

TRANSNET FREIGHT RAIL RME, a division of

TRANSNET SOC LTD

Registration Number 1990/000900/30 [hereinafter referred to as **Transnet**]

REQUEST FOR QUOTATION [Prox No RME RBY 082/2014

FOR THE PROVISION O

SUPPLY, DELIVER AND SAFELY OFFLOAD OF VARIOUS TRANSNET SIGNAL CABLES. (ONCE OFF ONLY.)

FOR **ELEVERY** TO:

TRANSNET FREIGHT RAIL - RICHARDS BAY LOCOMOTIVE DEPOT - NESEZI - SIGNALS DEPARTMENT.

ISSUE DATE:

03 to 10 December 2014

CLOSING DATE:

11 December 2014

CLOSING TIME:

10:00

Section 1 NOTICE TO BIDDERS

Quotations which must be completed as indicated in Section 2 of this RFQ are to be submitted as follows:

METHOD: Tender box, fax or e-mail submissions. (Complete documents,

with all supporting documents)

CLOSING VENUE: Fax/E-Mail tenders to; 011-774 9760/011-774 9129/011-774

9186 or Nomsa.maseko@transnet.net .

Transnet Freight Rail (RME), The Chairman of the Acquisition Council, Inyanda House 1, 21 Wellington Road, Parktown,

Gauteng.

PROOF Of SUBMISSION: Please fax /e-mail your "PROOF" (Fax the post or E-Mail Proof) with

first page of tender document that is stamped with company detail to, 086 515 9978/or TCPtendersRichal SBay@Transnet.net as

proof that your submission was submitted successfully.

1 Responses to RFQ

Responses to this RFQ [**Quotations**] must not include documents or reference relating to any other quotation or proposal. Any additional conditions must be embodied in an accompanying letter.

2 Broad-Based Black Economic Empowerment [B-BBEE]

Transnet fully endorses and supports the Government's Broad-Based Black Economic Empowerment Programme and it would there is prefer to do business with local business enterprises who share these same values. Transnet will accordingly allow a "preference" to companies who provide a valid B-BBEE Verification Cartilisate. All procurement transactions will be evaluated accordingly.

2.1 BESEE Scorecard and Rating

prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2007 and its Regulations, Respondents are to note that the following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R1 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).
- Bidders are to note that if the 80/20 preference point system is stipulated in this RFP and all Bids received exceed R1 000 000.00, the RFP must be cancelled. Similarly, if the 90/10 preference point system is stipulated in this RFP and all Bids received are equal to or below R1 000 000.00, the RFP must be cancelled.

The value of this bid is not estimated to exceed R1 000 000 (all applicable taxes included); and therefore the **80/20** system shall be applicable.

When Transnet invites prospective suppliers to submit Proposals for its various expenditure programmes, it requires Respondents to have their B-BBEE status verified in compliance with the Codes of Good Practice issued in terms of the Broad Based Black Economic Empowerment Act No. 53 of 2003.

The Department of Trade and Industry recently revised the Codes of Good Practice on 11 October 2013 [Government Gazette No. 36928]. The Revised Codes will replace the Black Economic Empowerment Codes of Good Practice issued on 9 February 2007. The Revised Codes provide for a one year transitional period starting 11 October 2013. During the transitional period, companies may elect to be measured in terms of the Revised Codes or the 2007 version of the Codes. After the first year of the implementation of the Revised Codes, B-BBEE compliance will be measured in terms of the Revised Codes without any discretion. Companies which are governed by Sector-specific Codes will be measured in terms of those Sector Codes.

As such, Transnet will accept B-BBEE certificates issued based on the Revised Codes. Transnet will also continue to accept B-BBEE certificates issued in terms of the 2007 version of the Codes provided it was issued before 10 October 2014. There fter, transnet will only accept B-BBEE certificates issued based on the Revised Codes.

Respondents are required to complete Annex are A [the B-BBEE Preference Point Claim Form] and submit it together with proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

Note: Failure to submit a falid and original B-BBEE certificate or a certified copy thereof at the Closing Date of bis RFQ will result in a score of zero being allocated for B-BBEE.

[Refer clause20 below for Returnable Documents required]

2.2 B-BBEE Improvement Plan

B-BBEE in proving at Plan will not be required for this tender.

2.3 Symplied Development Initiatives

Supplier development will not apply to this tender.

3 on munication

Respondents are warned that a response will be liable for disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer(s) or employee of Transnet in respect of this RFQ between the closing date and the date of the award of the business.

A Respondent may, however, before the closing date and time, direct any written enquiries relating to the RFQ to the following Transnet employee:

Name:

Eddie Quinn

Email:

eddie.quinn@transnet.net

Respondents may also, at any time after the closing date of the RFQ, communicate with the Regional Supply Chain Manager of the Supply Chain Department on any matter relating to its RFQ response:

Telephone

035 905 4609

Email

Lizelle.smith@transnet.net

4 Tax Clearance

The Respondent's original and valid Tax Clearance Certificate must accompany the Quotation. Note that no business shall be awarded to any Respondent whose tax matters have not been declared by SARS to be in order.

5 VAT Registration

The valid VAT registration number must be stated here: ______ [if applicable].

6 Legal Compliance

The successful Respondent shall be in full and complete compliance with any and all applicable national and local laws and regulations.

7 Changes to Quotations

Changes by the Respondent to its submission will not be considered and the closing date and time.

8 Pricing

All prices must be quoted in South African Rand on a fixed rice lasis, excluding VAT.

9 Prices Subject to Confirmation

Prices quoted which are subject to confirmation will not be considered.

10 Negotiations

Transnet reserves the right to undertake post-tender negotiations with selected Respondents or any number of shortlisted Respondents.

11 Binding Offer

Any Quotation fun isher oursuant to this Request shall be deemed to be an offer. Any exceptions to this statement must be charly and specifically indicated.

12 Disclainers

Transfer is not committed to any course of action as a result of its issuance of this RFQ and/or its receipt a Quotation in response to it. Please note that Transnet reserves the right to:

- modify the RFQ's goods / service(s) and request Respondents to re-bid on any changes;
- reject any Quotation which does not conform to instructions and specifications which are detailed herein;
- disqualify Quotations submitted after the stated submission deadline;
- not necessarily accept the lowest priced Quotation;
- reject all Quotations, if it so decides;
- place an order in connection with this Quotation at any time after the RFQ's closing date;
- award only a portion of the proposed goods / service/s which are reflected in the scope of this RFQ;
- split the award of the order/s between more than one Supplier/Service Provider; or
- make no award at all.

Transnet reserves the right to award business to the highest scoring bidder/s unless objective criteria justify the award to another bidder.

13 Transnet's supplier integrity pact

Transnet's Integrity Pact requires a commitment suppliers and Transnet that they will not engage in any corrupt and fraudulent practices, anti-competitive practices; and act in bad faith towards each other. The Integrity Pact also serves to communicate Transnet's Gift Policy as well as the remedies available to Transnet where a Respondent contravenes any provision of the Integrity Pact.

Respondents are required to familiarise themselves with the contents of the Integrity Pact which is available on the Transnet Internet site [www.transnet.net/Tenders/Pages/dufault.aspx] or on request. Furthermore, Respondents are required to certify that they have acquainted themselves with all the documentation comprising the Transnet Integrity Pact and that they fully comply with all the terms and conditions stipulated in the Transnet Supplier Integrity Pact as follows:



Should a Respondent need to declare previous transgressions or a serious breach of law in the preceding 5 years as required by Annexure A to the Integrity Pact, such declaration must accompany the Respondent's bid submission.

14 Respondent's Samples

Respondent's samples will not be required for this tender.

15 Evaluation Criteria

Transnet will utilise be following criteria [not necessarily in this order] in choosing a Supplier/Service Provide, if so to wired:

Crit Gion/Criteria	Explanation
dministrative responsiveness	Completeness of response and returnable documents
Substantive responsiveness	Prequalification criteria, if any, must be met and whether the Bid materially complies with the scope and/or specification given. • All items on the Pricing Schedule should be priced; if not it will result in a bid being disqualified.

Final weighted	•	Pricing and price basis [firm / fixed] - whilst not the sole factor for
evaluation based		consideration, competitive pricing and overall level of unconditional discounts ¹
on 80/20		will be critical
preference point	•	B-BBEE status of company - Preference points will be awarded to a bidder for
system as		attaining the B-BBEE status level of contribution in accordance with the table
indicated in		indicated in Annexure A.
paragraph 2		

16 Validity Period

Turnamak dariman a saaliidika masia d	- C 00 [-:]	lacca fuero blea alesina	data of this DEO
Transnet desires a validity period	or yu i ninetvi a	iavs from the closing	date of this RFO.

	This RFQ is valid until
17	Banking Details
	BANK:
	BRANCH NAME / CODE:
	ACCOUNT HOLDER:
	ACCOUNT NUMBER:
18	Company Registration
	Registration number of company / C.
	Registered name of company / C.C
19	Disclosure of Prices Quality
	Respondents must indicate the whether Transnet may disclose their quoted prices and conditions to
	other Respondents:
	YEL NO

20 Returnable Documents

Note that the continuous states and the documents, Sections and Annexures, as listed in the tables show

Respondents are required to submit with their Quotations the **mandatory Returnable Documents**, as detailed below.

Failure to provide all these Returnable Documents at the Closing Date and time of this RFQ will result in a Respondent's disqualification. Respondents are therefore urged to ensure that <u>all</u> these Documents are returned with their Quotations.

Respondent's Signature

¹ Only unconditional discounts will be taken into account during evaluation. A discount which has been offered conditionally will, despite not being taken into account for evaluation purposes, be implemented when payment is effected.

All Sections, as indicated in the footer of each page, must be signed, stamped and dated by the Respondent. Please confirm submission of these mandatory Returnable Documents by so indicating [Yes or No] in the table below:

Mandatory Returnable Documents	Submitted [Yes or No]
SECTION 2 : Quotation Form	

b) In addition to the requirements of section (a) above, Respondents are further required to submit with their Quotations the following <u>essential Returnable Documents</u> as detailed below.

Failure to provide all these Returnable Documents may result in a Respondent's disqualification. Respondents are therefore urged to ensure that <u>all</u> these documents are returned with their Quotations.

All Sections, as indicated in the footer of each page, must be ligned stamped and dated by the Respondent. Please confirm submission of these essential returnable Documents by so indicating [Yes or No] in the table below:

Essential Returnable Documents	Submitted [Yes or No]
SECTION 1 : Notice to Bidders	
- Valid and original B-BBEE Verification Serificate or certified copy thereof [Large Enterprises and QSEs]	
Note: failure to provide a valid B-BBL Verification Certificate at the closing date and time of the RFQ with result in an automatic score of zero for preference	
 Valid and original B-BBE - Stificate/sworn affidavit or certified copy thereof from auditor, account of officer or SANAS accredited Verification Agency [EMEs] 	
Note: failure ro provide a valid B-BBEE Verification Certificate at the closing date and time of the RFQ will result in an automatic score of zero being allocated for proference	
- In the case of Joint Ventures, a copy of the Joint Venture Agreement or written commation of the intention to enter into a Joint Venture Agreement	
Original valid Tax Clearance Certificate [Consortia / Joint Ventures must submit a separate Tax Clearance Certificate for each party]	
- SECTION 3 : Standard Terms and Conditions of Contract for the Supply of Goods or Services to Transnet	
SECTION 4 : Vendor Application Form	
- Original cancelled cheque or bank verification of banking details	
- Certified copies of IDs of shareholder/directors/members [as applicable]	
 Certified copies of the relevant company registration documents from Companies and Intellectual Property Commission (CIPC) 	
- Certified copies of the company's shareholding/director's portfolio	
- Entity's letterhead	
 Certified copy of VAT Registration Certificate [RSA entities only] 	

	Essential Returnable Documents	Submitted [Yes or No]	
-	Certified copy of valid Company Registration Certificate [if applicable]		
- A signed letter from Respondent's auditor or accountant confirming most recent annual turnover figures		, x	
ΑN	NEXURE A – B-BBEE Preference Points Claim Form		
ΑN	ANNEXURE B – Specification of the Goods		



Section 2 QUOTATION FORM

I/V				
T/ A	v C			

hereby offer to supply the goods/services at the prices quoted in the Price Schedule below, in accordance with the conditions related thereto.

I/We agree to be bound by those terms and conditions in:

- the Standard Terms and Conditions for the Supply of Goods or Services to Transnet [Section 3 hereof];
 and
- any other standard or special conditions mentioned and/or embodied in the Request for Quotation.

I/We accept that unless Transnet should otherwise decide and so inform me/us, this Quotation [and, if any, its covering letter and any subsequent exchange of consequence], together with Transnet's acceptance thereof shall constitute a binding contract between Transnet and me/us.

I/We further agree that if, after I/we have been notified of the acceptance of my/our Quotation, I/we fail to deliver the said goods/service/s within the letivery read-time quoted, Transnet may, without prejudice to any other legal remedy which it may bave, cancel the order and recover from me/us any expenses incurred by Transnet in calling for Quotations a resh and/or having to accept any less favourable offer.

Price Schedule

I/We quote as follows for the roods required, on a "delivered nominated destination" basis, excluding VAT:

Item:	Description / Text	Quantity	Unit of Measure	Unit Price	Total Value
1	Orar ge Steel lack cable. STRIN DED, GALVANISED HIGH TENSILE STEEL, PVC INSULATED, OUTDOOR CABLE FC TRACK JUMPERING, CNE 1164-008 VERSION 3	500	М		
	Cable 61 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	М		
3	Cable 16 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	М		
4	Cable 4 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT, SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	М		

Respondent's Signature

Item:	Description / Text	Quantity	Unit of Measure	Unit Price	Total Value
5	Cable 2 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	М		
6	Cable 37 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	М		
7	Cable 52 core x 1.6mm armoured. ANNEALED COPPER CONDUCTORS PVC INSULATED ARMOURED 600/1000 VOLT SPEC: CSE-1164-001 CATEGORY X 47 ISSUE 3, 13 MARCH 1997	500	M		

Delivery Lead-Time from date of purchase	rder:	[days/weeks]
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Notes to Pricing:

- a) All Prices must be guo of in South African Rand, exclusive of VAT
- b) To facilitate like-inr-like comparison bidders must submit pricing strictly in accordance with this price schedule and negotialise a different format. Deviation from this pricing schedule could result in a bid bring disculified.
- c) Please rote that should you have offered a discounted price(s), Transnet will only consider such price discount(s) in the final evaluation stage if offered on an unconditional basis.
- Prices to be firm & fixed, including the delivery cost to our site at TFR (RME) Locomotive depot, Richards Bay, Nsezi, Signals Department.
- e) All items on the Pricing Schedule should be priced / completed; if not, it will result in a bid being disqualified.

Section 3

STANDARD TERMS AND CONDITIONS FOR THE SUPPLY OF GOODS OR SERVICES TO TRANSNET

A Supplier/Service Provider shall be obliged to adhere to the Standard Terms and Conditions for the Supply of Goods and Services to Transnet as expressed hereunder. Should the Respondent find any condition(s) unacceptable, it should indicate which condition(s) is/are unacceptable and offer an alternative(s). A Quotation submitted by a Respondent will be subjected to review and acceptance or rejection of its proposed contractual terms and conditions by Transnet's Legal Counsel, prior to consideration for an award of business.

1 SOLE AGREEMENT

Unless otherwise agreed in writing, these terms [Terms and each Term] and Transnet's purchase order(s) [Order or Orders] represent the only conditions upon which Transnet SOC Ltd [Transnet] procures goods [the Goods] or services [the Services] specified in the Order from the person to whom the Order is addressed [the Supplier/Service Provider]. Transnet does not accept any other conditions which the Supplier/Service Provider may specify, unless otherwise agreed to by Transnet in writing. In the event of any inconsistency between these Terms and any Order, these Terms shall take precedence.

2 CONFORMITY WITH ORDER

Goods/Services shall conform strictly with the order. The Supplier/Service Provider shall not vary the quantities specified and/or the specification, in any, stipulated in the Order, without the prior written consent of Transnet. The Supplier/Service Frevider warrants that the Goods/Services shall be fit for their purpose and of satisfactory quality.

3 DELIVERY AND TITLE

- 3.1 The delivery outres and addresses are those in the Order. Time shall be of the essence in respect of the Supplier's Service Provider's obligations under the Order.
- The Supplie VService Provider will not be excused for delay in delivery or performance except due to circumstances outside its control and then only subject to the Supplier/Service Provider having officed Transnet in writing on becoming aware of such circumstances. Transnet may terminate an order, in whole or in part, without incurring any liability to the Supplier/Service Provider if such a delay becomes, in Transnet's absolute opinion, significant.
- 3.3 Risk of loss or damage to Goods shall pass to Transnet on delivery and acceptance, and title shall pass to Transnet when payment to the Supplier for the Goods has been effected.
- 3.4 If on delivery, the Goods/Services do not conform to the Order, Transnet may reject the Goods/Services and the Supplier/Service Provider shall promptly rectify any defects or in Transnet's opinion, supply appropriate replacement Goods/Services at the Supplier's/Service Provider's expense within the specified delivery times, without any liability due by Transnet. Goods shall be subject to such testing and/or inspection as Transnet may consider necessary.

4 PRICE AND PAYMENT

- 4.1 Prices specified in an Order cannot be increased. Payment for the Goods/Services shall be made by Transnet against an original undisputed invoice(s) [a Tax Invoice], supporting documentation and month-end statement from the Supplier/Service Provider. Tax Invoices plus supporting documentation shall be posted to the address shown in the Order.
- 4.2 Payment of the Supplier's/Service Provider's valid Tax Invoice(s) will be made by Transnet in the South African currency and on the terms stated in the Order, the standard payment terms being 30 [thirty] days from date of receipt by Transnet of a month-end statement, unless otherwise agreed to in writing. Transnet shall arrange for payment of such Tax Invoices and any pre-authorised additional expenses incurred, provided that the authorised expenses are supported by acceptable documentary proof of expenditure incurred [where this is available]. In amounts due in terms of these Terms shall be paid to the Supplier/Service Provider, taking interaccount any deduction or set-off and bank charges.

5 PROPRIETARY RIGHTS LIABILITY

If any allegations should be made or any claim asserted against Transnet that ownership of, or any act or omission by Transnet in relation to Goods/Services or any written material provided to Transnet relating to any Goods/Services or pursuant to an Order being a violation or infringement of any third party's contractual, industrial, commercial or intellectual property rights including but not limited to any patent, registered design, design right, trade mark, applyight or service mark on any application thereof, the Supplier/Service Provider hereby indomining Transnet against and hold it harmless from any and all losses, liabilities, costs, claims, damages and expenses [including any legal fees] arising directly or indirectly from such allegation or claim provided that this indemnity shall not apply where the allegation or claim arises solely as a result of the Supplier Service Provider following a design or process originated and furnished by Transnet. The Supplier Service Provider shall either

- a) procure for leans of the right to continue using the infringing Goods; or
- b) modify or place the Goods/Services so that they become non-infringing,

provided that it both cases the Goods/Services shall continue to meet Transnet's requirements and any specifications stipulated in the Order. Should neither option be possible, the Supplier/Service Provider may remove with Transnet's prior written consent, such Goods/Services and will pay to Transnet a sum equivalent to the purchase price. If Transnet refuses to give such consent, the Supplier/Service Provider shall have no liability in respect of any continued use of the infringing Goods/Services after Supplier's/Service Provider's prior written request to remove the same.

6 PROPRIETARY INFORMATION

All information which Transnet has divulged or may divulge to the Supplier/Service Provider and any information relating to Transnet's business which may have come into the Supplier's/Service Provider's possession whilst carrying out an Order, and the existence of the Order, shall be treated by the Supplier/Service Provider as confidential information and shall not, without Transnet's prior written consent, be disclosed to any third party, or be used or copied for any purposes other than to perform the Order. This clause does not apply to information which is public knowledge or available from other sources other than by breach of this Term. Upon request by Transnet, the Supplier/Service Provider shall return all

materials issued pursuant to the Order and, pending this, shall protect Transnet's rights in any such materials. Such confidential information shall at all material times be the property of Transnet.

7 DEVELOPMENT WORK IN THE PRODUCTION OF GOODS

If the production or provision of any Goods involves research and/or development which are wholly or partly funded by Transnet, then all intellectual property or other rights as a result thereof shall be the property of Transnet on creation.

8 PUBLICITY

The Supplier/Service Provider shall not name Transnet or use its trademarks, service marks [whether registered or not] or Goods in connection with any publicity without Transnet's after written consent.

9 AFTER SALES SERVICE

The Supplier shall provide replacement parts necessary to ensure the cointerrupted operation of the Goods supplied for the duration of the warranty period, from delivery of any particular item of the Goods and if requested by Transnet shall make these parts available to a third party maintainer of Transnet's choice at the same price as if the parts had been supplied to Transnet. The Supplier undertakes to provide a maintenance service for Goods, should Transnet so request, on terms to be agreed. If the Order so indicates, the Supplier will provide a warranty service to the Goods at a level to be agreed with Transnet.

10 TERMINATION OF ORDER

- Transnet may cancel an Order in whole or in part at any time upon at least 7 [seven] days' written notice to the Supplier/Service Provider, or when there is a change in control of the Supplier/Service Provider or the Supplier/Service Provider commits any serious breach or any repeated or continuous susterial breach of its obligations under these Terms and/or Order or shall have been suilty of conduct tending to bring itself into disrepute, on written notice to the Supplier/Cervice Provider when such work on the Order shall stop.
- Transne sharpay the Supplier/Service Provider a fair and reasonable price for justified work in progress, where such price reflects only those costs not otherwise recoverable by the Supplier/Service Provider, at the time of termination, and the Supplier/Service Provider shall give Transnet full assistance to check the extent of such work in progress. Payment of such price shall be in full and final satisfaction of any claims arising out of such termination and upon such payment the Supplier/Service Provider shall deliver to Transnet all work, including any materials, completed or in progress. The sum payable to the Supplier/Service Provider under this clause will not in any event exceed the total amount that would have been payable to the Supplier/Service Provider had the Order not been terminated.
- 10.3 In the event of termination the Supplier/Service Provider must submit all claims within 2 [two] months of termination after which time claims will only be met in what Transnet considers exceptional circumstances.
- 10.4 If the Goods or Services are not provided in accordance with an Order, the Order shall be deemed terminated and the Supplier/Service Provider shall compensate Transnet for any costs incurred in obtaining substitute Goods or any damage caused due to the failure or delay in the delivery.

11 ACCESS

The Supplier/Service Provider shall be liable for the acts, omissions and defaults of its personnel or agents who, for the purposes of the Order, shall be treated as if they are the Supplier's/Service Provider's employees. The Supplier/Service Provider shall ensure that any such personnel or agents, whilst on Transnet's premises, shall comply with Transnet's health and safety, security and system security rules and procedures as and where required.

12 WARRANTY

The Supplier/Service Provider warrants that it is competent to supply the Goods/Services in accordance with these Terms to the reasonable satisfaction of Transnet and that all Goods/Services delivered under the Order: (a) conform and comply in all relevant legislation, standards, directives and orders related to [inter alia] the supply, manufacture and use of the Goods/Services in force at the time of delivery, and to any specifications referred to in the Order; (b) will not cause any deterioration in the functionality of any Transnet equipment; and (c) do not infringe any third party rights of any kind. The Supplier/Service Provider hereby indemnifies Transnet against all losses, liabilities are claims, damages, expenses and awards of any kinds incurred or made against Transnet in connection with any breach of this warranty.

13 INSOLVENCY

If the Supplier/Service Provider shall have a receiver, manager, administrator, liquidator or like person appointed over all or any part of its assets or if the Supplier/Service Provider compounds with its creditors or passes a resolution for the writing up or administration of the Supplier/Service Provider, Transnet is at liberty to terminate the Order or orders received, or at its option, to seek performance by any such appointed person.

14 ASSIGNMENT

The Supplier/Service Provider shall not assign its obligations under an Order without Transnet's prior written consent which appent shall not be unreasonably withheld or delayed.

15 NOTICES

Notices under these Terms shall be delivered by hand to the relevant addresses of the parties in the Order or man he served by facsimile or by email, in which event notice shall be deemed served on ac nowledgement of receipt by the recipient.

16 LAW

Orders shall be governed by and interpreted in accordance with South African law and any disputes arising herein shall be subject to South African arbitration under the rules of the Arbitration Foundation of South Africa, which rules are deemed incorporated by reference in this clause. The reference to arbitration shall not prevent Transnet referring the matter to any South African courts, having jurisdiction, to which the Supplier/Service Provider hereby irrevocably submits but without prejudice to Transnet's right to take proceedings against the Supplier/Service Provider in other jurisdictions and/or obtaining interim relief on an urgent basis from a court of competent jurisdiction pending the decision in other courts or from instituting in any court of competent jurisdiction any proceedings for an interdict or any other injunctive relief. If the Supplier/Service Provider does not have a registered office in the South Africa it will at all times maintain

an agent for service of process in South Africa and shall give Transnet the name and address of such agent as such may be amended, in writing, from time to time.

17 GENERAL

Completion or termination of an Order shall be without preint to any Term herein which by its nature would be deemed to continue after completion or termination, including but not limited to clauses 5, 6 and 10. Headings are included herein for convenience only. If any Term herein be held illegal or unenforceable, the validity or enforceability of the remaining Terms shall not be affected. No failure or delay by Transnet to enforce any rights under these Terms will operate as a waiver thereof by Transnet. All rights and remedies available to either party under these Terms shall be in addition to, not to the exclusion of, rights otherwise available at law.

18 COUNTERPARTS

These Terms and conditions may be signed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party may other not only agreement by signing any such counterpart.

By signing this RFQ document, the Respondent is deemed to acknowledge that he/she has made himself/herself thoroughly familiar with all the conditions governing this RFQ, including those contained in any printed form stated to form part hereof and Transnet SOC Ltd will recognise no claim for relief based on an allegation that the Respondent overlooked any such condition or failed to properly take it into account for the purpose of calculating quoted prices or otherwise.

SIGNED at	on this	day of	20
			,'' '
	••••		•
SIGNATURE OF RESPONDENT'S AU	THORISED REPRESE	NTATIVE	•
NAME:			,
DESIGNATION:			
	4		
REGISTERED NAME OF COMPANY:			
PHYSICAL ADDRESS:			
Respondent's contact preson: [Please complete]		
Name			
Designation			
Telephone			
zéll Photo :			
-acsimile :			
Email :			
Website :			

Transnet urges its clients, suppliers and the general public to report any fraud or corruption to TIP-OFFS ANONYMOUS: 0800 003 056

Date & Company Stamp

Section 4 VENDOR APPLICATION FORM

Respondents are to furnish the following documentation and complete the Vendor Application Form below:

- Original 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 copies of the relevant company registration documents from Companies and Intellectual Property Commission (CIPC)
- 4. Certified copies of the company's shareholding/director's portfolio
- 5. A letter on the company's letterhead confirm physical and postal addresses
- 6. Original valid SARS Tax Clearance Certificate
- 7. Certified copy of VAT Registration Certificate
- 8. **A valid and original** B-BBEE Verification Certificate / sworn affidavit **or certified copy** thereof meeting the requirements for B-BBEE compliance as per the B-BBEE Codes of Good Practice
- 9. **Certified copy** of vall company Registration Certificate [if applicable]

Vendor Application Form

ompan trading nar	me				
Company registered nar	me				
Company Registration N	Number or ID Nu	mber if a Sole	Proprietor		
Form of entity [√] CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
VAT number [if registere	ed]				
Company telephone numb	per				
Company fax numb	per				
Company email addre	ess				
Company website addre	ess				
Bank name			Branch & Brai	nch code	
Account holder			Bank account	number	
Postal address					

				Code	
Physical Address	••		#	Code	\$
Contact person					
Designation					
Telephone					
Email					
Annual turnove	r range [last financial year]	< R5 m	R5 - 35 m	> R35 m	
C	Does your company provide	Products	Service	Both	
	Area of delivery	National	Prayincial	Local	
	Is your company a pub	lic or private entity	Public	Private	
Does your o	company have a Tax Directive of	or IRP30 Certificate	Yes	No	
Ma	in product or services [e.g. Stat	tionery/Consulting			

Complete B-BBEE Ownership Details:

% Black ownership	% Black women ownership	% Disabled Black ownership	% Youth ownership
Does you	ur entity have a B-EREE certificate	Yes	No
	What is your B-BBEE s	tatus [Level 1 to 9 / Unknown]	
How many	y person relaces the entity emplo	py Permanent	Part time

If you are an existing Vendor with Transnet please complete the following:

Transitet contact person	
Contact number	
Francinet Operating Division	

Duly authorised to sign for and on behalf of Company / Organisation:

Name	Designation	
Signature	Date	

ANNEXURE A: B-BBEE PREFERENCE POINTS CLAIM FORM

FOR THE SUPPLY, DELIVER AND SAFELY OFFLOAD OF VARIOUS TRANSNET SIGNAL CABLES. (ONCE OFF ONLY.)

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

1. INTRODUCTION

- 1.1 A total of 20 preference points shall be awarded for B-BBEE Status Level or Contribution.
- 1.2 Failure on the part of a Bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the Sour African Accreditation System [SANAS] or a Registered Auditor approved by the independent Regulatory Board of Auditors [IRBA] or an Accounting Officer as contemplated in the Close Corporation Act [CCA] together with the bid will be interpreted to mean that preference points for B-BBEE Status Level of Contribution are not claimed.
- 1.3 Transnet reserves the right to require of a Ridder, either before a Bid is adjudicated or at any time subsequently, to substantiate any chim in regard to preferences, in any manner required by Transnet.

2. GENERAL DEFINITIONS

- 2.1 "all applicable take" include value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 "B BBE" means broad-based black economic empowerment as defined in section 1 of the on ad-last d Black Economic Empowerment Act;
- on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **"Bid"** means a written offer in a prescribed or stipulated form in response to an invitation by Transnet for the provision of goods, works or services;
- 2.5 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 [Act No. 53 of 2003];
- 2.6 **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can utilised have been taken into consideration;
- 2.7 "consortium or joint venture" means an association of persons for the purpose of combining their expertise, property, capital, efforts, skills and knowledge in an activity for the execution of a contract;

- 2.8 "contract" means the agreement that results from the acceptance of a bid by Transnet;
- 2.9 "EME" means any enterprise with an annual total revenue of R5 [five] million or less as per the 2007 version of the B-BBEE Codes of Good Practice and means any enterprise with an annual total revenue of R10 [ten] million or less as per the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928;
- 2.10 "firm price" means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs and excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies for the rendering costs of any service, for the execution of the contract;
- 2.11 "functionality" means the measurement according to predetermined noises, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality inliability, viability and durability of a service and the technical capacity and ability of a budge.
- 2.12 "non-firm prices" means all prices other than "firm" prices:
- 2.13 "person" includes reference to a juristic pers
- 2.14 "QSE" means any enterprise with an argual total revenue between R5 [five] million and R35 [thirty five] million as per the 2007 version on the B-BBEE Codes of Good Practice and means any enterprise with an annual total revenue of between R10 [ten] million and R50 [fifty] million as per the Revised Codes of Good Practice is juiced on 11 October 2013 in terms of Government Gazette No. 36928
- 2.15 "**rand value**" means the too estimated value of a contract in South African currency, calculated at the time of bit invitations, and includes all applicable taxes and excise duties;
- 2.16 "subcontract" me to the primary contractor's assigning or leasing or making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.17 "total wenue" bears the same meaning assigned to this expression in the Codes of Good Nactice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Empowerment Act and promulgated in the Government Gazette on 9 February 2007;
- 2.18 "trust" means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.19 "trustee" means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The Bidder obtaining the highest number of total points for the evaluation criteria as enumerated in Section 2 of the RFP will be awarded the contract, unless objective criteria justifies the award to another bidder.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.
- 3.3 Points scored will be rounded off to 2 [two] decimal places.

- 3.4 In the event of equal points scored, the Bid will be awarded to the Bidder scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more Bids have scored equal points including equal preference points for B-BBEE, the succession Bid will be the one scoring the highest score for functionality.
- 3.6 Should two or more Bids be equal in all respect, the award shall be decided by the drawing of lots.

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

4.1 In terms of the Preferential Procurement Regulations, 2011, preference points shall be awarded to a Bidder for attaining the B-F A status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of Points [Maximum 20]
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- 4.2 Bidders who qualify as EMEs in terms of the 2007 version of the Codes of Good Practice must submit a certificate issued by an Accounting Offic r as contemplated in the CCA or a Verification Agency accredited by SANAS or a Register of A ditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EME's with B-BBEE Status Level Certificates.
- 4.3 Bidders who qualify as EMEs in terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928 are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R10 million or less and the entity's Level of Black wnership.
- 4.4 In terms of the 20 7 version of the Codes of Good Practice, Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- In terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928, Bidders who qualify as QSEs are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R50 million or less and the entity's Level of Black ownership. Large enterprises must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.6 A trust, consortium or joint venture will qualify for points for its B-BBEE status level as a legal entity, provided that the entity submits its B-BBEE status level certificate.
- 4.7 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 4.8 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialised scorecard contained in the B-BBEE Codes of Good Practice.

- 4.9 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 subcontracting more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not qualify for at least the same number of points that such a Bidder qualifies for, unless the intended subcontractor is an EME that has the capability and ability to execute the subcontract.
- 4.10 A person awarded a contract may not subcontract more than 25% [twenty-five per cent] 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 subcontracted to an EME that has the capability and ability to execute the subcontract.
- 4.11 Bidders are to note that in terms of paragraph 2.6 of Statement 000 of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gizette No. 36928, any representation made by an entity about its B-BBEE compliance must be upported by suitable evidence or documentation. As such, Transnet reserves the next of equest such evidence or documentation from Bidders in order to verify any B-BBEE reconnuc. claimed.

5.

5.1	Riddors	who claim points in respect of BEE Status Level of Co	ntribution must
5.1		te the following:	intribution must
	-		of 20 points]
		oints claimed in respect of the paragraph 5.1 must be in accordan	ce with the table
		in paragraph 4.1 above and must be substantiated by means of a	
		a Verification Agency accredited by SANAS or a Registered Auditor ap	
		affidavit in the care of an EME or QSE.	,
5.2	Subcont	racting:	
	Will a	setion of the contract be subcontracted? YES/NO [delete which is not a	annlicable1
			аррпсавіс
	If YET in		0/
	(i)	What percentage of the contract will be subcontracted?	%
	(ii)	The DREE state base of the subcontractor	***************************************
	(iii)	The B-BBEE status level of the subcontractor	VEC/NO
	(iv)	Is the subcontractor an EME?	YES/NO
5.3	Declarati	on with regard to Company/Firm	
	(i)	Name of Company/Firm	•
	(ii)	VAT registration number	
	(iii)	Company registration number	***
	(iv)	Type of Company / Firm [TICK APPLICABLE BOX]	
		□ Partnership/Joint Venture/Consortium	
		☐One person business/sole propriety	
		□Close Corporations	
		□Company (Pty) Ltd	

Date & Company Stamp

1.

2.

Respondent's Signature

((v)	Describe Principal Business Activities
(vi) C	Company Classification [TICK APPLICABLE BOX]
`	/ -	☐ Manufacturer
		□ Supplier
		□ Professional Service Provider
((vii)	Other Service Providers, e.g Transporter, etc Total number of years the company/firm has been in business
ID DECLA	RAT	ION
		signed, who warrants that he/she is duly authonse to do so on behalf of the
		ertify that points claimed, based on the B-BIEE status level of contribution indicated in
ıragraph 4		ve, qualifies the company/firm for the preference(s) shown and I / we acknowledge that:
`	. ,	The information furnished is true and corlect.
((ii)	In the event of a contract being a varded as a result of points claimed as shown in
		paragraph 6 above, the cord actor may be required to furnish documentary proof to the satisfaction of Transnet that the gaims are correct.
((iii)	If the B-BBEE status evel of contribution has been claimed or obtained on a fraudulent
((111)	basis or any of the contradors of contract have not been fulfilled, Transnet may, in
		addition to any other remedy it may have:
		(a) di quality he person from the bidding process;
		(b) re over costs, losses or damages it has incurred or suffered as a result of that
		person's conduct;
		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;
	Y	(d) restrict the Bidder or contractor, its shareholders and directors, and/or associated
		entities, or only the shareholders and directors who acted in a fraudulent manner,
X		from obtaining business from Transnet for a period not exceeding 10 years, after
		the audi alteram partem [hear the other side] rule has been applied; and/or
		(e) forward the matter for criminal prosecution.
WITNE	SSES	5:
		SIGNATURE OF BIDDER
***************************************	•••••	DATE:
	IV NIA	ME:
COMPAN	II IVA	

ANNEXURE B: SPECIFICATION OF GOODS

FOR THE SUPPLY, DELIVER AND SAFELY OFFLOAD OF VARIOUS TRANSNET SIGNAL CABLES. (ONCE OFF ONLY.)

1. SCOPE

The contract will be for the supply, delivery & safely offloading of various Transnet Signal Cables.

- 500m x Orange Steel Track Cable.
- 500m x Cable 61 Core x 1.6mm
- 500m x Cable 16 Core x 1.6mm
- 500m x Cable 4 Core x 1.6mm
- 500m x Cable 2 Core x 1.6mm
- 500m x Cable 37 Core x 1.6mm
- 500m x Cable 52 Core x 1.6mm



Transnet only approves items supplied a cording to Transnet's Certificate of approval.

The specification of each item is detailed in Section 2 the Quotation form, as per the attached Specifications;

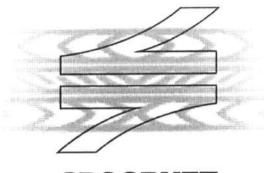
- CSE 1164-008 V rsin 3
- CSE 1164-Q11 Sates X 47 Issue 3 13 March 1997

3. DELIVER REJUIREMENTS

The Cables are to be delivered at TFR (RME) Signals - Nsezi - Locomotive Depot – Richards Bay.

4. SITE REQUIREMENTS

All personnel to be fully dressed with standard PPE at all times and adhere to site safety requirements. The delivery vehicle to be fully road worthy, with no fuel / oil leaks at all.



SPOORNET

A Division of Transnet Limited

PLANNING AND TECHNOLOGY RAILWAY ENGINEERING

SPECIFICATION

STRANDED, GALMANISED HIGH TENSILE STEEL, PVC INSULATED, OUTDOOR CABLE FOR TRACK JUMPERING

Author:	Technologist Engineering	H.J. Fourie	
3Y'		P.J Labuschagne	
Approved:	Senior Engineer Engineering	A.M. Hanekom	
Authorised:	Principal Engineer Engineering	Dr. B.M. Steyn	
		Date	September 2001

Circulation restricted to:

Rail and terminal services (Maintenance)

Planning and Technology

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1 Scope:

This specification covers the requirements for outdoor, PVC insulated, single core, stranded, galvanised high tensile steel cable, intended for use in railway signalling in the Republic of South Africa.

1.1 Classification:

The nominal core diameter is 4.3 mm, the rated operating voltage 1 900/3 300V and it is used as set out in guideline CSE-1133-105.

2 Applicable documents:

Except where specifically called for otherwise in this specification, the cables shall comply with all the relevant requirements of the latest issue of the specifications listed here, and inclusive of all official amendments issued by the SABS Cable Committee, current at the time of tendering.

- SABS 1507: Standard specification for Electric cables with extruded solid dielectric insulation for fixed installations (30√50 V to 1 900/3 300 V)
- SABS 1411: Materials of insulted electrical cables and flexible cords:

Part II: Polyvinylchloride (PVC)

British Standard BS183. Secification for general purpose galvanised steel wire strand

3 References:

Guidelines for the tree of cables in signalling installations: CSE-1133-105 Category N98.

4 Requirements

4.1 Cable construction:

4.1.1 Conductor:

The conductor shall consist of a stranded, circular shaped conductor, of galvanised steel wires with a tensile strength as specified in Table 1 below.

The size and number of wires in the conductor shall be as specified in Table 2 below.

The outer layer of the strand shall have a right hand lay. The inner layer shall have an opposite lay. The lay length of the strand shall be 12 to 18 times the normal overall diameter of the strand. Construction shall be according to BS 183.

Table 1: Wire tensile strength

Minimum	Maximum	
1600 MPa	1800 MPa	

Table 2: Size and New per of wires

Diameter of wire [mm]	Number of wires
0,85	19

4.1.2 Insulation:

The insulation shall consist of a continuous extruded solid dielectric complying with the requirements of Type D2 PVC as specified in SABS 1411 Part II.

The thickness of the isolation shall be as specified in Table 3 below.

Table 3: Insulation thickness

Minimum	Maximum					
2,0mm	1	2,5m	n			

4.1.2.1 Identification:

The colour of the insulation material shall be orange.

4.2 Cable assembly:

The cable assembly shall be accordance with SABS 1507.

5 Qualification:

5.1 Differentiating equirements:

All tests shall be performed according to SABS 1507 and BS 183. Tests shall be carried out by an inteperident organisation approved by Planning and Technology (Railway Engine ring) Spoornet. If this is not possible, the manufacturer shall submit a certified copy of all the relevant tests carried out as well as the name of the independent organisation by which the tests were performed, for approval by Spoornet.

5.2 Test methods:

Tests to be conducted are those listed in the SABS 1507 paragraph 6.1 for the following components: the Insulation and Finished cable.

The galvanised steel strand should be tested according to BS 183 clause 6 for General strand.

The requirements are as set out in this document.

6 Quality assurance provisions:

6.1 Responsibility for inspection:

A Spoornet Quality assurance officer shall be responsible for the inspection of the final product delivered by the tenderer.

7 Preparation for delivery:

7.1 Marking of cables:

Cables not bearing the SABS mark require batch certification to each tender by an independent organisation, approved by Spoornet, for compliance to SABS 1507. Any costs shall be for the tenderer's account. Where batch certification is used, the name of the proposed independent organisation shall be submitted for approval to Spoornet.

The cables shall be marked in accordance with the requirements of SABS 1507, paragraph 5.2.1. It shall bear the information required in this SABS clause a) and the legend "Spoornet".

The above markings shall be done at a sparing of 1 metre.

7.2 Packing:

The cable shall be supplied in coils

7.3 Marking of package

Where batch certification is used (see clause 7.1 of this specification) the coils shall be numbered numerically sturing from one for each individual tender. The numbers of the coils for batch certification shall appear on the certificate issued by the independent organisation.

Each coil package shall bear the following information in legible and indelible marking: the name of the manufacturer, the length of cable, the cross sectional area of the top luctor and the gross kilogram mass of the cable.

7.4 Lengths:

Standard Lengths for cables shall be as follows:

100 m per coil.

8 Notes:

8.1 Compliance:

Tenderers shall submit a clause by clause statement of compliance with their quotation. Where the cable offered differs from the requirements of this specification, the relevant information must be given in a covering letter.

If the tenderer is not the manufacturer of the cable offered, the full identity of the manufacturer must be disclosed.

Failure to comply with these requirements will render quotations invalid.

Office of the General Manager Spoornet Planning and Technology (Railway Engineering) Johannesburg

SPOORNET

A Division of Transnet Limited

INFRASTRUCTURE (SIGNALS)

SPECIFICATION

FOR

PVC INSULATED METAL PROTE TED OUTDOOR CABLES

Drawn up by	:	Sen. Eng. Tech. (R&D)	H.J. Fouri	e
Checked by		Sex or Engineer (R&D)	B.M. Steyn	
Authorised by		Senior Manager (R&D)	G. Paverd	

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1.0. Scope:

This specification covers the requirements for outdoor railway signalling cables for use in the Republic of South Africa.

1.1. Classification:

The specification covers 600/1 000 volt PVC insulated cables, with extruded bedding, wire or tape armouring, and PVC sheat ing of single or multicore construction with copper conductors and are used as set out in guidline CSE-11 3-105.

2.0. Applicable documents:

Except where specifically called for otherwise in this specification, the cables shall comply with all the relevant requirements of the latest issue of the specifications listed here, and inclusive of all official amendments issued by the SABS Cable Committee, current at the time of tendering.

- 2.1. SABS 1507: Standard specification for Electric cobles with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V)
- 2.2. Other applicable Standards:
 - 2.2.1. SABS 1411: Materials of insulated electrical cables and flexible cords.: Part I : Conductors
 - 2.2.2. SASS 14 : Materials of insulated electrical cables and flexible cords.: Part II : Polyviralch pride (PVC)
 - 2.2.3. SALS 1411 : Materials of insulated electrical cables and flexible cords.: Part VI : Armon
 - 2...4. SABS 05: Preservative treatment of timber.

2. References:

2.3.1. Guidlines for the use of cables in signalling istallations: CSE-1133-105 Category N98

3.0. Requirements:

The cables may be buried and must be protected from termite attack and made rodent- resistant by means of metallic tape or wires. Both the outer sheath and the bedding must be impenetrable to moisture.

Individual cables shall conform to all the requirements as set out in the relevant tables of SABS 1507 and with the specific requirements of claues 4.2. of SABS 1507 unless stated otherwise in this specification.

3.1. Cable construction:

3.1.1. Conductors:

The conductor shall consist of a stranded or solid, circular shaped, uncompacted,

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annealed copper wire/s. Solid conductors shall be constructed in accordance with SABS 1411 Part I. Use SABS 1507 Table 6 for standard solid conductor sizes from 0,5 mm diameter to 1,6 mm diameter and SABS 1507 Table 6 and Table 8 for standard stranded conductor sizes.

The stranded conductor shall conform to the requirements of Class 2 conductors as specified in SABS 1411 Part 1.

3.1.2. Dielectric:

Type D2 PVC dielectric, as set out in SABS 1411 Part II, must be used and the nominal thickness and isolation resistance of the dielectric shall comply with the relevant requirements of Table 8 of SABS 1507 for 3 anded conductors with sizes ranging from 1,00 mm² to 1200,00 mm². For stranded conductors with sizes ranging from 0,196 mm² to 1,00 mm² Table 6 of SABS 1507 must be used. Table 6 of SABS 1507 must also be used for all cables with said conductors with sizes from 0,5 mm diameter to 1,6 mm diameter. Where the conductor cross-sectional area lies between two stranded values as specified in Table 6 of SABS 1507 the larger of the two values must be used. When Table 8 is used the larger of the two values for the 300/500 voltage or 66/0/10.00 oltage range must be used.

For solid conductor sizes or 0.9; 1.4 and 1.6 mm, the minimum insulation resistance shall be $36 \text{ M}\Box/\text{kh}$. The assured core to core, dry, at $20 \ \Box C$.

3.1.3. Col e:

Each color of a multicore cable shall have substantially the same profile and the cable shall have no crossed cores. The cores shall be identified by colour and position.

3.1.3.2. Cables up to four cores:

Table 1:

Number of cores in cable	Colour and sequence			
1	Red			
2	Red, Blue			
3	Red, White, Blue			
4	Red, White, Black, Blue			

3.1.3.3. Cables of five cores and more:

The first (marker) core of each layer shall be red, the last (reference) core of each layer shall be blue, and all the remaining cores shall be coloured alternately white and black.

Cores will be counted from the marker to the reference.

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For cables with more than one layer all the reference cores shall be on the same rotational side (e.g. clockwise) of the marker core.

3.2. Assembly:

3.2.1. Fillers and dummy cores:

If fillers and/or dummy cores are used in the core assembly they shall be made of PVC type D2, polypropylene yarn or other acceptable material. Dummy coles shall be black, and be placed immediately preceding the reference core.

3.3. Bedding:

Bedding shall comply with SABS 1507 clause 3.2.5.2., except if otherwine noted. The bedding shall be type B or B1.

3.4. Core assembly tapes:

Core assembly tapes shall be in accordance with clause 3.2.5.1. of SABS 1507.

3.5. Armouring:

Armouring shall be of galvanised steel and hall comply with SABS 1507 clause 3.2.5.3., except if otherwise noted.

3.5.1. Wire:

Armour wire diameter must be according to SABS 1507 Table 14.

Cables having a gutt calculated diameter over the laid-up cores of up to 12,5mm shall be armoured by means of a single layer of galvanised steel wires as required by SABS 1411 Part VI

3.5.∠. 1 pe:

ables larger than 12,5 mm nett calculated diameter over the laid-up cores shall be accounted by means of two galvanised ferrous tapes, complying with SABS 1411 Part VI.

Cables shall be armoured by means of two galvanised ferrous tapes, having a nominal thickness of 0,30 mm and a minimum thickness of 0,25 mm. The tapes shall be applied closely and helically in the same direction, with a gap spacing not greater than 50% of the width of the tape. Where it is necessary to join the tapes the joint shall be electrically welded or brazed, and shall be so finished or made that they are free from sharp edges and protruding points. The application of PVC or any other tape over the armouring shall be optional, the thickness of any such tape being ignored, deriving nett calculated diameters.

3.6. Outer sheathing:

The outer sheath shall comply with clause 3.2.5.4. of SABS 1507. When specially called for in paragraph 8.1 of this specification the outer sheathing shall contain an acceptable insecticide, the common name and nominal concentration of which shall be declared in the relevant quotation. The sheathing shall be of Type S2.

4.0. Qualification:

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4.1. Differentiating requirements:

All tests shall be performed according to SABS 1507 clause 6. Tests shall be carried out by an independant orginisation approved by Infrastructure (Signals) Spoornet. If this is not possible, the manufacturer shall submit a certified copy of all the relevant tests carried out as well as the name of the independent organisation by whom the tests were performed, for approval by this office.

4.2. Test methods:

Tests shall be carried out in accordance with SABS 1507 clauses 6.3, 6.4, 6.7, 6.8, 6.9, 6.10, 6.11 and 6.12.

5.0. Quality assurance provisions:

5.1. Responsibility for inspection:

A Spoornet Quality assurance officer shall be responsible for the inspection of the final product as delivered by the manufacturer.

6.0. Preparation for delivery:

6.1. Marking of cables:

Locally manufactured cables shall bear the SABS 1507 mark. Imported cables not bearing the SABS mark, require batch certification for each enter by any independent organisation, approved by Spoornet, for compliance to SABS 1507. Any costs shall be for the suppliers account. Where batch certification is used, the name of the proposed independent organisation shall be specified for approval by this office (see paragraph 4).

The cables shall be marked in scordance with the requirements of SABS 1507, together with the year of manufacture and the legal d "SPOORNET", except that in the case the manufacturer not holding a permit to apply the SABS mark, the cable shall not be marked SABS 1507.

The above man ings shall be done at a spacing of approximately 1 metre and must include the appropriate casts identification i.e. 12 core; 21 core etc.

To determine the remaining length of cable on partly used drums of cable, the cable shall be marked in the fealing on the outer sheath at one metre intervals, starting with "1", "2", "3", "4", etc. on the inner wilding of the cable on the drum and finishing with the total length of the cable on the also outer wilding on the drum.

The marking of the cable on the drum shall be done by means of:

- (i) indenting the numerals on the sheath
- (ii) a thermic process
- (iii) indelible colour markings

6.2. Packing:

All cables shall be supplied on drums, the periphery of which shall be closed for transport from the manufacturer's works.

Both ends of all cables having 3 or more cores shall be marked with a band of coloured, durable, selfadhesive, plastic tape. The tape colour shall be red at the end where the core counting sequence described in clause 3.1 of this specification is in a

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clockwise direction and green for the anti-clockwise direction.

6.3. Marking of drums:

Where batch certification is used (see clause 6.1.1. of this specification) the drums shall be numbered numerically starting from one for each individual tender. The numbers of the drums for batch certification shall appear on the certificate issued by the independent organisation.

The gross kilogram mass of the cable and the drum shall be clearly and eparately marked on the outside of the drum.

6.4. Lengths:

Standard Lengths for cables shall be as follows:

650 ±30m:

(a) For single-wire conductor cables having up to 12 cores.

(b) For stranded conductor cables awng up to 6 cores.

500 ±30m:

For larger cables.

The length of the last drum of each item of every order shall be adjusted to ensure that the total length supplied is as specified on the order.

7.0. Notes:

7.1. Compliance:

Tenderers shall submit a clause by clause statement of compliance with every quotation. Where the cable offered differs from the requirements of this specification, the relevant information must be given in a covering letter.

If the tenderert's hat the manufacturer of the cable offered, the full identity of the manufacturer must be disclosed.

Failure comply with these requirements will render quotations invalid.

8.0 m ri ation supplied by customer:

8. The conductor diameter mm² / mm

8.2 Number of cores in the cable cores

8.3 Conductor Solid / Stranded

Office of the Chief Engineer (Signals)(Infrastructure)
Johannesburg

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9.0. Appendix

(SABS 1507)
TABLE 6 - REQUIREMENTS FOR SINGLE-CORE UNSHEATHED PANEL/CUBICLE CABLES (300/500 v)

Туре	Condu	Diameter of wire(s) in	Approximate diameter of	Thickness of insulation, mm		Conductor resistance at 20 □C	Insulation resistance per km at 23 □C or per 7 m at 60 □C, M□, min.		
of cable	ctor size, mm²	conductor, mm	conductor, mm	Normal	Min	□/km, max	D1	HFD1	HFD2
	Calcula ted	Normal							
	100	0,5	0,50	0,50	0, 0	89,6	10	100	10
	0,196	0,63	0,63	0,50	0,0	56,4	10	100	10
	0,312	0,71	0,71	0,55	0,45	44,4	10	100	10
Non -	0,396								
flexible		0,8	8,0	J,55	,45	35,0	10	100	10
	0,504	0,9	0,9	0,53	0,45	27,6	10	100	10
	0,636	1,0	1,0	ն 55	0,45	22,4	10	100	10
	0,785							400	
		1,12	1,1.	0,55	0,45	17,9	10	100	10
	0,985	1,25	1,25	0,55	0,45	14,3	10	100	10
	1.227	1,40	.40	0,55	0,45	11,4	10	100	10
	1,539 2,011	1,60	0	0,55	0,45	8,75	10	100	10
	, ,	X					С)2-D6	
Flexib	Norma	Maximum							
le	<u> </u>	0,31	0,93	0,6	0,5	35,9	10	100	10
	0	<i>3</i> ,31	1,14	0,6	0,5	23,9	10	100	10
	0, 5	0,31	1,32	0,6	0,5	17,9	10	100	10
	,0	0,31	1,67	0,7	0,5	11,9	10	100	10

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(SABS 1507) TABLE 8 - THICKNESS AND INSULATION RESISTANCE OF PVC INSULATION OF TYPES D1, D2, D3, D4, D5 AND D6

					Voltage	rating					
Con-		300/	500 V		600/1 0	00 V		1 900/3 300 V			
ductor size mm²	Thickness of insulation resistance per km at 23 □C, M□, min.		Thickness of insulation, mm		Insulation resistance per km at 23 □C, M□, min.	Thickness of insulation,		Insulation resistance per km at 23 □C, M□, min.			
	No m.	Min.		Nom	Min.		Vo m.	Min.			
1,0	0,6	0,44	20	0,8	0,62	25	1-1	-	-		
1,5	0,7	0,53	22	0,8	0,62	24	-		-		
2,5	0,8	0,62	20	0,8	0,62	20	-		-		
4,0	0,8	0,62	16	1,0	06	19	-	-	-		
6,0	0,8	0,62	14	1,0	0,8	17	-	-	-		
10,0	0,9	0,71	12	1,0	0,8	14	2,2	1,88	25		
16,0	0,9	0,71	10	16	0,8	11	2,2	1,88	21		
25,0		-		1,2	0,98	11	2,2	1,88	18		
35,0	-	-		1,2	0,98	9	2,2	1,88	16		
50,0	_			1,4	1,16	9	2,2	1,88	14		
70,0				1,4	1,16	8	2,2	1,88	12		
95,0	-	-		1,6	1,34	8	2,2	1,88	10		
420.0			Y	1,6	1,34	7	2,2	1,88	9		
120,0 150,0	7			1,8	1,54	7	2,2	1,88	8		
185,0			- T	2,0	1,70	7	2,2	1,88	8		
						_		4.00	-		
240,0		-	•	2,2	1,88	7	2,2	1,88	7		
280,0		-	-	2,3	1,97	7 7	2,3 2,4	1,97 2,06	7		
300,0	•	-	-	2,4	2,06	•	2,4	2,00	,		
380,0	-	-	-	2,5	2,15	6	2,5	2,15	6		
400,0	-	-	0 =	2,6	2,24	6	2,6	2,24	6		
480,0	•	-	•	2,7	2,33	6	2,7	2,33	6		
500,0		.		2,8	2,42	6	2,8	2,42	6		
600,0			-	2,8	2,42	5	2,8	2,42	5		
630,0		-	•	2,8	2,42	5	2,8	2,42	5		
740,0	-			2,8	2,42	5	2,8	2,42	5		
800,0	-	_	-	2,8	2,42	5	2,8	2,42	5		
960,0		-		2,9	2,51	4	2,9	2,51	4		
, ,					-						

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1 000,0		-	-	3,0	2,6	4	3,0	2,6	4
1 200,0	-	-	-	3,2	2,78	4	3,2	2,78	4

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