be caused by the design, execution and/or location and any other aspect pertaining to the contract work.
- 14.9 The Contractor shall be required to analyse his scope of work and define these critical activities. For each activity, a risk assessment shall be required which defines systems and safe work procedures that will be used in order to complete the activity safely.
- 14.10 Copies of all safe work procedures and proof that employees have been trained on those safe work procedures shall be kept on the SHE file.
- 14.11 Preliminary risk and hazard identification shall be conducted by the Contractor prior to work commencement on site. Should the Client's Agent, Project Manager, TFR Contract

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Representative/Technical Officer or his duly nominated alternative identify hazardous activities performed by the Contractor on the site for which the Contractor has not submitted a risk assessment, the Contractor shall be required to do so before continuing with work.

### 15. Safety, Health and Environmental (SHE) File

- 15.1 The Contractor shall prepare a SHE file and submit to TFR Contract Representative for approval prior to commencement of work on site. The file shall include all documentation required as per the OHS Act and applicable regulations. ,
- 15.2 The approval time of the SHE file is at least 5 working days
- 15.3 The Contractor shall ensure that a copy of the both his SHE File as well as any subcontractor's SHE File is kept on site and made available to an inspector of the Department of Labour, the TFR Contract Representative/Technical Officer, or subcontractor upon request.
- 15.4 The Contractor shall hand over a consolidated SHE file to the TFR Contract Representative/Technical Officer upon completion of the Construction Work and shall in addition to documentation mentioned in the OHS Act and applicable Regulations include a record of all drawings, designs, materials used and other similar information concerning the completed structure.

### 16. Occupational Health

### **16.1** Medical Surveillance Programme

- 16.1.1 The Contractor shall ensure that all his and subcontractor employees have a valid medical certificate of fitness issued by an Occupational Health Practitioner.
- 16.1.2 Medical certificate of fitness must be available and be kept in the SHE file.

### 16.2 Substance Abuse

- 16.2.1 All Contractors must comply with the Transnet Substance Abuse Policy and Regulation 2A of the General Safety Regulations of the OHS Act.
- 16.2.2 No Contractor may possess, sell, offer to other person, use, store, manufacture, transport, distribute, or transfer drugs or alcohol during work hours, on or off TFR premises.
- 16.2.3 TFR will not tolerate substance abuse or use which put at risk the health and safety of its employees or threatens its services to our stakeholders. It is on this basis that a contractor employee will be considered unfit for work if:

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- (a) He/she is subjected to alcohol screening and/or alcohol testing and is found to have alcohol in his/her breathe and/or blood;
- (b) Refuses to undergo substance screening and/or testing;
- (c) He /she produces a positive confirmatory test for any other substances, measured by sample analysis at a registered pathological laboratory and authorised by a medical practitioner; and/or
- (d) Through observation by security personnel or TFR Contract Representative, it is evident that the contractor's physical, emotional, mental or behavioural state reflects that they are intoxicated or under the influence.
- 16.2.4 Any transgression of this policy will constitute a breach of the relevant contract and may result in the termination of services/contract.
- 16.2.5 Any contractor employee using medication that has a narcotic effect must declare before work to his / her supervisor.

#### 16.3 Occupational Hygiene

- 16.3.1 The Contractor shall conduct Health Risk Assessments of all the Occupational Hygiene / Environmental stressors (e.g. noise, dust, illumination, HCS, heat & cold stressors, ergonomics, etc.) present in the area where they operate to determine if there is any possible worker exposure. Records of all these assessments should be documented and kept up to date.
- 16.3.2 The Contractor shall monitor the extent to which their employees are exposed to the occupational hygiene stressors. These assessments shall be conducted by an Approved Inspection Authority as listed on the Department of Labour database. The findings from these assessments should be kept on the SHE file, communicated to all affected parties and be reported to relevant authorities.

#### 16.4 First Aid requirements

- 16.4.1 All Contractors shall ensure that their employees receive prompt first aid treatment in case of injury or emergency. The Contractor must have the necessary equipment and/or facility on site for treatment of injured persons.
- 16.4.2 Contractor shall ensure that the first aid box / boxes are available and accessible. More first aid boxes shall be provided if the risks, distance between work teams, or the working environment requires it.
- 16.4.3 Taking into account the type of injuries that are likely to occur on site, the nature of activities performed and the number of employees on site, the Contractor shall ensure that the first aid box contain suitable first aid equipment which includes at least the minimum contents as listed on Annexure 1 of General Safety Regulation (GSR).

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16.4.4 The Contractor must ensure that trained / certificated first-aid personnel are appointed and be available on site at all times. The ratio of first aiders to employees shall be 1:50.

#### 16.5 Asbestos Control

16.5.1 The Contractor shall inform the TFR Project Manager or TFR Contract Representative if during construction work asbestos or suspected asbestos containing material is found. Only Asbestos Approved Contractor can work on asbestos containing material.

#### 16.6 Noise

- 16.6.1 The Contractor shall ensure that the requirements of the Noise Induced Hearing Loss Regulations are complied with.
- 16.6.2 Contractor shall ensure that machinery and equipment are operated at noise levels not exceeding an equivalent level of 85-dB (A) during normal working conditions.
- 16.6.3 Where the noise levels at the Operator position or to employees working in the vicinity exceed an equivalent level of 85-dB (A) during normal working conditions, the Contractor shall take appropriate measures to reduce such levels to an equivalent level of 85-dB (A). The use of Personal Protective Equipment (PPE) should be the last resort.
- 16.6.4 All employees exposed to noise must be trained on the effects of exposure, precautionary measures to be taken to prevent exposure and the correct use of PPE.
- 16.6.5 Noise zones must be demarcated as such.

#### 16.7 Vibration

- 16.7.1 Contractors must put measures to reduce the risks associated with hand—arm vibrations, avoid, whenever possible, the need for vibration equipment.
- 16.7.2 Contractor shall develop a good maintenance regime for tools and machinery. This may involve ensuring that tools are regularly sharpened, worn components are replaced or engines are regularly tuned and adjusted.
- 16.7.3 The Contractor must introduce a work pattern that reduces the time exposure to vibrations.
- 16.7.4 The Contractor shall issue employees with gloves and warm clothing. There is a debate as to whether anti-vibration gloves are really effective but it is agreed that warm clothing helps with blood circulation which reduces the risk of vibration white finger. Care must be taken so that the tool does not cool the hand of the operator.

#### 16.8 Manual Handling

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- 16.8.1 Contractor must reduce risk of injury due to manual handling by using mechanical assistance involving the use of mechanical aids to assist the manual handling operation. Mechanical aids such as hand-powered hydraulic hoists, specially adapted trolleys, hoist for lifting patients and roller conveyors can be used.
- 16.8.2 Contractor shall ensure all employees involved in manual handling are trained in good lifting techniques.

#### 16.9 **Dust**

- 16.9.1 The Contractor shall monitor dust caused by their activities, mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which the impact is experienced.
- 16.9.2 Dust suppression measures must be in place to reduce the dust caused by the activities on site.
- 16.9.3 Appropriate PPE should be provided to exposed employees.

#### 16.10 Weather precautions

- 16.10.1 In the event of adverse weather (high winds, flooding, storm surge, lightning etc) or other conditions, the Contractor must institute precautionary measures to protect employees on site.
- 16.10.2 The Contractor shall take steps to prevent heat stroke, dehydration and exhaustion of employees as a result of exposure to excessive heat on site. Such steps may include employees taking regular breaks, consuming enough water, provision of sun brims for their hard hats and sun screen to protect them against sun burn.
- 16.10.3 The Contractor shall take steps to prevent hypothermia or dangerous overcooling of the body as a result of exposure to cold temperatures.

#### 16.11 COVID 19 Requirements

- 16.11.1 The Contractor shall complete and submit to the TFR Contract Manager a declaration stating that the contractor is permitted to operate in terms of the provisions of the Disaster Management Act 2002 (Act No 57 of 2002) and Regulations, Transnet COVID-19 Guidelines and COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19 (C19 OHS), 2020 and have prepared a COVID-19 Workplace Readiness Plan and shall operate within the regulated permissions and restrictions of applicable lockdown level.
- 16.11.2 The Contractor must ensure that all its employees are trained on the health risks and hazards associated with COVID-19 and what precautionary measures they must follow for the protection of their health, including the proper use and maintenance of PPE. They are prepared and informed regarding updated rules, hygiene and behavioural

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- practices, complete a "return to work interview" with their line manager and sign commitment to maintain social distancing.
- 16.11.3 The Contractor shall ensure that every employee reporting for duty is screened to ascertain whether they have any observable symptoms associated with COVID-19 and require such employee to immediately inform the contractor if he/she experiences such symptoms
- 16.11.4 Non-essential physical work that requires close contact between workers should be avoided where it is possible to do so.
- 16.11.5 Where it is practicable, every employee must be issued with own tool for use for the duration of the shift. Tools and equipment in stores should be sanitised before issued and on return to the stores.
- 16.11.6 Washing hands facilities must be provided on site, and where it is not available, employees should be provided with hand sanitisers. Employees should be encouraged to regularly wash their hands.
- 16.11.7 Alcohol testing on site should be managed in such a way that no employee is exposed to the virus and contractors must promote personal hygiene. Breathalyzer equipped with disposable mouthpieces shall be used and shall be cleaned and/or disinfected after every use.
- 16.11.8 All non-essential visitors to site are not allowed, only suppliers are allowed. Suppliers must be advised in advance of the COVID-19 site screening tests and required COVID-19 PPE requirements for the site.
- 16.11.9 Where site meetings are held, only absolutely necessary meeting participants should attend. Social distancing should be maintained.
- 16.11.10 The Contractor shall when transporting his employees to TFR premises comply with the regulations which outlines that 70% of the vehicle capacity can be utilised.
- 16.11.11 The Contractor shall inform the TFR Contract Manager when any of its employees working on TFR premises has been diagnosed with COVID-19. The contractor shall investigate the cause and control failure and review its risk assessment to ensure that the necessary controls and PPE requirements are in place.

#### 16.12 Fatigue Management and Fit for Duty Processes

- 16.12.1 The Contractor must ensure that it complies to the requirements of RSR 00-4-1.2016 Edition 1, Part 4-1 Human Factors Management-Fatigue Management standard.
- 16.12.2 The Contractor shall document, implement and maintain processes and procedures to identify, assess and mitigate the risks associated with fatigue's contributory factors.

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- 16.12.3 The Contractor shall comply with TFR Fatigue Risk Management Plan (FRMP) and Fatigue Risk Management System (FRMS).
- 16.12.4 The Contractor shall collect data and report on their management of fatigue as outlined in Clause 8.3 of Part 4-1 Human Factors Management-Fatigue Management standard.
- 16.12.5 The Contractor shall document and implement fit for duty processes for all its employees.

#### 17 Incidents/Occurrences

- 17.1 All incidents referred to in Regulation 9 of General Administration Regulations of the OHS Act involving the contractor and his subcontractor on TFR premises, shall be reported to the TFR Contract Representative and Department of Labour as prescribed by the OHS Act.
- 17.2 TFR must be forwarded with a copy of a report of any investigation, formal inquiry conducted in terms of Section 31 and 32 of the Act into any incident involving the contractor, his subcontractor, any person or machinery under his control on TFR premises.
- 17.3 TFR Contract Representative must be informed of the above incidents/occurrences before the end of shift when the incident/occurrence occurred.
- 17.4 The Contractor shall make available its employees to attend as witnesses when required so by TFR during an investigation into any incident where TFR believes the said contractor employees were witnesses or may assist in the investigation.
- 17.5 The contractor shall make available to TFR any documents required to assist in their investigation.

#### 18. SHE Cost

- 18.1 The Contractor shall ensure that it has made adequate provision for the cost of health and safety measures in the tender offer.
- 18.2 The Contractor shall ensure that its subcontractors have made adequate provision for the cost of health and safety measures in the tender offer.

#### 19. Personal Protective Equipment (PPE)

- 19.1 The contractor shall ensure that all employees are provided with appropriate prescribed Personal Protective Equipment (PPE) free of charge (according to General Safety Regulations (2), suitable for the type of activities that the employees will perform.
- 19.2 Such PPE shall be approved by credible institution such as SABS, EN, or AN.

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- 19.3 The contractor shall manage the issuing of PPE and ensure that PPE is used at all times.
- 19.4 Employees shall be trained in the proper use of PPE.
- 19.5 The provision of PPE should prevent incidents, for use by persons engaged in working on or in close proximity to live electrical machinery or dead electrical machinery which may become live

#### 20. Emergency Evacuation Plan and Procedure

- 20.1 The Contractor must establish and implement an emergency evacuation plan to ensure that in the event of fire, explosion structural collapse etc. all staff is able to evacuate the area to a demarcated area for the purpose.
- 20.2 The area so selected must be demarcated and the relevant "Assembly Point" sign displayed where applicable or use TFR nearest assembly point.
- 20.3 An Emergency Evacuation Procedure must be drawn up; all staff members and contractors shall be given awareness training and participate in regular evacuation drills.
- 20.4 The Contractor and its employees shall collaborate and adhere to TFR evacuation drills and requirements.

#### 21. Access Control and Security

- 21.1 The Contractor shall, before commencing any work, obtain from the TFR Contract Representative/Technical Officer a Site Access Certificate executed and signed by him, permitting and limiting access to the designated site or place of work by the Contractor and any subcontractors under his control.
- 21.2 No Site Access Certificate will be granted to the Contractor who fails to comply with TFR minimum SHE requirements, with the SHE File not approved and without the SHE induction been concluded.
- 21.3 The contractor must assess the security risks and implement appropriate measures. All contractors are to strictly adhere to all security requirements on the premises.
- 21.4 The Contractor in collaboration with the TFR representative will ensure that proper access control is in place and functional at all times onto and out of the site. A form of access control will be issued to contractor employees who have been inducted and submitted copies of ID documents or work permits (where required).
- 21.5 Access Permits should be carried by a contract employee at all time when on site. Access Permits shall be produced at the point of entry / gate.
- 21.6 Contractors shall ascertain from TFR Contract Representative/Technical Officer the correct route along with their employees may proceed when coming on or going off shift and direct their employees accordingly.

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#### 22. Management of Subcontractors

- 22.1 The Contractor is directly responsible for the actions of his contractors/sub-contractors.
- The Contractor will also be responsible for initiating any remedial action (recovery plan) that may be necessary to ensure that the contractor complies with all requirements.
- 22.3 The Contractor shall provide any contractor who is making a bid or appointed to perform construction work, with the relevant sections of the documented SHE specification, who would in turn provide a SHE plan for approval.
- 22.4 The Contractor shall carry out inspection/audits on the contractor/subcontractor to ensure that their SHE plan is being implemented and maintained and submit audit report to TFR Representative.
- 22.5 The Contractor shall stop any contractor/subcontractor from executing construction work which poses a threat to the safety and health of persons or the environment.
- 22.6 The Contractor shall ensure that the sub-contractors appointed have the necessary competencies and resources to perform the work safely.
- 22.7 The Contractor will be required to submit 37(2) mandatory agreement between the Contractor and subcontractor to the TFR Contract Representative

#### 23. Environmental Management

- 23.1 The Contractor shall identify, document and comply with all pertinent Environmental laws and associated Regulations, approvals, licenses and permits which are applicable to the Services and activities undertaken.
- 23.2 Before commencement with any of the services to be rendered to TFR, the Contractor shall make available all personnel who will be working on the specified contract to be given environmental induction training. All Contractor employees arriving on the site shall attend such induction.
- 23.3 The Contractor shall adhere to all instructions issued by Project Manager or his /her delegated person in promotion of environmental management and legal compliance.
- 23.4 The Contractor shall determine the correct positioning of topsoil stockpiling to avoid massive disturbance and prepare the topsoil for reuse during landscaping.
- 23.5 Concrete shall not be mixed directly on the ground or any other permeable surface. Should concrete batching activities occur, these should be located in the designated area on site with low environmental sensitivity levels.

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- 23.6 All excess concrete shall be removed from site on completion of plastering or concrete pouring and disposed of in an environmentally acceptable manner.
- 23.7 The Contractor shall ensure that his or her employees are aware of the procedures to be followed when dealing with spills and leaks, which shall include notifying the relevant authorities and TFR as required in terms of National Environmental Management Act (NEMA), 1998 and National Water Act (NWA), 1998. The Contractor shall ensure that all necessary material and equipment required for use during clean up/rehabilitation of spills and leaks are available on site at all times. Treatment, remediation and/or rehabilitation of contaminated areas shall be undertaken to the reasonable satisfaction of the TFR Environmental Control Officer or relevant Environmental Specialist.
- 23.8 Contractor shall be solely responsible for the control of dust generated from his or her activities. Excavation, handling and transport of erodable material shall be avoided under aggressive wind conditions or when a visible dust plume is present. If dust damping measures are deemed inadequate, working must cease until the wind speed drops to an acceptable level.
- 23.9 Construction activities generating output levels of 85 db (A) or more shall be confined to the hours 08h00 to 17h00 Mondays to Fridays (close to residential areas).
- 23.10 No on-site burying or dumping of waste material shall occur. Waste must be collected by a licensed waste transporting contractor and disposed of at a licensed disposal site. Disposal certificate must be made available to TFR on request.
- 23.11 Waste bins must be provided in sufficient number and capacity to store solid waste produced on a daily basis. These bins must be kept closed and emptied regularly.
- 23.12 A designated re-fuelling area (s) must be provided. The re-fuelling area must be protected from hydrocarbon spillage to the reasonable satisfaction of the TFR Environmental Control Officer or Relevant Environmental Specialist. As a minimum requirement, re-fuelling and workshop areas shall have a bunded floor surface and storm water collection mechanism. Refuelling shall always be accompanied by the use of drip trays.
- 23.13 The Contractor must notify the Project Manager immediately of any pollution incident. An incident record system shall be maintained on site for inspection by TFR and relevant authorities.
- 23.14 All vehicles and equipment's shall be kept in good working condition. All leaking equipment's shall be repaired immediately or removed from site. All vehicles and equipment shall be maintained and not emit excessive noise.
- 23.15 In case of major hydrocarbon spill or leakage as a result of equipment failure, Project Manager must be made aware of such event and the affected area must be fenced off and be cleaned immediately to the reasonable satisfaction of the TFR Environmental Control Officer to prevent contamination of soil and both surface and groundwater.

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- 23.16 The Contractor shall ensure that no spillage occurs when toilets are being cleaned or emptied and that the contents are removed from site by a licensed service provider.
- 23.17 The use of borrow pits for the construction of access roads must comply with the provisions of Minerals and Petroleum Resources Development Act of 2004 as amended and should not be located inside the border of any protected area (e.g. Nature Reserve).
- 23.18 All disturbed areas must be rehabilitated to the reasonable satisfaction of TFR Environmental Control Officer or Relevant Environmental Specialist.
- 23.19 Transportation, handling and storage of all substances classified as hazardous must comply with the provisions of the Hazardous Substances Act, 15 of 1973, relevant Regulations and SANS Codes.
- 23.20 Archaeological remains, artificial features and structures older than 60 years are protected by the Natural Heritage Resources Act, 25 of 1999. Should any archaeological artefact be exposed during construction or any contract work, such work must be stopped immediately. The TFR Environmental Control Officer must be called in for inspection and to recommend the way-forward. Under no circumstances may any artefacts be destroyed or removed from site.
- 23.21 The extraction of water for construction purposes must at all times comply with licensing requirements of Department of Water Affairs, where applicable. Extraction of water from a stream or a river requires approval.
- 23.22 Blasting work that may be required on site shall be carried out entirely within the provisions of the Explosives Act, 26 of 1956 and other relevant engineering and safety standards.
- 23.23 Office and camp sites shall be established, as far as is practicable, outside the flood plain, above the 1:50 flood level mark within the boundaries of the construction area.
- 23.24 No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.
- 23.25 The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation.
- 23.26 Camps and site offices shall be fenced (where necessary) in consultation with the landowner.
- 23.27 The Project Manager or TFR Contract Representative may, at his or her discretion stop any work, activity or process not in accordance with Environmental laws and associated Regulations, approvals, licenses and permits.
- 23.28 The contractor shall preserve wild life in terms of the NEMA.

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#### 24. Operational Safety

#### 24.1 National Safety Regulator requirements

- 24.1.1 The Contractor shall ensure that its equipment, machinery and employees when on TFR premises complies fully with all applicable railway safety requirements and/or regulations of the National Safety Regulator Act 16 of 2002 and the relevant SANS Codes of Practice.
- 24.1.2 Permission for the engagement of a subcontractor by the Principal both initially and during a contract shall be subject to a review by TFR of the capability of the proposed subcontractor to comply with railway safety requirements and user specifications.
- 24.1.3 The Contractor and/or his subcontractors must grant TFR access, during the term of the contract, to review any railway safety related activities, including the coordination of such activities across all parts of the organisation.
- 24.1.4 The Contractor shall ensure that where applicable, such work is performed by person who has the necessary competencies as required in terms of any applicable railway safety standard or code of practice.
- 24.1.5 The Contractor shall ensure that all his employees are protected from the risk of being hit by moving trains.

#### 24.2 Special Permits

24.2.1 Where special work permits are required before work may be carried out such as for e.g. hot work (welding, cutting etc.), isolation, and occupations, the Contractor shall apply to the TFR Contract Representative/Technical Officer or the relevant authority for such permits to be issued. The Contractor shall strictly comply with the conditions and requirements pertaining to the issue of such work permits.

#### 24.3 Vehicle Safety

With respect to vehicles, vehicles and mobile plants the Contractor must ensure that:

- 24.3.1 They are of an acceptable design and maintained in a good working order and are used in accordance with their design and the intention for which they were designed
- 24.3.2 Are operated by a person who-has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate such vehicle and mobile plant;
- 24.3.3 Are operated by a person who has a medical certificate of fitness to operate those vehicle and mobile plant, issued by an occupational health practitioner;

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- 24.3.4 Vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried. No employees will be allowed to be transported at the back of LDV's / bakkies unless it is provided with a seat and safety belt and further that the risk assessment has indicated it to be a low risk.
- 24.3.5 Vehicles are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- 24.3.6 Vehicle must be equipped with an acoustic warning device which can be activated by the operator and an automatic acoustic reversing alarm
- 24.3.7 Vehicles must be inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.
- 24.3.8 No person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose.
- 24.3.9 All vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured.
- 24.3.10 Whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation
- 24.3.11 Tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees.
- 24.3.12 Where applicable, also in collaboration with the TFR representative and other appropriate personnel develop a traffic management plan for the site to ensure the safe movement of all construction related mobile plant where applicable
- 24.3.13 This plan is to be reviewed as and when required to ensure its applicability where applicable.
- 24.3.14 Those working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

#### 24.4 Housekeeping and general safeguarding on sites

- 24.4.1 Contractor must ensure that suitable housekeeping is continuously implemented on each construction site
- 24.4.2 The Contractor must ensure proper storage of materials and equipment and the removal of scrap, waste and debris at appropriate intervals.

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- 24.4.3 The Contractor must ensure that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways
- 24.4.4 The Contractor must ensure that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals.

#### 24.5 Hazardous Chemical Substances (HCS)

- 24.5.1 The Contractor must ensure that all employees exposed to hazardous chemicals are trained on the potential source of exposure, potential risk to health caused by exposure and measures to be taken by the contractor and employees against any risk of exposure.
- 24.5.2 HCS risk assessment to be conducted and where it indicates that any employee may be exposed, the contractor shall ensure that monitoring is carried out in terms of regulation 6 and 7 of the Hazardous Chemical Substances Regulations.
- 24.5.3 Employees exposed to hazardous substances shall be under medical surveillance
- 24.5.4 Where herbicides are used, the contractor shall comply with all relevant legislative requirements pertaining to the use of herbicides and that work is undertaken under the supervision of a person with a valid certificate in Pest Control.

#### 24.6 Stacking and Storage

- 24.6.1 The Contractor shall ensure that a competent person is appointed in writing with the duty of supervising all stacking and storage.
- 24.6.2 Adequate storage areas are provided, demarcated as storage areas and are kept neat and under control.

#### 24.7 Fire Precautions and Fire Safety

- 24.7.1 The Contractor must ensure that all appropriate measures are taken to avoid the risk of fire. The Contractor shall comply to the fire precautions as stipulated in the Environmental Regulations for Workplaces, 1987 and regulation 29 of the Construction Regulations, 2014
- 24.7.2 Sufficient and suitable storage is provided for flammable liquids, solids and gases.
- 24.7.3 Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials
- 24.7.4 The Contractor shall ensure that the work areas are clear, at all times, of any material, which could fuel a fire and that ccombustible materials do not accumulate, oily rags, waste and other substances liable to ignite are without delay removed to a safe place.

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- 24.7.5 A thorough inspection is made of the work site at the end of any working period to ensure that no material is left at the work site or any situation left in such a manner that a fire or accident could result (all machines to be turned off at main switches, and cylinders to be closed and hoses deflated).
- 24.7.6 Suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned and that such equipment is maintained in a good working order.
- 24.7.7 The fire equipment is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof
- 24.7.8 Sufficient number of employees are trained in the use of fire extinguishing equipment and familiarise themselves with locations of fire fighting equipment in the work site.
- 24.7.9 There is an effective evacuation plan providing for all persons to be evacuated speedily without panic, accounted for and a siren is installed and sounded in the event of a fire.
- 24.7.10 Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire and the means of escape is kept clear at all times.
- 24.7.11 The Contractor must ensure that fire fighting equipment are not to be used for any purpose other than their intended use.

#### 24.8 Demarcation of the site

- 24.8.1 It is important that activities of the contractor(s) are conducted within a limited area to facilitate control and to minimize the impact on the existing natural environment and the surroundings landowners.
- 24.8.2 The Contractor shall demarcate the boundaries of the site in order to restrict activities to the site.
- 24.8.3 The method of demarcation and the location of the demarcated area shall be determined by the Contractor and approved by the TFR Contract Representative prior to any work being undertaken. The Contractor shall ensure that all his plant, labour and materials remain within the boundaries of the site.
- 24.8.4 Failure to do so may result in the Contractor being required to fence off the boundaries of the site at his own expense to the satisfaction of the TFR . The contractor is responsible for the safeguarding of his/her own equipment and material while on site.

#### 24.9 Fall Protection Plan

24.9.1 In the event of the risk and hazard identification, as required in terms of clause 14 of this Specification, revealing risks relating to working from an elevated position the

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- contractor shall cause the designation of a competent person, responsible for the preparation of a fall protection plan;
- 24.9.2 The Contractor shall implement, maintain and monitor the fall protection plan for the duration of the contract. The Contractor shall also take such steps to ensure the continued adherence to the fall protection plan.
- 24.9.3 The fall protection plan shall include:-
  - (a) the procedures and methods to address all the identified risks per location;
  - (b) the evaluation of the employees physical and psychological fitness necessary to work at elevated positions;
  - (c) the training of employees working from elevated positions;
  - (d) rescue plan; and
  - (e) the procedure addressing the inspection, testing and maintenance of all fall protection equipment

#### 24.10 SHE Signage (Symbolic Safety Signs) on plant and in buildings

- 24.10.1The Contractor's employees shall comply with all SHE signage posted at various locations of TFR sites.
- 24.10.2The Contractor shall after occupation of the construction site ensure that appropriate SHE signs (Symbolic Safety Signs) are displayed on site

#### 24.11 General Machinery, Tools and Equipment

- 24.11.1 The Contractor shall ensure that all machinery, tools and equipment are identified, numbered or tagged, listed on an inventory list.
- 24.11.2 The Contractor shall ensure that all machinery, tools and equipment are safe to be used and is maintained in a good condition.
- 24.11.3 The Contractor shall ensure that all machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded in such a manner that persons cannot gain inadvertent access to the moving parts.
- 24.11.4 All machinery, tools and equipment to be regularly inspected at least monthly or as required by legislation and risk assessments. Records of such inspections shall be kept on the SHE file.
- 24.11.5 Where applicable machinery, tools and equipment must have the necessary approved test or calibration documentation.

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24.11.6 The Contractor shall ensure that all machinery, tools and equipment are operated by persons who have been trained to operate such machinery, tools or equipment.

#### **24.12 Portable Electrical and Explosive Power Tools**

- 24.12.1 The Contractor shall ensure that use and storage of all explosive power tools and portable electrical tools comply with all applicable legislation.
- 24.12.2 The Contractor shall ensure that only trained employees are authorised to use portable electrical tools and explosive power tools
- 24.12.3 The Contractor shall ensure that all portable electrical tools and explosive power tools are kept in a safe working condition.
- 24.12.4 All portable electrical tools and explosive power tools are inspected monthly by a competent person and daily before use by the operator of such tool. Records of such inspections must be kept in the safety file.
- 24.12.5 Users / Operators of electrical power tools and explosive power tools should be issued with suitable protective equipment

#### 24.13 Lifting Machine, Lifting Tackle and Suspended Loads

- 24.13.1 The Contractor shall ensure that lifting machine and tackle comply with Driven Machinery Regulation 18 and all other applicable legislative requirements and standards.
- 24.13.2 The Contractor shall ensure that lifting machine operators shall be competent to operate a lifting machine. They must be in possession of a valid permit. The training should have been done according to the Code of Practice by a provider registered by the Department of Labour.
- 24.13.3 A lock out system should be implemented to ensure that only an operator that is competent can draw lifting machines and fork lifts.
- 24.13.4 The Contractor shall ensure that before using any lifting machines or tackle the operator inspect it. Records of such inspections and examinations shall be kept on the safety file.
- 24.13.5 All lifting machines shall be examined and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months.
- 24.13.6 All lifting tackle should be recorded on a register and should be examined by an accredited person/company at intervals not exceeding 3 months.
- 24.13.7 All hooks shall be fitted with a safety latch/catch.

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- 24.13.8 All lifting tackle should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.
- 24.13.9 No person shall be moved or supported by means of a lifting machine unless such a machine is fitted with a cradle approved by an inspector.
- 24.13.10 Rigging of loads to be done in accordance with acceptable safe work practices
- 24.13.11 Contractors and their employees shall keep out from under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. They shall not pass or work under the boom or any crane or excavator.
- 24.13.12 Contractors and their employees shall ensure that crane loads are not carried over the heads of any workmen.
- 24.13.13 The Contractor shall ensure proper supervision in terms of guiding the load including the use of guide ropes to prevent loads from swinging and a trained person to direct lifting operations and checking the lifting tackle and attachments daily.

#### **24.17 Electrical Equipment**

The Contractor must ensure that:

- 24.17.1 Implementation and compliance with Electrical Machinery Regulations and regulation 24 of the Construction Regulations and OH&S Act.
- 24.17.2 All electrical, machinery and electrical work is performed in compliance with TFR Electrical Safety Instructions.
- 24.17.3 Connections are not made to any power supply without the prior written approval of the TFR Contract Representative.
- 24.17.4 All electrical machines and appliances provided by the Contractor for his own use on the Site are in a serviceable condition
- 24.17.5 Power tools used on the Site are protected by residual current devices approved by TFR Contract Representative and are double insulated.
- 24.17.6 All extension cords, portable tools and electrical plant supplied at a voltage above 32 volts are inspected, tested and tagged by a Licensed Electrician at regular monthly intervals. Details of inspections and tests are kept in Log Books available for inspection by the TFR Contract Representative or any other authorised Officer of TFR.
- 24.17.7 All electrical installations are inspected by the TFR Contract Representative (or his nominee) to ensure that the installation complies with the Statutory Regulations applicable to the site and TFR Electrical Safety Instructions. Any installations deemed

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- unsatisfactory by the TFR Contract Representative should be removed by the Contractor at his expense.
- Portable lights have adequate stability and are fitted with a mechanical guard to 24.17.8 protect the lamp. Temporary festoon lighting is of the 'double insulated' type and is supported at least 2.5m above the floor, if possible. Hand lamps are of the 'all insulated' type.
- All temporary light fittings are supplied from more than one final sub-circuit, with the 24.17.9 supply from a residual current device, extra low voltage source or an isolating transformer.
- 24.17.10 The Contractor must obtain approval from the TFR Contract Representative before any of his employees or Sub-contractors commence work within three (3) metres of conductor rails or high tension wires, or where there is a possibility of equipment coming close to and/or touching a power source, and must provide suitable protective insulating barriers. For the erection of scaffolding, the distance is five (5) metres.
- 24.17.11 Only authorised persons may enter Electrical Contactor Houses, Motor Rooms, Switch Rooms, Control Rooms or Cable Ducts. Should the Contractor require entering such places to carry out work, he must first obtain permission from the TFR Contract Representative and obtain a valid Permit to Work.
- 24.17.12 The Contractor's employees required to enter such electrical spaces "authorised persons", with the names entered in the TFR Authorised Persons Register, after receiving approval from the TFR Electrical Officer, or they are accompanied by an authorised person who must supervise the placement of Danger Tags and Out-of-Service Tags, as well as Electrical Isolation Permit.
- 24.17.13 Electrical equipment supply cabling distribution boards, fixed lighting and portable appliances, extension leads, welding machines, compressors, pumps and hand portable tools are inspected on a monthly basis and also by the user daily before use.
- 24.17.14 Such monthly inspection(s) are to be performed by an appropriately qualified Electrician.
- 24.17.15 Contractors working on, over, under, or adjacent to railway lines and near high voltage equipment shall comply with the TFR E7/1 Specification for Works On, Over, Under or Adjacent to Railway Lines and Near High Voltage Equipment.

#### 25. **Electric fences**

25.1 No person shall design, manufacture, sell, install or use an electric fence or electric fence energiser other than in accordance with the relevant health and safety standard incorporated into these Regulations under section 44 of the Act

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- 25.2 Provided that electric fences or electric fence energizers installed in accordance with the Electrical Machinery Regulations, 1988, prior to the coming into force of these Regulations shall be deemed to comply with this regulation.
- 25.3 The seller, importer and manufacturer of an electric fence energizer shall prove compliance with SANS 60335-2-76 by producing a certificate issued by an accredited test laboratory recognized by the accreditation authority
- 25.4 Every user or lessor of an electric fence system shall have an electric fence system certificate in respect of such electric fence system:
- 25.4 1 provided that such certificate shall be transferable. Sub regulation (4) shall not apply to an electric fence system that existed prior to the coming into force of these Regulations:

#### 25.4.2 Provided that if-

- a) any addition or alteration is effected to such electric fence system; or
- b) there is a change of ownership of the premises on which such electric fence system exists after 1 October 2012, the user or lessor shall obtain an electric fence system certificate for the electric fence system, where after the provisions of sub regulation {4} shall be applicable.

#### 26. Work on disconnected electrical machinery

- 26.1 Without derogating from any specific duty imposed on employers or users of machinery by the Act,
- 26.2 An employer or user shall, whenever work is to be carried out on any electrical machinery which has been disconnected from all sources of electrical energy,
- 26.3 which is liable to acquire or to retain an electrical charge, as far as is practicable, cause precautions to be taken by earthing or other means to discharge the electrical energy to earth from such electrical machinery or any adjacent electrical machinery if there is danger there from before it is handled and to prevent any electrical machinery from being charged or made live while persons are working thereon.

#### 27 Notice

- 27.1 The Contractor or user shall cause notices to be displayed within, and at all designated entrances to premises, as the case may be, where generating plant and transforming, switching or linking apparatus are situated,
- 27.2 which notices shall-
  - (a) prohibit unauthorized persons from entering such premises; STAATSKOERANT, 25 MAART 2011 No. 34154 7

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- (b) prohibit unauthorized persons from handling or interfering with electrical machinery;
- (c) contain directions of procedure in case of fire; and
- (d) contain directions on how to resuscitate persons suffering from the effects of electric shock:
- 27.3 Provided that this regulation shall not apply to miniature substations and distribution boxes, on condition that their access doors can be locked or bolted and that only authorized persons are permitted to open them and work thereon.

#### 28. Switchgear and transformer premises

- 28.1 The Contractor or user shall cause enclosed premises housing switchgear and transformers:
  - (f) to be of an ample size so as to provide clear working space for operating and maintenance staff;
  - (g) to be sufficiently ventilated to maintain the equipment at a safe working temperature;
  - (h) to be, as far as is practicable, constructed so as to be proof against rodents, leakage, seepage and flooding;
  - to be provided with lighting that will enable all equipment, thoroughfares and working areas to be clearly distinguished and all instruments, labels and notices to be easily read;
  - (j) to have doors or gates, which can be readily opened from the inside, opening outwards;
  - (k) to be provided with fire extinguishing appliances or systems which are suitable for use on electrical machinery and which are maintained in good working order: Provided that, in the case of unattended premises, suitable . fire extinguishing appliances be made available at such premises only when work is in progress thereon or therein; and
  - (I) to be of such construction that persons cannot reach in and touch bare conductors or exposed live parts of the electrical machinery.
- 28.2 No person other than a person authorized thereto by the employer or user shall enter, or be required or permitted by the employer or user to enter, premises housing switchgear or transformers, unless all live conductors are insulated against inadvertent contact or are screened off: Provided that the person so authorized may be accompanied by any other person acting under his control.

#### 29 Electrical control gear

29.1 The Contractor shall provide all electrical machinery with controlling apparatus and protective devices which shall, as far as is reasonably practicable, be capable of automatically isolating the power supply in the event of a fault developing on such machinery.

Date





- 29.2 The Contractor shall not place a switch, circuit breaker or fuse in the neutral conductor of a polyphase alternating current or three-wire direct current distribution system unless such switch, circuit breaker or fuse is so arranged as to isolate all phase conductors and the neutral conductor simultaneously:
  - Provided that this shall not include an isolating link on the neutral conductor installed for test purposes or to prevent circulating currents.
- 29.3 The Contractor shall, whenever reasonably practicable, provide switchgear with an interlocking device so arranged that the door or cover of the switch cannot be opened unless the switch is in the 'off position and cannot be switched on unless the door or cover is locked.
- 29.4 The Contractor shall mark or label all controlling apparatus permanently so as to identify the system or part of the system or the electrical machinery which it controls, and where such control apparatus is accessible from the front and the back these markings shall be on both the front and the back.
- 29.5 The Contractor shall post a notice at switchgear or control gear which has been switched off or locked out to enable persons to work on electrical machinery or other machinery operated by electricity and controlled by. such switchgear or control gear, warning against reclosing such switchgear or control gear.

#### 30 Switchboards

- 30.1.1 The Contractor shall provide an unobstructed space for operating and maintenance staff at the back and front of all switchboards, and
- 30.1.2 the space at the back shall be kept closed and locked except for the purpose of inspection, alteration or repair:
  - Provided that the requirements of this regulation with respect to the unobstructed space at the back of the switchboard shall not apply in the case of:
  - (a) switchboards which have no uninsulated conductors accessible from the GOVERNMENT GAZETTE, 25 MARCH 2011 back;
  - (b) switchboards the switchgear of which is of a totally enclosed construction;
  - (c) switchboards, the backs of which are accessible only through an opening in the wall or partition against which they are placed, such openings being kept closed and locked; and
  - (d) switchboards which can be safely and effectively maintained from the front and which have all parts accessible from the front.
- 30.2 The Contractor shall ensure that all switchboards are selected, designed, manufactured, installed and maintained in accordance with sound engineering practice.

#### 31 Electrical machinery in hazardous locations

Contractor Signature	Date
Some detail of graded community	5466



- 31.1 The Contractor shall identify all hazardous locations and classify them in accordance with the relevant health and safety standard incorporated into these Regulations under section 44 of the Act.
- 31.2 The Contractor shall not use electrical machinery in locations where there is danger of fire or explosion owing to the presence, occurrence or development of explosive or flammable articles, or where explosive articles are manufactured, handled or stored, unless such electrical machinery, with regard to its construction relating to the classification of the hazardous locations in which it is to be used, meets the requirements of the safety standard incorporated for this purpose in these Regulations under section 44 of the Act.

#### 32. Portable electric tools

- 32.1 The Contractor shall not use or permit the use of a portable electric tool with an operating voltage that exceeds 50 V to earth unless:
  - a) it is connected to a source of electrical energy incorporating an earth leakage protection device, the construction of which meets the requirements of the relevant health and safety standard incorporated into these Regulations under section 44 of the Act; or
  - b) it is connected to a source of electrical energy through the interposition between each tool and the source of an individually double-wound isolating transformer, the secondary winding of which is not earthed at any point and the construction of which meets the requirements of the relevant health and safety standard incorporated into these Regulations under section 44 of the Act; or
  - c) it is connected to a source of high frequency electrical energy derived from a generator which is used solely for supplying energy to such portable electric tool and which arrangement is approved by the chief inspector; or
  - d) it is clearly marked that it is constructed with double or reinforced insulation.
- 32.2 The Contractor shall not shall sell a portable electric tool constructed with double or reinforced insulation referred to in subregulation unless:
  - a) it is clearly marked that it is constructed with such insulation; and
  - b) its insulation is constructed in accordance with the relevant health and safety standard incorporated into these Regulations under section 44 of the Act.
- 32.3 No employer or user shall use or permit the use of a portable electric tool which is not fitted with a switch to allow for easy and safe starting and stopping of the tool.
- 32.4 The employer or user shall maintain every portable electric tool, together with its flexible cord and plug, in good working order.

#### 33 Portable electric lights

33.1 The Contractor shall not use or permit the use of a portable light where the operating voltage exceeds 50 V unless:

Contractor Signature	Date



- a) it is fitted with a substantial handle which is made of non-hygroscopic, nonconducting material;
- b) all live metal parts or parts which may become live owing to a faulty circuit are completely protected against accidental contact;
- c) the lamp is protected by means of a substantial guard firmly fixed to the insulated handle; and
- d) the cable lead-in is such that the insulation can withstand rough use.
- 33.2 The Contractor shall not use or permit the use of a portable electric light in wet or damp conditions or in confined spaces inside metal vessels or when the person is in contact with large masses of metal, unless:
  - a) the lamp is connected to a source of electrical energy incorporating an earth leakage protection device the construction of which meets the requirements of the relevant safety standard incorporated into these Regulations under section 44 of the Act; or
  - b) the operating voltage of the lamp does not exceed 50 V, and where this electrical energy is derived from a transformer, such transformer shall have separate windings.

# 34. Management and control of exposure to Polychlorinated Biphenyls (PCB) contaminated material

- 34.1 The Contractor shall ensure that all personnel, persons who work with material that contains PCBs and persons who might come into contact with such material are appropriately familiarized with the danger of working with PCBs.
- 34.2 The Contractor shall ensure that provide systems to ensure that personnel who are involved in activities that affect the safe and acceptable use of material that contains PCBs have, at all times, current and suitably authorized documented procedures and standards available, and that such documentation can be retrieved and updated when required.
- 34.3 The Contractor shall ensure adequate ventilation in the working area; portable fans at ground level should be used in enclosed substations.
- 34.4 The Contractor shall ensure full protective clothing shall be worn, which includes:
  - a) a one-piece chemical resistant suit,
  - b) chemical resistant gloves,
  - c) disposable covers for shoes,
  - d) in confined spaces, approved self-contained breathing apparatus, and

Contractor Signature	Date



- e) a full-face mask with a type "CC" replacement canister can be used for lower level exposure.
- 34.5 A respiratory protection device with a full-face mask and a cartridge or canister suitable for use with PCBs is required when PCB liquids hotter than 55 °C are handled, where a significant amount of PCB liquid is exposed to the air, or where adequate ventilation is not possible. In a fire situation where PCBs are involved, self-contained breathing apparatus should be used.
- 34.6 The Contractor shall ensure impervious gloves made of butyl rubber, neoprene, nitrite rubber, polyvinyl alcohol, Viton saranex or teflon (NOT ordinary rubber) should be worn when PCB liquids are handled.
- 34.7 The Contractor shall ensure that all PPE shall be disposed of after use and potentially contaminated protective equipment shall be treated as material that contains PCB and shall be disposed of accordingly.
- 34.8 The Contractor shall ensure that respiratory protective equipment is provided and worn when required as per the requirements of clause 5.2 of SANS 290:2016.
- 34.9 The Contractor shall ensure that employees likely to be exposed to PCB contaminated material are trained in first aid measure to be taken in case of exposure.

#### 35. The designer of a structure

- 35.1 The designer of a structure must:
  - (a) Ensure that the applicable safety standards of the Act are complied with in the design.
  - (b) Take into consideration the health and safety specification submitted by the client.
  - (c) Before the contract is put out to tender, make available in a report to the client-
    - (i) all relevant health and safety information about the design of the relevant structure that may affect the pricing of the construction work.
    - (ii) the geotechnical-science aspects, where appropriate; and
    - (iii) the loading that the structure is designed to withstand.
  - (d) Inform the client in writing of any known or anticipated dangers or hazards relating to the construction work and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered.
  - (e) Refrain from including anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which can be avoided by modifying the design or by substituting materials.

Contractor Signature	Date



- (f) Take into account the hazards relating to any subsequent maintenance of the relevant structure and must make provision in the design for that work to be performed to minimize the risk;
- (g) Carry out the necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design
- (h) Stop any contractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects
- (i) In his or her final inspection of the completed structure in accordance with the National Building Regulations, include the health and safety aspects of the structure as far as reasonably practicable, declare the structure safe for use, and issue a completion certificate to the client and a copy thereof to the contractor; and
- (j) During the design stage, take cognizance of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

#### 36. Confidentiality

- 36.1 The Contractor must, at all times, consider all data or information given to him or that is required in connection with the work of the Company, as confidential and not makes unauthorized use of it.
- 36.2 He/she must ensure that such data or information is not given to any non-employee of the contractor without written consent of the TFR Project Manager.
- 36.3 The Contractor shall be aware of the confidentiality of the mentioned information and is compelled to treat it accordingly.
- 36.4 The contractor must provide adequate physical protection for any confidential documents, etc, which were obtained from Transnet in connection with the contract work as well as any copies made thereof. If any documents or sketches are lost TFR must be notified immediately.

Contractor Signature	Date
5	



## **ANNEXURE 1**

## **CONTRACTOR MONTHLY SHE REPORT**

For Month/Year			Name Contractor	of		
Name of Project						
<b>Project Number</b>		Date of 0	Commencement	Da	te of Completio	n
Number of employees	Man-he worked Month		Cumulative (Project duration man hours)	n- S	fan-hours Since last Lost Sime Incident LTI)	

## 1. Details of SHE Incidents

Incident	This Month	Cumulative(Project duration)	Short description of major/ significant incidents and preventative action taken
Number of fatalities			
Number of disabling incidents			
Number of Medical Treatment Cases			
Number of first aid Cases			
Number of near miss incidents			
Motor vehicle incidents			
Number of environmental incidents			
Positive substance abuse incidents			
Substandard Act/ Conditions observed			
Legal violations observed			

Date



## 2. Details of SHE Meetings

Date	No of participants	Major SHE Concerns	Action taken

# 3. Details of Audits/Inspections

Date	Area / Facility	Findings/Recommendations	Action taken

# 5. Details of any SHE Promotional activities for the month

Date	Activity	Remarks

# **6. Safety Communication**

Month	Number of Safety talks held	Remarks

Attach separate sheets for further or other	· details	
Name of Contractor Representative	Signature	Date
Contractor Signature	. Date	
TRN-IMS-GRP-GDI -014 2	Version 1.0	



Contractor Signature	Date
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# **TRANSNET**



Transnet SOC Limited Registration Number 1990/00900/06

# TRANSNET SPECIFICATION

# E7/1 - SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

(This specification shall be used in network operator contracts)

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(This page not to be issued with contract)

# SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

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Date:

May 2011

(This page not to be issued with contract)

# **TRANSNET**



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#### 1.0 SCOPE

1.1 This specification covers the network operator's requirements for general work and works on, over, under or adjacent to railway lines and near high voltage equipment.

#### 2.0 DEFINITIONS

The following definitions shall apply:

"Authorised Person" - A person whether an employee of the network operator or not, who has been specially authorised to undertake specific duties in terms of Transnet' publication Electrical Safety Instructions, and who holds a certificate or letter of authority to that effect.

"Barrier" Any device designed to restrict access to "live" high-voltage electrical equipment.

"Bond" - A short conductor installed to provide electrical continuity.

"Contractor" - Any person or organisation appointed by the network operator to carry out work on its behalf.

"Contract Supervisor" - The person or juristic person appointed by the network operator from time to time as the Contract Supervisor, to administer the Contractor's performance and execution of the Works according to the powers and rights held by and obligations placed upon the Contract Supervisor in terms of the Contract.

"Dead" - Isolated and earthed.

"Electrical Officer (Contracts)" - The person appointed in writing by the Project Manager in terms of this specification as the person who shall be consulted by the Contractor in all electrical matters to ensure that adequate safety precautions are taken by the Contractor.

"Executive Officer" - The person appointed by the network operator from time to time as the Executive Officer to act according to the rights and powers held by and obligations placed upon him in terms of the Contract.

"High-Voltage" - A voltage normally exceeding 1000 volts.

"Live" - A conductor is said to be "live" when it is at a potential different from that of the earth or any other conductor of the system of which it forms a part.

"Near" - To be in such a position that a person's body or the tools he is using or any equipment he is handling may come within 3 metres of "live" exposed high-voltage electrical equipment.

"Occupation" - An authorisation granted by the network operator for work to be carried out under specified conditions on, over, under or adjacent to railway lines.

"Occupation Between Trains" - An occupation during an interval between successive trains.

"Optical Fibre Cable" - Buried or suspended composite cable containing optical fibres used in:

- telecommunication networks for transmission of digital information and
- safety sensitive train operations systems.

"Project Manager" – As defined in the special conditions of the contract. The person or juristic person appointed by the network operator from time to time as the Project Manager, to administer the Contract according to the powers and rights held by and obligations placed upon him in terms of the Contract.

"Responsible Representative" - The responsible person in charge, appointed by a contractor, who has undergone specific training (and holds a certificate) to supervise (general or direct) staff under his control who perform general work or to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

"Total Occupation" - An occupation for a period when trains are not to traverse the section of line covered by the occupation.

"Work on" - Work undertaken on or so close to the equipment that the specified working clearances to the "live" equipment cannot be maintained.

"Work Permit" - A combined written application and authority to proceed with work on or near dead electrical equipment.

"Works" - The contractual intent for the work to be done as defined in the contract at a defined work site.

#### **PART A - GENERAL SPECIFICATION**

#### 3.0 AUTHORITY OF OFFICERS OF TRANSNET

- 3.1 The Contractor shall co-operate with the officers of the network operator and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of the network operator's railway lines and high-voltage equipment.
- 3.2 Without limiting the generality of the provisions of clause 3.1, any duly authorised representative of the network operator, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of the network operator's assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS**.

#### 4.0 CONTRACTOR'S REPRESENTATIVES AND STAFF

- 4.1 The Contractor shall nominate Responsible Representatives of whom at least one shall be available at any hour for call-out in cases of emergency. The Contractor shall provide the Contract Supervisor with the names, addresses and telephone numbers of the representatives.
- 4.2 The Contractor guarantees that he has satisfied himself that the Responsible Representative is fully conversant with this specification and that he shall comply with all his obligations in respect thereof.
- 4.3 The Contractor shall ensure that all contractor staff receives relevant awareness, educational and competence training regarding safety as prescribed.

#### 5.0 OCCUPATIONS AND WORK PERMITS

- 5.1 Work to be done during total occupation or during an occupation between trains or under a work permit shall be done in a manner decided by the Contract Supervisor and at times to suit the network operator requirements.
- 5.2 The Contractor shall organise the Works in a manner which will minimise the number and duration of occupations and work permits required.
- 5.3 The network operator will not be liable for any financial or other loss suffered by the Contractor arising from his failure to complete any work scheduled during the period of an occupation or work permit.
- 5.4 The Contractor shall submit to the Contract Supervisor, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 21 days before they are required. The network operator does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 5.5 The network operator reserves the right to cancel any occupation or work permit at any time before or during the period of occupation or work permit. If, due to cancellation or change in date or time, the Contractor is not permitted to start work under conditions of total occupation or work permit at the time arranged, all costs caused by the cancellation shall be born by the Contractor except as provided for in clauses 5.6 to 5.8.
- When the Contractor is notified less than 2 hours before the scheduled starting time that the occupation or work permit is cancelled, he may claim reimbursement of his direct financial losses caused by the loss of working time up to the time his labour and plant are employed on other work, but not exceeding the period of the cancelled occupation or work permit.
- 5.7 When the Contractor is notified less than 2 hours before the scheduled starting time, or during an occupation or work permit, that the duration of the occupation or work permit is reduced, he may claim reimbursement of his direct financial losses caused by the loss of working time due to the reduced duration of the occupation or work permit.
- 5.8 Reimbursement of the Contractor for any loss of working time in terms of clause 5.6 and 5.7, shall be subject to his claims being submitted within 14 days of the event with full details of labour and plant involved, and provided that the Contract Supervisor certifies that no other work on which the labour and plant could be employed was immediately available.
- 5.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Contract Supervisor written confirmation of the date, time and duration of the occupation.
- 5.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of the Work Permit, signifying that he is aware of the work boundaries within which work may be undertaken. After the work for which the permit was granted has been completed, or when the

work permit is due to be terminated, or if the permit is cancelled after the start, the same person who signed portion C shall sign portion D of the Work Permit, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

#### 6.0 SPEED RESTRICTIONS AND PROTECTION

- 6.1 When speed restrictions are imposed by the network operator because of the Contractor's activities, the Contractor shall organise and carry out his work so as to permit the removal of the restrictions as soon as possible.
- When the Contract Supervisor considers protection to be necessary the Contractor shall, unless otherwise agreed, provide all protection including flagmen, other personnel and all equipment for the protection of the network operator's and the Contractor's personnel and assets, the public and including trains.
- 6.2.1 The network operator will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Contract Supervisor, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in the Manual for Track Maintenance (Document no. BBB0481):
  - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
  - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
  - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
  - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)
- 6.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction which may be given by the network operator personnel providing protection.

#### 7.0 ROADS AND ROADS ON THE NETWORK OPERATOR'S PROPERTY

- 7.1 The Contractor shall take every reasonable precaution to prevent damage to any roads or bridges used to obtain access to the site, and shall select routes, use vehicles, and restrict loads so that any extraordinary traffic as may arise from the moving of plant or material to or from the site shall be limited as far as is reasonably possible.
- 7.2 The Contractor shall not occupy or interfere in any way with the free use of any public or private road, right-of-way, path or street unless the Contract Supervisor has obtained the approval of the road authority concerned.

#### 8.0 CLEARANCES

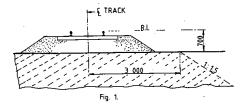
- 8.1 No temporary works shall encroach on the appropriate minimum clearances set out in the Manual for Track Maintenance (Document no. BBB0481):
  - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
  - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
  - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
  - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

#### 9.0 STACKING OF MATERIAL

9.1 The Contractor shall not stack any material closer than 3m from the centre line of any railway line without prior approval of the Contract Supervisor.

#### 10.0 EXCAVATION, SHORING, DEWATERING AND DRAINAGE

10.1 Unless otherwise approved by the Contract Supervisor any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 10.2 The Contractor shall provide, at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 10.3 Where required by the Contract Supervisor, drawings of shoring for any excavation under or adjacent to a railway line shall be submitted and permission to proceed, obtained before the excavation is commenced.
- 10.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Contract Supervisor.
- The Contractor shall not block, obstruct or damage any existing drains either above or below ground level unless he has made adequate prior arrangements to deal with drainage.

#### 11.0 FALSEWORK FOR STRUCTURES

- 11.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Contract Supervisor and his permission to proceed obtained before the falsework is erected. Each drawing shall be given a title and a distinguishing number and shall be signed by a registered professional engineer certifying that he has checked the design of the falsework and that the drawings are correct and in accordance with the design.
- 11.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Contract Supervisor a certificate signed by a registered professional engineer certifying that he has checked the falsework and that it has been erected in accordance with the drawings. Titles and numbers of the drawings shall be stated in the certificate. Notwithstanding permission given by the Contract Supervisor to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

#### 12.0 PILING

12.1 The Contract Supervisor will specify the conditions under which piles may be installed on the network operator's property.

#### 13.0 UNDERGROUND SERVICES

- 13.1 No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services which may be damaged thereby.
- Any damage shall be reported immediately to the Contract Supervisor, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

#### 14.0 BLASTING AND USE OF EXPLOSIVES

- 14.1 When blasting within 500m of a railway line, the Contractor shall observe the requirements stipulated in this specification.
- 14.2 No blasting shall be carried out except with the prior written permission of the Contract Supervisor and under such conditions as he may impose.
- 14.3 On electrified lines the Contractor shall also obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 21 days notice of his intention to blast. No blasting shall be done in the vicinity of electrified lines unless a member of the network operator's electrical personnel is present.
- 14.4 The Contractor shall arrange for the supply, transport storage and use of explosives.
- 14.5 The Contractor shall have labour, tools and plant, to the satisfaction of the Contract Supervisor, available on the site to clear immediately any stones or debris deposited on the track or formation by blasting, and to repair any damage to the track or formation immediately after blasting. Repairs to the track shall be carried out only under the supervision of a duly authorised representative of the network operator.
- 14.6 The Contractor shall notify the Contract Supervisor of his intention to blast at least 21 days before the commencement of any blasting operations.
- 14.7 Before any blasting is undertaken, the Contractor and the Contract Supervisor shall jointly examine and measure up any buildings, houses or structures in the vicinity of the proposed blasting to establish the extent of any existing cracking or damage to such structures, etc. The Contractor, shall, subject to the provisions stipulated in the Contract Insurance Policy, make good any deterioration of such buildings, houses, or structures, which, in the opinion of the Contract Supervisor, was directly caused by the blasting.
- 14.8 After completion of the blasting the Contractor shall obtain a written clearance from each landowner in

- the vicinity of the blasting operations to the effect that all claims for compensation in respect of damage caused by the blasting operations to their respective properties, have been settled.
- 14.9 The Contractor shall provide proof that he has complied with the provisions of clauses 10.17.1 to 10.17.4 of the Explosives Regulations (Act 26 of 1956 as amended).
- 14.10 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Contract Supervisor, assisted by flagmen with the necessary protective equipment, will be in communication with the controlling railway station.
  - Only this person will be authorised to give the Contractor permission to blast, and the Contractor shall obey his instructions implicitly regarding the time during which blasting may take place.
- 14.11 The flagmen described in clause14.10, where provided by the network operator, are for the protection of trains and the network operator's property only, and their presence does not relieve the Contractor in any manner of his responsibilities in terms of Explosives Act or Regulations, or any obligation in terms of this Contract.
- 14.12 The person described in clause 14.10 will record in a book provided and retained by the network operator, the dates and times:-
  - (i) when each request is made by him to the controlling station for permission to blast;
  - (ii) when blasting may take place;
  - (iii) when blasting actually takes place; and
  - (iv) when he advises the controlling station that the line is safe for the passage of trains.
- 14.13 Before each blast the Contractor shall record in the same book, the details of the blast to be carried out. The person appointed by the Contract Supervisor and the person who will do the blasting shall both sign the book whenever an entry described in clause 14.12 is made.

#### 15.0 RAIL TROLLEYS

- 15.1 The use of rail trolleys or trestle trolleys on a railway line for working on high voltage equipment will be permitted only if approved by the Contract Supervisor and under the conditions stipulated by him.
- 15.2 All costs in connection with trolley working and any train protection services requested by the Contractor shall, be borne by the Contractor, unless otherwise agreed.

#### 16.0 SIGNAL TRACK CIRCUITS

- Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of railway line/lines.
- 16.2 No signal connections on track-circuited tracks shall be severed without the Contract Supervisor's knowledge and consent.

#### 17.0 PENALTY FOR DELAYS TO TRAINS

17.1 If any trains are delayed by the Contractor and the Contract Supervisor is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor as stipulated in the contract, for the period and number of trains delayed.

#### 18.0 SURVEY BEACONS AND PEGS

- 18.1 The Contractor shall not on any account move or damage any beacon, bench mark, reference mark, signal or trigonometrical station in the execution of the Works without the written approval of the Contract Supervisor.
  - Should the Contractor be responsible for any such occurrence, he shall report the circumstances to the Contract Supervisor who will arrange with the Director-General of Surveys for replacement of the beacon or mark at the cost of the Contractor.
- 18.2 The Contractor shall not move or damage any cadastral or mining beacon without the written approval of the Contract Supervisor and before it has been referenced by a registered land surveyor. Any old boundary beacon, which becomes an internal beacon on creation of new boundaries, shall not be moved without the written approval of the Contract Supervisor.

- Should the Contractor move or damage any cadastral or mining beacon without authority, he shall be responsible for having it replaced, at his cost, by a land surveyor.
- 18.3 The Contractor shall preserve all pegs and bench marks. Such survey points shall not be removed without the written approval of the Contract Supervisor. Should any peg or benchmark be removed without authority, the Contract Supervisor will arrange for its replacement and the cost will be recovered from the Contractor. No claim will be considered for delay in replacing any such peg or bench mark. Each peg replaced shall be checked by the Contractor.
- 18.4 Where a new boundary has been established, beacons on the fence line shall not be disturbed, and fence posts or anchors may not be placed or excavations made within 0,6 m of any beacon without the prior written approval of the Contract Supervisor.

#### 19.0 TEMPORARY LEVEL CROSSINGS

- 19.1 The Contract Supervisor may, on request of the Contractor, and if necessary for the purpose of execution of the Works, permit the construction of a temporary level crossing over a railway a line at a position approved by the Contract Supervisor and at the Contractor's cost. The period for which the temporary level crossing is permitted will be at the discretion of the Contract Supervisor.
- 19.2 The Contractor will provide protection and supervise the construction of the road over the track(s) and within the railway servitude at the level crossing, as well as the erection of all road signs and height gauges. All cost to be borne by the applicant.
  - The Contractor shall exercise extreme caution in carrying out this work, especially in respect of damage to tracks, services, overhead power and communications routes and prevent contact with "live" overhead electrical equipment.
  - Unless otherwise agreed, the Contractor will provide the service deviations or alterations to the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to accommodate the level crossing.
- 19.3 The Contractor shall take all necessary steps including the provision of gates, locks and, where necessary, watchmen to restrict the use of the temporary level crossing to himself and his employees, his subcontractors and their employees, the staff of the network operator and to such other persons as the Contract Supervisor may permit and of whose identity the Contractor will be advised. If so ordered by the Contract Supervisor, the Contractor shall provide persons to control road traffic using the temporary level crossing. Such persons shall stop all road traffic when any approaching train is within seven hundred and fifty (750) metres of the temporary level crossing, and shall not allow road traffic to proceed over it until the lines are clear.
- 19.4 The Contractor shall maintain the temporary level crossing within the railway servitude in good condition for the period it is in use. A temporary agreement with the road authority to be concluded for the maintenance of the level crossing outside the railway servitude.
- When the temporary level crossing is no longer required by the Contractor, or permitted by the network operator, the Contractor shall at his own cost remove it and restore the site and the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to its original condition. Work over the tracks and within the railway servitude will be supervised by the network operator.

#### 20.0 COMPLETION OF THE WORKS

20.1 On completion of the works, the Contractor shall remove all the remaining construction plant and material from the site, other than material which is the property of the network operator, and leave the site in a clean, neat and tidy condition. If material and plant is required for the liability and maintenance period the Contract supervisor must authorise it's retention on site.

#### 21.0 PROTECTION OF PERSONS AND PROPERTY

21.1 The Contractor shall provide and maintain all lights, guards, barriers, fencing and watchmen when and where necessary or as required by the Contract Supervisor or by any statutory authority, for the protection of the Works and for the safety and convenience of the public.

Red, yellow, green or blue lights may not be used by the Contractor as they can be mistaken for signals. Red, yellow, green or white flags shall only be used for protection by the Contractor. Within the precincts of a port the Contractor shall obtain the permission of the Port Captain before installing any light.

- 21.2 The Contractor shall take all the requisite measures and precautions during the course of the Works to:
  - (i) protect the public and property of the public,
  - (ii) protect the property and workmen of both the network operator and the Contractor,
  - (iii) avoid damage to and prevent trespass on adjoining properties, and
  - (iv) ensure compliance with any instruction issued by the Contract Supervisor or other authorised person, and with any stipulation embodied in the contract documents which affects the safety of any person or thing.
- 21.3 The network operator will provide, at its own cost, protection for the safe working of trains during such operations as the Contract Supervisor may consider necessary. Protection by the network operator for any purpose whatsoever, does not absolve the Contractor of his responsibilities in terms of the Contract.
- 21.4 The Contractor shall take all precautions and appoint guards, watchmen and compound managers for prevention of disorder among and misconduct by the persons employed on the Works and by any other persons, whether employees or not, on the work site and for the preservation of the peace and protection of persons and property in the direct neighbourhood. Any relocation of camps because of disorder shall be at the Contractor's expense.
- 21.5 All operations necessary for the execution of the Works, including the provision of any temporary work and camping sites, shall be carried out so as not to cause veldt fires, ground and environmental pollution, soil erosion or restriction of or interference with streams, furrows, drains and water supplies.
  - If the original surface of the ground is disturbed in connection with the Works, it shall be made good by the Contractor to the satisfaction of the land owner, occupier or responsible authority.
- 21.6 The Contractor shall take all reasonable steps to minimise noise and disturbance when carrying out the Works, including work permitted outside normal working hours.
- 21.7 Dumping of waste or excess materials by the Contractor shall, in urban areas, be done under the direction and control of, and at sites made available by the local authority. Dumping outside local authority boundaries shall be done only with the express permission and under the direction and control of the Contract Supervisor.
- 21.8 The Contractor shall comply with environmental protection measures and specifications stipulated by the Contract Supervisor and/or local and environmental authorities.

#### 22.0 INTERFERENCE WITH THE NETWORK OPERATOR'S ASSETS AND WORK ON OPEN LINES

- 22.1 The Contractor shall not interfere in any manner whatsoever with an open line, nor shall he carry out any work or perform any act which affects the security, use or safety of an open line except with the authority of the Contract Supervisor and in the presence of a duly authorised representative of the network operator.
- 22.2 The Contractor shall not carry out any work or operate any plant, or place any material whatsoever nearer than three metres from the centre line of any open line except with the written permission of the Contract Supervisor and subject to such conditions as he may impose.
- 22.3 Care must be taken not to interfere with or damage any services such as overhead wire routes, cables or pipes and optical fibre cable, except as provided for the work specified. The Contractor will be held responsible for any damage to or interruption of such services arising from any act or omission on his part or of any of his employees, or persons engaged by him on the Works. The cost of repairing, replacing or restoring the services, as well as all other costs arising from any damage to services, shall be borne by, and will be recovered from the Contractor.
- 22.4 Authority granted by the Contract Supervisor and the presence of an authorised representative of the network operator in terms hereof, shall not relieve the Contractor of his duty to comply with this specification.

#### 23.0 ACCESS, RIGHTS-OF-WAY AND CAMPSITES

- Where entry onto the network operator's property is restricted, permission to enter will be given only for the purpose of carrying out the Works and will be subject to the terms and conditions laid down by the network operator.
- 23.2 The Contractor shall arrange for campsites, workplaces and access thereto as well as for any right-of-

way over private property to the site of the Works, and for access within the boundaries of the network operator's property. The owners of private property to be traversed shall be approached and treated with tact and courtesy by the Contractor, who shall, if necessary, obtain a letter of introduction to such property owners from the Contract Supervisor.

The Contractor shall be responsible for the closing of all gates on roads and tracks used by him or his employees. Except with the prior approval of the Contract Supervisor and the owner or occupier of any private land to be traversed, the Contractor shall not cut, lower, damage, remove or otherwise interfere with any fence or gate which is either on the network operator's property or on private property and which restricts access to the Works. Where such approval has been given, the Contractor shall prevent entry of animals or unauthorised persons onto the network operator's or private property, and shall make the fences safe against trespass at the close of each day's work.

- 23.3 The Contractor shall take all reasonable steps to confine the movement of vehicles and plant to the approved right-of-way to minimise damage to property, crops and natural vegetation.
- 23.4 When access is no longer required, and before completion of the Works, the Contractor shall repair, restore or replace any fence or gate damaged during execution of the Works to the satisfaction of the Contract Supervisor and shall furnish the Contract Supervisor with a certificate signed by the owner and occupier of land over which he has gained access to a campsite, workplace and the Works, certifying that the owner and occupier have no claim against the Contractor or the network operator arising from the Contractor's use of the land. Should the Contractor be unable to obtain the required certificate, he shall report the circumstances to the Contract Supervisor.

#### 24.0 SUPERVISION

- 24.1 The Contract Supervisor will provide overall technical superintendence of the Works, and may direct the Contractor in terms of the provisions of the Contract or in respect of any measures which the Contract Supervisor may require for the operations of the network operator, the safety of trains, property and workmen of the network operator, and for the safety of other property and persons. The Contractor shall carry out the directions of the Contract Supervisor. The superintendence exercised by the Contract Supervisor, including any agreement, approval, refusal or withdrawal of any approval given, shall not relieve the Contractor of any of his duties and liabilities under the Contract, and shall not imply any assumption by the network operator or by the Contract Supervisor of the legal and other responsibilities of the Contractor in carrying out the Works.
- 24.2 The Contract Supervisor may delegate to any deputy or other person, any of his duties or functions under the Contract. On receiving notice in writing of such delegation, the Contractor shall recognise and obey the deputy or person to whom any such duties or functions have been delegated as if he were the Contract Supervisor.
- 24.3 The Contractor shall exercise supervision over the Works at all times when work is performed or shall be represented by an agent having full power and authority to act on behalf of the Contractor. Such agent shall be competent and responsible, and have adequate experience in carrying out work of a similar nature to the Works, and shall exercise personal supervision on behalf of the Contractor. The Contract Supervisor shall be notified in writing of such appointment which will be subject to his approval.
- 24.4 The Contractor or his duly authorised agent shall be available on the site at all times while the Works are in progress to receive the orders and directions of the Contract Supervisor.

#### 25.0 HOUSING OF EMPLOYEES

- 25.1 The Contractor shall, where necessary, make his own arrangements for suitable housing of his employees. Where temporary housing is permitted by the Contract Supervisor on any part of the site, the Contractor shall provide suitable sanitation, lighting and potable water supplies in terms of the requirements of the local authority or the current network operator's specification; Minimum Communal Health Requirements in Areas outside the Jurisdiction of a Local Authority E.4B, as applicable.
- 25.2 Fouling the area inside or outside the network operator's boundaries shall be prevented. The Contractor will be called upon by the Contract Supervisor to dispose of any foul or waste matter generated by the Contractor.

#### 26.0 OPTICAL FIBRE CABLE ROUTES

- 26.1 The Contractor shall not handle, impact, move or deviate any optical fibre cable without prior approval.
- 26.2 Works that in any way affect the optical fibre cable requires prior approval from the Contract Supervisor

BBD8210 Version 1 who will determine the work method and procedures to be followed.

#### PART B - SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT

#### 27.0 GENERAL

- 27.1 This specification is based on the contents of Transnet's publication ELECTRICAL SAFETY INSTRUCTIONS, as amended, a copy of which will be made available on loan to the Contractor for the duration of the contract.
  - These instructions apply to all work near "live" high-voltage equipment maintained and/or operated by the network operator, and the onus rests on the Contractor to ensure that he obtains a copy.
- 27.2 This specification must be read in conjunction with and not in lieu of the Electrical Safety Instructions.
- 27.3 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Electrical Safety Instructions.
- 27.4 The Electrical Safety Instructions cover the minimum safety precautions which must be taken to ensure safe working on or near high-voltage electrical equipment, and must be observed at all times. Should additional safety measures be considered necessary because of peculiar local conditions, these may be ordered by and at the discretion of the Electrical Officer (Contracts).
- 27.5 The Contractor shall obtain the approval of the Electrical Officer (Contracts) before any work is done which causes or could cause any portion of a person's body or the tools he is using or any equipment he is handling, to come within 3 metres of any "live" high-voltage equipment.
- 27.6 The Contractor shall regard all high-voltage equipment as "live" unless a work permit is in force.
- 27.7 Safety precautions taken or barriers erected shall comply with the requirements of the Electrical Officer (Contracts), and shall be approved by him before the work to be protected is undertaken by the Contractor. The Contractor shall unless otherwise agreed, bear the cost of the provision of the barriers and other safety precautions required, including the attendance of the network operator's staff where this is necessary.
- 27.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

#### 28.0 WORK ON BUILDINGS OR FIXED STRUCTURES

- 28.1 Before any work is carried out or measurements are taken on any part of a building, fixed structure or earthworks of any kind above ground level situated within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted to ascertain the conditions under which the work may be carried out.
- 28.2 No barrier erected to comply with the requirements of the Electrical Officer (Contracts) shall be used as temporary staging or shuttering for any part of the Works.
- 28.3 The shuttering for bridge piers, abutments, retaining walls or parapets adjacent to or over any track may be permitted to serve as a barrier, provided that it extends at least 2,5 metres above any working level in the case of piers, abutments and retaining walls and 1,5 metres above any working level in the case of parapets.

#### 29.0 WORK DONE ON OR OUTSIDE OF ROLLING STOCK, INCLUDING LOADING OR UNLOADING

- 29.1 No person may stand, climb or work, whilst on any platform, surface or foothold:
- 29.1.1 higher than the normal unrestricted access way, namely -
- 29.1.1.1 external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
- 29.1.1.2 walkways between coaches and locomotives.
- 29.1.2 of restricted access ways in terms of the Electrical Safety Instructions namely -
- 29.1.2.1 the floor level of open wagons
- 29.1.2.2 external walkways or decks of road-rail vehicles, on-track maintenance machines and material trains.
- 29.1.3 Unauthorised staff working on these platforms must be directly supervised by duly authorised persons in terms of clause 607.1.3 of the Electrical Safety Instructions. These persons must attend the relevant electrical safety module training. A letter of training must then be issued by an accredited training authority. A Category C Certificate of Authority must be obtained from the

local depot examining officer.

- 29.2 When in the above positions no person may raise his hands or any equipment he is handling above his head.
- 29.3 In cases where the Contractor operates his own rail mounted equipment, he shall arrange for the walkways on this plant to be inspected by the Electrical Officer (Contracts) and approved, before commencement of work.
- 29.4 The handling of long lengths of material such as metal pipes, reinforcing bars, etc should be avoided, but if essential they shall be handled as nearly as possible in a horizontal position below head height.
- 29.5 The Responsible Representative shall warn all persons under his control of the danger of being near "live" high-voltage equipment, and shall ensure that the warning is fully understood.
- 29.6 Where the conditions in clauses 30.1 to 30.4 cannot be observed the Electrical Officer (Contracts), shall be notified. He will arrange for suitable Safety measures to be taken. The Electrical Officer (Contracts), may in his discretion and in appropriate circumstances, arrange for a suitable employee of the Contractor to be specially trained by the network operator and at the Contractor's cost, as an Authorised Person to work closer than 3 metres from "live" overhead conductors and under such conditions as may be imposed by the senior responsible electrical engineer of the network operator.

#### 30.0 USE OF EQUIPMENT

- 30.1 Measuring Tapes and Devices
- 30.1.1 Measuring tapes may be used near "live" high-voltage equipment provided that no part of any tape or a person's body comes within 3 metres of the "live" equipment.
- 30.1.2 In windy conditions the distance shall be increased to ensure that if the tape should fall it will not be blown nearer than 3 metres from the "live" high-voltage equipment.
- 30.1.3 Special measuring devices longer than 2 metres such as survey sticks and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer of the network operator, but these devices must not be used within 3 metres of "live" high-voltage equipment in rainy or wet conditions.
- 30.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in clauses 31.1.1 to 31.1.3 are required.
- 30.1.5 The restrictions described in 31.1.1 to 31.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a barrier effectively prevents contact with the "live" high-voltage equipment.
- 30.2 Portable Ladders
- 30.2.1 Any type of portable ladder longer then 2 metres may only be used near "live" high-voltage equipment under the direct supervision of the Responsible Representative. He shall ensure that the ladder is always used in such a manner that the distance from the base of the ladder to any "live" high-voltage equipment is greater than the fully extended length of the ladder plus 3 metres. Where these conditions cannot be observed, the Electrical Officer (Contracts) shall be advised, and he will arrange for suitable safety measures to be taken.

#### 31.0 CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 31.1 Pipes, scaffolding, iron sheets, reinforcing bars and other material which exceeds 2 metres in length shall be carried completely below head height near "live" high-voltage equipment. For maximum safety such material should be carried by two or more persons so as to maintain it as nearly as possible in a horizontal position. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any "live" high-voltage equipment.
- 31.2 Long lengths of wire or cable shall never be run out in conditions where a part of a wire or cable can come within 3 metres of any "live" high-voltage equipment unless the Electrical Officer (Contracts) has been advised and has approved appropriate safety precautions.
- 31.3 The presence of overhead power lines shall always be taken account of especially when communications lines or cables or aerial cables, stay wires, etc. are being erected above ground level.

#### 32.0 PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.

32.1 A pole may be handled for the purpose of erection or removal near high-voltage equipment under the following conditions:

- (i) If the distance between the point at which the pole is to be erected or removed and the nearest "live" high-voltage equipment is more than the length of the pole plus 3 metres, the work shall be supervised by the Responsible Representative.
- (ii) If the distance described in (i) is less than the length of the pole plus 3 metres, the Electrical Officer (Contracts) shall be consulted to arrange for an Authorised Person to supervise the work and to ensure that the pole is earthed where possible. The pole shall be kept in contact with the point of erection, and adequate precautions shall be taken to prevent contact with "live" high-voltage equipment.
- 32.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 32.3 The provisions of clauses 33.1 and 33.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

#### 33.0 USE OF WATER

33.1 No water shall be used in the form of a jet if it can make contact with any "live" high-voltage equipment or with any person working on such equipment.

#### 34.0 USE OF CONSTRUCTION PLANT

- 34.1 "Construction plant" entails all types of plant including cranes, piling frames, boring machines, excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.
- When work is being undertaken in such a position that it is possible for construction plant or its load to come within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted. He will arrange for an Authorised Person to supervise the work and to ensure that the plant is adequately earthed. The Electrical Officer (Contracts) will decide whether further safety measures are necessary.
- 34.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- When loads are handled by cranes, non-metallic rope hand lines shall be used, affixed to such loads so as to prevent their swinging and coming within 3 metres of "live" high-voltage equipment.
- 34.5 Clauses 35.1 to 35.4 shall apply *mutatis mutandis* to the use of maintenance machines of any nature.

#### 35.0 WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT

- 35.1 If the Responsible Representative finds that the work cannot be done in safety with the high-voltage electrical equipment "live", he shall consult the Electrical Officer (Contracts) who will decide on the action to be taken.
- 35.2 If a work permit is issued the Responsible Representative shall-
  - (i) before commencement of work ensure that the limits within which work may be carried out have been explained to him by the Authorised Person who issued the permit to him, and that he fully understands these limits.
  - (ii) sign portion C of the permit before commencement of work;
  - (iii) explain to all persons under his control the limits within which work may be carried out, and ensure that they fully understand these limits;
  - (iv) care for the safety of all persons under his control whilst work is in progress; and
  - (v) withdraw all personnel under his control from the equipment on completion of the work before he signs portion D of the work permit.

#### 36.0 TRACTION RETURN CIRCUITS IN RAILS

- 36.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 36.2 Broken rails with an air gap between the ends, and joints at which fishplates are removed under "broken bond" conditions, are potentially lethal. The rails on either side of an air gap between rail ends on electrified lines shall not be touched simultaneously until rendered safe by the network operator personnel.
- The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Contract Supervisor at least 7 days written notice when removal of such bonds is necessary.

36.4 No work on the track which involves interference with the traction return rail circuit either by cutting or removing the rails, or by removal of bonds shall be done unless the Electrical Officer (Contracts) is consulted. He will take such precautions as may be necessary to ensure continuity of the return circuit before permitting the work to be commenced.

### 37.0 HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY THE NETWORK OPERATOR

Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by the network operator, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

Such equipment includes:-

- (i) Eskom and municipal equipment;
- (ii) The Contractor's own power supplies; and
- (iii) Electrical equipment being installed but not yet taken over from the Contractor.

**END** 

A Division of Transnet SOC Limited

# RAIL NETWORK (TECHNICAL) ELECTRICAL

#### **MANUAL**

## HANDBOOK FOR TESTING AND CALIBRATION OF RAILWAY ELECTRICAL PROTECTION EQUIPMENT

Circulation Restricted To: Transnet Freight Rail

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#### INTRODUCTION AND CONTENT

Commissioning and regular routine testing and calibration of protection equipment is required as an essential good practice to ensure that electrical equipment can be protected inherently in the event of abnormal conditions. It relies on sound calculations, appropriate device settings and effective earthing. Equipment that provides protection is installed in 3kV DC traction sub- & Tie stations, 25/50 kV AC Traction Substations, Distribution substations and Stepdown Signal supplies.

This handbook is a reference for testing of electrical equipment used in the railway electrification environment. It contains very important guidelines and procedures which should be followed during routine maintenance, commissioning and fault finding, and to ensure proper operation of protective devices. The intention of the manual is not to create a course in protection theory and design, but to serve as a practical guide for testing.

Testing entails different types of tests, whether routine calibration tests, conductivity earthing, commissioning, the test procedure on any piece of equipment is effectively the same. In this handbook special effort is directed towards:

- € a basic explanation of the function of each device in the electrical system;
- € its principle of operation;
- € basic precautions;
- € types of the tests;
- € test equipment used;
- € the test circuit;
- € the test procedure;
- € documentation, i.e. test sheet(s) used;
- € the range of acceptable test results;
- € special pitfalls;
- € annexures which provides broader background to the design and application of to the equipment.

Frequent reference is be made to the content of the publication "Substation Electrician's Handbook", latest edition being BBF8190, and no duplication will be made of material covered in that publication. It is assumed that the reader is familiar with the contents thereof.

All personnel involved in testing of electrical installations must be thoroughly acquainted with the contents of this handbook. Each Test Officer responsible for traction substation must be issued with his own personal copy of the handbook.

This handbook also provides a basis for training of Test Officers in the duties of traction substation maintenance.

Note that it is a dismissible offence to disable protection equipment and circuits in any way.

#### **RECORD OF AMENDMENTS**

Note: Remove the existing pages and insert the new pages.

Amendment No	Section Reference	Version	Summary of amendments	Authorised by	Date
1	BBF8128_Cover-Content	2	Updated and reformatted entirely	CF du Toit	20 May 2016
2	BBF8128_Section_01	2	Updated and reformatted entirely	CF du Toit	20 May 2016
3	BBF8128_Section_02	2	Updated and reformatted entirely	CF du Toit	20 May 2016
4	BBF8128_Section_03	2	Updated and reformatted entirely	CF du Toit	20 May 2016
5	BBF8128_Section_04	2	Updated and reformatted entirely	CF du Toit	20 May 2016
6	BBF8128_Section_05	2	Updated and reformatted entirely	CF du Toit	20 May 2016
7	BBF8128_Section_06	2	Updated and reformatted entirely	CF du Toit	20 May 2016
8	BBF8128_Section_07	2	Updated and reformatted entirely	CF du Toit	20 May 2016
9	BBF8128_Section_08	2	Updated and reformatted entirely	CF du Toit	20 May 2016
10	BBF8128_Section_09	2	Updated and reformatted entirely	CF du Toit	20 May 2016
11	BBF8128_Section_10	2	Updated and reformatted entirely	CF du Toit	20 May 2016
12	BBF8128_Section_11	2	Updated and reformatted entirely	CF du Toit	20 May 2016
13	BBF8128_Section_12	2	Updated and reformatted entirely	CF du Toit	20 May 2016
14	BBF8128_Section_13	2	Updated and reformatted entirely	CF du Toit	20 May 2016
15	BBF8128_Section_14	2	Updated and reformatted entirely	CF du Toit	20 May 2016
16	BBF8128_Section_15	2	Updated and reformatted entirely	CF du Toit	20 May 2016
17	BBF8128_Section_16	2	Updated and reformatted entirely	CF du Toit	20 May 2016
18	BBF8128_Section_17	2	Updated and reformatted entirely	CF du Toit	20 May 2016
19	BBF8128_Section_18	2	Updated and reformatted entirely	CF du Toit	20 May 2016
20	BBF8128_Section_19	2	Updated and reformatted entirely	CF du Toit	20 May 2016
21	BBF8128_Section_20	2	Updated and reformatted entirely	CF du Toit	20 May 2016
22	BBF8128_Section_21	2	Updated and reformatted entirely	CF du Toit	20 May 2016

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01	GENERAL RESPONSIBILITIES FOR TESTING AND CALIBRATION			
02	ROUTINE TESTING REQUIREMENTS			
03	COMMISSIONING TESTING REQUIREMENTS			
04	CURRENT TRANSFORMERS: INSULATION, RATIO, POLARITY AND MAGNETIZATION CURVES			
05	TRANSFORMERS: INSULATION AND RATIO			
06	TRANSFORMERS: OIL AND WINDING TEMPERATURE THERMOMETER			
07	TRANSFORMERS: GAS OPERATED RELAY (BUCHHOLZ)			
08	TRANSFORMERS: MAIN OVERLOAD RELAYS INSTANTANEOUS AND THERMAL			
09	TRANSFORMERS: AUXILIARY OVERLOAD RELAYS INSTANTANEOUS AND THERMAL			
10	AC EARTH LEAKAGE PROTECTION SYSTEM			
11	MAIN TRACTION RECTIFIER			
12	WAVE FILTER EQUIPMENT			
13	DC EARTH LEAKAGE PROTECTION SYSTEM			
14	EARTH RESISTANCE AND CONDUCTIVITY SYSTEM			
15	PANEL METERS			
16	3 KV UNDER-VOLTAGE PROTECTION			
17	110 VOLT BATTERY UNDER-VOLTAGE PROTECTION			
18	SECONDARY BREAKERS: 3 KV DC HIGH SPEED CIRCUIT BREAKERS			
19	SECONDARY BREAKERS: 25/50 KV AC VACUUM CIRCUIT BREAKERS			
20	SIGNAL AND DISTRIBUTION SUBSTATIONS: OVERCURRENT, EARTH FAULT, SENSITIVE EARTH FAULT AND CABLE PROTECTION.			
21	VOLTAGE TRANSFORMERS: INSULATION AND RATIO			

#### **ACKNOWLEDGEMENTS**

The contributions of Atholl Bruyns. Coert van Straaten, Pieter le Roux and others, who greatly contributed towards the compilation of this handbook through their knowledge and experience, is hereby acknowledged.

Mallon Tallies and Khimane Motupa assisted with recording some of the procedures.

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#### SECTION 01

#### RESPONSIBILITY FOR TESTING AND CALIBRATION

- 1.1 GENERAL
- 1.1.1 Electrical Protection Staff must be appointed at various depots, to ensure the integrity of supply systems which include commissioning and routine testing of HV protection systems.
- 1.2 RESPONSIBILITY OF THE RESPONSIBLE ELECTRICAL ENGINEERING OFFICER
- 1.2.1 The responsible electrical engineering officer is responsible for:
- 1.2.1.1 The proper functioning of the Electrical Protection section in terms of facilities skilled manpower, facilities, vehicles and equipment. A schedule of test equipment is included in Annexure 1.1
- 1.2.1.2 Defining the duties to be performed and control the standard of work.
- 1.2.1.3 Maintaining a database of protection devices with associated calibration calculations for breakers i.e. circuits, along with loop impedance test results where available. A schedule of assets is included in Annexure 1.1
- 1.2.1.4 Calibration of test equipment.
- 1.2.1.5 Corrective action to exceptions.
- 1.2.1.6 Outsourcing the functions if responsibilities cannot be met with in-house staff, under strict controls of standards and work procedures.
- 1.3 DUTIES WITH RESPECT TO PROTECTION TESTING
- 1.3.1 Duties of the Electrical Protection Officer
- 1.3.1.1 Electrical Protection staff will be responsible for the routine testing and calibration of HV protective equipment in accordance with a routine program drawn up by the responsible electrical engineering officer. This program will be based on guidelines and a time cycle laid down by the Principal Electrical Engineer.
- 1.3.1.2 The settings for new equipment will be provided by the Technology Management section. Electrical Protection Officers may not change these settings.
- 1.3.1.3 Protection staff at depots will be responsible for maintaining a data base of all base loads and protection settings, and notifying the Manager (Resource optimisation) of any change in base loads or the protection settings.
- 1.3.1.5 When Infrastructure managers require special tests or assistance, the procedure to be followed are fully detailed in Engineering Instruction CEE-GI 045.
- 1.3.1.6 The management of protection settings is indicated in Appendix 1.
- 1.3.2 Duties of Substation Maintenance Electricians
- 1.3.2.1 The tasks with respect to substation protection and earthing safety systems are defined in the Traction Substations Electrician Handbook (BBF8190).
- 1.3.2.1 Electricians responsible for substation maintenance are not permitted to adjust or tamper with protection relays. They must however check all cable connections to the various components associated with DC and AC Earth Leakage protection as well as under-voltage on a routine basis, as well as after severe earth faults.

#### 1.4 INSTRUMENTS

- 1.4.1 The responsible electrical engineering officer must provide the electrical protection staff with the instruments required to perform their normal duties. These tools are indicated in this handbook, for the specific equipment present in the section.
- 1.5 REPORTS AND TEST SHEETS
- 1.5.1 Protection staff at every depot shall submit copies of regular test reports to the Maintenance Manager (Electrical) concerned.
- 1.6 ASSOCIATED INSTRUCTION AND APPENDIX
- 1.6.1 CEE-GI\_045: Management and Responsibilities of Infrastructure's Electrical Laboratory.
- 1.6.2 The following Appendix forms part of this instruction:-

Appendix 1: Protection setting data flow.

- 1.7 REFERENCES
  - € Electrical Safety Instructions (BBF3690)
  - € Traction Substations Electrician Handbook (BBF8190)
  - € Relevant Manufacturers Specifications And Manuals Of Substation Equipment
  - € Substation Wiring Diagrams
  - € Electrical Engineering Instructions: CEE-GI 012, CEE-S 013 & CEE-GI 029
- 1.8 COMPETENCY
- 1.8.1 Only persons authorised in terms of clauses 303.1.4.6 or 303.1.7.1 of the Electrical Safety Instructions (BBF3690) shall be allowed to perform high voltage tests in the substations.
- 1.9 PREPARATION
  - € Ascertain that all required tools & equipment as per Appendix 1 are available.
  - € Obtain reference handbooks, engineering instructions and substation schematic diagrams.
  - € Arrange with the relevant depot staff for access to the substation or tiestations for taking out the relevant work/test permits.
  - € Obtain copies of the previously completed test results and substation reports.
  - € Ensure that all relevant test sheets are available for testing.

Annexure 1.1

DATABASE PROFILE FOR ELECTRICAL PROTECTION ASSET REGISTER

	Aspect and			N AGGET REGIGTER
	technical reference			
		file	Subsection	Detail
1.1	ELECTRICAL	Inventory of	Substation site	Equipment detail per site:
	PROTECTION	Protection installed.	(50kV, 25kV or 3kV). (workload or Electrical	-Substations 3kV
	EQUIPMENT			-Substations 25kV
			Protection	-Switching stations 25kV
			Officers)	-Distributions subs
				-Distributions intake subs
1.2		3kV HSCBs	Inventory o HSCB's	Substation site
			(workload or	Reports sheet per equipment
			Substation	-HSCB type
			electricians)	-Equipment detail per site.
				-HSCB Setting
				-Work procedure (TA Handbook, specific manufacturer instructions)
				specific manufacturer matricetions)
1.3		Protection	Equipment	-OHTE/Cable/Return material per
		calculations and settings	material per circuit.	circuit.
		Settings	Circuit.	-Loop-impedance calculations per
				circuit. (AC & DC).
1.4			Substation	-Calculations  Per installation:
1.4			protection	
			settings per	-Types relays, CT ratios,
			equipment	-Schedule o testing.
				-PCB (Main transformer)
				-HSCB/Track breaker
				-AC Earth Leakage
				-DC Earth Leakage
				-Auxiliary Transformer OL
				-Battery Under-voltage
1.5			Commissioning	-Substation Under-voltage (DC) Commissioning sign-offs (3kV:
1.5			test recordings &	Commissioning sign-ons (3kV:   BBC9921).
			sign-offs per sub	- ,
1.6			Test sheet per	-Status o protection testing
			Sub	-DC Traction Substation:
				BBB0342, BBB0343 & BBB0344.
				-Traction Substation (Brown
				Boveri): BBB0345.
				-E L & P Substation BBB0346
				-E L & P Intake Substation: BBB0348.
				-Sub defect report: BBB0347.
2.1	PROTECTION	Availability of test	Skilled personnel	· · · · · · · · · · · · · · · · · · ·
	MAINTENANCE	resources,	in place	-Skilled personnel in place
	RESOURCES			

BBF8128\_Section 01 Version 2

			BBF8128_Section of Version 2	
	Aspect and			
	technical reference			
		file	Subsection	Detail
2.2		Availability of test equipment	Schedule of test instruments and equipment	-3 Phase Generator, Hand tools, Extension leads, Test Leads,
			счиртст	-Water container and Petrol container
				-Null Balance Digital Earth Megger
				-10kV Digital Megger
				-4 kV DC Hi Pot Test Set
				-25 kV AC Hi Pot Test Set
				-Primary Injection Test set variable 500/1000 Amps.
				-Secondary Injection Test set, variable from 0 to 100 Amps
				-AC / DC Injection Test Set, 200A, variable 0 to 250V
				-LCR Meter
				-Digital Millisecond Timer, 999 seconds
				-Multimeter Analog (A.V.O.)
				-2 x Multi-meters Digital (R.M.S.)
				-DC Milli-volt Injection Set,
				-Bucholtz Pump (air compressed pump or bicycle pump)
				-Heating Apparatus (Oil heating)
				-Thermometer
				-Emergency Lighting
				-Boom crane
2.3			Calibration of	Calibration intervals - BBD5294.
			instruments	Calibration certificates.
3.1	PROTECTIVE	Inventory.	Equipment detail	-Equipment location
	DEVICES - LIGHTNING	Workload (of Electricians)	per site. Reports sheet	-Earth tests results
	PROTECTION	Licetifoldilaj	per equipment	-BBD(standard report sheet)
3.2	AC/DC	Inventory of	Changeover sites	Equipment detail per site.
	PROTECTIVE	devices	_	-Reports sheet per equipment
	DEVICES	(workload of		Location (e.g. Mast location)
		Electricians)		-Prescribed report sheet (BBC)

\*\*\*

#### **SECTION 2**

#### ROUTINE TESTING REQUIREMENTS

#### 2.1 DC TRACTION SUBSTATIONS

#### 2.1.1 The following routine testing must be performed

BBF9000: CT Ratio and Magnetisation curves. Overload relays: Thermal & Instantaneous. AC earth Leakage, Buchholz, Over-temperature and Pressure Relief Device.

BBF9001: DC Earth Leakage, Metering, Wave Filter Equipment, Diode & Rectifier Over temperature, 3 kV DC Under voltage Relay, Battery Under voltage Relay and Phase Fail relay.

BBF9295: Earth and Insulation Measurements.

BBB0344: Transformer / Rectifier protection Trafogaurd T100.

BBB0345: Transformer / Rectifier protection Brown Boveri.

BBB0347: Substation Defect Report.

BBB0348: Transformer Insulation & Ratio tests.

BBB0349: Insulation oil report.

#### 2.2 DC TRACTION TIE-STATIONS

#### 2.2.1 The following routine testing must be performed

BBF9294: Battery and 3kV Under-voltage protection, kV Meter, DC Earth Leakage, Earth and Insulation Measurements.

BBB0347: Substation Defect Report.

#### 2.3 25KV TRACTION SUBSTATIONS

#### 2.3.1 The following routine testing must be performed

BBF8995: Current transformers: Ratio and Magnetisation curves. Protection Relays Main Overload- and Restricted/Duo Biased Earth Fault Protection. Buchholz, Over-temperature, PRD, Battery Under voltage Relay and Earth Resistance measurement.

BBF8996: Current transformer: Ratio and Magnetisation curves. Battery Under voltage Relays. Protection Relays: IDMT, Reverse power, Thermal Overload and Distance Protection.

BBF8998: Primary Circuit Breakers: Contact Resistance and Operational Timing tests. Secondary Circuit Breakers (VCB's): Contact Resistance and Operational Timing tests.

BBB0347: Substation Defect Report.

#### 2.4 DISTRIBUTION INTAKE SUBSTATIONS

#### 2.4.1 The following routine testing must be performed

BBF9296: Frame Leakage Protection: Current Transformer Ratio and Mag Curves. Zone Relay inter-tripping. Insulation Resistance and Pressure tests. Voltage Transformer and Indication tests. Battery Under-voltage protection. Earth Resistance Measurement.

BBF9297: Current Transformers: Ratio, Magnetisation curves and Polarity tests. Protection Relays: Overload, Earth fault, Sensitive Earth Fault and Cable Protection. Transformer Protection.

BBB0344: Transformer protection Trafogaurd T100.

BBB0346: Electrical Light and Power.

BBB0347: Substation Defect Report.

BBB0348: Transformer Insulation & Ratio tests.

#### 2.5 DISTRIBUTION RING SUBSTATIONS

The following routine testing must be performed

BBF9296: Frame Leakage Protection: Current Transformer Ratio and Mag Curves. Zone Relay inter-tripping. Insulation Resistance and Pressure Tests. Voltage Transformer and Indication tests. Battery Under voltage protection. Earth Resistance Measurement.

BBF9297: Current Transformers: Ratio, Magnetisation curves and Polarity tests. Protection Relays: Overload, Earth fault, Sensitive Earth Fault and Cable Protection. Transformer Protection.

BBB0344: Transformer protection Trafogaurd T100.

BBB0346: Electrical Light and Power.

BBB0347: Substation Defect Report.

BBB0348: Transformer Insulation & Ratio tests.

#### 2.6 EQUIPMENT REQUIRING EARTHING TESTS

#### 2.6.1 The following routine testing must be performed:

- € Earth spike readings at transmission line terminations and stepdown points, according to Section 14.2.0 of the Technical Assistant Handbook EP001. This testing must be performed at 5-yearly intervals and proper records kept.
- € Spark gap testing at all locations, excluding substations, where installed to provide a fault path between AC and DC negative return circuits.

#### 2.7 FREQUENCY OF TESTING

Routine tests on 3kV DC Substations to be conducted as per yearly time cycle are described below.

At all other substations the routine tests to be conducted as per 2 yearly time cycle are described below.

NOTE: All high voltage tests (>1000V) must be carried out in accordance with clause 609 of the Electrical Safety Instructions (BBF3690)

#### 2.8 ANNEXURES: ELECTRICAL TEST LABORATORY TEST SHEETS

BBF9000: CT Ratio and Magnetisation curves. Overload relays: Thermal & Instantaneous. AC earth Leakage, Buchholz, Over temperature and Pressure Relief Device.

BBF9001: DC Earth Leakage, Metering, Wave Filter Equipment, Diode & Rectifier Over temperature, 3 kV DC Under voltage Relay, Battery Under voltage Relay and Phase Fail relay.

BBF9294: 3 kV DC Traction Tie Station Test Sheet. 3 kV and Battery under voltage protection, KV Meter, DC Earth Leakage protection, Earth and Insulation measurements.

BBF9295: Earth and Insulation Measurements.

BBB0344: Transformer / Rectifier protection Trafogaurd T100.

BBB0345: Transformer / Rectifier protection Brown Boveri.

BBB0347: Substation Defect Report.

BBB0348: Transformer Insulation & Ratio tests.

BBB0349: Insulation oil report.

BBF8995: Current transformers: Ratio and Magnetisation curves. Protection Relays Main Overload- and Restricted/Duo Biased Earth Fault Protection. Buchholz, Over-temperature, PRD, Battery Under voltage Relay and Earth Resistance measurement.

BBF8996: Current transformer: Ratio and Magnetisation curves. Battery Under voltage Relays. Protection Relays: IDMT, Reverse power, Thermal Overload and Distance Protection.

BBF8998: Primary Circuit Breakers: Contact Resistance and Operational Timing tests. Secondary Circuit Breakers (VCB's): Contact Resistance and Operational Timing tests.

BBF9296: Frame Leakage Protection: Current Transformer Ratio and Mag Curves. Zone Relay inter-tripping. Insulation Resistance and Pressure tests. Voltage Transformer and Indication tests. Battery Under voltage protection. Earth Resistance Measurement.

BBF9297: Current Transformers: Ratio, Magnetisation curves and Polarity tests. Protection Relays: Overload, Earth fault, Sensitive Earth Fault and Cable Protection. Transformer Protection.

BBB0346: Electrical Light and Power.



A Division of Transnet SOC Limited

# RAIL NETWORK (TECHNICAL) ELECTRICAL

#### **MANUAL**

### HANDBOOK FOR TESTING AND CALIBRATION OF RAILWAY ELECTRICAL PROTECTION EQUIPMENT

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Date: 12 November 2012

Circulation restricted to. Harishet Freight Rail

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