

SINGLE TENDER

Single Tender No: IITH/EE/GAJENDRANATH/2026/S/T011

Date:14.08.2026

Indian Institute of Technology Hyderabad invites online bids (e-tender) in Two Bid (Technical + Financial) System for of the following item :

Item Description	Qty	Tender fee (GST 18%)	EMD
Equipment for deployment of indigenous 5G gNB Solution for FWA Connectivity in India - Stage 2	01	Rs. 2,360.00	Rs.3,20,000.00
All the formats of the Annexures are given below			

The Tender Document can be downloaded from <https://eprocure.gov.in/eprocure/app> OR Institute website- <https://iith.ac.in/tenders>

The bid is to be submitted online only through the E-procurement portal of <https://eprocure.gov.in/eprocure/app> up to the last date and time of submission of tender.

Schedule of Dates

Sr. No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	14.08.2026	06.00 PM
2	Bid Submission Start Date	14.08.2026	06:30 PM
3	Bid Submission Close Date	29.08.2026	06.00 PM
4	Opening of Bids	31.08.2026	11.30 AM

No manual bids will be accepted. All quotation should be submitted online through CPP Portal only (<https://eprocure.gov.in/eprocure/app>)

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact details of the helpdesk are +91 0120-4711 508, +91 0120-4200462, +91 0120-4001002, +91 0120-4001005 and support-eproc@nic.in

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:
<https://eprocure.gov.in/eprocure/app>.

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link **"Online bidder Enrollment"** on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: *My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.*

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a

standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact details of the helpdesk are +91 0120-4711 508, +91 0120-4200462, +91 0120-4001002, +91 0120-4001005 and support-eproc@nic.in.

TERMS & CONDITIONS

1. It may kindly be noted that your bid should:

- a. Two Bid system (Technical Bid + Financial Bid)

2. The acceptance of the quotation will rest with the competent authority, who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotations received without assigning any reason.
3. Price quoted should be as per the BoQ and valid for a minimum period of 60 days from the date of opening of the quotation. The rate quoted should be free delivery at IITH Stores, Kandi 502285.
4. Complete specification with manufacturer's name and address should be given while quoting. Literature/Pamphlets should also be enclosed wherever applicable
5. In cases of agents quoting on behalf of the manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
 - i) The manufacturer directly or through one agent on his behalf; or
 - ii) Agent on behalf of only one principal.
6. In case the items in the enquiry are covered by any rate contract or running contract finalized by any other state or central Government, it should be specified in your quotation and accepted contract rates should also be mentioned.
7. Delivery period: Material should be delivered and installed within 30 days from the date of issue of purchase order. The offered delivery period shall have to be strictly adhered to in case an order is placed.
8. Liquidated Damages Clause for delays: The applicable rate is 0.5% per week and maximum deduction is 10% of the contract price.
9. If the deliveries are not maintained and due to that account the purchaser is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained there by will be recovered from the defaulting supplier.
10. **Payment: - No advance payments are allowed**

90% payment will be made on successful completion of each phase to the satisfaction of the Institute/Professor and the balance 10% payment will be released after submission of performance bank guarantee (PBG) for the value of 3% of the total order value, valid for a period of warranty plus 60 days .
11. IIT Hyd is registered with Dept. of Scientific & Industrial Research, Govt. of India and concessional customs duty is livable vide notification No.51/96-Customs dated 23.07.1996.
12. Warranty & Maintenance contract / Validity of the Software: One (01) year from the date of installation.

13. Installation & Testing: The installation shall be completed within a week from the date of intimation regarding the arrival of the equipment in the institute. The installed system shall be performance tested at our premises in accordance with the manufacturer's/supplier's recommendation/specifications. Tests shall demonstrate the proper operation of the instrument and all components.
14. All supplies are subject to inspection and approval before acceptance. Manufacturer warranty certificates and manufacturer/Government approved lab test certificate shall be furnished along with the supply, wherever applicable.
15. Kindly furnish your PAN & GST Number etc. in your quotation for our records.
16. Conditional tenders will not be accepted.
17. **Requirement of registration:** Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.
 - i. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).
 - ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
 - iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
 - iv. An entity incorporated, established or registered in such a country; or
 - v. A subsidiary of an entity incorporated, established or registered in such a country; or
 - vi. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - vii. An entity whose beneficial owner is situated in such a country; or
 - viii. An Indian (or other) agent of such an entity; or
 - ix. A natural person who is a citizen of such a country; or
 - x. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

For details about registration procedures please visit the above mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates as **per Annexure** for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

18. **Public Procurement (Preference to Make in India), Order 2017:**

- a. IIT Hyd shall compare all substantially responsive bids to determine the lowest valued bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and its subsequent amendments. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.
- b. As per the above order and its subsequent amendments “Local Content” means the amount of value added in India which shall be value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all the custom duties) as a proportion of the total value, in percent. Accordingly, the suppliers will be classified in following categories.
 - i) Class I local Supplier – has local content minimum 50%
 - ii) Class II local Supplier – has local content minimum 20%
- c. **Verification of Local Content:** The Class I Local Supplier /Class II Local Supplier at the time of bidding shall be required to indicate the percentage of local content and provide self-certification as per Annexure D that the items offered meet the local content requirement. The details of the location(s) at which the local value addition is made also needs to be specified.
- d. **The bidders can be debarred for a period up to two years as, per Rule 151(iii) of GFR 2017, in case of false declaration.**

Complaint Redressal Mechanism:

In case any complaint received by the procuring agency or the concerned Ministry/Department against the claim of a bidder regarding local content/domestic value addition in a product, the same shall be referred to competent authority at IITH or the relevant Ministry.

The bidder against whom the complaint is received shall be required to furnish the necessary documentation in support of the domestic value addition claimed in the product to authority. If no information is furnished by the bidder, such laboratories may take further necessary action, to establish the bonafides of the claim

A complaint fee of Rs. 2 lakh or 1% of the value of the domestically manufactured products being procured (subject to a maximum of Rs.5 lakh), whichever is higher, to be paid by Demand Draft to be deposited with Procuring Institute. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

False declarations will be in breach of the Code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

19. ARBITRATION:

- a. Unless otherwise specified, in all cases of disputes which cannot be settled by mutual negotiations, the disputes or differences shall finally be settled and binding on both parties by arbitration in conformity with the rules of Indian Arbitration Act, 1940. All disputes or differences what so ever arising between the parties out of relating to the construction, meaning and operation or effect of the general terms and conditions including the Purchase Order or the breach thereof shall be settled by Arbitration Act, 1940 and the award made in pursuance thereof shall be binding on the parties.
- b. Performance of the purchase order shall continue during arbitration and any subsequent proceedings.
- c. The Jurisdiction and Venue of arbitration shall be Hyderabad. The Arbitrator will be the Director, IIT Hyderabad, or his nominee.

20. **Note for MSME/NSIC Bidder:** If in the view of bidder, any exemption /preference/ relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

21. All disputes shall be settled in the courts of Hyderabad/Sangareddy only.

22. The Director, IIT Hyd reserves the right to accept the offer in full or in parts or reject summarily or partly and also reserves the right to cancel the tender at any stage without assigning reasons.

23. **Tender Fees :** Tender Fees of **Rs. 1,180/- (including 18% GST)** in the form of Demand Draft/Bankers cheque in the name of Director IIT Hyd, should be submitted. The Demand Draft/Bankers Cheque in original should be posted/couriered/given in person to the Stores & Purchase Section of IIT Hyd , before the last date of Opening of Technical Bid. In case of non-receipt of original document before the due date of opening of technical bid, the uploaded bid will be summarily rejected.

24. Earnest Money Deposit (EMD)

- a. The tender documents must be accompanied by Earnest Money Deposit (EMD) of **Rs. 3,20,000/-** in the form of Insurance Surety Bonds/Account Payee/Demand Draft/ Bank guarantee from any commercial Banks on any Scheduled/Nationalized Bank **in favour of the Director, Indian Institute of Technology Hyderabad.**
- b. **The original document (other than MSME/NSIC) should be posted/couriered/given in person to the Stores & Purchase Section of IIT Hyd on or before opening of**

Technical Bid. In case of non-receipt of original document before the due date of opening of technical bid, the uploaded bid will be summarily rejected.

Note: If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

25. Security Deposit: Within fifteen (15) days of the award of contract, the vendor shall furnish a Security Deposit amounting to **3%** of the purchase order value in the form of Insurance Surety Bonds, Account Payee, Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Performance Bank guarantee from any commercial Banks or payment online of a scheduled bank in the name of Director, IIT Hyd favouring the Director, IIT Hyd.

For Online Payment of EMD /& Tender Fees : The EMD/Tender Fees can be also be paid online , the bank details are as follows:

Name of the Bank & IIT Hyderabad	Account Number	IFSC CODE	Branch code
SBI	30412797764	SBIN0014182	14182

The Online payment proof needs to be uploaded along with the Technical Bid.

Technical Specifications for Mineral Liberation Analyzer

Supply of equipment for deployment of Indigenous 5G gNB Solution for FWA Connectivity – Stage-2

S No.	Description	Qty
1	Power Backup	2
2	Outdoor Power Distribution Rack & 5G gNB Rack	2
3	Terrace Mounted Telecom Mast	2
4	5G FWA Outdoor CPE	100
5	Wi-Fi Access Points	200
6	Site Survey, Site & RF/Network Planning	2
7	RAN Installation, CPE Installation, Commissioning & Provisioning Tota	2

1. Warranty: One Year
2. Delivery Period: Within 45 Days
3. Payment: After delivery and installation

Detailed Specifications:

1. Power Backup Technical Specifications - 2 Qty

Sl.n o	Parameters
1.	19", 4U, Subrack System
2.	AC input: 1 x 125A/1P, Single phase, 3-wire
3.	AC SPD, Class C, included
4.	Provision for 4 x eSure R48-3000e3 Rectifier Module
5.	Controller: M530B

6.	DCDB Load: LLVD, MCB, 2 x 63A/1P, 1 x 6A/1P BLVD, MCB, 2 x 63A/1P, 2 x 32A/1P changed considering your DC 48V Load: (31A+31A+16A+16A) = 94A
7.	DCDB Battery: MCB, 2x125A/1P - 3 x eSure R48-3000e3 Rectifier Module included
8.	48V / 200Ah VRLA Battery

2. Outdoor Power Distribution Rack & 5G gNB Rack Technical Specifications -2 Qty

2.1 Physical & Structural Requirements

2.1.1 Dimensions

- External Height: 58.5" (excluding base & canopy)
- External Width: 32"
- External Depth: 26"
- **Rack Capacity:** 33U usable space, strictly conforming to **EIA-310-E standard**.
- **Mounting:** Floor-mounted with fixed **C-Channel base**.

2.1.2 Material

- Main enclosure: Mild Steel (MS) HR sheet, thickness 1.6 mm
- Bottom base: MS 5mm C Channel for enhanced structural integrity and corrosion resistance

2.1.3 Modular Construction

- Top Cover (Canopy) with Eye Bolts
- Main Box with Door & Base (pre-assembled)
- **Mounting Rails:** Adjustable 19" standard rails, suitable for blade servers and rectifiers of size 1.75" (H) × 18.75" (W) × 15" (D) and 7" (H) × 18.75" (W) × 15.75" (D) respectively.

(D) respectively.

- **Finish:** UV-resistant powder coating, light shade (RAL 7035 or equivalent) to minimize solar heat absorption.

2.2 Environmental Protection & Security

- **Ingress Protection:** Minimum **IP55** rating (IP65 preferred), maintained post cable installation.
- **Solar Shielding:** Double-wall roof/canopy and internal walls insulated with **FR-grade 6 mm thermal insulation foam sheet**.
- **Security:** Door equipped with a **3-point locking system**.

2.3 Thermal Management (High-Capacity Cooling)

- **Cooling Method:** High-capacity forced air ventilation (open-loop pull).

- **Cooling Capacity:** Minimum **2,500 W net heat dissipation**.
- **Fan Configuration:**
 - 8 fans (120 mm × 120 mm, 48 VDC)
 - 4 inlet fans + 4 exhaust fans
 - Each fan rated ≥ 240 CFM at 40mm H₂O static pressure
- **Control:** PWM variable speed with thermostatic regulation for energy efficiency.
- **Heat Dissipation Formula:**

$$Q \text{ (Watts)} = V_{\text{Net}} \text{ (CFM)} \times \Delta T \text{ (}^{\circ}\text{C)}$$

$$3.17$$

$$Q = 240 \text{ CFM} \times 4 \text{ Fans} \times 8 \text{ (}^{\circ}\text{C)} / 3.17 = 2,425 \text{ W}$$

- Maximum permissible temperature rise (ΔT): **8°C** at full 2,500 W load.

2.4 Filtration & Pressure Management

- **Dual-Stage Filtration:**
 - Stage 1: G4 (EN779) / ISO Coarse 60%+ for large debris
 - Stage 2: M5 (EN779) / ISO ePM10 50% for fine dust protection

2.5 Electrical Safety

- **Grounding:** Dedicated copper earth bar; all metallic components bonded.
- **Cable Entry:** IP-rated cable glands/sealed plates to maintain enclosure integrity.
- **Surge Protection:** AC & DC SPDs on all incoming power and data lines.

2.6 Additional Accessories

- Door sensor switch (for open/close status)
- Temperature & humidity sensor
- Ambient Temperature & humidity sensor
- Smoke sensor (real-time alarm)

3. TERRACE MOUNT SELF-BALANCED TELECOM MAST Technical Specifications -2 Qty

3.1 Scope of Supply

This specification covers the design, engineering, manufacture, supply, transportation, and installation of a Self-Balanced Tri-Pole Mast, complete with base platform assembly, bolts & nuts, accessories, and all associated fittings, suitable for telecom applications as per approved drawings and relevant standards.

3.2 Mast Configuration

- Type: Self-Balanced Tri-Pole Mast
- Structural System: Three tubular steel poles interconnected with bracings
- Installation: Free-standing/self-supporting (no guy wires)
- Application: Antenna mounting/equipment requirements support
- Service Life: Minimum 20 years

3.3 Height and Geometry

- Overall Height: As specified in tender / BOQ (typ. 6 m to 9 m or as required)
- Number of Poles: 3 Nos.
- Pole Arrangement: Equilateral triangular configuration
- Taper: As per structural design

3.4 Design Criteria

- Design Standard:
 - **IS 875 (Part 1, 2 & 3)**
 - **IS 800:2007**
 - IS 802 (where applicable)
 - TIA-222 / EN 1993 (if specified)
- Wind Speed: As per project location (basic wind speed per IS 875)
- Terrain Category: As specified
- Importance Factor: As per applicable code
- Seismic Zone: As per IS 1893 (if applicable)
- Factor of Safety: As per relevant standards

3.5 Materials

1.1 Mast Members

- Material Grade:
 - Structural Steel: IS 2062 E350 / E250 or equivalent
 - Tubular Sections: IS 1161 / IS 4923
- Yield Strength: Minimum 250–350 MPa (as applicable)

1.2 Fasteners

- Bolts, Nuts & Washers: High tensile bolts Grade 8.8 / 10.9
- Standard: IS 1367 / ISO equivalent

3.6 Base Platform & Foundation Interface

- Base Type: MS Structural Base Platform Assembled with bolts
- Base Plate Thickness: As per design
- Anchor Bolts:
 - Type: L-bolt / J-bolt / straight bolt with plate
 - Material: High tensile steel

3.7 Corrosion Protection

- Surface Preparation: Shot blasting to Sa 2.5
- Hot Dip Galvanization: As per IS 4759 / IS 2629
- Minimum Zinc Coating: $\geq 610 \text{ g/m}^2$ (≥ 85 microns)
- Fasteners: Hot dip galvanized or mechanically galvanized

3.8 Fabrication & Welding

- Fabrication: As per approved fabrication drawings
- Welding Standard: IS 816 / IS 9595
- Weld Inspection: Visual inspection and NDT as required
- Dimensional Tolerance: As per IS standards

3.9 Testing & Quality Assurance

- Raw Material Test Certificates (MTC)
- Galvanization Test Certificates
- Bolt Test Certificates
- Dimensional Inspection Reports
- Factory Acceptance Test (if specified)

3.10 Erection & Installation

- Erection Method: Crane-assisted / manual as per site condition
- Alignment & Plumbness: $\pm 1/1000$ of height
- Torque Tightening: As per bolt manufacturer recommendation
- Safety Compliance: As per statutory and site safety norms

4. 5G FWA OUTDOOR CPETechnical Specifications -100 Qty

S.N	Description	
1.	Interface	1G/ WAN Port 3 *10/100/1000 Mbps LAN Ports 1 * m.2 slot 1 * Nano SIM Card Slot
2.	External Power	Supply 48V/0.5A Standard POE
3.	Environment	Operating Temperature: 0°C~40 Operating Humidity: 10%~90% non-condensing
4.	RAM	DDR4 1GB
5.	Flash	128MB NAND Flash
6.	Antenna	Built in 2* omnidirectional 8dbi 2.4G and 4G/5G external antennas Built in 2* omnidirectional 8dbi 5.8G and 4G/5G external antennas
7.	Wireless Standards	IEEE 802.11a/n/ac/ax 5 GHz, IEEE 802.11b/g/n/ac/ax 2.4 GHz
8.	Frequency	2.4 GHz and 5.8 GHz
9.	Signal Rate	600Mbps at 2.4 GHz, 2400Mbps at 5.8 GHz
10.	Wireless Security	WPA/WPA2, WPA-PSK
11.	5G Modem	RM520N-GL
12.	Mobile module	5G Sub-6Ghz SA/NSA 2.1/3.3Gbps DL (4x4 MIMO), 900/600 Mbps UL (2x2); 4G LTE Cat 20 up to 2.0 Gbps DL/ 200M Mbps UL; 3G up to 42 DL/ 5.76 UL Mbps
13.	3GPP Release	Release 15/16 depending on the hardware version
14.	WAN	1 x WAN port 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover
15.	LAN	4 x LAN ports, 10/100/1000 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover
16.	Access control	Flexible access control of SSH, Web interface, CLI and Telnet

17.	WEB UI	HTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, multiple event log servers, firmware update availability notifications, event log, system log, kernel log, Internet status
18.	FOTA	Firmware update from server, automatic notification
19.	Weatherproof Enclosure	• IP65 • Outdoor
20.	Mounting	• Pole/Wall Mounting (Kits included)

5. Wi-Fi Access Points Technical Specifications - 200 Qty

Sl.no	Description	
1	Interface	1x Gigabit Ethernet (RJ-45) Port (Support 802.3af/at PoE (Alternative A) and Passive PoE)
2	Button	Reset
3	Power Supply	• 802.3af/at PoE (Alternative A) • 24V Passive PoE (+4,5pins; -7,8pins. PoE Adapter Included)
4	Max. Power Consumption	EU: 10.4 W US: 10.7 W
5	Antenna	• 2.4 GHz: 2x 3 dBi • 5 GHz: 2x 5 dBi
6	Wireless Standards	IEEE 802.11a/b/g/n/ac
7	Frequency	2.4GHz, 5GHz
8	Signal Rate	• 802.11ac: 5G: 6.5 Mbps to 867 Mbps(MCS0-MCS9,NSS = 1 to 2 VHT20/40/80) • 802.11n: 6.5 Mbps to 300 Mbps (MCS0-MCS15, HT 20/40) • 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11b: 1, 2, 5.5, 11Mbps • 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
9	Wireless Functions	• Multiple SSIDs (Up to 16 SSIDs, 8 for each band) • Enable/Disable Wireless Radio • Automatic Channel Assignment • Transmit Power Control (Adjust Transmit Power dBm) • QoS(WMM) • MU-MIMO • Omada Mesh* • Airtime Fairness • Beamforming

		• Band Steering • Load Balance • Reboot Schedule • Wireless Schedule • Wireless Statistics based on SSID/AP/Client • Repeater Mode
10	Weatherproof Enclosure	• IP65 • Outdoor
11	Mounting	• Pole/Wall Mounting (Kits included)
12	Centralized Management	• Omada Cloud-Based Controller • Omada Software Controller

6. Site Survey, Site & RF/Network Planning Technical Specifications - 2 Qty

6.1 Executive Summary

A detailed site survey was conducted at Ramakrishnapuram for deployment of Indigenous 5G gNB solution for FWA connectivity. The survey assessed infrastructure availability, power, rooftop feasibility, RF planning, backhaul feasibility, coverage potential and deployment constraints. The site is a government school rooftop location with approximately 600–700 houses available for service coverage.

6.2 Detailed Site Survey Checklist

S.No	Section	Checklist	Survey Observation
1	Server Room or Space availability for Hosting Outdoor gNB Enclosure and CN	Rack availability for CU/DU server	Not available
2		Rack availability for Rectifiers with 230V power supply	Not available

3		230V Power sockets availability to the	Not available
		CU-DU Rectifier	
4		230V Power sockets	Not available
		availability to RU Rectifier	
5		Server Room or NOC availability for CN	One room is available in the school, and the School Administrator has agreed to allocate it for installation of the RAN and Power Distribution Unit
		Deployment	
6		Duct availability for	Not available
		FH from CU-DU server to RU	
7		Power supply backup availability	Not available
		3.2KW DC Power	
8		Space Availabilty to Host Outdoor gNB	Yes Space available
		Enclosure on rooftop/base	
9		Space Availabilty to Host Outdoor Power Distribution	Yes Space available
		Enclosure on rooftop/base	
10	Existing Tower/Mast details/Building	Tower height from ground	NA
11		Tower height from building	NA
12		Space to Mount the	NA
		RU on tower	
13		Tower base type	NA
14	Tower/Mast Requirement for gNB from ground or Building	Building height	Single floor School and it's Height is 4 Meters
15		Mast Height required	18-20 Meters Mast required
16		Clearance(or) visibility for the sector 1 and sector	If Required Height Mast is deployed, visibility is there
		2	
17		Type of Mast	Need to Decide
18		Tower Base type	Concrete Type
19	Existing eNB/gNB details	Check nearby tower distances	300 Meters Jio and Airtel
20		4g Ru height	NA
21		4g antenna height	NA
22		4g antenna direction	NA
23		4g antenna angle	NA

24		4g coverage distance	NA
25	Power Requirement	Wattage availability at the site (Required	Yes available
		1.64 kW AC or 3.2	
		kW DC for single cell site)	
26		Grid, backup	Not available
		generator, UPS capacity available	
27		Single Phase and 3 Phase	Single and 3 Phase Power is Available
28	Cable Lengths	FH OFC Length Required between	Total 160 Meters required for Both
		CU-DU and RU	RUs
29		Power cable length for HPRU from SMPS/Power Rack	Total 160 Meters required for Both RUs
30		Power cable length for CU-DU server	3 Meters
		from SMPS/Power supply	
31		Length of GNSS antenna cable from outdoor gNB	80 Meters
		rack/Server room	
32		GNSS visibility to sky	Yes
33	PTP- BackHaul link	BH Line of Sight	No
34		Tower required for BH link at source (Access Point)	A 30-meter tower is required on top of the Collectorate Office building, which has an approximate height of 15 meters, to achieve line of sight as there is currently
			no clear visibility.
35		Tower required for BH link at Destination (Client)	A 30-meter tower is required on top of the School building, which has an approximate height of 4 meters, to achieve line of sight
			as there is currently no clear visibility.
36		Load-bearing capacity, mounting	
		feasibility	
37		Tower type Concrete base	Concrete Type
38	Network	BH Optical or LAN	Need to check with
	Availability	and Speed	T-Fiber
39		Wireless BackHaul or Wired BackHaul	Wireless BackHaul

40		Availability of SFP based switch	NA
41		Availability of CoreNetwork CPU	Installation is required on T-Fiber NOC located at Gachibowli
42		Connection between CoreNetwork and cu/du	1G through Backhaul
43		Check the CN and DU are in same network	No
44		Remote access availability required for CN/CU-DU	T-fiber will provide
45	Other gNB Information	Other Available Network(like jio/airtel/vi) (check rsrp)	Jio and Airtel - 70dBm to - 80dBm
46		Frequency bands of other Available Networks	
47		Signal coverage and radius(existing)	
48	FWA Installation	Poles for FWA installation	Current Poles are available
49		Pole Height for FWAs	4-4.5 Meters
50		230V Power socket Supply for FWA	Required Permission from T-Fiber to get power from Houses
51		Near by houses for present to supply 230V	Yes
52		Length of Ethernet cable required for FWA power	10-15 Meters
53		No.of FWAs installation required in village	
54	APs Installatoin	230V Power socket is availability	Yes available
55		Distance 2.4GHz WiFi Signal reach from FWA to APs	

6.3 Power Availability Assessment

Based on survey observations, commercial power infrastructure is limited. Dedicated rectifier power arrangements and backup power systems will be required before deployment.

6.4 Safety & Accessibility Assessment

The school premises provide physical access for installation activities. Site permissions and administrative support are available. Safety compliance, grounding and mast foundation verification are required during deployment.

6.5 RF & Network Planning

The proposed deployment location is a school rooftop. An 18–20 meter mast is recommended to achieve required visibility and coverage objectives. Nearby operator infrastructure from Airtel and Jio is approximately 300 meters away.

6.5.1 Coverage Planning

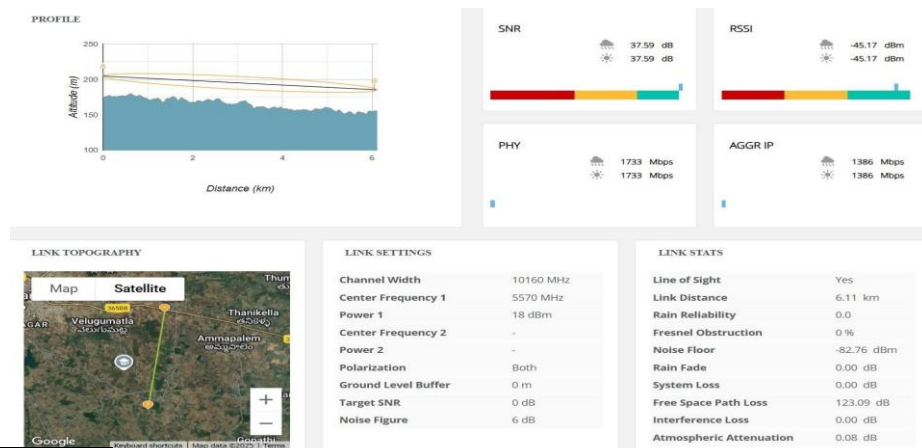
The target service area contains approximately 600–700 households. Coverage planning should be optimized to provide reliable FWA connectivity across the village.

6.5.2 Antenna Planning

Installation on a rooftop mast of 18–20 meters is recommended. Final antenna azimuth, tilt and mounting arrangements should be validated during deployment.

6.5.3 Backhaul Planning (1G/10G)

Wireless backhaul is proposed between Khammam ZHQ and Ramakrishnapuram. The design should support current bandwidth requirements with scalability for future upgrades.



SITE A



Site Name	17.24079502947763, 80.22015355992278
Location	17.240795/80.220154
Address	66R9+6XW V.Venkatayapalem Telangana 507318 India
Elevation	175m
Height	30m
Tilt	-0.18 °
Heading	187.28 °

SITE B



Site Name	17.186323, 80.212867
Location	17.186323/80.212867
Address	56P7+5CP Khammam Raghavapuram Telangana 507208 India
Elevation	155m
Height	30m
Tilt	0.18 °
Heading	7.28 °

RADIO A



Radio Type	C6x-PTP
Radio Name	v. Venkatayapalem Khamr
Noise Figure	6
Transmitter Power	+ 18 dBm
Mismatch/Cable Loss	0 dB
Antenna Gain	+ 30 dBi

RADIO B



Radio Type	C6x-PTP
Radio Name	Ragava Puram
Noise Figure	6
Transmitter Power	+ 18 dBm
Mismatch/Cable Loss	0 dB
Antenna Gain	+ 30 dBi

6.6 PTP Backhaul Reference

Reference PTP planning indicates a link between Khammam ZHQ and Ramakrishnapuram with approximately 8.68 km distance. LOS assessment indicates feasibility subject to final physical verification.

6.7 Link Budget Considerations

Link budget calculations shall consider transmitter power, antenna gain, receiver sensitivity, free-space path loss and fade margin to ensure reliable service availability.

6.8 House Identification & Service Potential

Survey information indicates approximately 600–700 houses in the village, providing strong potential for broadband and FWA service adoption.





భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Indian Institute of Technology Hyderabad

Kandi, Sangareddy - 502 284, Telangana, India

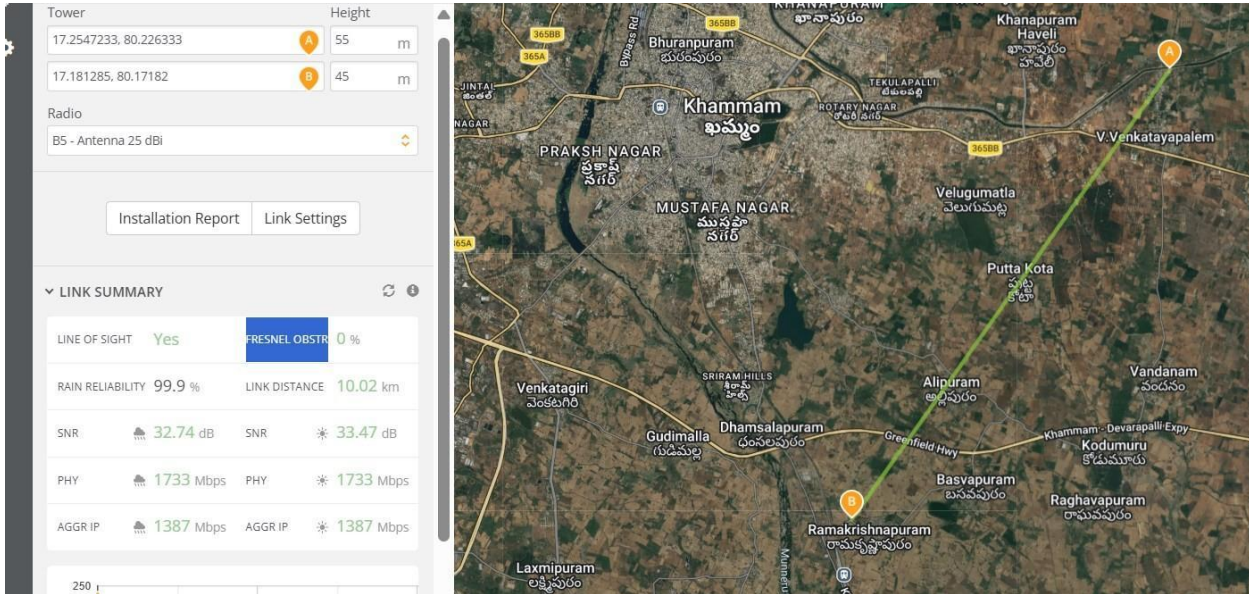
Phone: 040-23016071:

Website: www.iith.ac.in, Email: office.stores@iith.ac.in



6.9 Risks & Recommendations

- Provide dedicated power and backup systems.
- Deploy 40–50 meter mast for required coverage.
- Conduct final LOS and RF validation.
- Complete grounding and lightning protection.
- Validate backhaul capacity requirements before commissioning.



7. RAN Installation, Commissioning & Provisioning Technical Specifications - 2 Qty

Activity	Scope of Work	Deliverables
RAN Installation, Commissioning & Provisioning	- Installation of 5G gNB/RAN equipment, antenna mounting - power and network connectivity - software configuration, commissioning, integration, - service activation.	Installation Report, Commissioning Report, Configuration Details, Site Acceptance Report, Photographs, Test Reports.

8. CPE Installation, Commissioning & Provisioning

Technical Specifications -2 Qty

Activity	Scope of Work	Deliverables
CPE Installation, Commissioning & Provisioning	- Installation of Customer Premises Equipment (CPE) - Alignment and connectivity verification - Configuration commissioning - service activation, and end-to-end connectivity validation.	CPE Installation Report, Commissioning Report, Configuration Details, Connectivity Test Results, Photographs.

9. End-to-End FWA Service Validation

End-to-End FWA Service Validation	Verification of connectivity between RAN and CPE, throughput testing, latency testing, service stability checks, and user acceptance validation.	Performance Test Report, Throughput Results, Network Validation Report.
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All installation, commissioning, provisioning, configuration, test, and acceptance reports related to the deployment at NIMS Hospital and Ramakrishnapuram shall be compiled and submitted in soft-copy format through a Pen Drive upon successful completion of the deployment activities.

For any technical query related to enquiry you may to contact

Dr. CH. Gajendranath Chadhuary , Dept of Electrical Engg, Email: gajendranath@ee.iith.ac.in

For Commercial query

Mr. Venkatesh M - Senior Assistant Registrar, Email : ar.purchase@iith.ac.in

Mr. K. Ramesh Kumar - Assistant Registrar, Email : ar.stores@iith.ac.in

Ms. D Chanchala Devi- Deputy Registrar, Email : hos.snp@iith.ac.in

With CC: office.stores@iith.ac.in

ANNEXURE - A

UNPRICED TECHNICAL BID

(Bidder should provide the following details on Letter head)

Quotation No :

Date:

Name of the Bidder _____

GeM bid No. _____

Sr.No	Item Description	Country of Origin	Make & Model	HSN Code	GST %	Qty
1						
2						
3						
n						

Other Terms & Conditions

1	Payment terms	:
2	Delivery Period from the date of Issue of PO	:
3	Warranty	:
4	Any other additional terms	:

ANNEXURE – B
MANUFACTURER'S AUTHORIZATION & WARRANTY SUPPORT DECLARATION

(ON OEMs Letter head)

Date:

Tender No / GeM bid no:

To
The Director,
Indian Institute of Technology Hyderabad,
Kandi, Hyderabad – 502 284

We, _____ [name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee, warranty, availability of spare parts and AMC support in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Authorized representative of the Manufacturer

Authorized representative Bidder

Signature:

Signature:

Name:

Name:

Address:

Address:

Mobile No:

Mobile No:

Email ID:

Email ID:

ANNEXURE – C

PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by <i>{Full address of Purchaser}</i>	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily? <i>{Attach a certificate from the Purchaser/ Consigner}</i>	Contact Person along with Telephone no., Fax no. and e-mail address.

Signature and Seal of the Manufacturer/ bidder

Place:

Date:

ANNEXURE – D

BIDDER INFORMATION FORM

Company Name : _____

Registration Number : _____

Registered Address : _____

Name of Partners /Director:_____

City : _____

Postal Code : _____

Company's Establishment Year : _____

Company's Nature of Business : _____

Company's Legal Status 1) Limited Company

(tick on appropriate option) 2) Undertaking

3) Joint Venture

4) Partnership

5) Others (In case of Others please specify)

Company Category 1) Micro Unit as per MSME

2) Small Unit as per MSME

3) Medium Unit as per MSME

4) Ancillary Unit

5) SSI

6) Others (In case of Others please specify)

CONTACT DETAILS

Contact Name: _____

Email Id : _____

Designation : _____

Phone No : (_____) _____

Mobile No : _____

BANK DETAILS

Name of Beneficiary : _____

A/c. No. CC/CD/SB/OD: _____

Name of Bank : _____

IFSC NO. (Bank) : _____

Branch Address and Branch Code: _____

Other Details

Vendor's PAN No. _____

Vendor's GST _____

ANNEXURE – E

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely _____ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNUAL MAINTENANCE CONTRACT

We hereby certify that the Annual Maintenance Contract for the equipment, after expiry of warranty period will be charged as follows :

For Comprehensive AMC

- 1) 1st year ____ % of the equipment value
- 2) 2nd year ____% of the equipment value
- 3) 3rd year ____% of the equipment value.

For Non - Comprehensive AMC

- 1) 1st year ____ % of the equipment value
- 2) 2nd year ____% of the equipment value
- 3) 3rd year ____% of the equipment value.

We also certify that the spares for the equipment will be available for the equipment for ____ years.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNEXURE – G

ACCEPTANCE OF TENDER TERMS
(To be given on Company Letter Head)

Date: DD/MM/YYYY

To,
The Director
Indian Institute of Technology Hyderabad
Kandi – 502 285.Telangana, India

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender' from the web site(s) namely _____ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

NO RELATIONSHIP CERTIFICATE

(On Company Letterhead)

1. I/We hereby certify that I/We* am/are* related/not related(*) to any officer of IIT Hyderabad.
(If Related provide the details of the employee)
2. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.
3. I//We also note that, non-submission of this certificate will render my / our tender liable for rejection.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

Declaration for Local Content from OEMs Letter Head

(To be given on Company Letter Head - For tender value below Rs.10 Crores)

(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

Date: _____

To,
The Director,
Indian Institute of Technology Hyderabad,
Kandi, Sangareddy 502284

Sub: Declaration of Local content

Tender Reference No: _____

Name of Tender / Work: - _____

1. Country of Origin of Goods being offered: _____

2. We hereby declare that items offered has ____% local content **(Please provide exact %)**.

3. Details of location at which local value addition will be made / made: (Complete address to be mentioned) _____

“Local Content” means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*“*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.”*

**Yours Faithfully,
(Signature of the Bidder/OEM, with Official Seal)**

ANNEXURE –J

**CERTIFICATE
ON COMPANY LETTERHEAD**

CERTIFICATE BY BIDDER- DPIIT REGISTRATION

“ I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, / if from such a county, has been registered with the Competent Authority (copy of the Registration Certificate enclosed) . I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

Signature with Date and Stamp
Of the Bidder

FORMAT FOR PERFORMANCE BANK GUARANTEE

To
Indian Institute of Technology Hyderabad.
Kandi, Sangareddy 502284

Dear Sirs,

In consideration of the Indian Institute of Technology Hyderabad (hereinafter referred to as the "Buyer" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors administrators and assigns) having issued to (Name of the seller) with its Registered / Head Office at (hereinafter referred to as the "Seller" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) an order bearing Purchase Order No. dated and the same having been unequivocally accepted by the seller resulting into a Contract between the buyer and the seller for supply of, more fully described in the said Purchase Order and the buyer in terms of one of the provisions of the said Purchase Order and whereas the Seller has undertaken to produce a Bank Guarantee amounting to Rs. _____, which is 3% of the Contract value in aggregate for Performance and Warranty to the Buyers.

We, the _____ bank hereby expressly, irrevocably and unreservedly undertake the guarantee as Principal obligators on behalf of the SELLER that, in the event that the BUYER declares to us that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the BUYER by reason of breach/failure to perform by the said SELLER of any of the terms and conditions in the contract related to the Performance and Warranty clauses, we will pay you, on demand and without demur, all and any sum upto (3% of the contract value) Rs. _____ only at any one instance under this Guarantee. Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said contract. We shall not be entitled to ask you to establish your claim or claims under this guarantee but will pay the same forthwith without any protest or demur. We undertake to effect the payment upon receipt of such written demand.

We shall not be discharged or released from the undertaking and guarantee by any arrangements, variations made between you and the SELLER, indulgence to the SELLER by you, or by any alterations in the obligations of the SELLER or by any forbearance whether as to payment, time performance or otherwise.

We further agree that any such demand made by the BUYER on the Bank shall be conclusive, binding, absolute and unequivocal notwithstanding any difference or dispute or controversy that may exist or arise between you and the Seller or any other person.

In no case shall the amount of this guarantee be increased.

This Performance-cum-Warranty guarantee shall remain valid for a period until 60 days beyond the warranty period i.e. upto _____

Subject to the terms of this Bank Guarantee , the issuing bank hereby irrevocably authorizes the beneficiary to draw the amount upto Rs. _____ (10% of the total contract value) for breach/failure to perform by the Seller of any of the terms and conditions of the contract related to performance and warranty clause. Notwithstanding anything mentioned herein, the total drawings under the Guarantee by the buyer shall not exceed 10% of the total contract value. Partial drawing and multiple drawings under this Bank Guarantee are allowed within the cumulative amount and subject to each such drawing not exceeding 10% of the contract value.

This guarantee shall be continuing guarantee and shall not be discharged by any change in the constitution of the Bank or in the constitution of M/s. _____. We undertake not to revoke this guarantee during the currency except with previous consent of BUYER in writing.

Notwithstanding anything contained herein above:

- a) Our liability under this Guarantee shall not exceed Rs. _____ (Rupees_____only (in words)
- b) This Bank Guarantee shall remain valid until 2 months from the date of expiry of warranty period of the contract i.e. upto _____ (mention the date) which is 2 months after expiry of the warranty period and the BG shall cease to be valid after _____ irrespective whether the Original Bank Guarantee is returned to us nor not.
- c) We are liable to pay guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written demand or a claim in writing on or before _____ (Expiry Date)

Dated the _____ day of _____ (month and year)

Place

Signed and delivered by _____ (name of the bank)

Through its authorized signatory
(Signature with Seal)

ANNEXURE - N

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on _____ day of the month of _____ 20XX, between, on one hand, the President of India acting through Shri _____, Designation of the officer, Ministry / Department, Government of India (hereinafter called the “BUYER”, which expression shall mean and include, unless the context otherwise required, his successors in office and assigns) of the First part and M/s _____ represented by Shri _____, Chief Executive Officer (hereinafter called the “BIDDER/ Seller” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure (Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Ministry/Department of the Government of India/PSU performing its functions on behalf of the President of India.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered in with a view to : -

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the BUYER

- 1.1. The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, with demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2. The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3. All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

Commitments of BIDDERS

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
 - 3.1. The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
 - 3.2. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the

Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.

- 3.3. BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 3.4. BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5. The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether India or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9. The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10. The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11. The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.12. If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.
- 3.13. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

3.14. The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.

4. Previous Transgression

4.1. The BIDDER declares the no previous transgression occurred in the last three years immediately before signing of the Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.

4.2. The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit)

5.1. While submitting commercial bid, the BIDDER shall deposit an amount _____ (to be specified in RFP) as Earnest Money/Security Deposit, with the BUYER through any of the following instruments:

(i) Bank Draft in favour of _____

(ii) A confirmed guarantee by an Indian Nationalised Bank, promising payment of the guaranteed sum to the BUYER on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the BUYER shall be treated as conclusive proof of payment.

(iii) Any other mode or through any other instruments (to be specified in the RFP).

5.2. The Earnest Money / Security Deposit shall be valid upto a period of five years or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the BUYER, including warranty period, whichever is later.

5.3. In case of the Implementing Agency a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions of Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the dame without assigning any reason for imposing sanction for violation of this pact.

5.4. No interest shall be payable by the BUYER to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

6. Sanction for Violations

6.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-

(i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

(ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.

(iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

(iv) To recover all sums already paid by the BUYER, and in case of an Indian Bidder with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

(v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the buyer, along with interest.

(vi) To cancel all or any other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

(vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.

(viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

(ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.

(x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

6.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1(i) to (x) of this Pact also on the commission by the BIDDER or any one employed by it or acting

on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

- 6.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor (s) appointed for the purposes of this Pact.

7. Fall Clause

- 7.1. The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

8. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact of payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

10. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

11. Validity

- 11.1. The validity of this Integrity Pact shall be from date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the BUYER and the BIDDER/Seller, Including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

11.2. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12. The parties hereby sign this Integrity Pact at _____ on _____

Buyer

Bidder

Name of the Officer

CHIEF EXECUTIVE OFFICER

Designation

Deptt./MINISTRY/PSU

Witness

Witness

1. _____

1. _____

2. _____

2. _____