

TRANSNET

Background



Telecoms comprises of two main components:

- **Radio Network (wireless):** Trunked network and radio train order (open channel) equipment used to enable communication between train drivers and train control centers. All these radio network require testing and maintenance to enable communications.
- **Transmission network (wired):** supports train operation and enterprise network including other operating divisions. Comprises of access network (multiplexers, microwave, power systems) and backbone network (DWDM, IP equipment, fibre). All these equipment are important for Train authorization system, condition assessment system, Telecontrol and IT services.

TRANSNET

Scope of Works

- Majority of TFR's Telecoms tools and equipment are beyond their lifespan and are not economical to repair and require replacement or to be upgraded to the latest technologies.
- Respondents are required to bid for all items in a category of their choice. i.e., respondents are permitted
 to pick either of the three categories mentioned.
- Bidder must be able to supply all items within that chosen category.
- Bidders are also allowed to bid for more than one category.
- The tools and equipment to be supplied are divided into the following three categories:
 - ✓ Category 1 : Radio Tools & Equipment
 - ✓ Category 2: Transmission Equipment & Optic Fibre Tools
 - ✓ Category 3: Power Tools & Hand Tools





Scope of Works CAT:1

Category 1: Radio tools			
Description	Specifications	Quantity	
Radio Communication Test Set (for Analog & DMR/LTE, including all connectors, interface cables, licenses & Accessories)	LTE & DMR RADIO TEST INSTRUMENTS REPORT :TFR-RNT-QA-NTC003/23	10	
Audio Level Meter (including all connectors, interface cables, licenses & Accessories, Plus 4 Wire Tester)	SPECIFICATION FOR AUDIO LEVEL METER	16	
VSWR Meter / Portable Handheld cable & Antenna Site Analyser (including all connectors, interface cables, licenses & Accessories)	SPECIFICATIONS FOR A PORTABLE HANDHELD CABLE AND ANTENNA SITE ANALYZER: BBG 64666	3	
RF Signal Generator (including all connectors, interface cables, licenses & Accessories)	SPECIFICATION FOR RF SIGNAL GENERATOR: BBH3838	1	
SIM card tester	FUNCTIONAL SPECIFICATION FOR TELEMETER END OF TRAIN SIM CARD TESTER BBH 7757 VERSION 1.0	23	







Category 2: Transmission Equipment & Optic Fibre Tools

Description	Specifications	Quantity
Fusion Splicing machine and Splicing Kit (including all connectors, interface cables, licenses & Accessories)	SPECIFICATION FOR OPTICAL FIBRE SPLICING EQUIPMENT:SPC-00568 Revision 3.00	17
Power and Source Meter (including all connectors, interface cables, licenses & Accessories)	SPECIFICATION FOR OPTICAL FIBRE TESTING EQUIPMENT: SPC-00033 Revision 5.00	16
Optical Time-Domain Reflectometer (OTDR) (including all connectors, interface cables, licenses & Accessories)	SPECIFICATION FOR OPTICAL FIBRE TESTING EQUIPMENT: SPC-00033 Revision 5.00	24
Data test set / Transmission Analyzer (including all connectors, interface cables, licenses & Accessories)	SPECIFICATION FOR HANDHELD, LIGHTWEIGHT, STM- 1, ETHERNET AND 2 Mbit/s ANALYSER WITH DATACOMMUNICATION FOR FIELD USE:SPC-00576 Revision 2.00	13
Cleaver	SPECIFICATION FOR OPTICAL FIBRE SPLICING EQUIPMENT:SPC-00568 Revision 3.00	18
Fibre Probes	SPECIFICATION FOR OPTICAL FIBRE TESTING EQUIPMENT: SPC-00033 Revision 5.00	10
Fibre Optic Link Stick Tool Set	SPECIFICATION FOR OPTICAL FIBRE LINK STICK TOOL SET	5





Scope of Works CAT: 3

Category 3: Power Tools & Hand Tools			
Description	Specifications	Quantity	
Cable Fault Locator	USER REQUIREMENT FOR THE SUPPLY OF CABLE FAULT LOCATOR	11	
Earth Tester	SPECIFICATION FOR EARTH TESTER	18	
True RMS Multi-Meter 1000V	SPECIFICATION FOR TRUE RMS DIGITAL MULTIMETER	21	
Insulation Testers 1000V	SPECIFICATION FOR A 1KV ANALOGUE INSULATION TESTER	5	
Clampmeter - true rms	SPECIFICATION FOR TRUE RMS CLAMPMETER	1	
DC Variable Load Tester	SPECIFICATION FOR DC VARIABLE LOAD TESTER	1	
High Pressure Cleaner	SPECIFICATION FOR A COLD-WATER, HIGH-PRESSURE WASHER	16	
Generator Sets 7KVA Petrol / Diesel	SPECIFICATION FOR A THREE PHASE 7.5KVA PETROL GENERATOR	9	
Power Drill	SPECIFICATION FOR A DRILL MACHINE	12	
Extension cord - 25m	USER REQUIREMENTS FOR EXTENSION CORD	1	





Scope of Works CAT: 3 ... Continued

Category 3: Power Tools & Hand Tools		
Description	Specifications	Quantity
Electric angle grinder	SPECIFICATION FOR A GRINDER MACHINE	1
Lever chain hoist	PROVISION FOR THE SUPPLY OF MANUALLY OPERATED CHAIN LEVER HOIST	10
Chainsaw	SPECIFICATION FOR A COMMERCIAL CHAINSAW	6
Compressor	SPECIFICATION FOR A COMPRESSOR	10
Technician Toolbox	PROVISION FOR THE SUPPLY TELECOMS TECHNICIAN TOOLBOX EQUIPMENT	26
Crimping Tool Set	SPECIFICATION FOR A CRIMPING TOOL SET	6
Handheld Engraver	SPECIFICATION FOR AN ENGRAVER TOOL	1
Laser Distance Meter	SPECIFICATION FOR A CRIMPING TOOL SET	1
Labelling Machine	SPECIFICATION FOR A LABELLING PRINTER MACHINE	2
Handheld Ethernet Tester	SPECIFICATION FOR A HANDHELD ETHERNET TESTER	2

TRANSNET

Technical Evaluation Methodology Stage 1

Technical Pre-qualification: Submission of a letter declaring the bidder as an OEM or approved distributor for the following items

- ✓ Radio Communication Test Set,
- ✓ VSWR Meter/Portable Handheld cable & Antenna Site Analyzer,
- ✓ RF Signal Generator,
- ✓ Fusion Splicing machine and Splicing Kit,
- ✓ Optical Time-Domain Reflectometer (OTDR),
- ✓ Transmission Analyzer,
- ✓ Power and Source Meter.





Technical Evaluation Methodology: Stage 1 Continued...



Bidders who are **not an OEM** should submit an **MOU** from OEM or Approved Distributor indicating that the bidder is authorized to supply Transnet with any of the above-mentioned items. The MOU/authorization letter should meet the following requirements:

- ✓ The MOU/Authorization letter must be on the manufacturer's letterhead.
- ✓ The MOU/Authorization letter shall state the bidder's company name.
- ✓ The MOU/Authorization letter shall be signed by both the bidder and manufacturer.
- ✓ The MOU/Authorization letter must be dated.
- ✓ The MOU/Authorization letter must quote the RFP reference number of this project.
- ✓ The MOU/Authorization letter must quote the Item/s to be supplied.





Technical Evaluation Methodology: Stage 2

Criterion	Indicator for scoring	Unit score	Weight
1. Compliance to Technical	1 No submission of technical data sheets	0	
Specification: Compliance to the technical requirements as outlined in	2 Relevant technical datasheets submitted but incomplete and cover 25% or below of complete scope of items.		
the technical specifications Bidders to submit	3 Relevant technical datasheets submitted but incomplete and covers 50% or below of complete scope of items.		40
Technical Data Sheet per item, that is complaint to the Specification.	r incievant technical datasheets submitted but		
	5 Relevant technical datasheets submitted for complete scope of all items	40	



Technical Evaluation Methodology: Stage 2 Continued...

Criterion	Indicator for scoring	Unit score	Weight
executing similar scope projects.	 No reference letters submitted. Irrelevant reference letters submitted. Letter not signed or project scope not stipulated or budget not stated or in the client letterhead. 	0	
Proof of successful completion of project with similar scope of delivery. This in the form of	 One reference letter submitted. Relevant reference letters submitted. Letter signed, project scope stipulated, budget stated and in the client letterhead. 	5	
reference letter from the client confirming that the project was completed successfully.	relevant reference receis submitted.	10	20
	 Three reference letters submitted. Relevant reference letters submitted. Letter signed, project scope stipulated, budget stated and in the client letterhead." 	15	
	5. Four reference letters submitted. Relevant reference letters submitted. Letter signed, project scope stipulated, budget stated and in the client letterhead.	20	



Technical Evaluation Methodology: Stage 2 Continued...

Criterion	Indicator for scoring	Unit	Weight
3. Delivery lead time from the date of issue	1. No submission of delivery lead time.	score 0	
of purchase order. Bidder to declare and commit to number of	2. Delivery greater than 16 weeks but less than or	5	
weeks for delivery of Tools to Transnet after the receipt of a Purchase	3. Delivery greater than 12 weeks but less than or equal to 16 weeks	10	
Order. Specify delivery timelines for the	Delivery greater than 8 weeks but less than or equal to 12 weeks	15	20
supply and delivery of tools.	 Delivery less than or equal to 8 weeks (time ≤ 8 weeks) 	20	
4. Warranty period for the supplied	1. No Warranty offered	0	
Equipment.	2. Less than Six (6) months.	5	
	3. Six (6) to Eight (8) months	10	20
Bidder to commit to warranty period for	4. Nine (9) to Eleven (11) months.	15	
their proposed equipment	5. Twelve (12) months or more.	20	
	Total Weighting:		100
	Minimum qualifying score required:		80



Technical Evaluation Methodology: Stage 3



Due Diligence (Sample Testing)

- Respondents are to note that Transnet may not award a contract if the product does not meet the specifications.
- In this regard, Transnet will request the highest ranked bidder to provide product samples to be tested for compliance to specifications, by Transnet.
- Respondents will be afforded a maximum period of two weeks to provide the required samples. Failure to
 provide the samples within the stipulated time period may lead to disqualification.
- A bidder will be allowed one opportunity to replace/rectify a sample if the product fails the initial test.
- Should the sample fail the Lab tests, Transnet will test samples from the 2nd and 3rd ranked bidders (if required) in a sequential manner.

