

(भारत का लोक सेवा प्रसारक)
(India's Public Service Broadcaster)
आकाशवाणी महानिदेशालय /Directorate General: All India Radio
योजना एवं विकास एकक, आकाशवाणी भवन, संसद मार्ग, नई दिल्ली-110001
P & D Unit, Akashvani Bhawan, Sansad Marg, New Delhi-110001
[एफ. एम. डिजाईन अनुभाग /FM Design Section]

File No: Specification-RF Coaxial cable{airdielectric-9/4/2022-D(TD/FM)}.

Dated 04.05.2023

Subject: Specification for supply of -RF Coaxial cable{air dielectric -regarding Industry feedback &budgetary quotes **date extension**.

DG: AIR is planning for procurement of Supply of **RF Coaxial (air dielectric) cables** along-with associated equipments, items & accessories, on open tender basis. Draft technical specification is enclosed for reference.

In this regard, the feedback dates has now been extended up to 15.05.2023. Prospective bidders from India are requested to give their industry feedback (if any) on the above referred draft Specifications on or before 15.05.2023. To get an estimated cost, prospective bidders from India are also requested to give their budgetary quote for the above referred subject by **15.05.2023 , 1700 hrs.**

Industry feedback (if any) and budgetary quote may be sent to this Directorate at the following-mail addresses.

murugan_k@prasarbharati.gov.in
viveksingh@prasarbharati.gov.in
manzoor@prasarbharati.gov.in
yogendraair@prasarbharati.gov.in

Encl: As above.

To,
1. Prasar Bharati web-site
2. The Prospective Bidders
3. DDG (E-Purchase), P&D Unit, DG: AIR, New Delhi.



(Y P Singh)
Assistant Director-E (FM)
for Director General



for Director General

Specification No. RF Cable (Air Dielectric)/09/November/2022-D(TD/FM)

PRASAR BHARATI
(India's Public service Broadcaster)
DIRECTORATE GENERAL: ALL INDIA RADIO
(PLANNING & DEVELOPMENT UNIT)

SPECIFICATION FOR SUPPLY OF RF COAXIAL AIR DIELECTRIC CABLE ALONGWITH DEHYDRATOR WITH TUBING & ACCESSORIES (FOR VHF FM TRANSMITTERS SET UP)

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A. ESSENTIAL REQUIREMENTS FOR TENDER:

- The tenderer should submit Schedule of Requirements/Materials of Supply **without price in the same format as given in** All India Radio Specifications in the technical bid, failing which the tender shall be considered incomplete and is liable to be rejected.
 - It is also mandatory to mention **Make & Model of the offered equipment** in the Schedule of Requirements/Materials of Supply, failing which the tender shall be considered incomplete and is liable to be rejected.
- Each statement of this specification has to be complied with & supported by printed technical literature, technical data sheets, schematic drawings and technical manuals from the manufacturer of the equipment by the tenderer to assess the full merit of the offer, failing which, the tender will be considered incomplete and is liable to be rejected.
- The tenderer should submit the tender offer to All India Radio/ Prasar Bharati in the format given below, section wise & clause wise, in respect of all the sections of technical specifications. The OEM/tenderer must provide the page number reference, in column (4) of the table given below, of the Technical bid clearly indicating the volume number also, if any, for each supporting document to verify the parametric values shown in the compliance statement, to assess the full merit of the offer, failing which tender shall be considered incomplete and is liable to be rejected.

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S. No. of AIR Specifications (Section wise & Clause wise) (1)	Details of All India Radio Specifications (Part/ Section wise & Clause wise) (2)	Compliance (Yes/No) (3)	The page No. of the tender offer, where the information/ supporting document is available. (4)	Remarks (5)
A. Essential requirements for tender				
B. Essential eligibility criteria for tenderers				
Section-1.0 Clause wise				
Section-2.0 Clause wise				
Section-3.0 Clause wise				
Section-4.0 (A&B) Clause wise				

4. The tenderer should quote the rate/cost of individual items in the tender offer while submitting the offer in respect of spares (**OPTIONAL**) in commercial bid.
5. The complete Technical specifications (Section wise & Clause wise) compliance statement alongwith Schedule of Requirements/Materials (un-priced) must be signed & stamped by the respective Original Equipment Manufacturer (OEM) in the tender document, failing which the tender shall be considered incomplete and is liable to be rejected.
In case tender offer is from other than the Original Equipment Manufacturer, the tenderer must also sign & stamp the complete Technical specifications compliance statement (Section wise & Clause wise), failing which the tender shall be considered incomplete and is liable to be rejected. The OEM & the tenderer should mention their names in CAPITAL LETTERS & designation of the signatories, full address with pin code, phone number, fax number, e-mail addresses etc.
6. All the volumes of the entire tender offer must be page numbered.
7. The authorization and guarantee must be given by respective Original Equipment Manufacturer (OEM) on their letter head pad duly signed & stamped on each page. In case tender offer is from other than the Original Equipment Manufacturer, the tenderer must also give guarantee on their letter head pad duly signed & stamped, failing which the tender shall be considered incomplete and is liable to be rejected.
8. In case tender offer is from other than the Original Equipment Manufacturer, the tenderer should also furnish a certificate from the OEM that the tenderer can quote items of the OEM directly, failing which the tender shall be considered incomplete and is liable to be rejected without any notice/back reference.
9. Prasar Bharati will follow the reciprocal market access strategy of the Government of India, which describes on the Clause 10(d) of Public Procurement Preference to Make in India, Order 2017. The Purchaser shall have right for not consider any Bid and may restrict such Bidders from the bidding process; who originate from those countries, where they do not allow market access for Indian companies; in such cases, the Clause 10 (d) of Public Procurement Preference to Make in India, order 2017, shall be invoked wherever applicable, when it is relevant.

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10. Amendment in General Financial Rules (GFRs), 2017-Golobal Tender Enquiry issued vide F. No. 12/17/2019- PPD dated 15.05.2020 of Government of India, Ministry of Finance, Department of Expenditure, Public Procurement Division shall be applicable.
11. Any change/modification in the AIR technical specifications format , language, technical parameters or of any other nature including the deletion of clause, words, lines in the technical compliance statement by the OEM/ tenderer will not be acceptable to AIR and the tender is liable to be rejected.

12. Optional items will not be considered for ranking purpose.

B. ESSENTIAL ELIGIBILITY CRITERIA FOR TENDERERS:

- (1) **The tenderer shall be from India only.**
- (2) The tenderer should either be the OEM of RF Coaxial Air Dielectric Cable or their authorized representative/dealer.
- (3) In case tenderer is the authorized representative/dealer, the tenderer must be in the business of sales and supply of RF Coaxial Cables/high power broadcast antenna for last three years or more OR must be an authorized representative/dealer of any OEM of RF Coaxial Cables for last three years or more. Documentary evidence to support this must be provided.
- (4) (i)The OEM of the RF Coaxial Air Dielectric Cable must have an experience of manufacturing and supplying RF Coaxial Air dielectric Cable of not less than 50 kW average power rating (@ 108 MHz, VSWR 1.0, ambient temperature 40°C) for at least last ten years. Documentary evidence to support this must be provided.
(ii) The OEM should have supplied RF Coaxial Air Dielectric Cable to reputed/public broadcasters. The OEM must provide the details of past supply record (**in the format given below**) of such offered RF Coaxial Air Dielectric Cable of not less than 50 kW average power rating (@ 108 MHz, VSWR 1.0, ambient temperature 40°C) of length in total not less than 1500m, for last **five years** ending last day of the month previous to the one in which the tender is invited.

Supply Order/Invoice No.with date, reference	RF Coaxial Air dielectric Cable with power rating	Quantity/Length	Name of the broadcaster with full postal address including e-mail address to whom RF Coaxial Air Dielectric Cable was supplied, for getting feedback on RF Coaxial Air Dielectric Cable performance.	Remarks
(1)	(2)	(3)	(4)	(5)

- (iii) All India Radio reserves the right to get performance feedback of the RF Coaxial Air Dielectric Cable from any of the above broadcasters named by the tenderer/OEM.
- (iv) Copies of supply order/invoice of RF Coaxial Air Dielectric Cable of not less than 50 kW average power rating (@ 108 MHz, VSWR 1.0, ambient temperature 40°C) of length in total not less than 750m submitted by the tenderer in above format, are also to be enclosed by the tenderer.
- (5) The OEM of the offered RF Coaxial Air Dielectric Cable must have his local office/authorized representative/dealer in India for after sales support. **A certificate as per Annexure-I** duly signed by the OEM as well as local office/authorized representative/dealer must be submitted with the offer. Copy of Agreement/MoU executed between OEMs and their authorized representative/dealer duly signed by both must also be submitted with the offer.

SECTION - 1.0

GENERAL SPECIFICATIONS:

1.0 RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories as per AIR specification shall be used round the clock for continuous operation without any interruption in VHF FM broadcast service at AIR station for FM transmitter/studio setup.

The offered equipment/items as per specification shall be field proven for satisfactory operation.

1.1 General terms & conditions: Please refer tender documents for general terms and conditions of contract for supply including all the commercial aspects like; Packing and packing list, Insurance and Marine Risk etc., Payment terms, Penalty/Compensation for delay, Damages and liabilities, Time Period and Extension for Delay, Foreclosure of contract due to Abandonment or Reduction in scope of supply, Cancellation of contract in full or part, Recovery of security deposit, Performance Guarantee, Unsatisfactory workmanship, Damages incurred during transit, tenderer liable for damages, Defects, Recovery of compensation, Ensuring payment and amenities, tenderer to indemnify Government against Patent Rights, Release of security deposit, Safety Code, insurance from manufacturer's works/factory to respective site etc. **i.e. in totality.**

1.2 INSPECTION:

- a. RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories will be accepted on the basis of OEM's test certificates (as per AIR specifications) duly stamped and signed by respective OEM on their letterhead, failing to submit the test certificates will be considered incomplete and equipment offered by the firm is liable to be rejected.
- b. The complete Acceptance Test Procedure/Protocol (ATP) will be prepared by the respective OEM of the equipment/items and submitted to DDG (E-FM), P&D Unit, DG: AIR for approval within 30 days of issue of Acceptance of Tender. The **approved ATP** shall form the basis for OEM test certificate of actual performance measurements/inspection to be carried out by OEM. AIR has the right to include other technical parameters in ATP submitted by OEM within the ambit of specification of the product offered.

1.3 DOCUMENTS/ INFORMATION TO BE SUPPLIED WITH THE TENDER OFFER:

- (i) The complete technical specifications (Section wise & Clause wise) compliance statement alongwith Schedule of Requirements/Materials (un-priced) duly signed & stamped by the respective Original Equipment Manufacturer (OEM) and countersigned by the tenderer as per the format given above in clause A(3).
- (ii) Complete printed technical literature/technical data sheet/schematic drawings/detailed information including Technical Manual of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories and associated equipments/items from the respective Original Equipment Manufacturer (OEM) in support of compliance statement should be furnished, to assess the full merit of the offer, without which the tender offer will be considered incomplete and is liable for rejection.
- (iii) Detailed Schedule of Requirements/Materials (un-priced) offered for the supply of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories and associated equipments/items should be in conformity with Section-4.0 (A&B) without any change in the format without prices, failing which, the tender will be considered incomplete and is liable for rejection. The tenderer must quote all items.
- (iv) Descriptive information and complete details of each equipment offered shall be given by the tenderer.
- (v) **Country of Origin, Make, Type & Model** of all the offered items should be mentioned including the name & address of their vendors.
- (vi) A copy of the **Technical Manual** must be enclosed with technical bid for assessing the complete RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories. **Tenderer has to provide technical manual without insisting AIR to sign any non-disclosure certificates/agreements.** The Technical

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Manual must include at least the details given below

- (a) General description of the offered RF Coaxial Air Dielectric Cable
- (b) **For Dehydrator with tubing & accessories, working block diagram, control circuit details, schematic drawings, component details including their data sheets etc must be enclosed.**
- (c) Diagrams showing the isometric view of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories with dimensions in meters.
- (d) Installation Manual & drawings with dimensions in respect of offered equipment.
- (e) The procedure of settings RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories should be described in detail with practical examples.
- (f) Photograph of the RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories showing Front, Rear, Side & Top view.
- (g) **All Do's and Don'ts which are essential for safe Installation, Operation & Maintenance of the RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories.**

1.4 DOCUMENTS/INFORMATION TO BE SUPPLIED BY THE TENDERER WITHIN 30 DAYS AFTER ISSUE OF ACCEPTANCE OF TENDER:

One set of Technical Manuals (for Installation, Testing, Commissioning, Operation & Maintenance, including theory of operation, circuit description and fault diagnosis) **COLOUR** printed and duly bound for RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories alongwith soft copy on pen drive must be supplied to "DDG (E-FM), P & D Unit, DG: AIR, New Delhi-110001" for examination and approval.

1.5 INFORMATION TO PRECEDE DESPATCH OF EQUIPMENT:

Following information should be supplied to the DDG (E-FM), P & D Unit, DG: AIR and each of the consignee, two months prior to dispatch of Equipment:

- a) Detailed list of equipments under dispatch.

1.6 DOCUMENTS/INFORMATION TO BE SUPPLIED ALONGWITH EQUIPMENT:

Technical manuals (for Installation, Testing, Commissioning, Operation & Maintenance including theory of operation, circuit description and fault diagnosis) for RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories shall be supplied as per details given below:

- (i) For each consignee: 2 Sets of technical manual in hard copies **COLOUR** printed and duly bound along with one soft copy on pen drive.
- (ii) For the concerned offices/officers: One soft copy on pen drive alongwith one set of hard copy for each offices/officers:
Concerned Zonal Office (SZ, NZ, EZ, WZ), R&D, NABM (T), DDG (E-FM), DDG (E-TM), Technical Library P&D Unit.

1.7 GUARANTEE:

The tenderer shall submit with his tender an undertaking to accept the following guarantees:

{This Guarantee clause is applicable to all the equipments/items mentioned in Schedule of Requirements/Materials in Section-4.0 (A&B)}.

- (i) A guarantee that the equipment supplied will be in accordance with these specifications, varied only to the extent stated in his tender and agreed to in the contract.
- (ii) A guarantee to make good within 15 days (from the date of first intimation to OEM/tenderer) at tenderer's expense, if any component which becomes defective under normal operating conditions for 36 months from the date of **supply at site**. If the tenderer failed to rectify the fault within the stipulated period of 15 days, the guarantee period would be extended corresponding to the outage period of that site items.
- (iii) A guarantee to supply all components for a period of ten years from the date of supply, at rates at which these are being supplied by the firm to other customers and also should match prices of original manufactures of these components prevailing at that time.

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(iv) If at any stage during next 10 years, the manufacturer stops production of this model of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories, the tenderer/OEM shall intimate All India Radio in advance to enable the latter to stock the critical items.

1.8 LANGUAGE/UNITS:

All information supplied by the tenderer & all markings, notes, designation on the drawings & associated write-ups shall be in **"English language"** only.

All dimensions, units on drawings, all references to weights, measures & quantities shall be in SI Units.

1.9 DELIVERY PERIOD OF EQUIPMENT:

Supply will have to be completed within **Five months** from the date of Acceptance of Tender.

1.10 PACKING AND PACKING LISTS:

All the equipment should be securely and properly packed to withstand transit hazards. Equipment packing shall be fit for sea freight and incorporate adequate protection against ingress of moisture. Packing slips giving details of the items contained in each package shall be placed inside the package in a water proof envelop to enable easy identification and should contain cross references to item/part numbers of installation drawings/components lists. Copies of packing slips and other details should be sent separately to respective consignee and also to the Dy. Director General (E-FM), P & D Unit, DG: AIR, New Delhi.

1.11 INSURANCE AND MARINE RISKS ETC:

Please refer to commercial terms.

1.12 POWER SUPPLY FOR ALL EQUIPMENT:

(i)	Operating Line voltage	AC Single Phase : 230 Volts \pm 10 %
(ii)	Frequency	50 Hz \pm 4%
(iii)	Power factor	Better than 0.9

1.13 AMBIENT CONDITIONS FOR ALL INSIDE EQUIPMENT:

(i)	Operating temperature range	0 °C to 45 °C
(ii)	Relative Humidity	95% non-condensing.
(iii)	Working altitude	Up to 3000 meters AMSL

1.14 MAINTENANCE SUPPORT AND SPARES:

- (a) The minimum recommended essential spares shall be quoted separately by the tenderer.
- (b) The minimum recommended essential spares may be based on predicted rate of failure.
- (c) In case, the tenderer quotes the optional items as 'a Set', the details of the components/items offered in the 'Set' must be spelt out clearly including their Make & Model and quantity.

1.15 ESSENTIAL REQUIREMENT FOR LOCAL OFFICE/AUTHORIZED REPRESENTATIVE/ DEALER IN INDIA:

- (a) The OEM should have complete setup for maintenance/repair of RF Coaxial Air Dielectric Cable, Dehydrator with tubing & accessories in India, either of its own or through local office/authorized representative/dealer.
- (b) The local office/authorized representative/dealer will be the nodal point for resolving issues related to after sales support. It is the responsibility of local office/authorized representative/dealer to arrange the repair/replacement of faulty items. RF Coaxial Air Dielectric Cable, Dehydrator with tubing &

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accessories requiring repairs will be repaired at site. If it is not feasible to repair at site, the same will be collected from the site by local office/authorized representative/dealer that will arrange repairs locally. The cost of transportation, repairs etc. shall be borne by the tenderer during the guarantee period.

- (c) After sales support for the repairs/maintenance of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories after the completion of guarantee period, shall also be provided by the OEM of RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories through their local office/authorized representative/dealer in India.
 - (d) The details of technical facilities available with local office/authorized representative/dealer **for after sales support such as test bench, necessary test & measuring equipment and photographs thereof, must be provided in the technical bid.**
 - (e) At the discretion of AIR, AIR representative(s) may visit the works of local office/authorized representative/dealer of OEM in India to ensure/verify that adequate technical infrastructure is available for after sales service for timely resolving the issues related to attending/replacing the equipments. Tenders from the tenderers who failed to meet these criteria shall be considered incomplete and is liable to be rejected.
- 1. 16 Technical Manuals :** All the Technical Manuals (for Installation, Testing, Commissioning, Operation & Maintenance **including theory of operation, circuit description, components list, part numbers, vender details, technical details, electrical drawings with control circuit details, current rating/voltage rating etc. with fault diagnosis etc.**) where ever asked in this specification shall have to be supplied **free of cost**. Further Tenderers has to provide these technical manuals without insisting AIR to sign any Non-Discloser certificate/agreement.

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SECTION-2.0

TECHNICAL SPECIFICATIONS:

2.1. RF COAXIAL AIR DIELECTRIC CABLES & ACCESSORIES

S. No.	Technical parameter	Technical specification
1.	Average Power Rating of RF Coaxial Air Dielectric Cable(Corrugated Copper, PE Jacket, PE/PP spiral spacer) at standard conditions VSWR 1.0, ambient temperature 40° C (@ 108 MHz)	≥ 50 kW
2.	Attenuation of each RF Coaxial Air Dielectric Cable (Corrugated Copper, PE Jacket, PE/PP spiral spacer) at standard conditions VSWR 1.0, ambient temperature 20° C (@ 108 MHz in dB/100 M)	≤ 0.40 dB/100 M
3.	Frequency Range	88 MHz-108 MHz
4.	Impedance (88 MHz-108 MHz).	50 Ohm ± 1 Ohm

The RF Coaxial Air Dielectric Cable shall be as per AIR Specification, failing which, tender will be considered incomplete and is liable to be rejected. The RF Coaxial Air Dielectric Cable shall be supplied with 3-1/8" EIA flange Gas Barrier Connector (with gas inlet) fitted at one end of the cable alongwith 'O' rings, nuts, bolts & washers, silicon grease etc. and 3-1/8" EIA flange Gas Pass Connector fitted at other end of the cable alongwith 'O' rings, nuts, bolts, washers, silicon grease etc. with Bullets (inners) for 3-1/8" Flange Connectors for each places.

All following accessories associated with RF Coaxial Air Dielectric Cables are to be provided:

- (i) Hoisting stockings
- (ii) Earthing kits
- (iii) Wall gland
- (iv) Cable Clamps (adjustable height) with nut, bolt & washer and associated accessories (Material for cable clamp should be hot dip galvanized/stainless steel with stainless steel screws, nuts, bolts & washers)
- (v) Any other accessories offered for the completeness of the system (Item wise details & part No., if any, of the offered and included materials are to be given by the tenderer)

2.2. DEHYDRATOR WITH TUBING & ACCESSORIES FOR RF COAXIAL AIR DIELECTRIC CABLE:

For pressurization of entire RF Coaxial Air Dielectric Cable including Antenna System.

QUANTITY -1 Set

S. No.	Technical Parameter	Technical Specification
1.	Dehydrator Type	Automatic
2.	Operating Voltage	Single Phase as per Section-1.0
3.	Output Capacity (SCFM)	≥ 0.3
4.	Ambient Humidity, % maximum	85% RH
5.	Output Pressure	adjustable from 2.0 psig to 8.0 psig
6.	Low Pressure Alarm	Adjustable, details to be given by tenderer
7.	High Pressure Alarm	Adjustable, details to be given by tenderer
8.	Output air dew point	-40°C or better
9.	Operating temperature	0-40°C
10.	Power Fail Alarm	Loss of input power
11.	High Humidity Alarm	Details to be given by the tenderer
12.	Excess Run Alarm	Details to be given by the tenderer

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13.	Max. active Power consumption	Details to be given by the tenderer
14.	Compressor Rating/PWM rating	Details to be given by the tenderer
15.	Protection against earth fault	Details to be given by the tenderer
16.	Protection against overload	Details to be given by the tenderer
17.	Dimensions, H × W × D, (mm)	Details to be given by the tenderer
18.	Net Weight (kg)	Details to be given by the tenderer
19.	In addition to above, Dehydrator should have communication over IP facility for alarms/status	Details to be given by the tenderer

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SECTION-3.0

INSPECTION DETAILS:

RF Coaxial Air Dielectric Cables alongwith Dehydrator with tubing & accessories will be accepted on the basis of OEM's test certificate of actual performance measurements as per AIR specification before dispatch to All India Radio and receipt of equipments/items at site in good condition.

The Original Equipment Manufacturer's (OEM) test certificates shall be duly signed & stamped on the letter head of the OEM, failing which Original Equipment Manufacturers (OEM) test certificates will be considered incomplete and equipment offered by the tenderer is liable to be rejected.

Following information should also form part of OEM test certificate for each RF Coaxial Air Dielectric Cable alongwith Dehydrator with tubing & accessories.

1. Make, Type, Model and Country of Origin of the accessories and spares.
2. Measurements of all parameters as per Section 2.0 of Technical Specification.

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SECTION-4.0 (A)

SCHEDULE OF REQUIREMENTS/MATERIALS (UN-PRICED) [FOR ONE SET OF RF COAXIAL AIR DIELECTRIC CABLE ALONGWITH DEHYDRATOR WITH TUBING & ACCESSORIES

S. No.	Description	Make	Model	Unit	Qty.
4.1	i) Supply of RF Coaxial Air Dielectric Cable (Corrugated Copper, PE Jacket, PE/PP spiral spacer) as per AIR Specification			Metre	As per Annexure-II
	ii) 3-1/8" EIA flange Gas Barrier Connector (with gas inlet) fitted at one end of the above cable alongwith 'O' rings, nuts, bolts, washers, silicon grease etc.			Number	1 No.
	iii) 3-1/8" EIA flange Gas Pass Connector fitted at other end of the above cable alongwith 'O' rings, nuts, bolts, washers, silicon grease etc.			Number	1 No.
	iv) Bullets (inners) for 3-1/8" Flange Connectors			Number	2 Nos.
	v) 3-1/8" to 1-5/8" Reducer for connecting RF Cable with 1-5/8" Rigid line(Where ever applicable)			Number	1 No.
4.1.1	Hoisting stockings for each cable as per recommendation of manufacturer			Set	1 Set
4.1.2	Earthing kits for RF Coaxial Air Dielectric Cable			Number	2 Nos.
4.1.3	Wall gland/ feed through assembly with accessories for RF Coaxial Air Dielectric Cable			Number	2 Nos.
4.1.4	Cable Clamps (adjustable height) with nut, bolt & washer and associated accessories (Material for cable clamp should be hot dip galvanized/stainless steel with stainless steel screws, nuts, bolts & washers)			Number	As per Annexure-II
4.2	Dehydrator with tubing & accessories as per AIR specification			Set Complete	1 Set Complete
4.3	Any other items/hardware materials etc. offered for the completeness of the above System. (Item wise details & Part No., if any, of the offered items/hardware materials etc. shall be given by the tenderer) State NA, If not applicable			Lot	1 Lot

SECTION-4.0 (B)

SCHEDULE OF REQUIREMENTS/MATERIALS (UN-PRICED) [FOR ONE SET OF RF COAXIAL AIR DIELECTRIC CABLE ALONGWITH DEHYDRATOR WITH TUBING & ACCESSORIES (OPTIONAL) (SPARE) (Not to be considered for Ranking) {The tenderer must quote all items}

S. No.	Description	Make	Model	Unit	Qty.
4.4	3-1/8" EIA flange Gas Barrier Connector			Set	1 Set
4.5	3-1/8" EIA flange Gas Pass Connector			Set	1 Set

All India Radio at its own discretion may procure spares for a value not exceeding 10% of the cost of equipments. The tenderer should quote all the essential spares.

ANNEXURE-I

PERFORMA FOR INFORMATION ABOUT LOCAL OFFICE /AUTHORIZED REPRESENTATIVE/ DEALER IN INDIA FOR AFTER SALES SUPPORT

1.	Address of local office/authorized representative/dealer	
	Telephone (Landline) No.	
	Mobile No.	
	E-mail Address	
2.	Address for communication (if different)	
3.	Legal Status (local office/authorized representative/dealer)	
4.	Name, contact number (Mobile number) & e-mail address of official representative of the local office/authorized representative/dealer	
5.	Brief details of Technical facilities available for after sales support: The details of technical facilities available with local office/authorized representative/dealer for after sales support such as test bench, necessary test & measuring equipment and photographs thereof, must be provided in the technical bid.	
6.	Main line of business, specialization and number of years of operation	
7.	Total number of permanent technical employees including their designation and qualification	
8.	Details of Agreement/MoU for after sales support with OEM (Copy must be provided with the offer)	Date of Agreement: Executed at : Executed by :
(Authorized Signatory of local office/authorized representative/dealer)		(Authorized Signatory of RF Coaxial Cable OEM)
Name :		Name :
Signature :		Signature :
Place and Date:		Place and Date:

To be used anywhere in India to All India Radio

The RF Coaxial Air Dielectric Cable lengths 100 meter are approximate for each place final cable length will be provided .at the time of AT placement.

Locations where RF cable required.

	Proposed Location	Zone	RF Cable	Remark
1	Chintpalle	SZ	100M	
2	Viziangaram	SZ	100M	
3	Yercaud	SZ	100M	
4	Vellore	SZ	100M	

	Proposed Location	Zone	RF Cable	Remark
1	Sarkaghat	NZ	100M	
2	Farrukhabad	NZ	100M	
3	Basti	NZ	100M	
4	Etah	NZ	100M	
5	Hardoi	NZ	100M	
6	Munsiyari	NZ	100M	

	Proposed Location	Zone	RF Cable	Remark
1	Darbhanga	EZ	100M	
2	Pakur	EZ	100M	
3	Simdega	EZ	100M	
4	Giridih	EZ	100M	
5	Kodarma	EZ	100M	

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	Proposed Location	Zone	RF Cable	Remark
1	Narayanpur	WZ	100M	
2	Bailadila	WZ	100M	
3	Kanker	WZ	100M	
4	Devbhumi(Dwarka)	WZ	100M	
5	Bhavnagar	WZ	100M	

Actual quantity and places will be provided at the time of tender.