

Bid Number: GEM/2020/B/708158

Dated: 13-07-2020

#### **Bid Document**

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Bid Details				
Bid End Date/Time	24-07-2020 09:00:00			
Bid Opening Date/Time	24-07-2020 09:30:00			
Bid Life Cycle (From Publish Date)	90 (Days)			
Bid Offer Validity (From End Date)	30 (Days)			
Ministry/State Name	Ministry Of Railways			
Department Name	Na			
Organisation Name	N/a			
Office Name	Southern Railway			
Total Quantity	97			
Item Category	Analog Transceiver-Handheld			
MSE Exemption for Years of Experience and Turnover	No			
Startup Exemption for Years of Experience and Turnover	No			
Document required from seller	OEM Authorization Certificate *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer			
Bid to RA enabled	No			
Inspection Required	No			
Estimated Bid Value	1064478			
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#### **EMD Detail**

Required	No
required	1

#### ePBG Detail

Required	No
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#### Splitting

Bid splitting not applied.

## **Analog Transceiver-Handheld (97 pieces)**

## **Technical Specifications**

#### \* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
PERFORMANCE FEATURES	Frequency Range (MHz)	136-174	136-174
	Types of Bandwidth	VHF Full Band	VHF Full Band
	<b>Channel Capacity</b>	16	16
	Channel Spacing	12.5	*
	Frequency Spread without degradation in Tx / Rx Specification	5	*
	Frequency Stability (± )	2.5	*
	Antenna Impedance	50	*
TRANSMITTER	RF Power output setting of transmitter	Programmable	*
	RF Power output Range	1 to 5 Watts (VHF)	1 to 5 Watts (VHF)
	Type of Emission	11K0F3	*
	Frequency deviation	± 2.5Khz max. for 100% at 1KHz	*
	Modulation Sensitivity	1 to 10mV at 1 KHz at mic. Input for +/- 1.5 KHz standard deviation	*
	Modulation Distortion	5	*
	Modulation Fidelity	+1, -3 dB of 6dB/ octave pre-emphasis charactrestics from 350 Hz to 2700 Hz with 1KHz as reference	*
	Spurious & Harmonics Suppression (dB)	60	*
	VSWR	-1	*
RECEIVERS	Sensitivity at 12 dB SINAD	0.25	*
	Squelch Sensitivity of receiver	-0.25	*
	Adjacent Channel Selectivity (dB)	60	*
	Image Rejection (dB)	65	*

	Audio Output, (with less than 5 % distortion at 1 KHz reference measured at specified AF output)	500	*
	Audio Response	+1, -3 dB of 6dB/ octave de- emphasis charactrestics from 350 Hz to 2700 Hz with 1KHz as reference	*
ACCESSORIES	Antenna	Helical Antenna	*
	Programming kit	No	*
	Technical repairing & maintenance manual with complete block diagram, circuit layout etc in soft as well as hard copy	No	*
	Battery charger	Yes	*
	Output voltage of the charger	-	*
	Battery charger suitable for	Lithium-ion	*
	Charging time for standard mode	6 to 14hrs	*
	Charging time for rapid mode	1 tO 3 hrs	*
	Number of spare batteries with each Radio Set	NA	NA
POWER	Chemistry of Battery	Li-ion	*
SOURCE/BATTERY	Voltage rating of the Battery	7.5	*
	capacity of Battery (milli AH)	2000	*
VARIOUS FEATURES	Simple Press to talk	yes	*
	Protection against high VSWR	yes	*
	Low Battery Alert	yes	*
	CTCSS or DCS	yes	*
	Capable of VOX for hands-free operation	Yes	*
	PTT ID Encode	Yes	*
	Busy Channel Lockout	Yes	*
	Channel Scanning with call quieting facility	Yes	*

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	Selective Call Decode	Yes	*
	Capable of being Killed/ Unkilled	Yes	*
	Emergency SOS/SIREN	Yes	*
	LCD Display (Min 4 characters)	No	*
	Automatic Number Identification (ANI)	Yes	*
	Talk-around	Yes	*
	DTMF Keypad	No	*
	DTMF Microphone	No	*
	Keypad Lock	No	*
	Built-in GPS	Yes	*
	Battery Strength Bar Indicator or Digital Voltage read out	No	*
	Signaling	DTMF	*
GENERIC	Internal Speaker impedance	12	*
	External Speaker impedance	12	*
	Output Termination	BNC female socket	*
	Weight of Transceiver with Battery	600	*
	Other features	-	*
SAFETY	Protections	Reverse polarity protection & short circuit protection	*
SERVICE	Warranty	1	1.0
OPERATING CONDITION	Minimum Operating temperature	-10	*
	Maximum Operating temperature	55	*
	Minimum Storage temperature	-40	*
	Maximum Storage temperature	70	*
	Humidity non- condensing (at +40 oC )	95	*
CERTIFICATION	BIS registration under CRS of Meity for the battery	-	*
	BIS registration	-	*

	Number and Date for the Battery		
TEST REPORT DETAILS	conformity to Dry Heat for 16 hrs at a maximum temp in accordance with IS:9 000/part-3/section-5/ 1977 latest	Yes	Yes
	conformity to Cold Test for 4 hrs at a minimum temp in accordance with IS:9 000/part-2/section-4/ 1977 latest	Yes	Yes
	conformity to Damp Heat (Cyclic)Test for 2 Cycles of 24 h each at a temp of 40 degree C & 95% RH in accordance with I S:9000/part-5/sectio n-1/ 1991 latest	Yes	Yes
	Drop Test (in packed condition): IS 9000 Part VII/SEC,3/1979 (reaffirmed 2004): Six drops one on each face, Height of fall 1000 mm incase of handheld items and 500 mm in case of other items	Yes	Yes
	Vibration Test: IS 9000 Part VIII/1981 (reaffirmed 2006): 12 hours, 4 hours along with each axis, at 15-150 Hz and with amplitude of 0-15 mm/2g	Yes	Yes
	Storage Test: IS 9000 Part III/SEC 5/1977 & Part II/ SEC 4/1977 (reaffirmed 2004): -40 deg C for 5 hours, then raise the temperature to 70 deg C for 16 hours	Yes	Yes
	Bump Test: IS 9000 Part VII/SEC 2/1979 (reaffirmed 2004): 4000 bumps at peak acceleration of 400	Yes	Yes

m/s sq		
Availability of the test report from Central Govt/ NABL/ ILAC accredited lab to prove conformity to the specification	Yes	Yes
If yes test report to furnished,to the buyer on demand	Yes	*
Test Report Number and date for the specification test	-	*
Name and address of the Lab for the specification test	-	*

<sup>\*</sup> Specifications highlighted in bold are the Golden Parameters.

#### **Additional Specification Documents**

#### **Consignees/Reporting Officer and Quantity**

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	Rajamohan M K	678002,Office of the Senior Divisional Telecommunication Engineer Divisional Railway Manager Office Palakkad Division Palakkad	97	45

# **Bid Specific Additional Terms and Conditions**

- 1. IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.
- 2. Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance: Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC): RDSO INSPECTION
  Post Receipt Inspection at consignee site before acceptance of stores: Relevant inspection
  - Post Receipt Inspection at consignee site before acceptance of stores: Relevant inspection document should be submitted before supplying the materials
- 3. Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

This Bid is also governed by the General Terms and Conditions

<sup>\*</sup> Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

### ---Thank You---