ANNEXURE – A

TECHNICAL SPECIFICATIONS – TECHNICAL COMPLIANCE SHEET – SUPPLY AND DELIVERY OF POWER SUPPLIES/BATTERY CHARGER

MANDATORY DOCUMENT

The compliance response is to contain ONLY the following statements, "**Comply**", **or "Do not comply**".

Noted is to be applied against statements and either of the other responses for all other clauses. Where either "Partial Compliance" is inserted, remarks as to the reason for the deviation from the requirement is required

Item	Specification Clause No.	Compliance Response	Explanation / Deviation / Reason
1	2.1		
2	2.2.1		
3	2.2.2		
4	2.2.3		
5	2.2.4		
6	2.2.5		
7	2.2.6		
8	2.2.7		
9	2.2.8		
10	2.2.9		
11	2.3.1		
12	2.3.2		
13	2.3.3		
14	2.3.4		
15	2.4.1		
16	2.4.2		
17	2.4.3		

18	2.4.4		
19	2.5.1		
20	2.5.2		
21	2.5.3		
22	2.6.1		

Respondent's Signature **Date & Company Stamp**

TRANSNET
freight rail

ANNEXURE B

RNTEL - HC160601

SCHEDULE OF REQUIREMENTS FOR POWER SUPPLY/ BATTERY CHARGER FOR TELECOM APPLICATION

1. SCOPE

The schedule covers the requirements of Transnet for the supply of Power supply / Battery chargers for Telecom application that will be installed at various radio high sites. The power supply/battery chargers must comply with the requirements of this schedule and any deviation must be indicated in the tenderer's submission document.

2. SPECIFICATIONS

2.1. Service conditions:

The equipment offered must be suitable for continuous operation under the following conditions:

- Ambient temperature: -10 to 60 Degrees Celsius
- Relative humidity: As high as 95%
- Altitude: 0-2000 meters.
- Air pollution: Heavily saline laden industrial and locomotive fumes containing metallic dust.

2.2. General Requirements:

2.2.1 The power supply unit and charger must be capable of satisfactory operating from a 220/230volt, 50 hertz single-phase mains supply, with a possible voltage variation +10% and a possible frequency variation of +2%.

2.2.2. The power supply and charger modules must be capable of continuous operation at full load under the specified climatic conditions without resort to cooling fans.

2.2.3. The power supply and charger modules must be of the switch mode rectifier type and adequately rated to cater for the output voltages and currents called for. Sealed or encapsulated control boards will not be accepted.

2.2.4. Under normal operation, the power supply module must supply continuous rated current to the load and the charger module must supply a specified float voltage and continuous float current to the batteries as specified below in **schedule of equipment.**

2.2.5. Power supply with charger in its standard configuration must be 19 inch rack mountable and the height must not exceed 2U.

2.2.6. The supplier must provide a minimum of 12 month warrantee on the supplied equipment and must be able to support it for at least 3 years.

2.2.7. The as build circuit diagrams and component list to be supplied by the manufacturer.

2.2.8 The product quoted on must have been evaluated by the TFR Laboratory and accepted for use in the Transnet Telecoms environment. If the product quoted on was not evaluated, the supplier must be prepared to submit the product for evaluation at the supplier's costs.

2.2.9. Terminals for load and batteries must be separate and clearly marked.

2.3. Power supply and charger.

2.3.1. The rectifier bridge must be of a full-wave silicon type incorporating special fusing and surge suppression facilities for the protection of the silicon diodes against short circuits and forward and reverse voltage transients. Details of the actual precautions taken in offered equipment must be included in the tender.

2.3.2. All terminals must be clearly and indelibly designated with the relevant voltages and polarities and must be of a form, which must prevent stranded conductor wires from spreading.

2.3.3. Adequate provision must be made in the design of the equipment to protect electronic components in the power equipment and in the load against voltage transients induced by switching or lightning surges conducted into the equipment by the power leads. Details of the protection offered must be included in the tender.

2.3.4. The power supply unit and charger modules must be capable of supplying the full rated load (100%), but must be inherently current-limited to protect against overload from 100% of the nominal rated current up to a short circuit without disconnecting from the mains, blowing fuses.

2.4. Noise limitations:

2.4.1. The power supply unit and charger must not have a noise figure greater than10mV RMS and 100 mV peak-to-peaks. The line regulation must not exceed 1% of output voltage setting, and the load regulation must not exceed 5% of output voltage settings.

2.4.2. The total maximum level of acoustic noise generated by the components of the charger, e.g. transformer hum, under any load conditions must not exceed 55 dBA measured at a distance of 1 metre from the side of the charger in any direction. This must be achieved in the design of the components and not by cabinet silencing.

2.4.3. Wide-band noise should not exceed 55 mV (3, 4 – 150 kHz) and 25 mV 150 kHz – 30 MHz).

2.4.4. The radiation of spurious frequencies in the radio operating band must not be greater –119, 0 dBm, measured at 1m from the PS & Charger.

2.5. Mains Fail

2.5.1. In the event of the mains or power supply unit module failing, the conditions must be extendable. The batteries must provide load current without any interruption [instant changeover].

2.5.2 The load is to be automatically disconnected (load shed), from the charger, when the battery voltage has dropped to 1.9V/cell (11.4 for 13.8V).

2.5.3 On restoration of power to the charger, the load must be re-connected automatically. The power supply unit with charger must continue with normal operation as stipulated in 2.2.4.

2.6. Alarming

2.6.1. A relay contact, normally open and normally closed, with terminals clearly visible and marked, to be available on the charger to extent the following alarm conditions;

- Mains fail
- Output Low
- Load shed warning

Delivery Address: **Transnet Infra Telecoms**
Caledon West Street
Bellville South

ANNEXURE C

SUPPLY AND DELIVERY OF POWER SUPPLIES/BATTERY CHARGERS IN BELLVILLE

TECHNICAL SUBMISSION QUESTIONNAIRE

Previous /Current Relevant Experience

Note to tenderers:

Tenderers are required to demonstrate their experience in the supply and delivery of Power supplies. Battery Chargers to this end shall supply a sufficiently detailed reference list (minimum 3) with contact details of previous and /or existing customers. Must have supplied quality Power supplies successfully and within reasonable time. The experience will be based on the number and value of previous / current relevant Power supplies /battery chargers delivered successfully.

List of References

Name of Company	Contact Person and Details	Number and types of Power supplies /Battery Chargers delivered	Value of Power Supplies/ Battery chargers delivered	Contract Period

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

TRANSNET FREIGHT RAIL - BELLVILLE REQUEST FOR QUOTATIONS	TRANSNET freight rail

BOARD LIST NO. BLE/1172/2016

Transnet Freight Rail a Division of Transnet SOC Ltd. (Reg. No. 1990/000900/30), invites all interested parties to respond to a request for quotation (RFQ) as indicated below:

ISSUE OF DOCUMENTS – RFQ document may be purchased at **R250.00** [inclusive of VAT] per set, for those Bidders that require a copy from Transnet rather than downloading from the website. If a copy of the RFQ document is required, prior arrangements must be made one (1) day in advance and the RFQ document may be collected between **08:00** and **15:00** from **02 September 2016** until **12 September 2016 at** Transnet Freight Rail, Supply Chain Services, Tender Admin Support, 6th Floor, Transnet Park, Robert Sobukwe Road, and Bellville. RFQ documents will only be available, **Monday to Friday** between **08h00 and 15h00.**

RFQ document may be viewed and downloaded directly from the Transnet Freight Rail website by clicking on the RFQ number that is highlighted in red on the website: (http://www.transnetfreightrail.co.za/Website/tenders.html) free of charge

LAST DATE OF ISSUE – RFQ documents will only be issued until **(12 September 2016 at 15:00)**. **No RFQ documents will be issued after 15h00.**

All RFQ's are issued against a controlled register and responses other than those issued against the controlled register will be disqualified.

For enquiries regarding collection of documents, contact Iwan Theron telephone No**.** 021 940-1896

RFQ NUMBER	**BEL/1172/2016**
SCOPE OF WORK	**SUPPLY AND DELIVERY OF POWER SUPPLIERS/BATTERY CHARGES**
REQUIRED AT	**INFRA TELECOMS BELLVILLE**
CLOSING DATE	**13 SEPTEMBER 2016**
TIME	**10:00**
FOR ENQUIRIES CONTACT:	**FHATUWANI MUKWEVHO 021 940 1840**

Transnet SOC Ltd. - An Authorised Financial Service Provider – FSP 18828

Transnet Freight Rail urges Clients & Suppliers to report fraud/corruption at Transnet to TIPOFFS ANONYMOUS: 0800 003 056