



प्रसारभारती / PRASAR BHARATI

भारतीयलोकसेवाप्रसारक/ INDIA'S PUBLIC SERVICE BROADCASTER

अपरमहानिदेशक(अभि.) (द.क्षे) काकार्यालय/ O/o. ADDL. DIRECTOR GENERAL (E)(SZ)

आकाशवाणीएवंदूरदर्शन / ALL INDIA RADIO & DOORDARSHAN

स्वामीशिवानंदासालै, चेन्नई / SWAMY SIVANANDA SALAI, CHENNAI - 600 005

No. ADG(E)(SZ)/SMT/IEBR/METP/24-25/

Date: 14.02.2025

Sir/Madam,

**SUB: Request for Budgetary Quotation for one professional IRD receiver for the attached specification.**

Quotations are invited for one professional IRD receiver

Sl. No.	Particulars	Qty.
1.	Procurement of one professional IRD receiver	1 job

- 1) **GUARANTEE / WARRANTEE:**  
**One year** from the date of supply of material.
- 2) **Payment terms** :100% payment on testing of item.

Quotations may be Addressed to : Shri. N.Ravichandran, Deputy Director(E), Room No 306, O/o Additional Director General(E), Akashvani & DD, Swamy Sivananda Salai, Chennai - 600005.

And by Email to : [diravm\\_sz@yahoo.com](mailto:diravm_sz@yahoo.com) & [airmaintenance.sz@prasarbharati.gov.in](mailto:airmaintenance.sz@prasarbharati.gov.in)

Yours faithfully

A.Chithra  
Director(E)

for ADG(A&BO)(E)(SZ)

5.0	<b>PROFESSIONAL IRD RECEIVER Specifications:</b>	
	Tenderer shall quote for professional grade good quality field proven L – Band digital receiver capable of 24 x 7 Hrs. operation conforming to following specification. The IRD shall have front panel display and capability for entering / edit etc. of all the parameters for reception of the signals/ decoding of audio and data etc. . The equipment shall have provision for monitoring BER / Signal level on the front panel display.	
	The equipment shall have capability to receive /decode audio only. The equipment shall also have the capability to present each analog audio output as a stereo pair in the event of ‘Mono’ transmissions, Mono input channel shall be available to both left and right connectors as encoded at Transmission end. In other modes ( “Stereo” and “Dual mono”) the two channels shall be available as Left and Right as encoded at Transmission End.	
	The IRD Should have a front panel display and one should be able to enter or edit all the parameters for a perfect reception of the signals. There should be provision for observing the BER of the signal and signal level on the front panel. It will be required for receiving audio signal only	
<b>RF Parameter Specifications</b>		
1	Input frequency Range	940-1750 MHz
2	No of Inputs -	1 No
3	Tuning step size	1kHz
4	Satellite Frequency Band	C and Ku Band –selectable
5	Input Impedance	75 Ohms
6	Input Connector	F type female
7	Out put Connector	XLR for Analog & AES-EBU or Break – out box with XLR
8	Input power range	30 to -65dBm per carrier
9	De modulation method	DVB-S QPSK, DVB –S2 QPSK modulation
10	Variable symbol rates	256 symbols/sec to 10M symbols/sec
11	Convolutional Inner FEC rates selectable	R=1/2,2/3,3/4,5/6,7/8(DVB-S, QPSK)R-1/3,2/5,1/2,3/5,3/4,4/5,5/6,8/9 9/10 (DVB-
12	IF Filter Band width	Automatic selection( Dependant on symbol rate).

	The IRD offered	Should be able to receive both SCPC and MCPC signal, IRD shall be able to receive free to AIR Doordarshan's DTH radio signal.
<b>Audio Compression Parameters (48 kHz sampling rate)</b>		
	Audio compression type	MPEG-1 Layer II Audio (Dual mono, stereo) MPEG -4 with AAC, AACLC & AACHE v1 & v2
	<b>Analog Audio Output</b>	
	Each analog audio output shall be presented as a stereo pair in the event of 'mono' transmission, as the same encoder input channel side will be output to both left and right connector	
	<b>Analog audio output specifications</b>	
1	Output Impedance	600 Ohms (balanced)
2	Number of outputs	4 Stereo, configurable as stereo, joint stereo, mono, dual mono
3	Connector type	XLR male socket or with suitable adapter
4	Data Rate	64-256 kbps (MPEG-1 Layer 2 and MPEG -4 selectable)
<b>Audio performance specifications (at 48 KHz sampling rate)</b>		
1	Frequency range (analog)	50 Hz to 15 KHz +/- 0.5 dB
2	THD+N (1 kHz at max. level)	0.1% from 50 Hz to 15 KHz
3	Dynamic range	Better than 80dB
4	Cross talk at 1 KHz	Better than 80dB
5	Signal to Noise Ratio	Better than 80dB
	The IRD offered should be able to receive both SCPC and MCPC signal, IRD shall be able to receive free to AIR Doordarshan's DTH radio signal.	