



CENTRAL UNIVERSITY OF HARYANA

JANT- PALI

MAHENDERGARH- 123031

(Established under the Act of Parliament)

(www.cuh.ac.in)

Phone Nos. 01285-260111, e-mail : cucc@cuh.ac.in

e-TENDER NOTICE

E-Tenders are invited for Supply, Laying and installation of Fibre Optics Cable in the University Campus. The bid document can be downloaded from the website of Chandigarh Administration at <https://etenders.gov.in>.

1.	Downloading of e-tender document	Start Date: 04.05.2022 at 01.00 P.M. End Date : 25.05.2022 at 02.00 P.M.
2.	Pre Bid Query by email	Last Date : 16.05.2022 at 04.00 P.M.
3.	Date of submission of e-tender Physical submission of EMD and necessary documents	Start Date: 04.05.2022 at 01.00 P.M. End Date : 25.05.2022 at 02.00 P.M.
4.	Physical submission of EMD and necessary documents	Start Date: 05.05.2022 at 01.00 P.M. End Date : 25.05.2022 at 02.00 P.M.
5.	Opening of Technical Bid (online)	26.05.2022 at 10.00 A.M.

The complete tender document is also available on CUH website at:- <http://www.cuh.ac.in>.

Registrar- CUH

INSTRUCTIONS TO BIDDERS REGARDING e-TENDERING PROCESS

1. The Bidders shall have to submit their Bids online in Electronic Format Digital Signatures. For participation in the e-tendering process, the Bidders need to register themselves at <https://etenders.gov.in/eprocure/app>. On registration, they will be provided with a user ID and a system generated password enabling them to submit their Bids online using Digital System Certificates (DSC).
2. Tenders without Digital Signatures will not be accepted by the electronic tendering system. No tender will be accepted in physical form and in case it has been submitted in physical, it shall be rejected.
3. Bids will be opened online as per time schedule mentioned in “***Terms and Conditions of the Tender***”.
4. Before submission of online bids, bidders must ensure that scanned copies of all the necessary documents have been uploaded with the bid.
5. CUH, Mahendergarh will not be responsible for any delay in online submission of bids due to any reason whatsoever.
6. Bidders should get ready with the scanned copies of EMD as specified in the tender documents. Related EMD as per the section and amount in the form of a Demand Draft in favour of the Central University of Haryana, Mahendergarh payable at Mahendergarh should be submitted to ICT Section, Central University of Haryana, Mahendergarh so as to reach on or before the last date for receiving the tenders.
7. The details of EMD specified in the tender document should be same as submitted online (scanned copies). Otherwise tender will be rejected summarily.
8. The conditional bids shall not be considered and may be outrightly rejected in the very first instance.
9. The Financial Bid through e-tendering of only those bidders shall be opened who will qualify in the technical bid and are approved by the Purchase Committee/Technical Experts (Annexure-C).
10. **The bidders are required to upload all self-attested copies of the relevant documents required as per Terms & Conditions and Check List, failing which their bids may be summarily/outrightly rejected and will not be considered.**

TERMS AND CONDITIONS OF THE TENDER

1. The last date and time for submission online (through e-tendering only) and receipt of physical submission of EMD with necessary documents by post/courier/in-person related with the tender is **30.05.2022 up to 05:00 PM**.
2. The bid must be accompanied with Earnest Money Deposit (EMD) in the shape of Demand Draft in favour of CUH, Mahendergarh payable at Mahendergarh, valid for three months on any Scheduled Bank.
3. The EMD amount for Supply, Laying and installation of Fibre Optics Cable is Rs. 10,000/-
4. The number of items and quantity indicated in the enclosed **Annexure A** are tentative. CUH reserves the right to increase or decrease the quantity or delete some or all of the items depending on the needs of the university.
5. The tenderer should indicate specifically the sales tax, duties and levies chargeable against each item. The Institute is entitled to custom duty exemption and concessional sales tax applicable to Educational and Research organizations.
6. The tenderer should clearly indicate the delivery period and validity period of the offer.
7. The tenderer should clearly indicate the availability of services facilities at CUH, Mahendergarh for the items quoted.
8. The tenderer should clearly indicate the delivery period, validity period of the offer and duration of successful completion of the project. **If the project is not completed in the specific duration a penalty will be charged @ 0.5% per week or part thereof the project value.**
9. The above mentioned details particularly the Sales Tax, the levies and other charges, if not quoted properly, the bid can be cancelled. Conditional/doubtful bids will also be liable for cancellation. **[If the Sales Tax, the levies and other charges is not possible to enter in online tender, kindly quote your price inclusive of all taxes]**
10. Any attempt direct or indirect, to cast influence, negotiation on the part of the tenderer with the officials/authority to whom he/she will submit the tender or the tender accepting official/authority before the finalization of tenders will render the tenderer liable for exclusion from consideration.
11. Tender(s) received without earnest money (EMD) shall be rejected straightway.
12. The requirements of the CUH, Mahendergarh in terms of category of equipment, detailed specifications and quantity are given in **SCHEDULE OF TECHNICAL**

SPECIFICATION / REQUIREMENT (As per Annexures A). CUH, Mahendergarh reserves the right to change the quantity for any/all items without assigning any reason.

13. The Tender must be submitted along with the copies of:
 - Manufacturers' license or authority from the manufacturer
 - Latest Income Tax Clearance Certificate
 - Sales Tax Registration Certificate
14. The CUH, Mahendergarh reserves the right to reject any or all tenders without assigning any reason whatsoever.
15. The tenders will be opened on the date and time indicated in the presence of tenderers if any present on the occasion.
16. **The tenders not accompanied by Earnest Money or incomplete in any respect will be rejected outrightly.**
17. No advance payment or payment against proforma invoice will be made. Payment will be made after receipt, Supply, Laying and installation and testing of items, to the satisfaction of the authorized representative(s) of the CUH, Mahendergarh.
18. All damaged or unapproved goods shall be returned at the risk and cost of the Tenderer and the incidental expenditure thereupon shall be recovered from them.
19. CUH, Mahendergarh is recognized as Education and Research University and is exempted from Excise Duty. The quoted prices must be mentioned showing Excise Duty separately.
20. The institute is eligible for Concessional Sales Tax against Educational Certificate. VAT/Sales Tax must be quoted separately.
21. Instructional materials and **e-manuals** will be uploaded by the supplier free of cost.
22. The bidder must fill the Check List from the authorized signatory only with the seal of the firm. **(As per Annexure-B)**
23. The bidder for Supply, Laying and installation of the fibre cable must have a cumulative annual turnover of Rs. 3 crore or more in last 3 three financial years ending at 31 March 2022.
24. Bidder for Supply, Laying and installation of the fibre cable should supply a copy of similar work order of Rs. 50 lakhs or more with installation report of same work done in the last 3 years.

25. The bidder must submit a drawing in A4 size only for a tentative plan for Wired fibre cable Network which clearly indicates the laying of UTP cabling, optical fiber cables in various buildings. Bidders are free to visit our site for this purpose.
26. The Bidder may send query/clarification on or before 20.05.2022 at 04.00 P.M for PreBid Meeting by email at cucc@cuh.ac.in on technical specifications, terms and conditions. The Institute will provide the time slot for vendor for the Pre-Bid Meeting for the queries/clarifications sent by email to us. The bidders should strictly follow the time given to them. No on the spot queries / clarifications raised shall be addressed.
27. The bidder must quote all the items mentioned in tender, else the bid will be considered as incomplete, and liable to be rejected.
28. The Courts at Mahendergarh shall have the exclusive jurisdiction to try all disputes arising out this agreement between the bidder or supplier and CUH, Mahenfragh if any

Annexure- A

Following items are required for laying the fibre optics cable for connectivity of various buildings/blocks of the Central University of Haryana, Mahendergarh -123031.

Sr. No.	Description	Qty	UoM
1	Armoured 6 Core Single mode Fibre Cable	2000	Mt
2	Armoured 12 Core Single mode FibreCable	1000	Mt
3	Armoured 24 Core Single mode Fibre Cable	5000	Mt
4	LIU 6 Port Loaded	6	No.
5	LIU 12 Port Loaded	8	No.
6	LIU 24Port Loaded	2	No.
7	OFC Laying with Conduit	8000	Mt
8	Fibre Splicing	40	No.
9	Installation of Racks with patch cords	12	No.

1. Optical Fiber Cable

The technical specification of the above items are given below in Table 1 respectively.

Table 1 Technical Specification of OPTICAL FIBRE CABLE:-

S. No.	Technical Parameters
1	Armoured 6/12/24 Core Singlemode (OS2) 9/125 Fiber Cable, ITU G.652.D, G.657A1 & IEC 60794-1 Complied, Outdoor ECCS Armored Fiber Cable with PBT Loose Tube Filled With Thixotropic Jelly, Glass Yarn, Water Swellable Tape Under Armor, Uni-tube UV-HDPE, 8.5 mm Overall Diameter Nominal, Crush Resistant & Tensile Resistant 2200N, Operating Temperature : -30 to + 70 Deg C, Max. Attenuation @1310nm & 1550nm : <= 0.36dB/km & <= 0.23dB/km Respectively, Black Color
2	Application: The fiber cable should have Bend insensitive features to be installed in Outdoor, Duct, Trenches & Underground application.
3	Features : The fiber cable should have excellent features of Tensile, Crush, Water Prevention with Jelly & Moisture Barrier Tape
4	Cable Construction
5	Uni-tube (Central Loose Tube) with color coded fibers as per EIA/TIA 598
6	Loose Tube : PBT Loose Tube filled with Thixotropic Jelly
7	Loose Tube Diameter : 2.5mm Nominal
8	Armoring : Corrugated ECCS Tape Armoring (0.155 mm Nominal thickness)
9	Outer Sheath : UV Resistance HDPE
10	Moisture Barrer : Water Blocking Tape Under Armor
11	Strength Member over Central Tube : Glass Yarns
	Physical / Mechanical Characteristics
12	Outer Diameter : 8.5 +/- 1.0 mm
13	Nominal Jacket Thickness : 1.5 mm
14	Tensile Strength : >= 2220 Newton (IEC 60794-1-2-E1)
15	Bending Radius : <= 20*OD (IEC 60794-1-2-E11) (OD=Cable Outer Diameter)
16	Crush Resistance : >= 2200 Newton/100mm (IEC 60794-1-2-E3)
17	Water Penetration : Meets IEC 60974-1-2 (24 Hr, 3Meter Sample, 1Meter Height)
	Weight : <= 95 Kg/km
18	Environmental Characteristics
19	Operating Temperature : IEC 60794-1-2-F1 @ -30°C to +70°C
20	Storage Temperature : EC 60794-1-2-F1 @ -10°C to +60°C
21	Installation Temperature : EC 60794-1-2-F1 @ -30°C to +70°C
22	Safety : ROHS to be mentioned in data sheet
23	Optical Characteristics
24	Fiber Type : SM (9/125) OS2 as per G.657 A1
25	Max. Attenuation : 0.36 dB @ 1310nm , 0.23 dB @ 1550nm
26	Mode Field Diameter @ 1310nm : 8.8 +/- 0.4 μm
27	Dispersion : ≤ 3.5 ps/nm.km & ≤ 17.5 ps/nm.km
28	Fiber cut of Wavelength : ≤ 1320
29	Cable Cut of Wavelength : ≤ 1260
30	Zero Dispersion Wavelength : 1300-1324 nm
31	Zero Dispersion Slope : ≤ 0.090 ps/nm ² .km
32	Coating Diameter : 250 ± 15 μm
33	Cladding Diameter : 125 ± 0.7 μm
34	Fiber Curl : ≥ 4 m radius curve

35	Cladding Non-Circularity : $\leq 1\%$
36	Mode Field Concentricity error : $\leq 0.8 \mu\text{m}$
37	Coating/Cladding Concentricity Error : $\leq 12 \mu\text{m}$
38	Packaging : Wooden Spool of Min. 2KM roll

2. LIU

The technical specification of the above items are given below in Table 2 respectively.

Table 2 Technical Specification of LIU:-

S. No.	Technical Parameters
1	6/12/24 Port 1U x 19" LIU Loaded with Singlemode OS2 LC Adapters & LSZH Pigtailed along with Splice Trays, Min. 4 No of Circular Cable Entry with Rubber Grommet/Glands to close any open entry, Cable Holders for Cable Entry Inside Panel, Heat Shrink Tubes for Splices, Tube for open fibers, Ties, Panel shall be Powder Coated with Min. 1.2mm Metal Sheath
2	The Fiber Panel shall have Telescopic Sliding Shelf for easy smooth maintenance add/move/changes.
3	The optical fiber Pigtailed shall be factory loaded inside each individual Port of the panel. Pigtailed shall be LSZH with Single mode 9/125 μm fiber .
4	Panel shall have Min. 4 No. of Cable Entry Slots at back of the Panel supplied with Cable Holders inside Panel.
5	Completely Enclosed without any open area to avoid any Rodent Entry
6	Pigtail Parameters Loaded inside Panel shall meet below mentioned requirements: -
7	Pigtail Buffer Jacket Material: LSZH complying to IEC 61034-1 ,IEC-60332-1, IEC-60754-1
8	Connector Insertion loss should be better than 0.35 dB
9	Return Loss ≥ 55 for UPC
10	Attenuation: 1310/1550 : 0.3 /0.2 dB/KM
11	RoHS Complied, Meets ANSI/TIA 568.3-D
12	Repeatability: $\leq 0.2\text{DB}$ 1000 Times Mating Cycles

3. Fiber Patch Cord

The technical specification of the above items are given below in Table 3 respectively.

Table 3 Technical Specification of FIBER PATCH CORD:-

S. No.	Technical Parameters
1	Fiber Patch Cord, LC Duplex - LC Duplex, 9/125 μm OS2 Singlemode Duplex Zip Cord ($\leq 2.0\text{mm}$), IL $\leq 0.35\text{dB}$, RL $\geq 55\text{dB}$, LSZH Jacket IEC 60332-1, Operating Temperature -40°C to $+85^\circ\text{C}$, Meets ANSI/TIA 568.3-D, Length 3Meter
2	Connectors : The optical fiber patch leads shall comprise of Single mode 9/125 μm fiber
3	Connector Insertion loss $\leq 0.35 \text{ dB}$
4	Return Loss ≥ 55 for UPC

5	Jacket Material: LSZH complying to IEC 61034-1, IEC-60332-1, IEC-60754-1
6	Length : 3 Meter
7	Attenuation: 1310/1550 : 0.35/0.20 dB/KM
8	Operating Temperature: -40°C to +85°C
9	Repeatability: <= 0.2DB 1000 Times Mating Cycles
10	RoHS Complied, Meets ANSI/TIA 568.3-D

4. Rack

The technical specification of the above items are given below in Table 4 respectively.

Table 4 Technical Specification of RACK:-

S. No.	Technical Parameters
1	Rack 9U Wall Mount Width: NA x Depth: 450 Front Door Lockable Toughened Glass Static Load 30 Kg Steel Material Standard DIN 41494
2	Rack should be supply with 6*5/15AMP power strip, 2 FAN, 2 Nos of HW pkt of 10 & 1 Self/Tray

The bidder must upload all the following certificates in the technical bid to become responsive.

1. OEM Should be registered in INDIA.
 2. The OEM products when installed should carry and provide 5 years of end channel performance warranty.
 3. The Cabling product quoted should be in accordance latest global standard to EIA/TIA, IEE, ISO/IEC and should be mentioned the data sheet.
 4. All Product should when delivered to be submitted with FTC (Factory Test Certificates).
 5. The bidders must be ready to showcase complete solutions.
 6. The OFC Trenching with Conduit, OFC Laying with Conduit, Digging, Installations, Testing and OFC Laying under Road, OFC Splicing and LIU installation will be done by the bidder.
- Note: Failing to comply with any of these terms and condition will lead to rejection of the offer

Annexure-B

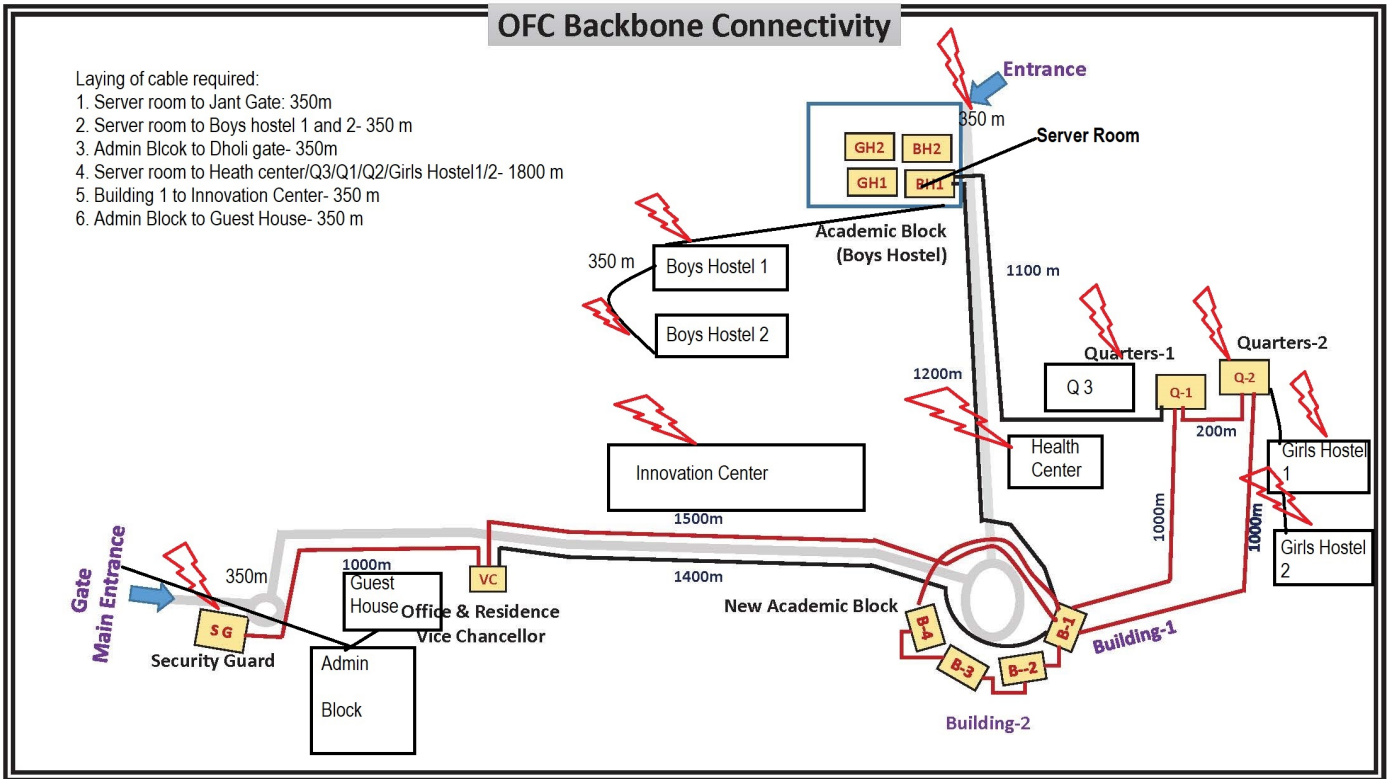
**CHECK LIST DULY FILLED IN TO BE ATTACHED WITH PRE-QUALIFYING-
CUM-TECHNICAL BID FOR THE EQUIPMENT/SERVICES FOR CUH,
MAHENDERGARH**

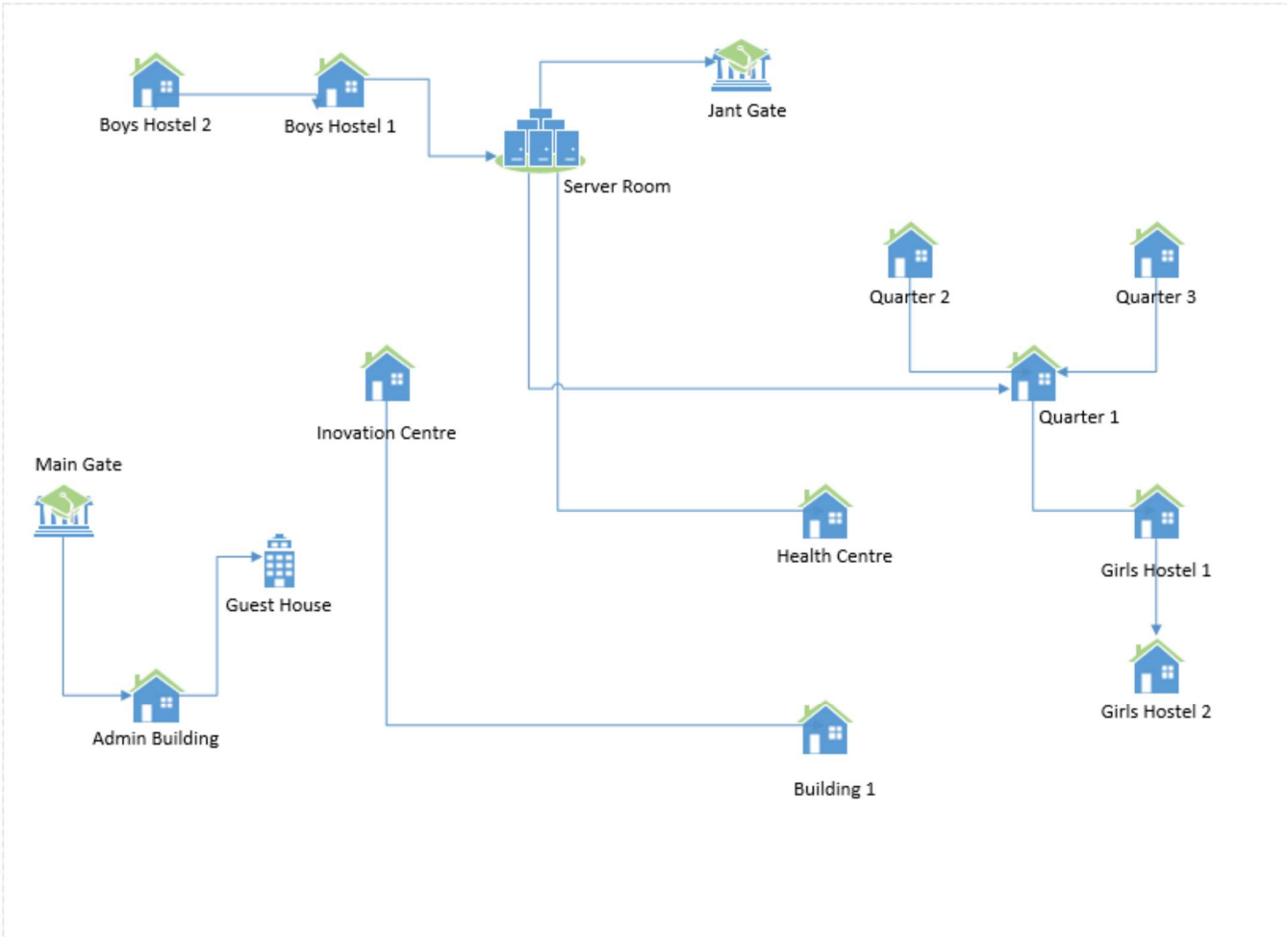
- | | | |
|----|--|-------------------|
| 1. | Whether EMD in the shape of Demand Draft valid for three months, asked-for amount attached? | Yes/No
for the |
| 2. | Whether tender document duly signed by authorized signatory Attached? | Yes/No |
| 3. | Whether a list of institutions / organizations where your firm has supplied this item / equipment / instrument / services recently, is Attached. | Yes/No |
| 4. | If you are an authorized agent / dealer / distributor of the firm / company / manufacturer and whether authority Letter as issued by them in your favour attached? | Yes/No |
| 5. | Whether Technical brochure of the equipment/services attached? | Yes/No |

Note: - If Yes, must attach all relevant documents.

**Signature of authorized signatory
with seal of the firm**

Passive Network Layout of CUH





Annexure C:

Name of Firm:
Registration no:
PAN No: GST No:

FINANCIAL BID/PRICE BID

S. No.	Name/description of item	Rate	Quantity	Total amount including GST(INR)
1				

Grand Total in words:

Terms and conditions if any: