Government of India
Bhabha Atomic Research Centre
Security Electronics & Software Systems Division

Ref: BARC/SESSD/NS/NIT/2022/ I/20349/2022 Date: 20-04-22

Sub: Invitation of quotation for fabrication, installation and commissioning of antenna masts with tripod and enclosures for TETRA base sets at 5 locations BARC, Mumbai and installation and commissioning of UHF antenna for these base sets as per specifications in annexures I and II.

On behalf of President of India, Head, **Security Electronics & Software Systems Division, E&I Group,** Bhabha Atomic Research Centre invites lowest quotation in **a sealed envelope through Registered Post/Speed Post of Indian Postal Services only** for the work given below as per Annexure-I & II enclosed herewith on or before 11-05-22 **up to 14.30 hrs**.

Sl. No.	Description of Job
1.	Fabrication, installation and commissioning of antenna masts with tripod and enclosures for TETRA base sets at 5 locations in BARC, Mumbai and installation and commissioning of UHF antenna for these base sets as per specifications in Annexures I and II.

The sealed quotation envelope shall contain Technical and commercial parts of the offer in **two separate sealed envelopes superscripted with type of bid (differentiated clearly by the item "TECHNICAL" and "COMMERCIAL" on the respective envelopes), description of job, tender Ref. No.** and **due date** as mentioned above. The technical bids will be opened after the due date of NIT and commercial bids of technically qualified bidders only will be opened subsequently.

The terms and conditions are given below:

1. The quotation envelope shall be superscripted with **Description of job, the Tender Ref. No. and due date** as mentioned above.

2. The complete quotation shall reach the following address on or before 11-05-22 **14:30 Hrs**. by Registered Post/ Speed post.

(Kind Attn.: Shri Nikhil Saxena)
Head, SESSD
BARC, Trombay
Mumbai-400085

3. **Printed Letter Head:** Quotation should be printed on the letter head of the firm; computer generated quotation is not valid.

4. **Validity of the Offer:** Validity of the offer shall be for 90 days from the date of opening of quotation. Quotation must also indicate the validity of offer.

5. **Delivery Charges:** Delivery charges, if any, must be clearly mentioned in the offer.

6. **Offer of Firm:** Offers of those firms, who do not submit their quotation as per the details given in the technical specifications and incomplete quotations in any respect shall not be considered. The offer must include detailed cost breakup including development cost, material cost, conversion cost, testing cost, cost of fabrication, inspection, testing, packing, safe delivery and any other charge.

7. The vendor shall submit detailed techno-commercial offer including salient features, components, raw material details and list of components. The offer must include all technical details for proper technical evaluation. The vendor shall confirm compliance of the technical specifications. Any deviation from tender specifications shall be clearly indicated in the offer.

8. All the tender rates should be inclusive of all taxes. Detailed Cost breakup including GST should also be provided. Adjustments (i.e., increase or decrease) in the rate of GST are not allowed. The vendor should mention HSN code and applicable GST for each of the items in the quotation clearly.

9. **The bidder should submit the proforma of qualifying criteria for bidder in Annexure III.**

10. If any of the employee, consultant, or partner of the company is an ex-BARC employee, the same must be stated in the quotation clearly.

11. The Head, SESSD, reserves the right to extend the date of opening the quotations.

12. Head, SESSD, reserves the right to accept/reject any or all quotations without assigning any reason.

18-04-22

19/04/22

(A. K. Bhattacharjee)
Head, SESSD

ए के भट्टाचारजी / A. K. Bhattacharjee
अध्यक्ष, एसईएसएसडी / Head, SESSD
भापअ केंद्र, मुम्बई / BARC, Mumbai

ANNEXURE I: General Terms and Conditions

i. The **specifications and drawing (in Annexure - II)** should be strictly followed by the vendor for this fabrication work.

ii. Drawings/sketches must not be given to any other party.

iii. The vendor must execute the job in phased manner as per Sr. No. 2.3 of Annexure-II.

iv. Fabrication and supply of items and quantity mentioned in the Bill of Quantity in Sr. No. 2.2 and the Technical Specifications in Sr. No. 5.

v. The vendor should facilitate inspection of raw materials by our engineers for quality checks. Only after inspection and approval by our engineers, the vendor can start the machining and assembly process.

vi. The fabrication work shall be subjected to inspection by our engineers at intermediate stages of the fabrication work and also for overall testing of the final product with prior notice to the supplier. All the necessary testing facility such as drawings and tooling involved, gauge, instruments etc. should be provided to the engineer during inspection for testing of the items at supplier's premises.

vii. Inspection and tests shall be carried out by the fabricator as per the requirements detailed in the drawings and specifications. The fabricator shall submit three copies of inspection report to the purchaser for approval. Components found unsatisfactory as to workmanship or material shall be removed by fabricator and replaced by components which are satisfactory and submit the material test certificate to the purchaser for his approval. The finished components shall not be dispatched prior to approval by our engineer.

viii. All the completed products should be delivered after approval by our engineer on or before **3 months** from date of issue of this WO.

ix. Installation will be done at BARC site. The bidder shall do the installation after approval by our engineer. The installation & commissioning work will be inspected by our engineers.

x. The vendor should deploy trained manpower with govt. approved certification. Insurance cover of manpower is mandatory. The vendor should arrange Police Verification Certificate (PVC) of manpower for working inside BARC. The vendor should ensure proper safety measures for the manpower working at heights.

xi. Workers/laborers given by the vendor should be well experienced in Fabrication, installation, servicing and commissioning of similar type of jobs.

xii. The vendor shall follow all the safety procedures as per the normal industrial practice during the execution of the job at site. Any mishap occurring during the work due to unsafe workmanship shall be the vendor's liability.

xiii. Security and transportation rules at BARC, Trombay premises shall be strictly followed.

xiv. Any delay which is attributable to the contractor is liable for imposition of penalty @0.5% per week (max. up to 10%) on the contractor.

xv. Requests for delivery date extension from the vendor shall be considered only if they are made before the due date.

xvi. Any Free Issue Material (FIM) and End use certificate shall not be provided.

xvii. Payment shall be made only on satisfactory completion of work and on production of **three copies of invoice, copy of cancelled cheques, option of payment through ECS / RTGS, advance stamped receipt and guarantee/warranty certificate**. Advance or Part payment against partial delivery cannot be made.

xviii. The party should furnish copy of their PAN no. and GSTIN no.

xix. The invoice should specifically indicate: GSTN, PAN, Location of Supply, Tax component to be separately indicated in the invoice and an undertaking should be submitted by the supplier that the GST has been promptly deposited with the authorities.

xx. It may be noted that the item shall be used for R&D purpose only. BARC is entitled for Concessional GST rate of IGST @5% or CGST @2.5% and SGST @2.5% (refer notification

no. 47/2017 dated 14/11/2017 issued by Ministry of Finance). A certificate will be provided to the supplier to the effect that items are for research purpose only for claiming exemption above GST @5%.

xxi. Income Tax @2% & GST TDS @2% will be deducted from your Bill.

xxii. The supplied items should be on a **warranty for 12 months** from the date of final acceptance. Warranty certificate shall be furnished by the supplier with bills at the time of delivery of the items.

xxiii. Confidentiality clause:

a. No party shall disclose any information to third party concerning the matters under this contract generally. In particular, any information identified as "PROPRIETARY" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.

b. "RESTRICTED INFORMATION" categories under section 18 of the Atomic Energy Act, 1962 and "OFFICIAL SECRETS" under section 5 of the official Secrets Act, 1923:
Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, advisor or the employees of a contractor will invite penal consequences under the aforesaid legislation.

c. Prohibition against the use of BARC's name without permission for publicity purposes:
The contractor or sub-contractor, consultant, advisor or the employees engaged by them, contractor shall not use BARC's name for Publicity purpose through any public media like press, radio, T.V. or Internet without the prior written approval of BARC (Vide circular ref: 2/Misc-9/Lgl/2001/92 dated April 30, 2001).

ANNEXURE II: Technical Specifications

1. OVERVIEW OF WORK

SESSD has installed & commissioned a TETRA communication network in BARC and Anushakti Nagar. SESSD is planning to add five TETRA stations at five different locations for providing voice communication for routine and emergency operations. For this task of adding TETRA stations, BARC will require Fabrication, I&C of Antenna masts, I&C of UHF Antenna for the TETRA base sets.

2. SCOPE OF WORK OF VENDOR

2.1 JOB DESCRIPTION

A. Fabrication, installation and commissioning of Antenna masts with tripod (detachable type) and enclosures for TETRA base sets at 5 locations.
B. Installation and commissioning of UHF antenna for the base sets as per the under mentioned table and technical specifications in Sr. No. 5 and drawings given in Fig 2a, 2b.
C. For Installing and commissioning the setup, Antenna will be installed at the Antenna mast with tripod (detachable type) for connecting to the base set after laying the cable from antenna to base set.
D. For connecting the cable to the base set, lightening protecting unit will be used for protecting the set.
E. Cable will be protected by high-density conduit pipe.
F. RF Coaxial cable crimping tool kit will be used for crimping the RF cable during installation & commissioning of Antenna and Masts at the locations.
G. Radio Programming & Configuration Tool will be used for programming the Radio sets at the fields during installation & commissioning activities for operating the radio and testing the network setup.

2.2 BILL OF QUANTITY

Sr. No	Scope of work of Vendor	Qty.
1.	a. Antenna mast (5m) with tripod: This antenna mast and tripod are going to be used for installing the antenna. Technical specifications as per Sr. No. 1 in detailed Technical specifications section at point 5 in Annexure-II. b. LMR 400 Coaxial cable: This Cable will be used for connecting the fiber antenna to the bas set. Technical specifications as per Sr. No. 2 in detailed Technical specifications section at point 5 in Annexure-II. c. 0dBi fiber glass antenna with Omni-directional radiation pattern: Antenna going to be used for radiating the signal in free space. Technical specifications as per Sr. No. 3 in detailed Technical specifications section at point 5 in Annexure-II. d. Cable conduit (High density): This is for protecting the feeder cable. Technical specifications as per Sr. No. 4 in detailed Technical specifications section at point 5 in Annexure-II. e. Lightning Protection Unit (LPU): LPU going to use for protecting the system from lightening. Technical specifications as per Sr. No. 5 in detailed Technical specifications section at	5 SET

	point 5 in Annexure-II. f. Enclosure for base set (2 nos.): Enclosure will be used for assembling the sets. Technical specifications as per Sr. No. 6 in detailed Technical specifications section at point 5 in Annexure-II. g. Battery for handset (2 nos.): Battery will be used for testing the sets at fields. Technical specifications as per Sr. No. 7 in detailed Technical specifications section at point 5 in Annexure-II. h. Helical Antenna for handset (2 nos.): Antenna are going to be used for testing the sets at fields. Technical specifications as per Sr. No. 8 in detailed Technical specifications section at point 5 in Annexure-II. i. UHF connector male (4 nos.) & UHF connector female (4 nos.): Connectors are going to be used at field. Technical specifications as per Sr. No. 9 and 10 respectively in detailed Technical specifications section at point 5 in Annexure-II.	
2.	RF Coaxial cable crimping tool kit (2 nos.) as per Sr. No.11 in detailed technical specifications section at point 5 in Annexure-II. Tools are going to be used at field for crimping the RF cable.	1 SET
3.	Radio Programming & Configuration Tool - Radio manager 2 (1 no.) as per Sr. No.12 in detailed technical specifications section at point 5 in Annexure-II. This software will be used for programming the sets at fields after installation of sets.	1 SET

2.3 IMPLEMENTATION DETAILS

The detailed scope of work for **Antenna mast and tripod** and **Enclosure of base set** in **Bill of Quantity** is as follows:

A. Design detailing based on preliminary design furnished by BARC in the drawings as per Sr. No. 4.
B. Preparation of General Arrangement (GA) layouts, sub-assembly level & assembly level drawings and obtaining approval from BARC.
C. Identification of raw material including bought out components to be used in various sub-assemblies and assemblies of the equipment.
D. The job should be executed in the following steps:
    i. Phase 1: Design review and approval: Vendor should submit detailed designs and drawings for purchaser's approval.
    ii. Phase 2: Fabrication.
    iii. Phase 3: Pre-dispatch Inspection
    iv. Phase 4: Assembly, Testing & demonstration to user at vendor's site.
E. The vendor must incorporate minor changes (within 5% of total cost) in the design as required at the time of execution of work at no extra cost.
F. Supply of GA layouts, as-built assembly, sub-assembly & component level drawings in soft copy along with two sets of hard copies of above drawings, operation/maintenance manuals and parts catalogue.

3. BARC SCOPE OF WORK

BARC shall arrange all necessary Security related clearances.

4. GENERAL DESIGN FEATURES

A. Design and drawings shall be reviewed by BARC for all components, sub-assemblies and complete assembly. The vendor should start fabrication only after obtaining drawings approval from BARC.

B. All angle bars and pipes of the antenna mast and tripod should be detachable and should be joined with nuts and bolts.

5. DETAILED TECHNICAL SPECIFICATIONS

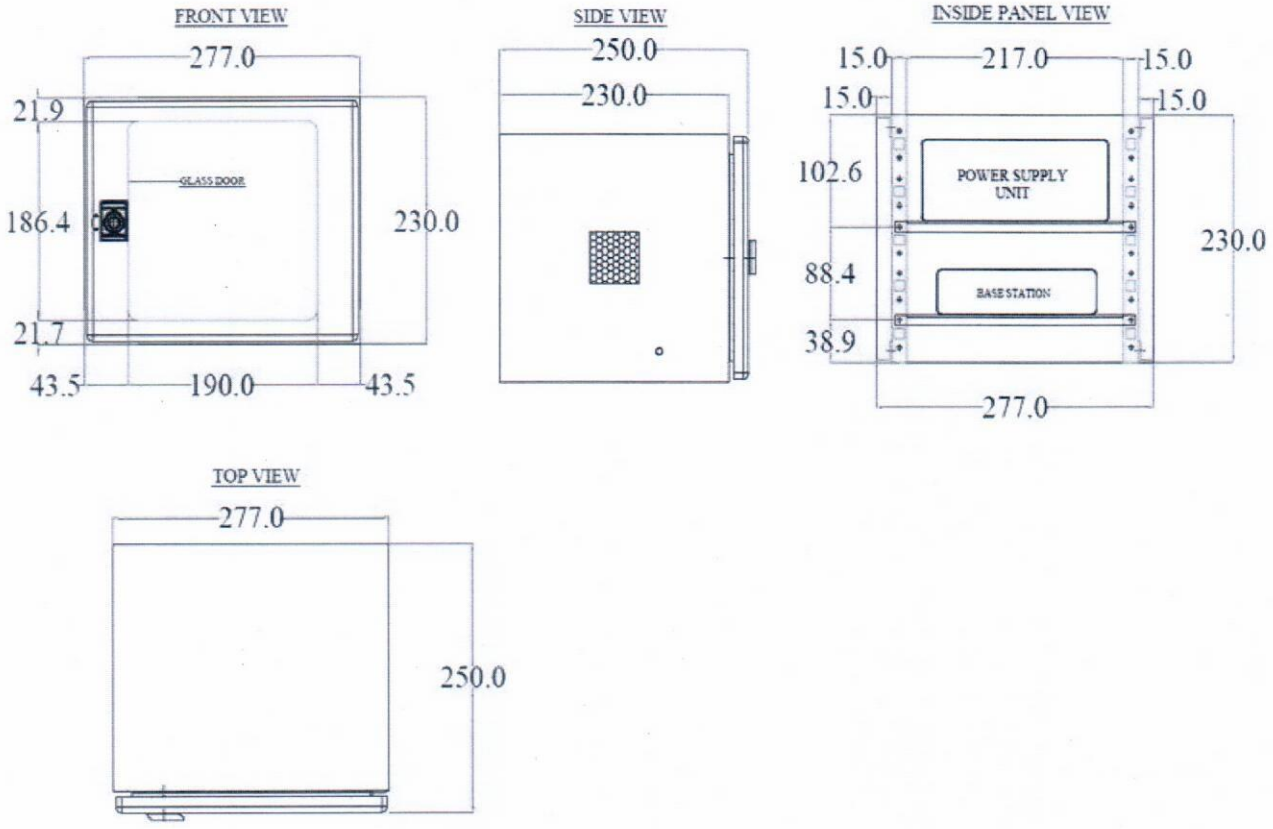
Sr. No.	Specifications	Qualitative Requirement
1.	**5m Antenna mast including guy ropes, hooks, bolts, nuts etc. with detachable side support bars and detachable type tripod** (refer photo and diagram)	
1.	Pipe 1 length	1m
2.	Pipe 1 diameter	76mm
3.	Pipe 2 length	5m (sealed at top)
4.	Pipe 2 diameter	60mm
5.	No. of Guy ropes	3
6.	Guy rope length	4500mm
7.	Guy rope diameter	4mm
8.	Guy rope material	Galvanized steel with PVC sleeve
10.	Tripod Angle Bar 2 (L x W x H)	670mm x 4mm x 34mm
11.	Tripod Angle Bar 3 (L x W x H)	900mm x 4mm x 34mm
12.	Tripod Angle Bar 4 (L x W x H)	420mm x 4mm x 34mm
13.	Support Angle Bar (L x W x H)	850mm x 4mm x 34mm
15.	Base plate radius	73mm
16.	Base plate thickness	6mm
17.	Canopy radius	110mm
18.	Canopy thickness	2mm
19.	Pipes, angle bars, canopy, base plate material	Galvanized iron
20.	Triangular cement block length	350mm sides, 50mm corners
21.	Triangular cement block height	150mm
22.	Hex head bolts	M10 (length 45mm)
23.	Max. head load	10kg
24.	Tolerable wind speed	100kmph.
2.	**LMR 400 Coaxial cable**	

1.	Connector Type	N-male to N-male
2.	Make	Times microwave systems or better
3.	Inner Conductor Material	Solid BCCAI
4.	Inner Conductor Size	2.74 mm
5.	Dielectric Material	Foam PE
6.	Dielectric Size	7.24 mm
7.	Outer Conductor Material	Aluminium Tape
8.	Outer Conductor Size	7.39 mm
9.	Overall Braid Material	Tinned Copper
10.	Overall Braid Size	8.13 mm
11.	Jacket Material	Standard polyethylene jacket
12.	Jacket Size	10.29 mm
13.	Impedance	50 Ω
14.	Velocity of Propagation	84 %
15.	Voltage Withstand	2500 Volts DC
16.	Jacket Spark	8000 Volts RMS
17.	Peak Power	16 kW
3.	**0dBi Fiberglass Antenna**	
1.	Frequency band	380-410 MHz (full band)
2.	Gain	0 dBi
3.	Bandwidth	10 MHz
4.	Radiation pattern	Omni directional
5.	Impedance	50 Ω
6.	VSWR	≤1.5:1
7.	Polarization	Vertical
8.	Maximum Input Power	100 Watt
9.	Connector	UHF/ N-female
10.	Operating Temperature	-30° C to 70° C
11.	Lightning Protection	Direct Ground
12.	Wind Rating	200 Km/Hr
4.	**Cable conduit (High density)**	

1.	Material	PVC
2.	Minimum outer diameter size	1.5 inch
3.	Thickness	1.5mm to 2.5mm
4.	Thermal resistance	-5°C to 60°C
5.	Features	Durable & impact resistant, Fire Retardant
5. Lightning Protection Unit (LPU)		
1.	Type	N type Female-Male
2.	Frequency Range	DC to 6.0 GHz or better
3.	Impedance	50 Ω
4.	Spark over voltage	600 ± 20V
5.	Surge Current	20 kA
6.	Insertion Loss	0.25 dB
7.	Input Power	1000W
8.	VSWR	1.1:1
9.	Construction	Aluminium
6. Enclosure for base set		
1.	Material	Galvanized steel
2.	Enclosure (L x W x H)	277mm x 250mm x 230mm
3.	Painting	Powder coated
7. Battery for handset		
1.	Make	Sepura (Should be compatible with STP9038) or better
2.	Capacity	1160 mAH or better
3.	Voltage	7.4 V max
4.	Dimensions (LxWxD)	83x53x13mm
5.	Weight	61g
6.	Battery Type	Rechargeable Li-polymer
8. Handset antenna		
1.	Make	Sepura (Should be compatible with STP9038) or better
2.	Antenna type	Extended compressed helical Antenna
3.	Nominal impedance	50 Ω
4.	VSWR at resonance	1.5:1

5.	Connector type	SMA Male
6.	Operational temperature range:	-20°C to +55°C (useable range -30°C to +75°C)
9. UHF Connector Male type		
1.	Connector	UHF- Male
2.	Cable type	LMR 400
3.	Connector plating	Nickel
4.	Contact plating	Nickel
5.	Attachment Method	Crimp sleeve, Solder pin
6.	Impedance	50Ω
10. UHF Connector Female type		
1.	Connector	UHF- Female
2.	Cable type	LMR 400
3.	Body Plating	Nickel
4.	Attachment Method	Solder pin
5.	Impedance	50Ω
11. RF Cable crimping tool kit		
1.	Make	Proskit or better
2.	Material	Metal
3.	Type	Coax Crimping Kit
4.	Dies	5
5.	Stripper	Rotary
6.	Contents	Crimping tool, Rotary coaxial cable stripper, Round cable cutter, screw drivers, carry case
12. Radio Programming & Configuration Tool		
1.	Software Tools	Radio Manager 2
2.	About	a. A comprehensive management tool, Radio Manager 2 provides simultaneous programming of multiple radios enabling efficient configuration and software updates of the radio fleet. b. Radio Manager is an integrated suite of software tools to configure and program Sepura TETRA Radios. With a database driven system, it tracks and manages the entire fleet of Sepura radios providing rich asset management

		capability. It also provides comprehensive reporting capabilities for reviewing and auditing.
3.	Functions	**a. Radio Manager Application: -** Configure and mange a fleet of Sepura radios. Create customisation files and batches to program Sepura radios. **b. Radio Manager Programming Client: -** Connect to the radio and execute the relevant batch. It also provides diagnostic functions. Programming Clients can be installed locally on the same PC with the RM Application or remotely for distributed programming. **c. Radio Manager Database Manager: -** Interfaces with the database and enables a number of database management tasks, such as back up and restoration in an easy and secure manner. **d. Radio Manager Database: -** All of these tools use the Radio Manager database, which lies at the heart of the system and holds all the data used to program and manage the radios.



NOTE: All dimensions in mm.

Fig 1. Enclosure for base set

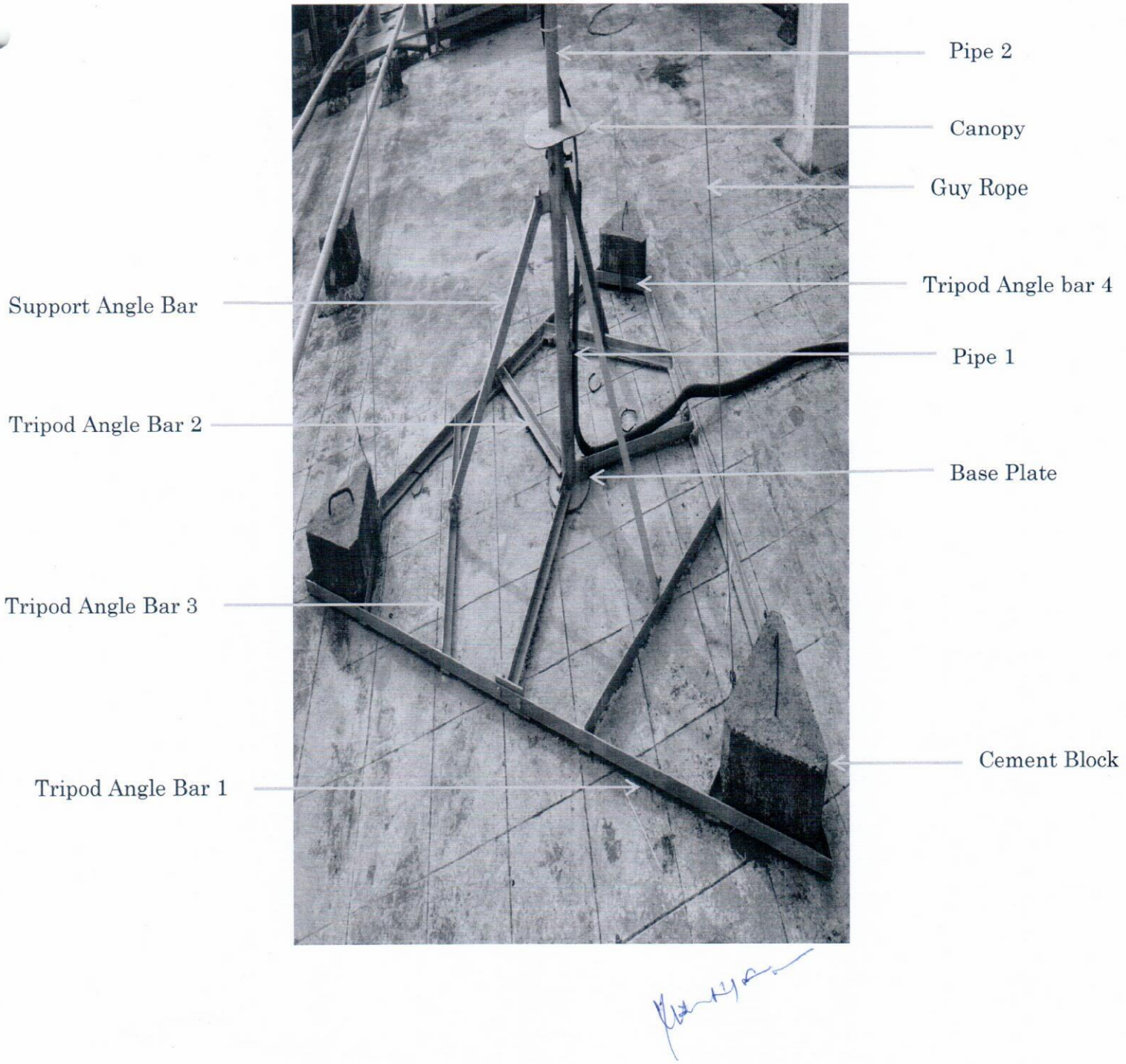
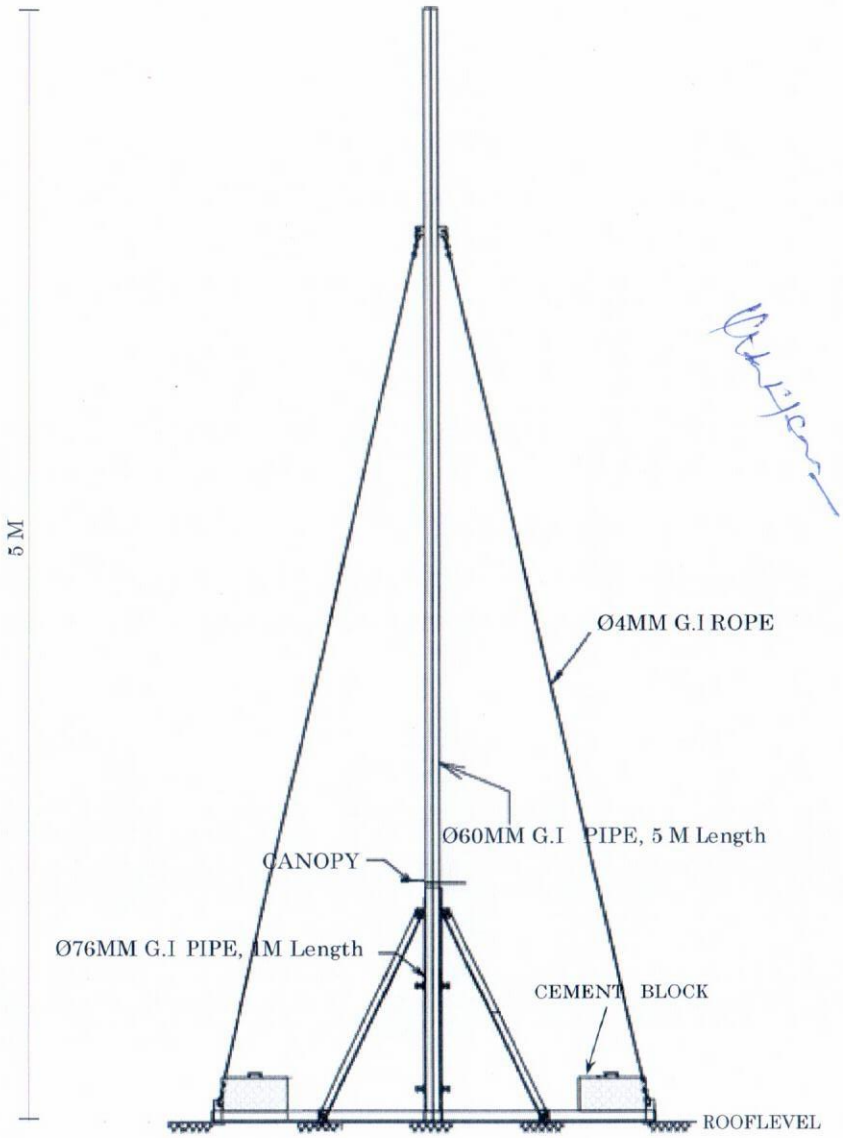
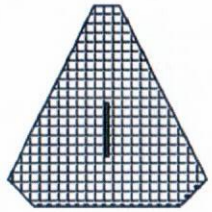


Fig 2a. 5m ANTENNA MAST AND TRIPOD



Antenna Mast Side View



Cement Block with Iron grip Top View

NOTE:

1. All bars and pipes should be detachable type and should be attachable with nuts and bolts.
2. The base plate should be welded to Pipe 1.
3. The canopy should be welded to Pipe 2.

Fig 2b. 5m ANTENNA MAST AND TRIPOD

6. BOUGHT OUT ITEMS

The vendor shall prepare a comprehensive list of all bought out items required for the work and get approval from BARC before going ahead with their procurement. Components shall be of best quality from reputed manufacturers to have long mean time between failures. The components procured should be brand new having suitable warranty from OEM.

7. DOCUMENTATION

A. Design Report & Drawing
   i. Detailed design report giving the design criteria, features, design calculations considering load & sizing of the components & all relevant design data concerning each sub-assembly/ component shall be furnished. The design shall be reviewed by BARC & if required changes shall be incorporated.
   ii. Two sets of finally approved as built drawings (assembly & part drawings) considering changes accorded during manufacturing & testing shall be submitted to BARC in hard copy and in electronic form.

B. Operation & Maintenance (O & M) Manual
   The vendor shall submit two sets of O&M manual in hard copy and in electronic form. The O&M manual shall also contain all the datasheets and user manuals for bought out components which are provided by OEM.

8. DELIVERABLES

A. Fabrication and supply of items and quantity mentioned in the Bill of Quantity in Sr. No. 2.2 and the Technical Specifications in Sr. No. 5.
B. Documentation as per Sr. No. 7.

9. ACCEPTANCE/REJECTION CRITERIA/PRE-DISPATCH INSPECTION

A. The work/job/items under the scope of supply shall be subject to surveillance/ inspection by the indenter or his authorized representative during the progress of the work and/or before final delivery.
B. Final acceptance shall be subject to meeting the technical specifications as per Sr. No. 5 and after its successful interfacing with the systems.
C. Failure in execution of any of the above operation or missing functionalities will lead to rejection.

10. PACKAGING & TRANSPORTATION

A. The items shall be properly packed, suitably crated and protected from damage during transport, transit and storage at site. The packing shall include adequate cushioning, blocking, bracing, anti-skidding, hoisting and tie down provisions.
B. The vendor shall notify the dispatch of the goods well in advance to BARC giving all pertinent details of this packing. This is necessary to avoid delays/damages during unloading of the packages and storages at site.
C. Safety of the items being transported shall be the responsibility of the vendor & hence vendor shall make necessary arrangement to deliver the goods safely to BARC. After receipt at BARC, the items will be assembled by vendor and tested to meet the functional requirements.

11. DELIVERY SCHEDULE, GUARANTEE & GENERAL INSTRUCTIONS

11.1 DELIVERY PERIOD & DELIVERY SCHEDULE

All the deliverable items as per Sr. No. 8 shall be delivered to BARC within 3 months from the date of placement of purchase order. The vendor shall submit to the purchaser the detailed time schedule covering various aspects involved in the manufacturing & supply of ordered items such as preparation of drawings, procurement of raw materials & bought out components, fabrication/machining, parts inspection, assembly, testing and safe delivery in the form of Gantt chart or PERT chart.

11.2 GUARANTEE

A. The vendor shall guarantee that the goods furnished by him shall be in full accordance with the requirements of the tender technical specifications.
B. The vendor shall provide the warranty that the goods are new & of high quality and that the goods are free from defects in design, materials or workmanship as applicable. The warranty shall cover for a period of **12 months** from the date of final acceptance.
C. If within the expiry of the above stipulated warranty period, the goods or a part thereof are found defective because of workmanship or materials, the vendor shall at his own expense repair or furnish a new part of proper workmanship & material duly approved by BARC. The same shall be installed & tested thoroughly. The warranty period for replaced parts or repair works shall be the same as above.

11.3 GENERAL INSTRUCTIONS

A. Suitable QA procedures must be followed by the vendor. The fabrication shop should be accessible to BARC representatives for evaluating the QA procedures followed.
B. All items shall be of best quality and brand new from reputed manufacturers procured from their authorized agents/principals. Used materials/recycled items/repaired items will not be acceptable and will be rejected.
C. The fabricator shall not sub-contract any or all the work without written consent from the purchaser. The vendor shall be responsible for the part of work that is being sub-contracted.
D. Payment terms & conditions: 100% after Final acceptance.

ANNEXURE III: - Proforma of bidder qualification

Sl. No.	Requirements	Compliance (Yes/No)
1.	Udyam registration for MSME (Copy of Udyam certificate to be submitted)	
2.	PAN and GSTIN (Copies of PAN and GST registration to be submitted)	
3.	Firms willing to bid for above mentioned job shall have been vetted by Security Section of BARC.	
4.	Firms willing to bid for above mentioned job shall have mechanical facilities like the following for fabrication of 25 mtr antenna mast: a. Lathe Machine, b. Digital Readout (DRO) Milling Machine, c. Band Saw Machine, d. Shearing Machine etc. Also, the firm shall have measurement tools like the following: a. Wind Speed Meter Gauge, b. Earth Ground Resistance Tester, c. Grounding Resistance Meter, d. Digital Vibration Meter etc. (All the supporting documents are to be submitted)	
5.	All the supervisors and workers should have valid Police Verification Certificate (PVC) not expiring during the tender period (i.e., from the date of issue of this enquiry till completion of job after getting work order). The list of manpower available with firm shall be submitted along with their details of PVC.	
6.	Workers/laborers given by the vendor should be well experienced in fabrication, installation, servicing and commissioning of similar type jobs.	
7.	Experience of at least 3 years for fabrication, installation and commissioning of Antenna mast with tripod, antennas. (Supporting documents/Purchase Orders for similar works undertaken for BARC or other government organizations).	
8.	Data sheets of all the items according to bill of quantity.	
9.	Organizational details including organizational chart, manufacturing facilities, testing and inspection facilities, manpower etc.	

Note: Indenting officer may visit service provider's site for verification/evaluation of the latter's facilities and seek further info. /documents as deemed necessary.