Tender No: AGG223



Vendor No: 11001386

BOARD LIST BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

Telephone: 033 897 2190

Purchaser: Antony Goldstone

Fax Number: 086 522 6399

Please quote reference:

E60/6000619822

sing Date

Deliver to:

2000

The Manager

TRANSNET FREIGHT RAIL

INFRA - TELECOMMS JHB MR RYNO LOUW 011-583-0126

2000 INYANDA HOUSE 3; FARKTOWN

: 1.03.2016 :11.04.2016

Validity Date No

:6000619822

RETURN OF QUOTATION/S:

SUPPLY & DELIVERY OF 9x RADIO RECEIVED UNITS AS PER SPECS

SPECS:BBG7404 ATTACHED.

FOR TER INFRA TELECOMMS RADIO DEPAT JOHANNESBURG .

PeDB REF: CRAC/DBN/21062. DEPOT REF PMB/TC/08

WUOTATIONS MUST BE EMAILED TENDERSDURBAN@transnet.net UK FAXED TO 011-584-1364

1.1 QUOTATION/S MUST BE SUBMITTED PUNCTUALLY AT 12:00 ON OR BEFORE CLOSING DATE AND LATE QUOTATIONS WILL NOT BE CONSIDERED.

1.2 IF POSTED: TFR SUPPLY CHAIN SERVICES TENDER ADMIN OFFICE

100 EEL ROAD

BAYHEAD

DURBAN

1000

1.3, IF DELIVERED BY HAND:

TRANSNET FREIGHT RAIL-SUPPLY CHAIN SERVICES

OFFICE D21; 100 EEL ROAD

BAYHEAD

DURBAN, 4000, TELEPHONE: 031-361-4123 CARROLL OR

: 031-361-4023 LINDIWE

2. CONDITIONS:

2.2 ANY PURCHASE ORDER PLACED AS A RESULT OF YOUR QUOTATION WILL BE SUBJECT TO THE STANDARD TERMS AND CONDITIONS OF CONTRACT, FORM US7, (LATEST), GENERAL TENDER CONDITIONS, FORM CSS5 (LATEST ) AND

DATE: ELLERGREEN FRANKERSKERS FRANKE	SIGNATURE OF TENDE	RER(S):	0.000	
	CONTACT PERSON:		TEL No:	

Tender No: AGG223

Page

Date

: 02.03.2016

2

BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

#### CONDITIONS MENTIONED HEREIN.

2.3 TENDERERS MAY OFFER AN EARLIER VALIDITY DATE, BUT THEIR QUOTATION MAY, IN THAT EVENT, BE DISREGARDED FOR THIS REASON.

2.4 TENDERERS ARE REQUIRED TO OFFER ONLY FIRM PRICES. PRICES SUBJECT TO REVIEW IN TERMS OF CLAUSE 32 OF FORM US7 WILL ONLY BE CONSIDERED SHOULD THE DELIVERY PERIOD REQUIRED EXCEED 6 MONTHS.

2.5 REST DELIVERY TIME MUST RE OFFERED

2.6 DISCOUNT (TRADE DISCOUNT) CASH DISCOUNT (CONDITIONAL SCOUNT) VALUE VALUE ADDED TAX (VAT) MUST BE SHOWN SEPARATELY.

2.7 TRANSNET RESERVES THE RIGHT TO NEGOTIATE PRICES THE COMMERCIAL ASPECTS AFTER THE CLOSING DATE OF THE QUOTATION,



λΔTF· ALLEGERIES ACCORDED TO PRODUCE OF THE PRODUC	SIGNATURE OF TENDERER(S):	

Tender No:

AGG223

Page

Date

02.03.2016

3

BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

2.8 DIRECT DELIVERY INTIMATES DELIVERY BEING EFFECTED INTO THE WAREHOUSE OR THE ACTUAL POINT OF SUPPLY AND SHOULD THEREFORE INCLUDE ANY TRANSPORTATION MODE DEEMED NECESSARY IN EXECUTING THIS METHOD OF DELIVERY BASIS IN ORDER TO MEET THE REQUIRED DELIVERY DATE.

#### TAX CLEARANCE CERTIFICATES:

The Regulations in terms of the Public Finance Management Act, 1999: Framework for Supply Chain Management as published in Government Gazette No. 25767 dated 5 December 2003, Clause 9 (1) (d), stipulates that the accounting officer or accounting authority of an institution to which those regulations apply must reject any bid from a supplier who fails to provide written proof from the South African Revenue that the supplier either has no outstanding tax obligations or has made arrangements to meet outstanding tax obligations.

Tenderers will be disqualified if a valid tax clearance certificate or written proof from the South African Revenue Service that supplier has made arrangements to meet outstanding tax obligations is not submitted with the tender.

COMPANY DETAILS:		~ ~
MAME OF COMPANY:		-5
CONTACT PERSON:		7
TEL. NO.	FAX NO:	<u> </u>
REG NO.		
EMAIL ADDRESS:		

BROAD BASED BLACK ECONOMIC EMPOYMENT (BBBEE)

Transnet fully endorses and supports the transment's Broad-based Black Economic Empowerment Programme and it is strongly of the opinion that all South African Business Enterprises have an equal obligation to redress the imbalances of the past. Transnet will therefore prefer to do business with local business enterprises who share these same values. Transnet will endeavour to do business with local business enterprises that possess a BBBEE "recognition level" of at least a level 5. Transnet urges Tenderers (large enterprises an) \$\frac{1}{26}\frac{1}{25

Although no agencies have, as yet, been accredited by SANAS (SA National Accreditation System), Transnet will, in the interim, accept rating certificates of tenderers who have been verified by any of the listed agencies.

Enterprises will be rated by such agency based on the following:

- Large Enterprises (i.e. annual turnover > R35million:
- " Rating level based on all seven elements of the BBBEE ecorecards
- 2. Qualifying Small Enterprises (QSE) (i.e. annual turnover > R5million but < R3bmillion:
- " Rating based on any four elements of the BRBFF scorecard.

NB:

3. Emerging Micro Enterprises - (EME) (i.e. annual turnover < R5m) are exempted from being rated/verified:

DATE:	SIGNATURE OF TENDERER(S):	

Tender No:

AGG223

Page

Date

02.03.2016

1

BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

- " Automatic rating of Level 4 BBBEE irrespective of race of ownership, i.e. 100% BBBEE recognition
- " Black ownership >50% or Black Women ownership >30% automatically qualifies as Level 3 BBBEE, i.e. 110% BBBEE recognition
- " EME's should provide certified documentary proof of annual turnover (i.e. audited financials) plus proof of Black ownership if Black ownership >50% or Black Women ownership >30% from the EME's Auditor/Accounting Officer.
- 4. In addition to the above, Tenderers who wish to enter into a Joint Venture or subcontract portions of the contract to BBBEE companies, must state in their tenders the percentage of the total contract value that will be allocated to such BBBEE companies, should they be successful in being awarded any business. A rating certificate in respect of such BBBEE JV-partners and / or sub contractor/s, as well as a breakdown of the distribution of the afgromentioned percentage must also be furnished

In view of the high emphasis which Transnet places on Broad based Black Economic Empowerment, Transnet will allow certain preference points for BBBEE in the evaluation of all responses. Depending upon the value of the ensuing business award (i.e. below or in excess of R2m), the 80/20 or 90/10 point presence systems will be utilized where BBBEE will count out of 20 or 10 respectively in the evaluation process.

EACH RESPONDENT IS REQUIRED TO FURNISH PROOF OF THE ABOVE TO TRANSNET. FAILURE TO DO SO WILL RESULT IN A SCORE OF ZERO BEING ALLOCATED FOR BBBEE.

Turnover: Kindly indicate your company's annual turnover for the past year R\_\_\_\_\_

- If annual turnover <R5m, please attach certified confirmation from your Auditor/Accounting Officer</p>
- " If annual turnover > R5m please attach original cortified copy of accreditation cortificate and detailed accreditation agency (registered as a "Full Member")

PAYMENT TERMS

The following payment terms will apply as from 1 October 2008.

' All suppliers will be paid 30 days from receipt of month end statement, i.e. payment term F055.

#### CONDITIONS:

This quotation is subject to the provisions of the Standard Terms and Conditions of Contract, Form US7, (Latest ) and the General Tender Conditions, Form CSS5 (Latest) and any other standard or special conditions mentioned and/or embodied in the quotation request.

#### SCHEDULE OF REQUIREMENTS

PRICES TENDERED ARE TO BE "DIRECT" AND EXCLUDE VAT.

IN THIS REGARD THE TENDERER'S ATTENTION IS DIRECTED TO PARAGRAPH 16 OF FORM CSS5 (LATEST).

DATE: ANNOUNCES OF THE PROPERTY OF THE PROPERT	SIGNATURE OF TENDERER(S):	

Tender No:

AGG223

Page

Date

02.03.2016

BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

TRANSNET INSISTS ON HONESTY AND INTEGRITY BEYOND REPROACH AT ALL TIMES AND WILL NOT TOLERATE ANY FORM OF IMPROPER INFLUENCING, BRIBERY, CORRUPTION, FRAUD, OR ANY OTHER UNETHICAL CONDUCT ON THE PART OF BIDDERS/ TRANSNET EMPLOYEES. IF, IN THE OPINION OF TRANSNET'S CHIEF OPERATING OFFICER, A TENDERER / CONTRACTOR / SUPPLIER HAS OR HAS CAUSED TO BE PROMISED, OFFERED OR GIVEN TO ANY TRANSNET EMPLOYEE, ANY BRIBE, COMMISSION, GIFT, LOAN, ADVANTAGE OR OTHER COSIDERATION, TRANSNET SHALL BE ENTITLED TO REVOKE THE TENDER / CONTRACT BY FOLLOWING ITS INTERNAL POLICIES THAT GOVERN THE ECLUSION PROCESS. IN SUCH AN EVENT TRANSNET WILL BE ENTITLED TO PLACE ANY TENDERER / CONTRACTOR / SUPPLIER WHO HAS CONTRAVENED THE PROVISIONS OF TRANSPET'S BUSINESS ETHICS ON ITS LIST OF EXCLUDED TENDEBERS. THIS LIST WILL ALSO BE DISTRIBUTED TO ALL OTHER STATE OWNED ENTERPRISES AND GOVERNMENT DEPARTMENTS.

TRANSNET INVITES ITS VALUED SUPPLIERS TO REPORT ANY ALLEGATIONS OF FRAUD & CORRUPTION OR OTHER UNETHICAL ACTIVITIES TO TRANSPEL TIP-OFFS ANONYMOUS, A TANK OF THE FOLLOWING ADDRESSES / CONTACT NUMBERS:

TOLL-FREE ANONYMOUS HOTLINE - 0800 003 056 EMAIL - Transnet@tip-offs.com FAX NUMBER - 0800 007 788 FREEPOST DN 298, UMHLANGA ROCKS, 4320

#### CONFIDENTIALITY IS GUARANTEED

Item Muteriul 00010 9 Radio Receiver Unit (as per specs) R..... Each

**Delivery Date:** 18.03.2016

DATE:

**FULL DETAILS OF DESCRIPTION** 

Supply & Delivery of Radio Receiver

As per Specification BBG 7404 A

SIGNATURE OF TENDERER(S): .....





### **RAIL NETWORK - TELECOMMUNICATION**

# SPECIFICATION BBG 7404 VERSION 1.00

# SPECIFICATION FOR UHF MOBILE RADIO RECIEVER

**Author** 

Engineer in Training

Rail Network

Telecommunication

Reviewed:

Chief Engineering Technician

Rail Network

Telecommunication Radio

Reviewed:

Manager Rach Rall Network

Telecommunication Radio

Authorised:

Serioi Engineer Raii Network

elecommunication Radio

Authorised:

Chief Engineer Rail Network

Telecommunication

AR Louw

A Kable

G.A Daly

M Mmbengwa

M Mungugw

A Matseke

Date

11 January 2016

H.E.Coelzee

Circulation Restricted To:

Transnet Freight Rail

Transnet and Relevant Third Parties

Unrestricted

© This document as a whole is protected by copyright. The information herein is the sole property of Transnet I to I I may not be used, disclosed or reproduced in part or in whole in any manner whatsoever, except with the written permission of and in a manner permitted by the proprietors.

### **Contents**

1.	Document Authorisation
11.	Distribution.
III.	Document Change History
IV.	Changes since Last Revision
٧.	List of Abbreviations and Acronyms
VI.	Relevant Documentation Applicable
1.	INTRODUCTION
2.	SCOPE
3	COMPLIANCE
4.	TENDER REQUIREMENTS
5.	TECHNICAL REQUIREMENT
6	TRAINING

A Division of Transnet Limited Registration Number 1990/00900/30

### **Contents**

1	Document Authorisation,
11	Distribution
Ш	Document Change History
IV.	Changes since Last Revision
٧	List of Abbreviations and Acronyms
VI,	Relevant Documentation Applicable
1.	INTRODUCTION
2.	SCOPE
3	COMPLIANCE
4.	TENDER REQUIREMENTS,
5	TECHNICAL REQUIREMENT
6.	TRAINING

### I. Document Authorisation

FUNCTION	NAME	TITLE & DIVISION	SIGNATURE	DATE
Reviewed By:	Chris Muller	Quality Assurance Rail Network	A	January 2016

### II. Distribution

Once updated, a copy of the latest revision will be published on the document management system, "Project Wise".

## III. Document Change History

I9SUE NO.	DATE ISSUED	ISSUED BY	HISTORY DESCRIPTION
1.00	January 2016	AR Louw	New Document

### IV. Changes since Last Revision

CLAUSES	DESCRIPTION

### V. List of Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS	DESCRIPTION	
dBm	Decibel relative to 1 milliwatt	
DC	Direct Current	
ICASA	Independent Communication Authority of South Africa	
ID	Identification	
IP	International Protection	
m	Metre	
mm	Millimetre	
mW	Milliwatt	
uV	Micro Volt	
NTC	National Test Centre	
RF	Radio Frequency	
RFQ	Request for quotation	
RSSI	Received signal strength indication	
Rx	Receive	
TFR	Transnet Freight Rail	
UHF	Ultra High Frequency	
V	Volt	
VSWR	Voltage Standing Wave Ratio	
W	Wett	



### V. List of Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS	DESCRIPTION	
dBm	Decibel rolative to 1 milliwatt	
DC	Direct Current	
ICASA	Independent Communication Authority of South Africa	
۵۱	Identification	
IP	International Protection	
m	Metre	
mm	Millimetre	
mW	Milliwatt	
πV	Micro Volt	
NTC	National Test Centre	
RF	Radio Frequency	
RFQ	Request for quotation	
RSSI	Received signal strengt indication	
Rx	Receive	
TFR	Transnet Freight Rall	
UHF	Ultra High Freque	
v	Volt	
VSWR	Voltage Standing Wave Ratio	
w	Watt	



#### 1. INTRODUCTION

Transnet utilise Mobile - Trunked and Conventional radio equipment, in the UHF frequency band to communicate between train control officers and trains, for the control of train movements, shunting movements, flagmen, shipping and harbours operations, etc. These networks have to adhere to minimum RSSI levels to ensure that communication can take place over the network. The receiver will be used to survey the RSSI levels on the tracks to determine where on the lines there is insufficient coverage.

#### 2. SCOPE

- 2.1. This specification is for the supply of the above mentioned receiver as per attached Schedule of Requirements. (Appendix A).
- 2 2 This specification will provide Bill of Quantities and Cost Schedule (Appendix B & C)
- 2.3. It is envisaged that equipment for this enquiry will be ordered and supplied to Transnet Freight Rail's nominated address (Appendix D & E).

### 3. COMPLIANCE

Item	Description	Comply Y/N	Remarks
3.1.,	Tenderers must comply with the clause-by-clause statement of the tender requirements provided below.  *Failure to comply will exclude Tunder its from consideration.		
3.2.	Alternative offers, will be considered at Transnet Freight Rail's discretion, provided that such offers provide equivalent functionality to what has been specified in this document.  *Failure to comply will exclude Tenderers from consideration.		
3.3.	Radio's that comply with Technical Specifications BBD 8635 version 8, dated 2. May 2014 and this specification BBG 7404 version 1.00, dated 20 January 2016, but have not yet been submitted to Transnet for evaluation, must be submitted to the Transnet Nitional Test Centre (NTC) at 2 Foley St. Factoria, Krugersdore, Guiteng, attention K S Mniniyo 011 774 8227 prior to, or, within 5 (Five) working days after the tender has closed.  Approval letter from Transnet NTC must be included in the Tender/RFQ for each product offered.  *Failure to comply will exclude Tenderers from consideration.		
Itom	Description	Comply Y/N	Remarks
3.4	This Specification BBG 7404 version 1.00, date 20 January 2016 must be read in conjunction with Technical Specification and Method of Measurement for Angle Modulated Radio Equipment BBD 8635 Version 8, dated 21 May 2014.  *Failure to comply will exclude Tenderers from consideration.		

3.5.	Tenderers must provide a copy of their current ICASA Radio Dealers certificate and type approval of the receiver (Certified copy to be provided)  *Failure to comply will exclude Tenderers from consideration.	
3.6.	Radios will be required to be batch tested by Transnet NTC prior to delivery or shipment.  *Failure to comply will result in the termination of the order when radio equipment is delivered.	
3.7.	Tenderers shall submit a clause-by-clause statement of compliance for equipment / items offered on the attached Schedule of Requirements (Appendix A) in the columns provided.  *Failure to comply will exclude Tenderers from consideration.	
3,8.	Tenderers shall complete the attacked Cost Schedule (Appendix B & C) for equipment.  *Tenderers will be excluded from supplying any items not priced.	
3.9.	Tenderers shall complete the acached Delivery Schedule (Appendix D & E) for equipment.  *Tenderers will be excluded from supplying if delivery dates are not included, as this will be a deciding factor.	

### 4. TECHNICAL REQUIREMENT

Iţem	Description	Comply Y/N	Remarks
4.1.	Technical specimentions for items offered must be submitted.  *Failure to comply will exclude Tenderers from consideration.		
4.2.	The receiver must use a 12V DC power supply.		
4.3.	The receiver must have sensitivity of 0.35 uV in the 400 470Mhz frequency band	už.	
4.4.	The receiver must have a linear RSSI from 709 uV down to - 0.35 uV in the 400 470Mhz frequency band.		
4.5.	The radio receiver must have a built in speaker.		
4.6.	Radios must be capable of handling frequency switching		

3.5.	Tenderers must provide a copy of their current ICASA Radio Dealers certificate and type approval of the receiver (Certified copy to be provided)  *Failure to comply will exclude Tenderers from consideration	
3.6	Radios will be required to be batch tested by Transnet NTC prior to delivery or shipment.	
	*Failure to comply will result in the termination of the order when radio equipment is delivered.	
3.7	Tenderers shall submit a clause-by-clause statement of compliance for equipment / items offered on the attached Schedule of Requirements (Appendix A) in the columns provided.	
	*Failure to comply will exclude Tenderers from consideration.	
38	Tenderers shall complete the attached Cost Schedule (Appendix B & C) for equipment.	
	*Tenderers will be excluded from supplying any items not priced.	
3.9.	lenderers shall complete the attached Delivery Schedule (Appendix D & E) for equipment.	
3.2.	*Tenderers will be excluded from supplying if delivery dates are not included, as this will be a deciding factor.	

## 4. TECHNICAL REQUIREMENT

Item	Description	Comply 1//hl	Remarks
4.1.	Technical operations for items offered must be submitted.  *Failure to comply will exclude Tenderers from consideration.		
4.2.	The receiver must use a 12V DC power supply.		
4.3.	The receiver must have sensitivity of 0.35 uV in the 400 - 470Mhz frequency band	•0	
4.4.	The receiver must have a linear RSSI from 709 uV down to - 0.35 uV in the 400 - 470Mhz frequency band.		
4.5.	The radio receiver must have a built in speaker.		
4.6.	Radios must be capable of handling frequency switching		

	bandwidths of 15 MHz between channels with no degradation.	
4.7,	Radio receiver must be able to switch between frequencies in the In the 400 – 470MHz band without signal degradation nor component or board changes.	
4.8.	Radio must Interface with a computer using the USB port of the computer without any external converters.	
4.9,	Computer must have full control over the radio once connected This includes:  1. Switching the current frequency of the radio 2 Query the receiver for the RSSI level of the current frequency.	
4.10.	The radio must have a settling time less than 200ms when scanning through frequencies	
4.11.	The radio must respond with a byte containing the RSSI level of the frequency queried (0-255).	
4.12.	Radios must be 1P54 compliant or better.	
4.13.	Birth date of radio. (Release date).	
4.14.	Date expected to be withdrawn, superseded or replaced from the market. (Manufacture official letter to be provided).	
4.15.	Warranty period comptions, terms and conditions to be indicated.	
4.16.	Warranty tage around time for repairs to be specified in working days	
4.17.	Supplier must prove that warranty repairs and technical support can be carried out on its own premises.	
4.18.	Spares and technical support must be readily available locally for a period of at least seven years from date of purchase.	
4.19.	All equipment returned from repairs must be fully aligned to meet the specification of compliance. Certification must be issued and random batch testing will be performed.	
4.20.	Service manuals must be in English and available on CD-ROM.	

4.21,	Programming software must be on CD-ROM.	
4.22.	Programming software must be Microsoft Windows / and newer compatible.	

### 5. TRAINING

Item	Description.	Comply Y/N	Remarks
5.1.	Tenderers must be in a position to provide training on all products offered, country wide.		4444
5.2.	Training required on products will be laguested in the schedule of requirements.		



#### APPENDIX A: SCHEDULE OF REQUIREMENTS TO THE SPECIFICATION ABOVE:

- Tenders are invited in respect of the following Schedule of Requirements.
- Tenderers must indicate compliance with each item and indicate make and model being offered.
- Alternate offers must be indicated on separate documents.

ITEM	DESCRIPTION	COMPLY YES/ NO / N/A	MAKE	MODEL
1.1	Radio Receiver			

### APPENDIX B & C: BILL OF QUANTITIES AND COST SCHEDULE

Indicate the cost per unit for the quantities indicated in the respective columns

### Quantities could vary and will be determined at time of adjustication

ITEM	DESCRIPTION	QTY	UNIT PRICE	TOTAL
1	Radio Receiver	9		

### APPENDIX D: DELIVERY PERIOD

Indicate the delivery period, in weeks, for the quantities as indicated in the bill of quantities above:

ITEM	DESCRIPTION	QTY DELIVERY DAT	Œ
1	Radio Receiver	9.	

#### APPENDIX E: DELIVERY SCHEDULE

The supplied equipment must be delivered to the following location.

#### TRANSNET FREIGHT RAIL

RAIL NETWORK
TELECOMS
Inyanda House 3
1st Floor
15 Girton Road
Parktown
Johannesburg

#### Box to be labelled - Transnet Security Operations

**CONTACT: Prior to delivery** 

**Ryno Louw** 060 539 6691

#### **TECHNICAL QUERIES**

**Graeme Daly** 011 583 0124 083 343 2840

