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PRASAR BHARATI (INDIA'S PUBLIC SERVICE BROADCASTER) O/o ADDITIONAL DIRECTOR GENERAL (E) (WZ) ALL INDIA RADIO & DOORDARSHAN Pratishtha Bhavan, 3RD FLOOR



Pratishtha Bhavan, 3RD FLOOR 101, M.K.ROAD, MUMBAI-20.

No. ENGP(10 kW FM TR AIR Ratlam)/11TR/ C Band RN Receiver terminal/2019-20 Dated. 20/01/2020

E - Tender

INVITATION TWO BID through e-Tendering

On behalf of the Prasar Bharati (India's Public service Broadcaster), **E-tenders** are invited by this Organization in the prescribed Bid Proforma under **two bid system**. The details of tender are given in the schedule below:

Sr.			
No			
1	Tender No.	No. ADG (E) (WZ)/AIR PROJECT/ E-TENDER/ RN Terminal at Ratlam /2019-20 /08	
2	Supply/ Name of the work	Supply, Installation, Testing & Commissioning of Digital C-Band RN Receive Terminal at AIR Ratlam (M.P.)	
3	Delivery Period	Six Months from the placement of supply order	
4	Estimated Cost	Rs.1420000/-(Fourteen lakh Twenty thousand only)	
5	Earnest Money Deposit	Rs.28400/-(Twenty Eight thousand Four Hundred only)	
	Bid Validity up to	180 (One Hundred and eighty Days) from the date of opening of Financial Bid.	
	Security Deposit	Required as per (General Terms & Conditions).	
	(i) Amount	i) 5% of the order value in form of Demand Draft / Bank Guarantee /FDR	
	(ii) Validity	ii) 60 (sixty) days beyond the date of expiry of Warranty / Guarantee	
	Correspondence	The Addl. Director General(E)(WZ), Kind attn. Ramesh Gharde DDG (E) All India Radio & Doordarshan,	
		AIR Project Section,	
		Pratishtha Bhavan, 101, M.K. Road, Mumbai 400 020	
	Paying Authority	The Addl. Director General(E)(WZ),	
		All India Radio & Doordarhsan,	
		Pratishtha Bhavan, 101,M.K. Road, Mumbai 400 020	
	Tender Opening Date	10/02/2020 Time 1500 hrs	

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11. Place of Delivery: Dy. Director (E), All India Radio, Ratlam (M.P).

12.Important Instructions:

The tender will be governed by the "Instructions to the Bidder". "General Terms & Conditions" and "Technical Specifications".

Two Bid System shall be followed for this tender. Tenderers should take due care to submit tenders in accordance with requirement as specified in "Instructions to Bidders". Bid evaluation criteria shall be the basis for evaluation of tenders.

The Technical & Commercial Bid should be submitted online. The tenderer while submitting their bid, must adhere to the following instructions of Central Vigilance Commission, otherwise their offer is likely to be ignored.

- **a)** One Agent / Dealer / Supplier shall not represent two manufacturers or quote on their behalf in a particular tender i.e. one bidder shall quote one type of equipment in a particular tender.
- **b)** Tender documents submitted by the tenderer shall be serially page numbered.
- **c)** Tenderers should take due care while uploading the Tenders.

LIST OF MANDATORY DOCUMENTS (to be scanned and uploaded with tender)

- a) Copy of Tender fee, copy of EMD/NSIC certificate in case of claim of exemption of EMD.
- **b)** Copy of GST Registration certificates/No as applicable.
- c) Copy of PAN card.
- d) Annexure A, B,E, F, G, h, I and Annexure J on firm's letter head.
- e) Proof of experience. Clause 23 of page no.9
- f) Signed tender document.

The bids not complied with the above shall be summarily rejected.

Director (E)(Project)
For Addl. Director General (E)(WZ)
Tel. No. (022) 22053528

mumbai.cewz@gmail.com
ddgairprojectwz@gmail.com

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INSTRUCTIONS TO BIDDERS

Important Note:-

- a. Tender documents, Bid forms, general instructions to bidders and other details including amendments/changes can be viewed/downed free of cost from websites;
 - https://www.tenderwizard.com/PB,
 - https://tenders.gov.in ,
 - https://prasarbharati.gov.in
- b. Brief instructions/guidelines for submitting quotation on e-tendering website/e-portal viz. http://www.tenderwizard.com/PB are given in Annexure II on page 27-31 of this document.
- c. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website http://tenderwizard.com/PB.
- d. The tenders will be received online up to 14:00hrs on 10/02/2020 and will be opened at 15:00hrs on the same day.
- e. No claim shall be entertained on account of disruption of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.
- f. All documents/papers uploaded/submitted by the bidder must be legible.
- g. To participate in e-bid, bidders shall be charged e-tendering processing charges @ 0.1% of estimated contract value + service Tax with minimum Cap Rs. 750/- only and maximum cap-Rs.7500/- only.
- h. Bidders shall ensure to quote rate of each item. If any cell is left blank and no rate is quoted by the bidders, the rate of such item shall be treated as "0" (zero).
- i. Correspondence:
 - Our telephone Fax / Email address is: Tel. No. (022) 22053528/22031415 Extn. 243/244 Mobile 8169580120 Telefax No. 022 22014683.
 - Email ID- mumbai.cewz@gmail.com;ddgairprojectwz@gmail.com
 - All correspondence from tenderer / contractor shall be made to the Purchase Authority (by name), who has issued this tender.
 - All correspondence from tenderer / contractor shall be made as per correspondence address
- j. Lowest tender will be decided on the basis of the total cost of price bid.

LIST OF MANDATORY DOCUMENTS (to be scanned and uploaded with tender)

- a) Copy of Tender fee, copy of EMD/NSIC certificate in case of claim of exemption of EMD.
- b) Copy of GST Registration certificates/No as applicable.
- c) Copy of PAN card.
- d) Annexure A,B, E, F, G, h, I and Annexure J on firm's letter head.
- e) Proof of experience. Clause 23 of page no.9
- f) Signed tender document.

The bids not complied with the above shall be summarily rejected.

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GENERAL TERMS & CONDITIONS

- 1. The prices given should be firm and as under:
 - a) The Prices quoted shall remain fixed during the entire period of supply/contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation is likely to be treated as non responsive and rejected.
 - b) The 'Unit' price should be for the unit as indicated in the tender enquiry.
 - c) Prices quoted should be for delivery at given place in India and Inclusive of charges as packing customs, etc, wherever applicable.
 - d) The quotation should specifically mention rates for specified Supply/works &Taxes if any, separately.
 - e) Prices including grand total are to be written in figure as well as in words.
- 2. In case of Quotation of F. O. R Station of dispatch basis, the purchaser will not pay separately transit insurance and the supplier will be responsible until the stores arrive in good condition at the destination. Tender/quotation in which transit insurance has been specified as an additional item of expenditure is liable to be ignored.
- 3. The tender shall consists of namely:
 - A. EMD: Earnest Money amounting to Rs.28400/-(Twenty Eight thousand Four Hundred only) in the form of FDR/Demand Draft/Bank guarantee on Nationalized Bank/Commercial Bank drawn in favour of Prasar Bharati, CE(WZ),AIR & DD, Mumbai should accompany the tender. EMD exemption is applicable for those who are registered with the central purchase organization, National small industries corporation (NSIC)/MSME or the Concerned Ministry or Department (MIB/DG:AIR/DG:DD). Bidders should upload valid NSIC/MSME Certificate of adequate monetary limit for the tendered stores/services.

FDR/ Demand draft of EMD shall be scanned and uploaded to e-tendering website within the period of bid submission.

Tender EMD deposit shall be placed in a single sealed envelope superscribed with tender reference no and date of opening and submitted so as to reach The Addl. Director General(E)(WZ), All India Radio & Doordarhsan, AlR Project Section, Pratishtha Bhavan, 101, M. K. Road, Mumbai 400 020 before the scheduled time on the prescribed tender opening date. EMD received late shall be summarily rejected.

The following undertaking in this regard shall also be uploaded by the intending bidders:-

"The Physical EMD shall be deposited by me/us with the Additional Director General (E)(WZ) All India Radio & Doordarshan Mumbai calling the tender before the scheduled time on the prescribed tender opening date otherwise department may reject the tender and also take action to withdraw my/our enlistment."

The Earnest Money deposited by the tenderer shall be forfeited by this Organization in the following events:

- (a) If tender is withdrawn during the validity period or any extension thereof.
- (b) If tender is varied or modified in a manner not acceptable to this Organization during the validity period or any extension of the validity duly agreed by the bidder.

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- (c) If a tenderer, whose tender has been accepted, fails to furnish Security Deposit within 2 weeks from the issue of the acceptance offer of the tender, the offer is likely to be cancelled.
- **B.** Make, type, literature and specifications of the stores offered should be uploaded.
- C. The bidders are required to fill up the Annexure A, B, E, F, G, H, I and Annexure J on firm's letter

Head and scanned copies of the same are to be uploaded.

D. Make, type, literature and specifications of the stores offered should be uploaded.

Interested contractor who wishes to participate in the bid has also to make following payments within the period of bid submission:

(i) E-Tender Processing Fee @ 0.1% of estimated contract value + GST(Rs.7500.00+GST) shall be payable to M/s ITI Limited through their egateway by credit/debit card, internet banking or RGTS/NEFT facility.

Copy of Enlistment Order and certificate of work experience and other documents as specified shall be scanned and uploaded to the e-Tendering website within the period of bid submission. Certified copy of all the scanned and uploaded documents as specified shall have to be submitted by the bidders along with physical EMD of the scanned copy of EMD uploaded physically in the office of tender opening authority before schedule time & date of opening of tender.

Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited e-Tender Processing Fee with M/s ITI Limited and Earnest Money Deposit and other documents scanned and uploaded are found in order.

The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:

- I. The bidder is found ineligible.
- II. The bidder does not upload all the documents (including GST registration) as stipulated in the bid document including the undertaking about deposition of physical EMD of the scanned copy of EMD uploaded.
- III. If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted **physically by the lowest tenderer** in the office of tender opening authority.

Tenderer should quote for all the required items partial tenders will be rejected.

4. **SECURITY DEPOSIT:** The Successful Tenderer shall furnish the Security deposit within 2 weeks before placement of order at the rate of **5** % **of the order value, failing which the EMD will be forfeited automatically, to Prasar Bharati without any notice.** The security deposit shall be furnished in the form of demand Draft/Bank Guarantee from nationalized bank drawn in favour of **Prasar Bharati, CE (WZ), AIR &DD, Mumbai.** The security deposit will be returned in full on completion of Guarantee/Warranty Period.

5. **TAXES:**

- a) As per Govt. of India's circular regarding payment of GST (IGST/CGST & SGST) following reverse charge Mechanism, GST No is mandatory to be quoted in quotation / Tender/Bills/Invoices without which tender is liable for rejection. The amount GST should be shown separately in their quotation/invoices.
- b) Payment of Entry Tax/ Octroi Duty and tall tax (on ultimate products). As the material which is to be transported to the consignee, belongs to the Government of

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India/Prasar Bharati and therefore is exempted from entry tax/octroi duty/Toll Tax. However if the State Government /statutory local bodies are bound to levy such taxes, the taxes will be paid by supplier /contractor. Supplier/contractor may raise its claim for reimbursement of such duties/taxes paid with organization, along with original receipt of payment.

c) GST leviable and intended to be claimed from the purchaser should be distinctly shown along with prices quoted. Where this is not done no claim for GST Will be admitted at any later stage and on any ground whatsoever.

Please note that office will not issue any form such as 'C' 'D' etc.

- 6. The contractor shall make his/her own arrangement for storage of all equipments and Materials bought to site from time and their safe custody at site till they are taken over by the indenter /his representative. The contractor shall make his own arrangement for providing accommodation for his workmen at site.
- 7. The contractor shall make his/her own arrangement for procuring labour, skilled and unskilled. He should confirm to all local government laws and regulations covering labour and their employment.
- 8. The contractor and his employees shall comply with the regulation in force for controlled entry into premises where work is being carried out.
- 9. Contractor liability for damage caused during installation work and imperfection noticed: If the contractor or his/her workmen or servants shall break, deface, injure or destroy any part of the building in which they may be working or building road kerb, fence, enclosure, water pipe, cable, drain, electric, or telephone posts or wires, trees, grass or grasslands or any Technical Equipment in the premises on which the work or any part of it as being executed, or if any defect shrinkage or other faults appear in the work the Contractor shall make good at his /her own expense, or default, the indenter may get the same rectified and deduct the expense from any amount that may be than due or at any time there after may become due to the contractor.
- 10. The contractor shall indemnify and hold harmless the purchaser against all claims in respect of injury to any person howsoever arising out of the work in the course of such installation. The contractor shall discharge his entire under the India workmen in his employment.
- 11. **GUARANTEE/WARRANTY PERIOD:** The work shall be guaranteed against any defects for a period of Two years from the date commissioning. Any parts failing during the guarantee period of Two years shall be repaired /replaced free of charge by the supplier at the sites.
- 12. **COMPLETION PERIOD**: The entire work/Supply at All India Radio site shall be completed within *Six Months* from the date of placement of order. The contract will be treated as terminated automatically unless otherwise extended in writing.

13. **TERMS OF PAYMENT:**

- a. 80 % of the contract price for the equipments/materials inclusive of goods service tax shall be paid on initial inspection and delivery of equipments at site in good condition. The consignee will complete necessary formalities at his end and verify the bill and submit to the paying authority along with measurement book for making payment.
- b. 20 % of the contract price for equipments and 100 % of installation charges on satisfactory completion of installation, testing, commissioning and handing over. The consignee will complete necessary formalities at his end and verify the bill and submit to the paying authority along with measurement book for making payment.

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Further the contractor/supplier/firm should submit the all bank details such as;

- a. Name of the Bank
- b. Branch
- c. Account Number
- d. IFC code
- e. MICR Code

along with their bill for online payment (if possible, a Photostat copy of the cheque leaf may be enclosed).

- 14. The quotations submitted shall remain open for acceptance for a period of **180** (one hundred eighty) days from the date of opening of the Tender if any Tenderer/suppliers withdraws his Tender/quotation before the said period or makes any modification in the Terms & Conditions on the Tender/Quotation which are not acceptable to the Department, then the Government shall, without prejudice to any other right or remedy, by at the liberty to forfeit 50% of the Earnest Money as aforesaid.
- 15. Both your PAN- permanent income tax account number and income tax circle &your TIN-Tax identification number and the tax circle should be definitely indicated in your quotation in addition to GST number.
- 16. After Sales Service and Training: The tenderer must furnish complete details of after sales service arrangement including training to be provided in respect of the equipment. After sales service arrangements should include details of infrastructure facilities available in the country. The training should be made available free of cost at sites. Failure to give this information, will lead to automatic rejection of the offer, without any reference to the Bidder.
- 17. **Unsolicited Post Tender Modification**: In case certain clarifications are sought by this Organization after opening of tenders, then the reply of the Bidder should be restricted to the clarifications sought. Any Bidder who modifies his Bid (including a modification, which has the effect of altering the value of his offer) after the closing date without specific reference by this Organization shall render the bid liable to be ignored and rejected without notice and without further reference to the Bidder. Canvassing in any form by the Bidders shall also render the bid liable to be ignored and rejected without notice and without further reference to the Bidder.
- 18. Clarification in respect of incomplete offer: This Organization has to finalize its purchase within a limited time schedule. Therefore, it may not be feasible in all cases for this Organization to seek clarification in respect of incomplete offers. Prospective Bidders are advised to ensure that their bids are complete in all respects and conform to our terms and conditions and Bid Evaluation Criteria of the tender. Bids not complying with this Organization's requirements may be rejected without seeking any clarifications.
- 19. Replacement/Rectification: In the event the stores supplied are found to be defective, the supplier will have to take back the defective materials at his own cost and replace the defective Stores free of charge without loss of time. The supplier will not be entitled to dispose of the Store Equipment / Material given for replacement / rectification without the prior permission of this Organization. All charges concerned with the rectification including freight charges will be borne by the supplier.
- 20. RIGHT OF ACCEPTANCE: The undersigned reserves the right to reject the lowest tender or all the tenders without assigning any reasons whatsoever. Further the undersigned reserves him self the right to increase or decrease upto 50% of the quantity of goods and service specified in the schedule of the requirement without any change in the unit price of the order quantities or other term conditions at the time of award of contract. This Organization also reserves to itself the right to accept any tender in part or split the order between two or more bidders. All Quotations/Tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be reject The competent authority on behalf of Prasar

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- Bharati reserve himself the right of accepting the whole or any part of the Tender shall be bound to perform the same at the rate quoted.
- 21. Canvassing whether directly or indirectly, in connection with Tender/quotation is strictly prohibited and the Tender /quotation submitted by the contractors/suppliers who resort to canvassing will be liable to rejection.
- 22. **LANGUAGE/UNITS:** All information supplied by the Tender & all markings, notes, designation on the drawings & associated write-ups shall be in "English/Hindi language" only all dimensions, units on drawings, all reference to weights, measures & quantities shall be in SI.
- 23. **Eligibility Criteria:** Bids should be from actual manufacturer. Bid from sole selling agents/authorised distributors/authorised dealers/authorised contractors can also be considered provided such bids are accompanied with necessary supporting documents /authority letter from concerned actual manufacturer who authorised them to market their products, provided further, such an authority letter is valid at the time of bidding .The supplier/ contractor shall ensure that the required warranty cover is provided by the original manufacturer of the product.
 - The tenderer should have sufficient experience and shall submit the satisfactory supply orders/work orders/completion certificates of at least three similar items/equipments/work, each of value not less than 40% of the estimated cost, or two similar items/equipments/work, each of value not less than 60% of the estimated cost, or one similar items/equipments/work of value not less than 80% of the estimated cost, all amounts rounded off to the nearest full figure, in the last seven years ending on the last day of the month previous to the one in which the Tenders are invited.
- 24. The contractor shall arrange to dispatch the good duly insured direct to the consignee under prior intimation for delivery at site by whichever mode of transport he may choose, to ensure safe delivery of goods at site. Unloading shall be done at site at the contractor's expense. The consignee will provide only storage space .The contractor will provide his own security like locking etc. and store the material at his own risk.
- 25. **Pre-dispatch Inspection:** The material will be inspected at manufacturer's workshop. All necessary tools equipments will be arranged by manufacturer/tenderer. If required any other tests are necessary and required to be carried out, the arrangements are to be made by manufacturer/tenderer. In case of disputes third party inspection will be carried out as per BIS standard for which charges will be borne by the firm/tenderer. If any damages are found, material will be rejected. Will site if any damages are found material will be rejected.
- 26. **INSURANCE:** The contractor shall arrange for the insurance covering the risk during transit storage and installation till commissioning. The contractor shall take insurance for his men while working at AIR site against any accident, death, etc. Similarly equipments, instruments, tools etc. belonging to the contractor shall be insured against damage, loss, theft etc. All the charges for such insurance shall be borne by the contractor.
- 27. **ADDITIONAL QUANTITIES:** The purchaser reserves the right to place order for additional quantity up to 100% of the ordered quantity at the same rates and terms and condition during the currency of the contract.
- 28. **PENALTY FOR DELAY:** If the contractor is unable to complete the supply ,installation ,testing and commissioning within the stipulated time limit the purchaser may at his option allow such additional time as may be considered justified with /without penalty and without altering terms and conditions of the order In the event of failure of the contractor to complete the supply, installation, testing and commissioning within the stipulated time or the extended time, the purchaser has the right to impose penalty of 0.5 per week or part thereof the contract price. The contractor's liability for delay, however, shall not exceed 5 % of the total contract price.
- 29. **ENFORCEMENT OF LABOUR LAWS:** While engaging labour for carrying out obligation under the contract the contractor shall satisfy the condition laid down under contract labour

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(Regulation and Audition) Act 1970 and (Central) Rule 1971 as amended from time to time and observe all formalities required as per the said act /Rule The supplier shall also observe the provision under minimum wages act 1948 (central Rule 1950 amended from time to time while engaging labour.

30. Force Majeure:

- a. If any time during the continuance of the contract the performance in whole or in part by the contractor shall be prevented or delayed by reason of any war, hostility acts of the public enemy, civil commotion, sabotage, fire floods, explosions, epidemics, Quarantine restriction, strikes, lock-outs or acts of god (therein after restriction refer to as events and provided notice of happenings of any such eventuality is given by the contractor within 21 days from the date of occurrence thereof, the purchaser shall by reason of such event, neither be entitle to cancel this order not shall have any claim for damages against the contractor in respect of such non-performance or delay in performance and delivery shall be resumed as soon as practicable after such events have come to an end or ceased to exist.
- b. Provided further that if the performance in whole or part or any obligation under this order is prevented or delayed by reasons of any such even for a period exceeding 180 days, the purchaser and the contractor shall meet to find a neutral agreement to any effect resulting the reform or the purchaser may at his option cancel order provided also if the order is cancelled under this clause the purchaser shall be at liberty to take over from the contractor at order prices all unused un-damaged and acceptable material bought out components and stores in course of manufacture in the possession of the supplier at the time of such cancellation or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the supplier may with the concurrence of the purchaser elect to retain.

31. CANCELLATION:

The Purchaser reserves the right to cancel the order in the event of non-performance/delay in execution of the work or unsatisfactory performance by the contractor and recover payment already made if any along with losses/damages incurred.

31. FAILURE AND TERMINATION CLAUSE

Time and date of delivery shall be essence of the contract. If the contractor/supplier fails to deliver the stores/execute SITC/SETC, or any installment thereof within the period fixed for such delivery in the schedule or at any time repudiates the contract before the expiry of such Periods, the purchaser may without prejudice to any other right or remedy, available to him to recover demurrages for breach of the contract:.

- a. Recover from the Supplier/contractor as agreed, liquidated demurrages including administrative expenses and not by way of penalty a sum equivalent to 0.5% per week up to maximum limit of 5% of the contract value for such delay or part thereof (this is an agreed, genuine pre-estimate of demurrages duly agreed by the parties) which the supplier /contractor has failed to deliver thereof is accepted after expiry of the
 - aforesaid period, provided that the total demurrages so claimed shall not exceed 5 % of the contract price of the stores/ SITC/SETC After full period of extension (Maximum 2 months after the normal delivery period), the contract will be automatically treated as terminated, unless otherwise extended in writing and the security deposit will be forfeited.
- b. Purchase or authorize the purchase elsewhere on the account and the risk of the contractor /supplier of the stores not so delivered/SITC/SETC not carried out or other of a similar description (where stores exactly complying with the particulars are not in the opinion of purchaser which shall be final readily procurable)by serving prior notice

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to the contractor /supplier without cancelling the contract in respect of the installment not yet due for delivery or,

- c. Cancel the contract or a portion thereof by serving prior notice to the Contractor /supplier and if so desired purchase or authorize the purchase of the stores not so delivered /SITC/SETC not carried out or other of a similar description (where stores not delivered /SITC/SETC not carried out exactly complying with particulars are not in the opinion of the purchaser, which shall be final readily procurable)at the risk and cost of the Contractor/supplier If the Contractor/Supplier had defaulted in the performance of the original contract, the purchaser shall have the right to ignore his tender for risk purchase even though the provisions of this clause, it shall be in the discretion of the purchaser to exercise his discretion to collect or not the security deposit from the firm on whom the contract is placed ,at the risk and expense of the defaulted firm .
- d. Where action is taken under sub-clause (b) or sub clause (c) above, the contractor shall be liable for any loss which the purchaser may sustain on that account, provided the purchaser or if there is agreement, to purchase, such agreement is made in case of failure and ion case of repudiation of contract the contractor/supplier shall not be entitled to any gain on such the entire discretion of the purchaser to serve a notice of such purchase on the contractor/supplier.
- e. It may further be noted that clause (a) above provides for recovery of liquidated demurrages on the cost of contract price of delayed supplies (whole unit) at the rate of 0.5% per week up to maximum limit of 5 % of the contract value for such delay or part thereof. Liquidated demurrages for delay in supplies thus accrued will be recovered by the paying authority on instruction as specified in the supply order from the bill for payment of the cost of materials/works submitted by the supplier/contractor in accordance with terms of supply order on instruction from purchaser regarding liquidated demurrages amount.
- f. Notwithstanding anything stated above equipment and materials will be deemed to have been delivered /STC/SETC will be deemed to have carried out only when all its components parts are also delivered. If certain components of stores are not delivered in the time /SITC/SETC not carried out in time, the stores/SITC/SETC will be considered as delayed until such time all the parts are also delivered.

32. ARBITRATION OF CONTRACTUAL DISPUTES:

If a dispute arises out of or in connection with the contract or in respect of any defined legal relationship associated therewith or derived there from the parties agree to submit that dispute to arbitration under ICADR Arbitration Rules 1996 The Authority to appoint the arbitrators shall be the International centre for Alternative dispute resolution.

The international center for Alternative Dispute Resolution will provide administrative service in accordance with the ICADR Arbitration Rule 1996

- A) The number of arbitrators (s) shall be one who has legal as well as Technical Background.
- B) The Place of arbitration proceeding shall be Mumbai only.
- **33.** Tenderers are requested to fill the check list duly filled in as per proforma provided on the website. Incomplete check list or non compliance may result in rejection of the Tender.

Director (Engg.)
For Additional Director General (E)(WZ)
Tel. No. (022) 22053528
Email ID- mumbai.cewz@gmail.com
ddgairprojectwz@gmail.com

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Technical Specification

AIRNET/ Speed Post

PRASAR BHARATI DIRCTORATE GENERAL: ALL INDIA RADIO

Satellite & Connectivity Division (Previously Telecom Cell)

No. 1(6)/2012-TC/RNT-2.4M PDA 426

Date: November 05, 2015

Subject: SPECIFICATION DOCUMENT FOR SUPPLY INSTALLATION TESTING & COMMISSIONING (SITC) OF DIGITAL C-BAND RECEIVER RN TERMINAL

This is in continuation of Dte's earlier letter of even no. dated 26/11/2012, the updated Specification document No. TC/2.4PDA/RNT-1 dated 05/11/2015 for Supply Installation Testing & Commissioning (SITC) Of Digital C-Band Receiver RN Terminal is enclosed here with for procurement of RNTs by Zonal Offices for all projects, where RNT is still to be provided and for future projects wherever RNT is envisaged.

This issues with the approval of Competent Authority.

(RAJAN CHOPRA)

Assistant Director Engineering (SCD)

Tele: 011-23421759

To,

- Addl. Director General (E-NZ) (Project), AIR & Doordarshan, Jamnagar House, Shahjahan Road, New Delhi-110011.
- The Additional Director General (E-EZ)(Project), AIR & Doordarshan, 4th Floor, Akashwani Bhawan Eden Garden, Kolkata-700001.
- The Additional Director General (E-WZ)(Project), AIR & Doordarshan, Old CGO Building, 3rd Floor, 101, M.K. Road, Mumbai-4000020.
- 4. The Additional Director General (E-SZ)(Project), AIR & T.V.Swami Sivananda Salai, Chennal-600005.
- The Additional Director General (E-NEZ) (Project), AIR & Doordarshan, Dr.Kakuti Building, Ganesh Guri Flyover, G.S. Road, Guwahati-781006.

Copy to:

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- 4. The Additional Director General (E-SZ)(AVM), AIR & T.V.Swami Sivananda Salai, Chennai-600005.
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- DDG(E-TD)/DDG(E-FM)/DDG(E-SD) DG:AIR for kind information & n/a while preparing project notes for future projects.
- 7. DDG(E-Pur), DG:AIR for kind information & n/a in respect of existing & future purchase proposals.
- 8. DDG(E-SMS)/DDG(E-HQ)/DDG(E-Est.)/DDG(E-Plg)/DDG(M&C), DG:AIR for kind information.

PRASAR BHARATI DIRCTORATE GENERAL: ALL INDIA RADIO Satellite & Connectivity Division (Previously Telecom Cell)

SPECIFICATION DOCUMENT FOR SUPPLY INSTALLATION TESTING & COMMISSIONING (SITC) OF DIGITAL C-BAND RECEIVER RN TERMINAL

SPECIFICATION NO.

TC/2.4PDA/RNT-1

DATE OF UPDATION

30/10/2015

DATE OF APPROVAL

04/11/2015

DATE OF ISSUE

05/11/2015

NO. OF PAGES

16

APPROVAL FILE NO.

1(6)/2012-TC/RNT/2.4M PDA

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٥.		: Draft ATP of the RNT	(P. No. 13-15)
4. 5	Annexure - B	: Block Schematic of the RNT	(P. No. 16)

- N.B:1. The tenderer should go through all the sections of this specification document carefully and should confirm clause-by-clause compliance of all the sections clearly. Tenders received without clause compliance are liable to be rejected.
- The tenderer should indicate the items offered as per schedule of requirements, Section-II, without cost details in technical bid to assess the completeness of offer against AIR's requirement.

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SECTION – I General condition of Tender/Contract

1.0 INTRODUCTION:

The AIR broadcasting stations spread throughout the country are required to relay certain programmes which are originated from Delhi and from other Regional Stations in State Capitals. In order to link Delhi and Capital Stations etc. with other stations, for the purpose of these relays, AIR uses Satellite Radio networking through INSAT/ GSAT series of Satellites..

The RN Receive Terminals located at AIR Stations act as Ground Terminals, to receive C-Band transmissions through satellite. These programmes thus down linked, are fed to the transmitters for broadcast purposes.

Present specifications are for SITC of complete Digital C-Band Receive RNT for AIR Stations.

1.1 SCOPE

The scope of this tender covers the Design, Supply, Installation, Testing and Commissioning of Digital C-Band receive RNT complete with installation material at AIR stations. The RNT shall be capable of receiving Radio Channels in SCPC/MCPC mode. All the associated equipments and installation material should be complete in all respect and fully sourced from their respective OEM. An acceptance test shall be carried out as per approved ATP by AIR on the RNT fully integrated with all its associated equipments, sub assemblies etc. at the integrators works before the ordered equipments are dispatched to AIR. Optional items such as spare etc. shall be tested and the installation material shall be physically inspected during the pre-dispatch acceptance test at Integrators works before the dispatch.

- i) After acceptance of the tender, the tenderer shall provide detailed plans of supply of material and testing as per ATP.
- ii) The indenter shall provide the necessary drawings etc. for the installation of the equipment, layout plan of the cable and location of the parabolic dish antenna.
- iii) The complete installation of RN Terminal at designated AIR site, including ground leveling, required foundation for the PDA and construction of platform shall be carried out by the tenderer.
- iv) During the installation of the equipment supplier shall be responsible for safety and security of his material and personnel. At the same time the supplier will also ensure that no damage to AIR material and personnel is caused. There shall be no disruption of running services at the Station during installation and commissioning.
- v) The tenderer shall ensure that the equipment offered fully incorporate the standard features for safety and protection including shielding from EMI.
- vi) The supplier will have to supply the equipment, arrange for its testing as per Acceptance Test Procedure and provide facilities and equipment to carry out the testing. The installation and commissioning of the C-Band receive terminal at designated AIR site will be carried out by the supplier. A draft copy of the Acceptance Test Procedure is attached in Annexure 'A'.
- vii) Pre dispatch Inspection will be carried out at Supplier/Integrator's premises by the Engineers(s) of All India Radio. The supplier shall put up all the equipment for test on the test bench at

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supplier/integrator premises before the AIR Representative and shall provide, without any extra charges, electric energy, consumable materials, tools, testing instruments, labour and assistance of every kind for carrying out acceptance tests. All the individual factory test reports of the complete lot of the equipment shall be made available to the inspecting authority before inspection.

Complete specifications and details will be checked and all parameters values will be measured. Typical details are enclosed in draft ATP. The inspection will be carried out on those lines.

Prior intimation for carrying out Inspection at Works is to be given by the Supplier to the Indenter at least 4 weeks in advance. Inspection charges if any are TO BE QUOTED SEPARATELY. viii) Supplier shall arrange two days' training at each designated AIR site to AIR Personnel on operation and maintenance of the equipment.

1.2 DELIVERY PERIOD:

SITC for all the items shall be completed within six months from the date of placement of order.

1.3 LOCATION FOR SITC OF DIGITAL C - BAND RECEIVE RN TERMINAL:

The location for SITC of digital C-band Receive terminal shall be at designated AIR site .

1.4 GUARANTEE & RELIABILITY:

In addition to standard guarantee and warranty clauses mentioned in the tender, the tenderer/supplier will ensure the following:

- i) The equipment offered should be capable of continuous round the clock operation.
- ii)It shall be field proven, of state of art technology and based on industry standard.

1.5 GENERAL CLAUSES:

- Warranty and guarantee clause will be as per the terms and conditions specified in the commercial section of the tender in this respect.
- ii) The tenderer shall quote all the optional items.
- iii) The supplier shall be asked to demonstrate the compatibility of the L Band digital receiver & set top box with existing system of AIR at NBH Delhi.

1.6 GENERAL REQUIREMENTS:

- 1.6.1) The RN terminals comprising of C Band Antennae, C band LNBCs and Digital Receivers, etc. will have to be supplied as complete integrated unit including interconnection of the sub-systems, supply of accessories and other materials necessary for proper installation, operation, maintenance and trouble free service.
- 1.6.2) Tenderer are required to provide proper access for repairing / maintaining LNBC and feed mounted on the Antenna.
- 1.6.3) The distance of in-door and out-door units could be around 50M. So provision should be made accordingly. The rate for the RF cable may also be quoted per meter basis so that additional

अ प्राचित्र प्रकास एकक / P&D Unit प्राचित्र विक्रियात्म / P&S Unit प्राचित्र विक्रियात्म / P& D Unit प्राचित्र प्रकास एकक / P& D Unit प्राचित्र प्रकास एकक / P& D Unit प्राचित्र प्रकास एकक / P& D Unit प्राचित्र प्रवासिक श्री (New Dark) length as per actual requirement may be ordered later. For ranking purposes, an average of 50m length is considered.

1.6.4) The technical bid of the tenderer should contain, apart from the technical compliance statement, all original data sheets of the manufacturer in support of the technical compliance statement. The tenders containing only technical compliance statement without the original data sheet/pamphlets of the equipment offered in full are likely to be rejected.

1.6.5) A comprehensive schedule of material offered should be attached with the offer in the same format as price bid minus price.

1.6.6) The tender/offer should include following details:

- Sufficient information should be furnished with the tender to assess full merits/demerits of the offer.
- Apart from printed technical data/specs of this equipment, Block schematic of the subsystem, including the photograph etc. should be attached with the offer.
- iii) A complete schedule of equipment, accessories and option etc. should also be appended with the tender.
- 1.6.7) List of essential spares giving quantities and cost may also be given along with the offer.
- 1.6.8) Maintenance support in terms of spare units/components be ensured for at least 10 years.
- 1.6.9) The supplier shall supply 05 (five) sets of equipment manuals from OEMs for installation, operation and maintenance for all the item of the Digital RN receive Equipments as per details below:-
 - · 2 Sets for each station
 - 1 Set for each Zonal office
 - 1 set for Directorate
 - 1 set for Staff Training Institute (Technical), Now NABM(T).

1.7 INSTALLATION & COMMISSIONING

Installation will include all the equipments within the wired racks, hoisting of the parabolic dish antenna, routing of the wave guide/RF cable from the PDA to indoor system and providing earth pits as per AIR Specifications (earth resistance of less than one ohm) at site. Racks and all the equipment must be earthed. The workmanship of the entire Installations shall be of high professional standard. PDA foundation will be done by the tenderer as per the design given by its OEM and as per soil bearing capacity, which will be conducted by the successful tenderer through authorized agencies and got certified and a copy of the report submitted for record.

The firm shall have to arrange all the installation material required for installation and insure all the personnel associated in the installation work at their own cost. Installation schedule has to be intimated at least 3 weeks in advance.

Complete Installation at the station shall thereafter be offered for Site Acceptance Test and Inspection at site shall be conducted by the representatives of AIR.

The successful tenderer shall make good all damages to the purchaser's buildings, property, equipment, article and departmental personnel during the course of installation and throughout the guarantee period.

The successful tenderer shall indemnify and hold harmless the purchaser, against all claims in respect of damages to buildings, property, articles, situated nearby not belonging to the

11.24 र प्राप्त / ASHON PANI अस्पाद अस्पता / Assil Engineer गोजना पंच विकास एक्क / P& Delhi आकाशनाजी महानिदेशालय / DG. AIR purchaser, and public personnel arising from the erection of the PDA during the course of such erection or mounting and throughout the guarantee period.

The successful tenderer shall fully discharge all obligations under the Indian Workmen's Compensation Act in so far as it affects the workmen under his employment.

The tenderer shall be responsible for safe erection of the PDA and other accessories etc. The tenderer shall take all necessary safety measures and precautions during the SITC. Installation work shall be got done at site under the supervision of qualified representative of the firm.

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SECTION - II SCHEDULE OF REQUIRMENTS

AIR Require following Equipments / Services as per specifications detailed under sections I & III. The tenderer shall quote price of each item separately with necessary break-up details keeping in view the following:

- i) Make & Model of each item, to be indicated.
- ii) Indenter reserves the right to choose & decide the quantity of Equipments at the time of finalization of Tender.
- iii) All items mentioned in the Schedule under mandatory items will be taken in to consideration for ranking purpose where as all items mentioned in the Schedule under Optional items will not be taken in to consideration for ranking purpose. However the tenderer must quote for all the items under the schedule of requirements.
- iv) Present requirement is for per station per site.

SI. No.	Equipment / Services	Qty. per site
2.1	MANDATORY ITEMS:	-
2.1.1	2.4M C- BAND PDA AND FEED: 2.4Meter Parabolic Dish Antenna along with Earthing System, Lightning arrestor, linear orthogonal feed and accessories complete with mounting fixtures, civil work for foundation etc	1 set
2.1.2	C- BAND L.N.B.C	2Nos.
2.1.3	LOW LOSS CABLE: 50M length Low loss cable with connectors mounted on each end. NB: cable rate per meter to be quoted.	2Nos.
2.1.4	L BAND LINE AMPLIFIER:	2 Nos.
2.1.5	L-BAND DVB - S / DVB - S2 DIGITAL SATELLITE RECEIVER (IRD)	2Nos.
2.1.6	FREE TO AIR (FTA) DTH SET TOP BOX	2 Nos.
2.1.7	WIRED RACK FOR EQUIPMENTS	1 No
2.1.8	STEREO AUDIO MONITORING EQUIPMENT	1No.
2.1.9	L BAND 1:4 POWER DIVIDER	1 No
2.1.10	LAPTOP	1 No.
2.1.11		
2.1.12	The state of the s	
2.1.13	Installation and Commissioning of the System at site	1 Job
2.1.14		
	Section - I.	1 lot

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-	Section - I.	1 lot
2.1.15	Charges for pre-dispatch Inspection as per approved ATP at integrator's works	1 Job
2.1.16	Charges for 2 days training at AIR site	1Job
2.2	OPTIONAL ITEMS:	
2.2.1	Spares for RNT (1) C-Band LNBC	1 No.
	(2) L-BAND DVB - S / DVB - S2 DIGITAL SATELLITE RECEIVER (IRD)	1 No.
	(3) L BAND 1:4 POWER DIVIDER	1 No.
2.2.2	Other item of spares recommend by the OEM/Integrator	1 lot

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SECTION-III **TECHNICAL SPECIFICATION**

TECHNICAL SPECIFICATION OF DIGITAL C - BAND RECEIVE RN TERMINAL: 3.0

The Digital C - Band Receive RN terminal should conform to the following technical specifications as per the block schematic shown in Annexure 'B':

3.1 2.4M C- BAND PDA AND FEED:

(A) Electrical Specification:

SI No	A) Electrical Specification: Parameter	Specification
1	Frequency Range	3.7-4.2 GHz
2	Mid frequency gain	36db or better
3	Polarisation	Linear Orthogonal, Orientable
4	Cross Polarisation Isolation	30db or better

(B) Mechanical Specification:

SI	B) Mechanical Specification: Parameter	Specification
No	Diameter	2.4Meter (nominal)
1	Diameter	Manual The Antenna should have calibrated marking for
2	Tracking mode	Elevation & Azimuth angle indication.
	Reflector Material	GFRP / Punch Sheet
3	Reflector Material	Heavy duty, Hot Dip Galvanized steel
4	Antenna Stand material	As per the recommended drawing of OEM
5	Foundation	Drive Focus
6	Feed mounting .	Two Orthogonal (LNBC mounted on each PORT)
7	Feed Ports	WR229
8	Feed Ports Flange	VVR229
9	Steerability:	201-2000
	a) Elevation	0° to 90°
	b) Azimuth	± 35°
10	Wind Load:	20 1/34/11/2
	a) Operational:	80 KM/Hr
•	b) Survival:	150 KM/Hr
11	Environmental:	600 to 150°C
(1815)	a)Temperature:	-20° to +50°C
	b)Relative Humidity:	95% non condensing

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The tenderer shall provide foundation as per drawings recommended by the original manufacturer of the antenna. One number of copper earth pit will have to be provided for earthing the lightening arrester of the antenna. The resistance of earth pit should be 1 ohm or less.

3.2 C- BAND L.N.B.C:

Tender shall quote for good quality, field proven C-Band LNBCs, capable of 24x7hrs operation mounted on each PORT of Feed conforming to following specification:

a)	Input frequency	3700 – 4200 MHz
b)	Input connector	WR 229 G Flange
d)	Output frequency	950 - 1450 MHz
c)	L.O. Stability	PLL, better than ± 2 PPM
e)	Noise temperature	≤ 35°K
f)	Conversion gain	≥ 55 dB
g)	Phase Noise 1 KHz 100 KHz	-60 dBc/Hz -80 dBc/Hz
h)	Output impedance & Connector	75 Ω & F (Female)
i)	Power supply	+ 15 V to + 24 V DC

3.3 LOW LOSS CABLE:

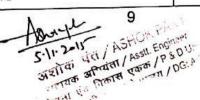
Tender shall quote for good quality professional grade RF cable with suitable connectors mounted at both ends conforming to the following specification:

i)	Cable Loss (with connectors at both ends)	≤ 3.50 dB/100 feet at 1500 MHz
	Impedance	75 Ω

3.4 L BAND LINE AMPLIFIER:

Tender shall quote for good quality, field proven L-Band line amplifier, capable of 24x7hrs operation, suitable for wall mounting conforming to following specification:

1.	Frequency of operation	950 - 1450 MHz
2.	Input level	- 80dBm to -50dBm
3.	Input and Output Impedances	75 Ω
4.	Input/ Output return loss	8dB or better .
5.	Noise figure	10 dB or better



6.	Gain	20dB or higher
7.	Gain flatness over entire frequency band	2 dB or better
8.	Operating voltage	14V to 24 VDC (Through center conductor of the RF cable)
9	Environmental :	40
	a)Temperature:	0° to +50°C
	b) Relative Humidity:	95% non condensing

L-BAND DVB - S / DVB - S2 DIGITAL SATELLITE RECEIVER (IRD): 3.5

Tender shall quote for professional grade good quality, field proven L - Band digital receiver, capable of 24x7hrs operation conforming to following specification. The IRD shall have a 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 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.

SI. No.	Parameter	Specification
Α	INPUT CHARACTERSTICS	
1	Input Frequency Range	950 - 1750 MHz
2	No. of Inputs	1 nos.
3	Tuning Step Size	1kHz
4	Input Impedance	75 Ohm
5	Input Connector	F-Type female
6	Input Power Range	-30dBm to -65dBm
7	Noise Figure	20dB or better
8	De-Modulation	QPSK
9	Symbol Rate	128 kilo symbol/Sec To 10 Mega symbol/Sec
10	Convolution Inner FEC	DVB-S -1/2, 2/3, 3/4, 5/6, 7/8 DVB S2- 1/3,/2/5,1/2,3/5, 2/3
11	IF Filter Bandwidth	Automatic Selection (dependent on Symbol Rate).
12	Audio Decompression / Decoding	MPEG-II and MPEG-IV, AAC

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B.	OUT PUT CHARACTERSTICS:	" " 1 A E O / E D L at 44 1 8
1	Audio out put	Analog and digital AES / EBU at 44.1 & 48kHz sampling rate
2	Number of audio Outputs	Four (4) Stereo, configurable as Stereo or Dual mono.
3	Connector Type	XLR Male Socket or with suitable Adapter
4	Output Impedance	600 Ohm (balanced) and 110 Ohm
5	Transport Stream O/P	ASI on BNC
6	Data Rate per Channel	64-256 kbps (MPEG-II and MPEG-IV, AAC)
7	Peak Output Level	10 ID into 600 ohms balanced or
	Analog	higher
	Digital	-10dBfs or higher
8	Frequency Response	± 0.5 dB or less, 20 Hz to 15 kHz
9	THD	1% or less
10	Cross talk	60 dB or higher isolation between L & R
11	Signal to noise ratio	60 dB or higher
12	Output Voltage	18V DC through central conductor of RF F - connector in receiver.
13	Power Supply	230V ± 10% AC single Phase
C	ENVIRONMENTAL	
_	(I) Temperature	0° to +45°C
	(II) Relative Humidity	90% non condensing

NB: Tenderer shall demonstrate the equipment for conforming compatibility with the CES NBH AIR DELHI as a part of Technical Evaluation.

FREE TO AIR (FTA) DTH SET TOP BOX: 3.6

Tender shall quote for good quality, field proven Free to Air (FTA) DTH set top box, capable of 24x7hrs operation having compatibility with the CES NBH AIR Delhi. NB: Tenderer shall demonstrate the equipment for conforming compatibility with the CES NBH AIR DELHI as a part of Technical Evaluation.

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3.7 WIRED RACK FOR EQUIPMENTS:

Tender shall quote for good quality, standard size (42U) wired rack with jack strip and tag blocks suitably mounted along with all the equipments.

3.8 STEREO AUDIO MONITORING EQUIPMENT:

The Tender shall good quality, field proven, hi-fi 5+5 Watt professional grade stereo monitoring amplifier, capable of 24x7hrs operation along with a set of two matching speakers. The equipment shall be capable to accept AES/EBU & Analog inputs. The Stereo Audio Monitoring amplifier shall be rack mountable.

3.9 L BAND 1:4 POWER DIVIDER:

Tender shall quote for good quality, field proven L - Band 1:4 power divider, capable of 24x7hrs operation suitably mounted in the rack.

3.10 LAPTOP:

Laptop shall be of reputed make with licensed OS and preloaded NMS of the RNT equipment and accessories, back-up CD / DVD along with proper drives etc. It shall be used for control and setting of the operational parameters of Digital Receivers and accessories of the RN receive Terminal. Laptop shall be rack mountable (sliding).

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Annexure 'A'

DRAFT ACCEPTANCE TEST PROCEDURE

INTRODUCTION

New C-band Digital receive terminal to be installed at designated AIR site is to be tested to ascertain the performance of the terminal before final acceptance.

SCOPE

This document describes the test procedure for link level measurement of C Band RN receive terminal. Details of the operating parameters and setting at which measurements are to be carried out are given in subsequent sections.

OBJECTIVE OF LINK LEVEL MEASUREMENTS

Digital C-Band transmit (uplink) is already operational at CES Delhi. The down link testing is to be carried out based on these parameters.

Detail measurements of the downlink receive system would consist of following:

- RF measurements
- Baseband measurements
- To test the received audio qualitatively
- Endurance test

These measurements would be carried out in real time coordination with CES, Delhi for the Cband Digital transmit system.

TEST EQUIPMENTS

The test equipment are required to be arranged by the supplier.

- (a) Spectrum Analyzer
- (b) Audio signal generator
- (c) Audio analyzer

SET-UP & PRE-CHECKING:

Following points may be checked up before the measurements are carried out:

- Check for the items model / type, serial no., quantity as per order including manuals etc. (i)
- Individual operational controls of units, settings, levels should be set up as per details given (ii) in the manual and subsequent sections. The functioning of controls and displays may be checked.
- The receive system, after installation, is to be lined up for satisfactory downlink audio (iii) reception and functioning of the system.

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(iv) Test and measuring equipment may be checked up and be kept switched on at least 15-20 minutes to allow them to stabilize before measurement.

(v) Arrangements for communication with CES Delhi for real time coordination and testing be made.

LINE UP & TESTING

ANTENNA LINE UP AND TESTS: The receive antenna is to be optimized for best down link reception using bacon signal. Optimization for all i.e. Azimuth, elevation and polarisation be done for best results. Readings of bacon signal be noted and beacon reception print out be taken. C/No for bacon should be better than 67dbHz.

DIGITAL RECEIVERS:

The measurements detailed below will have to be done in real time coordination with CES, AIR, BH, Delhi.

The transmit side parameters will be set by CES Delhi. The transmission signal parameters will be communicated from Delhi and the receiving station will note down the readings on receive side.

I. RF MEASUREMENTS

Following measurements are to be taken:

Received Signal level:

Check the received signal level of pure carrier on spectrum analyzer and note down the reading. Similarly check for same carrier on other port of feed. Note observation. This difference is crosspole discrimination.

Eb / No, C/No, BER measurement:

Vary modulator output level in steps of 1 dbm and note down the C/No at the receive end on spectrum analyser. The corresponding Eb/No and BER values may be noted down by giving the commands EB and RB respectively to the Receiver through laptop. The threshold at which the receiver starts to loose Audio synchronisation is to be noted.

Make / Model:

Serial No

S.No.	MODULATOR OUTPUT (dbm)	C/No Hz)	(dB-	Eb/No (dB-Hz)	BER	Remarks
					1	

II. BASE BAND MEASUREMENTS:

Linearity:

Vary the input to the Encoder in the uplink side from -8 dBm to +8 dBm in steps and note the output on the analyzer, which is connected to the receiver. Carry out measurements for both channels and note down the results.

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Linearity: (Test Signal 1 KHz)

Details	Input Level	Output Level
Details	Left Channel	Right Channel
(a) -8 dbm (b) 0 dbm		*
(c) +8 dbm		

Frequency Response:

Feed a 0 dbm reference signal at 1 KHz to the Encoder. Vary the frequency of the signal from 50 Hz to 15 KHz in steps and note down the output level of the signal at the receive end.

Frequency Response (0 dbm, 1 KHz reference)

S.No	Frequency (Hz)	Left Channel	Right Channel	Remarks

SNR, THD and Cross Talk:

Feed a +8 dBm, 1KHz test signal at the Encoder and measure output level, THD, SNR and cross talk in respect of both channels.

Input: 1 KHz, +8 dBm

S.No	Channel	Output (dBm)	THD (%)	SNR (dB)	Cross Talk (dB)	Remarks
	Left					
	Right					

III Subjective Listening:

Listen to the received programme for satisfactory audio quality. Subjective Listening comments may be given

IV. Endurance Test

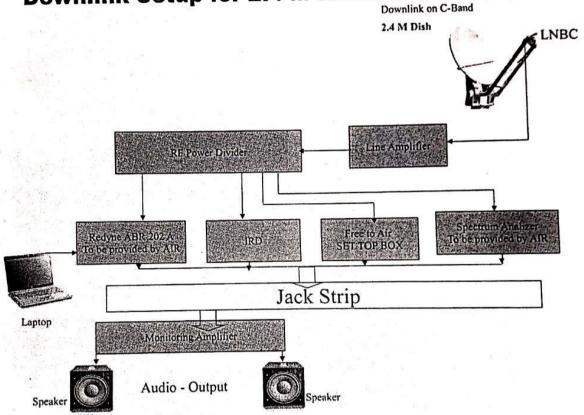
In addition to the above tests, the system is to be kept "ON" for 48 hours and any degradation/ malfunctioning of the RN Terminals, is to be noted. Variation in signal level, heating of components, particularly the working of LNBC, drift in L-Band output freq. of LNBC etc. are to be checked and noted.

15

अंशोंक पंत / ASHOK PANT पंता / ASH Engines पंता विकास पंक्क / P & DUN पंता पंता किसार पंक्क / P & DUN प्राची के विकास पंक्क / P & DUN प्राची के विकास पंक्क / P & DUN प्राची के विकास प्राची के प्र

ANNEXURE - 'B'

Downlink Setup for 2.4 M Receive RN Terminal



5.11.21 ASHOK PANT असीक ध्रत / ASH Enginear प्रहायक अन्यंता / Asatt Enginear प्रहायक अन्यंता महामित्रे शाला (Asatt Enginear / Asatt Enginear / Asat

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Submission of tenders

Interested Bidders are required to follow the below steps for submitting their offers

- 1. Bidding document may be downloaded from below mentioned web sites
 - https://www.tenderwizard.com/PB,
 - https://prasarbharati.gov.in ,
 - https://eprocure.gov.in

2. E-Bids are to be submitted on the e-tender portal http://www.tenderwizard.com/PB

To participate in the e-bid submission, it is mandatory for the Bidders to have user identification number & password (collectively referred to as the "ID and Password") which has to be obtained in Bidder's own name by submitting an annual registration charges of Rs. 2247/-(Rupees Two Thousand two hundred Forty Seven Only) to M/s ITI Ltd. The registration obtained, as mentioned above shall be valid for one year from date of its issuance and shall subsequently be got renewed.

- 3. The online payment facility for the submission of registration charges and tender processing fee payable to e-tender service provider, M/s ITI Ltd. (detailed address given below) has been enabled on e-tender portal http://www.tenderwizard.com/PB. The Bidders are required to pay registration charges and tender processing fee through e-payment gateway of Punjab National Bank using Credit Card/Debit Card/Master Card/Visa Card only. Demand Draft will not be accepted for payment of annual registration charges and tender processing fee to M/s ITI Ltd. (The e-tender service provider).
- 4. The Bidders, who have already obtained such valid user ID and Password for any other project and validity of registration is not expired, need not obtain fresh user ID and Password for the purpose of participation in the bidding under this BID.
- 5. Address & contact details of E-tender Service Provider is given below:

M/s ITI Ltd, Tender Wizard Helpdesk

B-1/5A, 2nd Floor, Main Nazafgarh Road

Near Janakpuri Metro Station (East)

Janakpuri New Delhi- 110058

(E-Mail: twhelpdesk680@gmail.com, <a href="mailto:twhelpdesk680@gma

(Ph No: 011-49424365.)

- 6. Bids can be submitted only during the validity of their registration.
- 7. The amendments/clarifications to the bid document, if any, will be hosted on the e-tendering website/e-portal viz. http://www.tenderwizard.com/PB
- 8. If the firm/Consortium is already registered with e-tendering portal viz.

 http://www.tenderwizard.com/PB and validity of registration is not expired, the firm consortium is not required to obtain fresh registration.
- 9. Bidders are advised to upload their Bids well in time, to avoid last minutes rush on the server or complications in uploading. Department, in any case, will not be responsible for any type of problem in uploading the Bid.
- 10. Bidders have to upload the scanned copy of below mentioned documents before the last date & time, on the e-tendering portal. The compliance of same is to be submitted in check-

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list table. However, certified copy of all the scanned and uploaded documents as specified have to be submitted by the lowest bidder only along with physical EMD of the scanned copy of EMD uploaded within a week physically in the office of tender opening authority.

- Earnest Money Deposit (EMD) Demand Draft
- The following undertaking regarding deposition of EMD shall also be uploaded by the intending bidders:-

"The Physical FDR/EMD shall be deposited by me/us with the Additional Director General (E)(WZ) All India Radio & Doordarshan Mumbai calling the tender in case I/we become the lowest tenderer within a week of the opening of financial bid otherwise department may reject the tender and also take action to withdraw my/our enlistment."

- PAN Card
- TIN Card, and VAT or C.S.T registration certificate
- Service Tax Registration No.
- Eligibility Criteria Documentary proof of having completed similar type of work/ supply.
 Such as copy of Enlistment Order and certificate of work experience

FAQs on Vendor Registration

1. Is registration compulsory on e-Tendering portal?

Yes. Registration is compulsory on e-Tendering portal.

2. How do I register on e-Tendering portal?

Go to Client Department URL, fill up online form using "**Register Me**" link. You can enter your preferred USER ID and system will provide with password which will be initially be in disable state. Once your registration fee is received by the service provider, the same will be enabled and communicated to you through Phone / email along with necessary document.

ELSE

Send mail to the Help Desk email id in the "Contact Us" Link along with the appropriate documents and you will get the user id and password within 24 hours.

3. What documents should I upload during registration, in case of online registration?

At the time of Vendor registration, you need to scan the copy of the registration certificate or any other supporting documents and upload to the system along with one requisition letter.

4. Do I get confirmation mail after registration?

Yes. All successful Vendors will get email communication. Please check your email account as provided by you during registration. After registration, you can also modify / update the E Mail address through "Modify Profile" link.

5. Can I update my registration information?

Yes. You can modify / update the registration information after log-in under "Modify Profile" link.

6. How frequently should I change / modify my Password?

The Password has to be changed every 3 to 4 months. (It can be changed, after log-in using "Modify Password" link)

7. When I log-in, it says 'Log-in failed. Contact Administrator'. What should I do?

If 'log-in failed, contact administrator, means Password may be entered wrong or it may be disabled, so it has to be enabled. You may request for a new password from the e-Tender Help desk, who will then authenticate your request and issue a new password.

8. Renewal of Registration

When the Registration validity is nearing expiry, an alert message is displayed at log-in time. The alert message is displayed 30 days in advance from the end of validity period. Vendors

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should steps to renewal their Registration and send the renewal fees by DD / NEFT to the eTender Help Desk.

FAQs on Digital Signature Certificate (DSC)

1. Do I need Digital Signature Certificate (DSC) during registration process?

Yes. Class-3 Digital Signature Certificate is compulsory for all the vendors to participate in the etendering system. Check with the Buyer Department regarding the guidelines stipulated for use of Digital Signature Certificate.

2. Where do I buy the Digital Signature Certificate (DSC)?

Digital Signatures can be obtained from any of the Controller of Certifying Authority, India. (refer to the CCA site www.cca.gov.in) If you have already obtained the certificate, then log-in with eToken having DSC. The certificate number will be automatically updated in your profile during your first login. Alternatively, send the Certificate Serial Number to our representative with authenticated documents to update your profile with the DSC serial number.

3. How do I get the application form and how much should I pay for Digital Signature Certificate?

It is available in the homepage of our portal. Call any of the helpdesk numbers from the website to get more details.

4. How do I update the digital signature certificate number to my user id?

Send a mail to our local representative. Mention your company name, user id and digital signature certificate number for easy and immediate reference.

5. I am displayed an error "Authentication Failed" during login, what do I do?

- a. Firstly, the above error might occur when your Digital signature certificate number is not integrated to your user id. In that case, send a mail to our local representative mentioning your company name, user id and digital signature certificate number to update the same.
- b. Secondly, to use any of the digital signature certificates, you need to enable all the ActiveX controls in your browser. In internet explorer, go to Tools >> Internet options >> Security >> Internet >> Custom Level and enable all the ActiveX controls and submit. Close the browser and open once more and try to log in.
- c. Even then you are not able to login, please call our helpdesk to attend the same.

6. What is this DSC password that is given along with the e-Token?

The e-Token has one unique password to access the DSC certificate. For PKI Login, the Vendor has to enter this password. If the Vendor forgets the password, the token will be automatically blocked for security reasons.

7. Is there a separate password for the hardware e-Token?

There is no separate password for e-Token hardware.

8. If I forget my DSC password or initialize the e-Token, what should I do?

If DSC Password is misplaced OR e-token is initialized, the Vendor cannot access the certificate. You have to apply for a new DSC and update the same in the e-token. Contact the help desk for support.

What is an e-Token?

- 1. The e-Token contains a smart card-like chip. Users can use it to store a variety of personal information, such as user names, passwords, cryptographic keys, licenses, credentials or other data.
- 2. Users cannot duplicate information on the e-Token. This means you can use it to store credentials that grant access to Internet services with confidence that the access will not be shared.

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3. What is stored in e-Token?

The individual's DSC is stored in the e-Token. This is done by the Registration Authority who has processed your application and installed the .PFX file to the e-Token. At any point of time, only one individual DSC can be stored in e-Token.

4. How to install the e-Token drivers?

There are different brands available in the market. Most popular are Alladin, Athena and Rainbow. The manufacturer provides the drivers to recognize the e-Token in the user's computer. Insert the Installation CD in your CD drive and follow the instruction. When prompted to insert the e-Token, then insert the e-Token in the USB Drive and proceed.

Some basic activity to be done include -

- a) Adding the e-procurement portal as trusted site
- b) Enabling the Active X controls in the Internet Explorer Browser
- c) Installing the Root and Chain Certificates of the CCA (provided in the CD)

For detailed help, pl. refer PKI Installation guide in Help section.

5. Care instructions for handling your e-Token

- a. Do not try to format or initialize the e-Token because this will result in loss of the Digital Certificate.
- b. The DSC in the form of .PFX file is installed on the e-Token. This cannot be copied or backed up elsewhere.
- c. The RA provides you a default password at the time of issue. You are advised to modify the password. Take care to remember the modified password when you use the same for E-procurement activity.
- d. More than 3 failed attempts using wrong password will disable your e-Token.

The DSC can never be retrieved. You will have to apply for a fresh Digital Certificate that will take minimum 3 days.

FAQs on Tendering Activity

1. How do I know that a tender is published?

You can find the same through "Tender Free View" link.

2. Do I pay for the tender documents?

- a) Check with the Buyer department. Few departments insist Vendors to remit the cost towards Tender Form Fee and then obtain the tender documents.
- b) Some departments allow you to download the tender documents at the time of online request itself. Initially all the tender documents are issued free of cost, but while submitting the tender, you need to enter the DD details of Tender form fee, e-Tender processing fees, wherever applicable.

3. How do I submit my tender to the department?

The tender documents can be downloaded from the e-Tendering portal. You can fill the tender documents along with EMD and submit online along with the scanned certificates required for the tender.

4. Can I download the drawings related to the tender if any?

Yes. Since drawings are part of the tender documents, while downloading the tender documents, these drawings can also be downloaded.

5. How do I view the drawings related to the tender if any?

Drawings will be usually uploaded in the .JPEG or .GIF format which can be viewed in MS paint.

6. How do I submit the EMD?

BG/DD taken for EMD is scanned and should be attached to the tender during submission. The originals should be handed over to the department before tender opening.

7. How do I upload and attach my additional certificates to the tenders?

You can upload all your certificates or documents through "General Documents" link. This link acts as a library where you can store any number of documents/certificates at any point of time. These certificates can be attached to any number of tenders (for attaching the file through "General Document" link, see help file).

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In case you are facing any problem of not uploading the general documents, then open your image file in MS Paint, go to Image >> Stretch/Skew >> Reduce the size of the image to 50% >> save image and then try to upload the same.

8. How do I confirm my tenders are submitted without any problem?

Once you submit your tender, you will be provided with an acknowledgement along with token number, time stamp and list of submitted documents which confirms that your tender has been successfully submitted in the portal.

9. Can I resubmit the tender repeatedly till the tender submission or closing date?

Check with the Buyer department. If the multiple submission facility is allowed, then you can submit the tender any number of times till the tender submission or closing date.

10. If I change my bid after initial submission, do I need to click "submit" button once again?

Yes. Whenever you change your submitted bid, you should click "Submit" button compulsorily to attach the fresh bid to the tender. If you fail to do so, the previously attached bid will be valid and taken for evaluation.

11. How will I come to know that my bid has been opened?

On the opening date, you can login and see the tender opening process.

12. How should I confirm my tenders are not opened by any third party before the Date of opening?

The system does not allow your bids to be opened before the due date specified in the Tender Schedule. The Tender Inviting Authority is given the rights to open the tender using his valid digital signature certificate in e-Token.

13. Can I view the proceedings of opening of technical bid?

Once the tender is opened, you will view and download the competitors bid sheets under the 'Edit Attachment' screen.

14. Can I refer to my tender documents submitted to the departments?

Yes. All the submitted documents can be viewed through "Tender Document" screen in your login.

15. How much space is provided to me for storing my documents online?

Presently there is no restriction on storing capacity. Preferably, it is advised to have around 100 documents in the General Documents Library. Old records may be archived for convenience.

Director (Engg.)
For Additional Director General (E)(WZ)
Tel. No. (022) 22053528
Email ID- mumbai.cewz@gmail.com

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GENERAL TERMS AND CONDITIONS FOR SUPPLY/ WORK ORDER

1.NAME OF PURCHASER : PRASAR BHARATI

2.PAYING AUTHORITY : The Additional Director General (E-WZ), All India Radio &

Doordarshan, Mumbai

3.PAYMENT TERMS : 100% payment will be released on satisfactory and

successful completion of supply at site. Further the contractor/supplier/firm should submit all the bank details

such as:

a. Name of the Bank

b. Branch

c. Account Number

d. IFSC code

e. MICR Code

along with their bill for online payment. Photostat copy of the

cancelled cheque leaf may be enclosed.

4. BILLS: All the supplies and works shall be in conformity with the order and the entire/ part bills shall be prepared in quadruplicate in the same format as that of the supply order. All those part bills shall be submitted to the consignee for necessary and onward transmission to the paying authority.

5. PRE-DISPATCH INSPECTION:

The stores/material/equipment will be inspected by the indentor or his authorised representative at manufacturers work before dispatched as specified in specification and in accordance with standard specified in the tender.

6. DISPATCH INSTRUCTIONS:

The packing and marking of goods shall be as laid down in clause-12 of general conditions of contract DGS &D69 (revised),

7. The contractor shall arrange to dispatch the good duly insured direct to the consignee under prior intimation for delivery at site by whichever mode of transport he may choose, to ensure safe delivery of goods at site. Unloading shall be done at site at the contractor's expense. The consignee will provide only storage space .The contractor will provide his own security like locking etc. and store the material at his own risk.

8. INSPECTION

The material will be inspected at manufacturer's workshop. All necessary tools equipments will be arranged by manufacturer/tenderer. If required any other tests are necessary and required to be carried out, the arrangements are to be made by manufacturer/tenderer. In case of disputes third party inspection will be carried out as per BIS standard for which charges will be borne by the firm/tenderer. If any damages are found, material will be rejected

9. INSURANCE:

The contractor shall arrange for the insurance covering the risk during transit storage and installation till commissioning. The contractor shall take insurance for his men while working at AIR site against any accident, death, etc. Similarly equipments, instruments, tools etc. belonging to the contractor shall be insured against damage, loss, theft etc. All the charges for such insurance shall be borne by the contractor.

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10. ADDITIONAL QUANTITIES

The purchaser reserves the right to place order for additional quantity up to 50% of the ordered quantity at the same rates and terms and condition during the currency of the contract.

11. PENALTY FOR DELAY

If the contractor is unable to complete the supply ,installation ,testing and commissioning within the stipulated time limit the purchaser may at his option allow such additional time as may be considered justified with /without penalty and without altering terms and conditions of the order In the event of failure of the contractor to complete the supply, installation, testing and commissioning within the stipulated time or the extended time, the purchaser has the right to impose penalty of 0.5 per week or part thereof the contract price. The contractor's liability for delay, however, shall not exceed 5% of the total contract price.

12. CONDITIONS OF CONTRACT:

- a. DGS & D-68 (Revised) and DGS & D-71 as amended up to date .However such of these conditions stipulated on this tender shall super cede corresponding conditions in DGS &D-71.
- b. The contractor shall submit the duplicate copy work order duly signed and stamped along with acceptance letter and security Deposit within 2 weeks. No supplies will be made and no work shall start unless the acceptance is signed by the contractor.

13. ENFORCEMENT OF LABOUR LAWS:

While engaging labour for carrying out obligation under the contract the contractor shall satisfy the condition laid down under contract labour (Regulation and Audition) Act 1970 and (Central) Rule 1971 as amended from time to time and observe all formalities required as per the said act /Rule The supplier shall also observe the provision under minimum wages act 1948 (central Rule 1950 amended from time to time while engaging labour.

14. ARBITRATION OF CONTRACTUAL DISPUTES:

If dispute arises out of in connection with the contract or in respect of any define legal relationship associated therewith or derived there from the parties agree to submit that dispute to arbitration under ICADR Arbitration Rule, 1996.

The authority to appoint the arbitrator(s) shall be international centre for Alternative dispute resolution. The international centre for Alternative Dispute Resolution will provide administrative services in accordance with the ICADR Arbitration Rules 1996.

- 1. The number of arbitrator(s) shall be one who has legal as well as technical background
- 2. The place of arbitration proceeding shall be Mumbai.

15. FORCE MAJEURE:

- a) If at any time during the continuance of the contract the performance in whole or in part by the contractor shall be prevented or delayed by reason of any war, hostility acts of the public enemy, civil commotion, sabotage, fire floods, explosions, epidemics, Quarantine restriction, strikes, lock-outs or acts of god (therein after restriction refer to as events and provided notice of happenings of any such eventuality is given by the contractor within 21 days from the date of occurrence thereof, the purchaser shall by reason of such event, neither be entitle to cancel this order not shall have any claim for damages against the contractor in respect of such non-performance or delay in performance and delivery shall be resumed as soon as practicable after such events have come to an end or ceased to exist.
- b) Provided further that if the performance in whole or part or any obligation under this order is prevented or delayed by reasons of any such even for a period exceeding 180 days, the purchaser and the contractor shall meet to find a neutral agreement to any effect resulting the reform or the purchaser may at his option cancel order provided also if the order is cancelled under this clause the purchaser shall be at liberty to take over from the contractor at order prices all unused un-damaged and acceptable material bought out components and stores in course of manufacture in the possession of the supplier at the time of such cancellation or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the supplier may with the concurrence of the purchaser elect to retain.

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16. CANCELLATION:

The Purchaser reserves the right to cancel the order in the event of non-performance/delay in execution of the work/supply or unsatisfactory performance by the contractor and recover payment already made if any along with losses/damages incurred.

Director (Engg.)
For Additional Director General (E)(WZ)
Tel. No. (022) 22053528
Email ID- mumbai.cewz@gmail.com

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BILL OF MATERIAL / SCHEDULE OF REQUIREMENTS

Name of Work: S.I.T.C of Digital C-Band RN Receive Terminal at AIR Ratlam (M.P.).

1. 2.4M C-BAND PDA AND FEED: 2.4 Meter Parabolic Dish Antenna along with Earthing System, Lightning arrestor, linear orthogonal feed and accessories complete with mounting fixtures, civil work for foundation etc. 2. C-Band L.N.B.C mounted on above feed. 3. Low Loss Cable: 50M length Low loss cable with connectors mounted on each end. NB: cable rate per meter to be quoted. 4. L band line Amplifier 4. Nos. 5. L-Band DVB - S / DVB - S2 Digital Satellite Receiver (IRD) 6. Free to AIR (FTA) DTH Set Top Box 7. Wired Rack For Equipments 8. Stereo Audio Monitoring Equipment 9. L band 1:4 Power Divider 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	SNo	Description of the equipment	Quantity	Make	Model
3. Low Loss Cable: 50M length Low loss cable with connectors mounted on each end. NB: cable rate per meter to be quoted. 4. L band line Amplifier 5. L-Band DVB - S / DVB - S2 Digital Satellite Receiver (IRD) 6. Free to AIR (FTA) DTH Set Top Box 7. Wired Rack For Equipments 8. Stereo Audio Monitoring Equipment 9. L band 1:4 Power Divider 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	1.	Antenna along with Earthing System, Lightning arrestor, linear orthogonal feed and accessories complete with	2 set		
50M length Low loss cable with connectors mounted on each end. NB: cable rate per meter to be quoted. 4. L band line Amplifier 5. L-Band DVB - S / DVB - S2 Digital Satellite Receiver (IRD) 6. Free to AIR (FTA) DTH Set Top Box 7. Wired Rack For Equipments 8. Stereo Audio Monitoring Equipment 2 No 9. L band 1:4 Power Divider 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	2.	C-Band L.N.B.C mounted on above feed.	4 Nos.		
5. L-Band DVB - S / DVB - S2 Digital Satellite Receiver (IRD) 6. Free to AIR (FTA) DTH Set Top Box 4 Nos. 7. Wired Rack For Equipments 2nos 8. Stereo Audio Monitoring Equipment 2 No 9. L band 1:4 Power Divider 2No.	3.	50M length Low loss cable with connectors mounted on each end.	4 Nos.		
(IRD) 6. Free to AIR (FTA) DTH Set Top Box 7. Wired Rack For Equipments 2 nos 8. Stereo Audio Monitoring Equipment 2 No 9. L band 1:4 Power Divider 2 No. 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	4.	L band line Amplifier	4 Nos.		
7. Wired Rack For Equipments 2nos 8. Stereo Audio Monitoring Equipment 2 No 9. L band 1:4 Power Divider 2No. 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	5.	(IRD)			
8. Stereo Audio Monitoring Equipment 2 No 9. L band 1:4 Power Divider 2No. 10. Laptop complete with pre-loaded NMS with back-up CD/DVD along with drives.	6.	Free to AIR (FTA) DTH Set Top Box	4 Nos.		
9. L band 1:4 Power Divider 2No. 10. Laptop complete with pre-loaded NMS with back-up 2No CD/DVD along with drives.	7.	Wired Rack For Equipments	2nos		
10. Laptop complete with pre-loaded NMS with back-up 2No CD/DVD along with drives.	8.	Stereo Audio Monitoring Equipment	2 No		
CD/DVD along with drives.	9.	L band 1:4 Power Divider	2No.		
11 Complete installation / integration material for all the 2lot	10.	• • • • • • • • • • • • • • • • • • • •	2No		
above items (SI.No.2.1.1 to 2.1.10) including all accessories, inter connecting cable, connectors etc.	11.		2lot		
12. Any other item/equipment required for completeness of 2lot SITC of RNT (to be indicated with details)	12.		2lot		
13. Installation and Commissioning of the System at site. 2 job	13.	Installation and Commissioning of the System at site.	2 job		
14 Complete manual for installation, operation & maintenance of all the equipment and accessories of the RNT as per clause 1.6.9 of Section – I.		of all the equipment and accessories of the RNT as per			
15 Charges for pre-dispatch Inspection as per approved ATP 1 Job at integrator's works.	15		1 Job		
16 Charges of 2 days training at AIR site. 1 Job	16		1 Job		

i) R.N.Terminal with 2.4 M Antenna along with IRD (1+1)on GSAT 10 -1 set

(To be attached with Technical Bid without price in the FORMAT as above)

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ii) R.N.Terminal with 2.4 M Antenna along with IRD (1+1)on GSAT 18 -1 set

BILL OF MATERIAL / SCHEDULE OF REQUIREMENTS (OPTIONAL ITEMS)

Sr.	Description	Make	Model	Qty.
1.	Spares for RNT			
	1. C Band LNBC	1 No		
	2. L BAND DVB –S/ DVB –S2 Digital Satellite	1 No		
	Receiver (IRD).	1 No		
	3 L Band 1:4 POWER DIVIDER			
2	Other Items of spares recommend by the OEM/Integrator	1 Lot		

(Not to be considered for Ranking)

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Form of Performance / Bank guarantee Bond

In consideration of the President of India (hereinafter called "The Government") having offered to accept

the terms and conditions of the proposed agreement between
1. We
7. We lastly undertake not to revoke this Guarantee except with (indicate the name of the Bank) the previous consent of the Government in writing 8. This Guarantee shall be valid up to unless extended on demand by the Government. Not withstanding anything mentioned above, our liability against this Guarantee is restricted to Rs (Rupees
Dated the day of For
(indicate the name of the Bank)

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Date:

To
The Addl. Director General (E-WZ),
All India Radio & Doordarshan,
PRATISTHA BHAVAN, 3rd floor,
101, M. K. Road, Mumbai -20

Sir,

Sub: S.I.T.C of Digital C-Band RN Receive Terminal at AIR Ratlam (M.P.).

With reference to the above tender, having examined and understood the instructions, terms and conditions forming part of the tender, we hereby enclose our offer for the supply of the following items as detailed in your above referred tender. Basic Item, No Item, Description Make& Model

We further confirm that the offer is in conformity with the terms and conditions as mentioned in your above referred letter and enclosures. We also understand that the O/o Chief Engineer (WZ), AIR& DD, Mumbai-20 is not bound to accept the offer either in part or in full and that this Office has right to reject the offer in full or in part without assigning any reasons whatsoever.

We have enclosed the required bank guarantee favoring PrasarBharati Chief Engineer (WZ),All India Radio & DD,Mumbai-400 020 issued by the(Bank),(Branch),...... (Date), and is payable at Mumbai, towards Earnest Money Deposit.

Yours faithfully,

Authorized Signatories (Name & Designation, seal of the firm) Date: (Note: This EMD bank guarantee certificate should be prepared on a non judicial stamp paper of Rs. 100/-)

ANNEXURE -E

Manufacturer's Authorization Form (MAF)
Ref: No dated
To,
The Addl. Director General (E-WZ), All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor, 101, M. K. Road, Mumbai -20
Dear Sir,
Tender Reference We who
are established and reputable manufacturers of having factories at and do hereby authorize M/s (Name and
address of Agent/Dealer) to offer their quotation, negotiate and conclude the contract with you against the above invitation for tender offer. We hereby extend our full guarantee and warranty as per terms and conditions of the tender and the contract for the equipment and services offered against this invitation for
tender offer by the above firm. Yours faithfully
Authorized Signatories (Name & Designation)
Date:
For and on behalf of M/s (Name of manufactures)
(Note: This letter of authority should be on the letterhead of the manufacturing concern and should be signed
by a competent person of the manufacturer.)

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Company Profile Details filled in this form must be accompanied by sufficient documentary evidence, in order to verify the correctness of the information.

- 1. Name of Company
- 2. Mailing Address
- 3. Telephone and Fax numbers
- 4. Date of registration of the Company
- 5. Year of commencement of Business
- 6. Name and designation of the person authorized to make commitments to the University
- 7. Contact details of the person authorized to make commitments to the University
- 8. Turnover of the company: 2016-2017

2017-2018

2018-2019

9. Profit of the company2016-2017

2017-2018 2018-2019

- 10. Sales Tax Number
- 11. Income Tax Number
- 12. Whether direct manufacturer or authorized dealers

Signature (Name & Designation)

Date:

(Note: This letter of authority should be on the letterhead of the manufacturing concern and should be signed by a competent person of the manufacturer.)

ANNEXURE-G

CERTIFICATE FROM THE VENDOR STATING THAT THE COMPANY HAS NOT BEEN BLACKLISTED BY ANY GOVERNMENT ORGANISATION

То,	
The Addl. Director General (E-WZ), All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor, 101, M. K. Road, Mumbai -20	
Sir,	
This is to certify that M/sGovernment Organization before submission of the tender document.	_ has not been blacklisted by any
	Yours faithfully
	Authorized Signatories
Datas Fan and an habalf of M/a	(Name & Designation)
Date: For and on behalf of M/s	

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To,

The Addl. Director General (E-WZ), All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor, 101, M. K. Road, Mumbai -20

Sir,

We hereby certify that we have executed the following 3 projects to completion on the similar items (**Digital C-Band RN Receive Terminal**) as offered in the present tender to other Government organizations//Govt. Research Organizations..

Note: Please quote only those projects which are of substantial value.

Name of the Vendor

S.No.	Name of Client/address	Project/Equipment	Clients Contact Details(Including name, email, phone and fax no. and address)	Remarks
1				
2				
3				

Signature (Name & Designation)

Date:

(Note: This letter of authority should be on the letter-head of the manufacturing Concern and should be signed by a competent person of the manufacturer.)

ANNEXURE -I

Details of Support and Service Centers

To,

The Addl. Director General (E-WZ), All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor, 101, M. K. Road, Mumbai -20 Sir,

Name of the Vendor	ſ <u></u>	
radine of the vendor		

S. No

Place

Own Office/ Franchise Postal Address

Contact Person & Contact details Number of Engineers Service Facilities available (Describe in detail)

Signature (Name & Designation)

Date:

(Note: This letter of authority should be on the letter-head of the manufacturing Concern and should be signed by a competent person of the manufacturer)

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Warranty Compliance Statement

To,
The Addl. Director General (E-WZ),
All India Radio & Doordarshan,
PRATISTHA BHAVAN, 3rd floor,
101, M. K. Road, Mumbai -20
Sir,
Subject: S.I.T.C of Digital C-Band RN Receive Terminal at AIR Ratlam (M.P.).
This bears reference to our quotation Ref
Yours faithfully
Signature
(Name & Designation)
Date :
(Note: This letter of authority should be on the letter-head of the manufacturing Concern and should be signed by a competent person of the manufacturer)

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To.

The Addl. Director General (E-WZ), All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor, 101, M. K. Road, Mumbai -20 Sir.

Following are the deviations from the Technical Specifications and Terms and Conditions of the Tender.

Sr	Tender Docume nt Clause	Technical Specification or terms and conditions in the Tender document	Deviati on offered	Reasons & whether deviation adds to the operational efficiency in case of the systems	Remar ks
1					
2					
3					
4					
5					
6					

Note:i) Above information in detail should be furnished separately for each of the items offered.

- ii) Also in case of deviations from any of the terms and conditions of the tender.
- iii) If any deviations from the technical specifications are warranted, reasons for such variations should be specified and
- iv). Whether such variations add to improvement of the overall performance of the systems, if any, should be specifically mentioned and supported by relevant technical documentation as required above.

Signature

Date:

(Name & Designation)

(Commercial Deviations)

[Bidders Name & Address:	
To,	
The Addl. Director General (E-WZ),	

All India Radio & Doordarshan, PRATISTHA BHAVAN, 3rd floor,

101, M. K. Road, Mumbai -20

Sub: S.I.T.C of Digital C-Band RN Receive Terminal at AIR Ratlam (M.P.).

Ref: your enquiry no:

Sir,

The following are the Commercial Deviations and variations from and exceptions to the specifications and documents for the subject package. These deviations and variations are exhaustive. Except for these deviations, the entire work shall be performed as per your specifications & documents.

Sr. No.	Page No.	As specified in the specification	variation to the specification	Withdrawal price in Rs.	Remarks
1					
2					
3					

1					
	Date:		(Signature)		Place:
			(Printed	l Name)	
		(Designa	tion)(Compa	ny Seal)	

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CHECKLIST FOR ELIGIBILITY OF TENDERERS

FIRMS NAME:-Enquiry No: -

Date:-

	ully 140	Date			
Sr. No.	Checklist point	Compliance by Tenderer Yes/No.	Supporting Documentary Evidence uploaded Yes/No	Remark	
1	Earnest Money Deposit (EMD) Demand Draft (Annexure D)				
2	Registration of firm with NSIC for exemption of EMD				
3	Copy of PAN Card				
4	Copy of GSTN registration				
5	Eligibility Criteria, documentary proof of having completed similar type of work/ supply. (Annexure H)				
6	Technical leaflets/manual for the make and model being offered				
7	Technical compliance statement to technical specifications.				
8	Full details of after sales service capability with location of service centers across the country. (Annexure I)				
9	Technical Specifications: Deviations in case of noncompliance (Annexure K, L)				
10	Certificate of Original Equipment Manufacturer (OEM) / Original Equipment Assembler (OEA) of the offered make / models. (Annexure E)				
11	Bill of materials/ Schedule of Requirements (Annexure A & B)				
12	Company Profile (Annexure F)				
13	Certificate of Non Blacklisting (Annexure G)				
14	Warrantee Compliance Statement (Annexure J)				

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