THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
COMPUTER CENTRE

TENDER DOCUMENT / REQUEST FOR QUOTATION

- Dismantling of Existing RF Tower
- Design/Supply/Erection of New Tower
- Foundation Work
- Recommissioning of Existing Point-to-Point RF Link

Technical specifications and site-dependent particulars shall be confirmed through site survey and approval by the competent University authority.

Tender particulars

Reference -	COMP / __339__ / 2026-27
Method-	Sealed quotation
Issue date	3/11/2026
Last date	19/11/2026
Opening date	20/11/2026
Site	M K Amin Arts and Science College, Padra, Gujarat
Contact for site visit	Mr. Arnav Bhatt Ph#+91 96240 24247
Completion period	15 days from the date of confirmed order
Validity	30 days

1. Background and objective

The University intends to replace the existing RF-supporting tower at the above site, preserving the University-owned RF dish, radio and reusable network equipment, and restoring its existing point-to-point connection to the remote endpoint. The successful contractor shall undertake the work on a turnkey basis, including safe dismantling, engineering, civil construction, supply, erection, installation, alignment, testing, documentation and approved scrap clearance.

2. Site information to be studied and submitted upon on site visit

Item	Site detail / bidder confirmation
Existing tower location / type / height	
Proposed tower location / target height	Drawing and dimension from defined datum
RF antenna / radio / mount	Cambium ePMP force 400C radio device
Remote endpoint / distance / frequency	University Press, Kirti Stambh
Power / cable path / surge protection	Existing facilities and replacement scope
Existing scrap estimate	Material inventory and indicative weight

Any measurements and dimensions furnished must be verified at the mandatory site visit. Bidder shall report discrepancies immediately.

3. Detailed scope of work

3.1 Survey, planning, and pre-execution submittals

- Conduct joint site survey; document obstructions, access, lifting/staging space, neighbouring structures, underground/roof services and safe shutdown requirements.

- Prepare method statement, risk assessment, lifting and fall-protection plan, dismantling sequence and proposed RF outage/rollback plan.
- Provide engineer-certified tower and foundation drawings with calculations for applicable dead/live, wind, antenna, seismic and stability loads; provide materials and fastener schedule.
- Obtain the University's written technical approval before manufacture, foundation work or dismantling; identify any required local/telecom/other permissions for approval by the competent authority.

3.2 RF equipment preservation and dismantling

- Record equipment serial numbers, cables, connectors, antenna azimuth/tilt, photographs and existing signal measurements; label and safely isolate equipment.
- Carefully unmount and store existing RF antenna, radio, brackets and designated reusable cable/accessories; damage or loss to be made good at contractor cost.
- Dismantle existing tower and required base elements under a safe approved sequence using competent personnel, lifting gear, PPE, barricading and exclusion zones.
- Segregate University assets/reusable materials from approved scrap; clear debris and restore affected surfaces.

3.3 Civil and structural construction

- Excavate/prepare subgrade and construct suitable reinforced concrete foundation/plinth or rooftop support in accordance with approved structural design and actual site bearing/structural conditions.
- Supply approved reinforcement, concrete, anchor bolts, templates, base plates, grout, weatherproofing and finishing. Record reinforcement/anchor inspection prior to concreting.
- Allow specified concrete strength development and inspections before tower loading; do not assume a fixed footing size without design or site verification.
- Provide drainage, corrosion/weather protection and reinstatement of damaged paving, waterproofing, access paths or building fabric.

3.4 New tower supply and erection

- Supply at least 42 meters self-supporting, triangular, 3 legs, ground based, hot dip galvanized structural tower, mounting structure and required accessories with approved coating, connection and anchor specifications.
- Install, plumb, torque/check fixings, secure access where relevant, and furnish an as-built structural completion/fitness certificate from qualified engineer.
- Provide safe maintenance access/fall-protection arrangements. Provide grounding, equipotential bonding, surge and lightning measures based on approved design and site assessment.

3.5 RF reinstatement and network commissioning

- Reinstall existing dish/radio with approved mount and appropriate separation/clearance, weatherproof connectors, strain relief, drip loops and cable management.
- Perform precision azimuth/elevation/polarization alignment to existing remote endpoint, in coordination with Computer Centre and other endpoint operator.
- Retain current network configuration unless University expressly directs changes; back up settings where possible and do not reset equipment without permission.
- Test radio link and end-to-end IP traffic; submit test report with measured RSSI/SNR or equivalent, negotiated link rate, throughput, latency, packet loss, uptime during soak test, and before/after photographs.
- Where existing radio, cable or remote endpoint is defective, promptly document evidence and seek a written variation; no unauthorized substitution or additional payment.

4. Technical specification and compliance schedule

Parameter	Requirement / approval basis
Nominal tower height	42 meters, measured from foundation top
Topology	ground-based
Structural design	Engineer-certified design for site, wind exposure, equipment loading and relevant current IS standards

Materials / coating	member thickness, hot-dip galvanizing standard and thickness
Antenna loading allowance	Existing equipment
Foundation details	By qualified design; drawings, bearing verification, concrete grade and test records
Bolts, baseplates and earthing	Grade/standards, fastener protection, earth test criterion
Lightning/surge	Approved site-specific arrangement
New Cable	Up to 160 Mtr UTP Cat 6 cable in PVC pipe if internal and HDPE or equivalent for external. Billing on actuals.
RF endpoints	Existing device reused; remote end at University Press
Link acceptance	Thresholds in Section 8, finalized from baseline/engineered link budget
Defect-liability/warranty	12 months for new works; existing RF equipment excluded except contractor-caused damage

Applicable standards shall be selected and verified by the structural consultant: e.g., IS 875 (Part 3) for wind load; other structural, concrete, steel, seismic, electrical/earthing and safety standards applicable to the final design. Naming a standard does not replace an engineer's site-specific calculation.

5. Scrap inventory, valuation and handover

- All existing tower steel is University property unless and until formally classified and transferred as approved scrap by the competent authority.
- Site team and contractor shall jointly prepare a dismantling inventory with approximate weights and photographs; identify items excluded from disposal.
- Bidder shall quote a separately priced CREDIT / BUYBACK AMOUNT for approved scrap. Evaluation shall compare bids on the same gross-price, scrap-credit and tax basis
- No RF dish, radio, active network device or other asset may be sold/removed as scrap
- Scrap shall be removed only after inventory sign-off and University-authorized handover, using weighment/receipts if required. Applicable tax/accounting treatment shall be confirmed by Finance.

6. Eligibility and bidder submission

- Firm registration, PAN, applicable GST details and authorized signatory details.
- Evidence of relevant tower fabrication/erection/dismantling and civil-foundation projects within 2 years (completion certificates/work orders as approved).
- Name/credentials of structural engineer responsible for design/certification; proposed field supervisor, riggers and safe-working-at-height personnel.
- Proposed methodology, indicative construction timeline, equipment and safety plan, technical compliance sheet, signed site visit certificate.

7. Execution, safety, approvals and liability

- University will coordinate campus access, location approval; contractor shall obtain and comply with all approvals allocated to it in the final tender.
- Contractor bears responsibility for personnel safety, statutory labour compliance, lifting equipment certification, barricading, PPE and third-party damage in contractor-controlled work.
- Contractor shall stop work on unsafe conditions and report incidents immediately. No work over occupied areas without approved protection/exclusion.
- Any deviation in tower geometry, material, foundation, RF mount or location requires written approval; oral instructions shall not establish payable variation.
- The site shall be made safe outside working hours. Contractor to maintain suitable insurance/indemnities as specified by University Legal/Engineering.

8. Inspection, testing, and acceptance

Stage	Acceptance evidence
Before dismantling	Joint asset inventory, photographs, baseline link measurements
Before concrete	Approved foundation drawings; excavation/subgrade and reinforcement/anchor inspection
Before tower loading	Concrete test evidence/curing, fastener and base inspection
After erection	Verticality, bolt torque records, coating check, earthing checks and engineer certificate
RF recommissioning	Measurable parameters RSSI/SNR, packet loss, throughput, RTT
Soak test	Continuous operational observation for 72 hours; log agreed outage tolerance
Final handover	As-built drawings, test records, asset/scrap handover, warranty, maintenance instructions, University sign-off

Final acceptance requires both structural/civil completion and a demonstrated end-to-end RF/IP link. If an agreed criterion fails, contractor shall rectify at no extra cost where failure is attributable to the work.

8A. Indicative execution schedule and outage control

The indicative completion period is 15 calendar days from confirmed work order and approval of structural drawings, subject to the schedule specified in the work order. The vendor shall submit its own achievable critical-path programme, including design approval, procurement lead times, foundation curing, tower erection and network cutover.

- Days 1–2: joint site survey; asset inventory; method statement; preliminary drawings; approval submissions.
- Days 3–4: design finalization, procurement and foundation/site preparation (subject to approvals and ground conditions).
- Days 5–7: RCC works, inspections, concrete curing/strength verification and tower fabrication/delivery; overlap only where technically feasible.
- Days 8–9: controlled dismantling, tower erection, corrosion/fastener/earthing inspections, antenna remounting.
- Days 10-11: link alignment, connectivity testing, soak test, snag closure, scrap handover and final documentation.
- Day 12-15 – Testing and event logging
- Any acceleration, temporary mounting or interim communications are outside the base price unless expressly included in the accepted bid.

8B. Technical details and implementation plan to be submitted by bidder

The document may be shared with one or more prospective contractors solely to validate feasibility, completeness, indicative costs and realistic schedule. This is not an invitation to award work or authorization to start. Comments received may inform neutral final specifications; eventual procurement shall follow applicable University procedure.

- Confirm proposed tower configuration/height, structural capacity, corrosion coating, engineer certification and any recommended changes.
- Identify foundation approach and inputs needed (soil bearing/rooftop assessment); flag assumptions that cannot be priced before survey.
- Provide antenna/ODU condition assessment, accessories or consumables to replace, and link performance achievable with existing hardware.
- Return a line-by-line deviation list and budgetary item-wise price, with separately disclosed scrap credit and taxes.
- Identify permissions, unsafe conditions, exclusions, warranty commitments and post-installation service support.

9. Commercial and contract conditions

- Contract shall be lump-sum turnkey including item-rate for variable components, with only expressly identified provisional quantities eligible for measurement.
- Bidder shall include mobilization, scaffolding/lifting, civil work, approvals under contractor scope, steel tower, equipment handling, alignment, testing, transport, housekeeping and consumables.
- Taxes shown separately and applied as confirmed by University Finance; bid comparison/evaluation formula declared uniformly in NIT.
- Completion 15 days; extension, liquidated damages (if any), variation limits, security, warranty, dispute resolution and payment milestones to be approved under University rules.
- Suggested payment milestones (subject to approval): 45 days after tower erection, link commissioning and handover.
- Contractor shall not remove approved scrap until written authorization. University may require scrap-credit settlement or separate receipt/accounting as advised by Finance.
- Award may be made only after responsive technical evaluation and commercial comparison under adopted procurement procedure.

10. Annexure A — Schedule of rates / financial bid

Sl.	Description	Qty	Unit	Amount ₹
1	RF survey, equipment preservation and dismantling	1	Job	
2	Civil foundation/plinth incl. excavation, reinforcement, concrete, anchors	1	Job	
3	New tower supply/fabrication, galvanizing and mounting	1	Job	
4	Erection, lifting and structural certification	1	job	
5	Earthing, lightning/surge, cable management	1	job	
6	RF dish reinstallation, alignment and IP testing	1	job	
7	Networking from Active Equipment using CAT 6 UTP cable including link testing	1	job	
A	GROSS WORK AMOUNT (sum 1–7)			
B	LESS: SCRAP BUYBACK CREDIT (separately quoted)			
C	NET BASE AMOUNT (A minus B; tax basis to confirm)			
D	GST / other applicable tax (show treatment explicitly)			

E	TOTAL NET PAYABLE / comparison amount	

Bidder statement: We have inspected the site, priced the complete work and separately valued only those items that the University approves for scrap transfer.

Bidder signature, seal, date: _____

11. Annexure B — technical compliance / deviation statement

Tender requirement	Comply (Y/N)	Offered details / document reference
Tower height/type		
Certified tower and foundation design		
Material / corrosion protection		
Civil work and site reinstatement		
RF equipment preservation and reinstallation		
Link testing and acceptance		
Safety plan and structural certificate		
Scrap credit and controlled handover		
Completion / warranty		

12. Annexure C — site-visit and asset-record sheet

Field	Joint recorded value
Date / University representative / bidder	
Current tower dimensions and condition	
New tower proposed location	
Ground vs rooftop / available foundation area	
RF equipment models and serial numbers	
Cable lengths / available spare	
Photo references / tower weight estimate	
Known obstructions / utility routes / restrictions	

13. Annexure D — bidder checklist

- Signed tender pages and technical deviations; firm registration/PAN/GST
- Relevant experience and structural-engineer details
- Method statement, safety plan and completion schedule
- Completed price bid with explicit scrap credit and tax breakup
- Tender fee/EMD/performance documents, only where applicable
- Site-visit certificate, if required by final NIT

14. Reference documents for preparing final version

Approvals: Computer Centre (RF Link), University Engineer/structural consultant (tower/civil), Finance/Purchase (scrap and procurement), and competent University authority.