

**Sant Longowal Institute of Engineering and Technology, Longowal, Distt. Sangrur
(Deemed to be University) (Established by Govt. of India)**

Notice Inviting Tender

e-Tenders in two bid system i.e. technical bid & commercial bid for the work as mentioned below from the Firms/OEM/contractors for participating in this tender. The intending bidder should have the proof of experience of successfully completed similar works (LAN/Internet facility) during the last 7 years ending last day of the month previously to one in which applications are invited.

The bidders should have completed at least three similar each costing not less than the amount equal to 40% or Two similar completed works, each costing not less than the amount equal to 60% or one similar completed work of costing not less than the amount equal to 80% of the estimated cost with Central Government Department/State Government Department/ Central Autonomous Body/Central Public Sector undertaking/reputed corporate/ Large private or Public educational Institutes/Hospitals/ Universities.

The intending bidder have to upload the following documents:

(i) Official and Residential address of the Tenderer alongwith mobile no. & e-mail on an affidavit duly attested by competent authority or any document containing photograph and Official & Residential address (ii) Valid license under the Contract Labour (Regulation & Abolition) Act.1970 (if applicable as per Labour laws) (iii) Proof of registration with EPFO & E.P.F. Account No. (iv) GST number (v) Proof of having carried out similar works as mentioned in para 1 above. (vi) Last three years income tax returns. (vii) Proof of ESI registration (viii) Annual financial turnover during last three consecutive financial years ending 31.03.2021 shall be at least 100%, 200% & 300% of the estimated cost respectively duly certified by the audited annual accounts of each year. (ix)The bidder has to submit an undertaking (as per **Annexure-I**) that his firm is not defaulter due to non-payment of EPF & following all EPF statutory requirements. (x) The bidder has to upload/submit an undertaking on letter head (as per prescribed format at **Annexure-II**) duly signed by authorized signatory that his firm has not been declared black listed/debar by any Govt. Department.

Sr. No.	Name of Work	DNIT Amount (Rs.)	Earnest Money Deposit (Rs.)	Cost of Tender Documents in Rs. (Non-refundable)	Tender Processing Fees (Rs.)	Time Period (Days)	Schedule of Quantities for Financial Bid (Annexure)
1	Provision of LAN/Internet facility in newly constructed EDP & EIE Block & other Departments	19,22,550/-	38451/-	1180/-	2269/-	90 Days	B

The tender documents will be available online only on the Institute's e-tendering website (www.tenderwizard.com/SLIET) and should also be submitted **ONLINE** through e-tendering along with tender fee of Rs.1000/- (non-refundable) and Earnest Money Deposit in favour of Director, SLIET through e-payment (IPG (Direct debit) NEFT/ OTC and Internet banking only). The tender processing fee (Non Refundable) should be paid through e-payment (debit or credit cards and internet banking).

It is mandatory for the Bidders/ Contractors to get themselves registered with www.tenderwizard.com/SLIET & get User Id, password & Class-3 Digital signatures for participating in the e-Tendering process. **For more details the bidder/contractor may contact Helpdesk of M/s ITI Limited on 0172-5035985, 9257209340, 8054628821 or mobile number-8146699866 or e-mail sliethelpdesk@gmail.com** can be contacted.

Schedule of Tender

Availability of Tenders online for Bidding		Last date of Submission for Online Bids	Date, time & venue of opening of Technical Bid	Date, time and venue of opening of Commercial bid
From	To			
04.04.2022 01:00 PM	18.04.2022 05:00 PM	18.04.2022 up to 05:00 PM	19.04.2022 at 11:00 AM in the O/o F.I. (ACSS), FF, CSE Department SLIET, Longowal	20.04.2022 at 02:30 PM in the O/o F.I. (ACSS), FF, CSE Department SLIET, Longowal

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Schedule of Quantities for Technical Bid

Sr. No.	Item	Make	Qty.	MOU	Specifications
Supply of PASSIVE Components					
1	CAT-6 UTP Cable(305m roll)	Molex/R&M/ Systimax	34	Roll	
2	1000BASE-LX/LH SFP Module	Cisco	8	Nos.	
3	Armored Optical fibre cable (SM 12 Core-9/125 micron)	Molex/R&M/ Systimax	500	Mtr	
4	Armored Optical fibre cable (SM 6 Core-9/125 micron)	Molex/R&M/ Systimax	250	Mtr	
5	12 Port Rack Mount LIU (Fully Loaded)	Molex/R&M/ Systimax	4	Nos	
6	6 Port Rack Mount LIU (Fully Loaded)	Molex/R&M/ Systimax	2	Nos	
7	CAT-6 24 port Jack Panel Populated	Molex/R&M/ Systimax	19	Nos.	
8	Optical Fibre Patch Cord SC to LC (SM Duplex 1 Mtrs)	Molex/R&M/ Systimax	8	Nos.	
9	Optical Fibre Patch Cord LC to LC (Duplex 1 Mtrs)	Molex/R&M/ Systimax	2	Nos.	
10	I/O with SMB & Faceplate	Molex/R&M/ Systimax	200	Nos.	
11	15U Wall Mount Rack with cable manager & all accessories.(minimum 600mm depth)	Schneider Electric/Rittal/A PW	1	Nos.	
12	12U Wall Mount Rack with cable manager & all accessories.(5/15 Amp PDU,minimum 500mm depth)	Schneider Electric/Rittal/A PW	10	Nos.	
13	6U Wall Mount Rack with cable manager & all accessories.(minimum 500mm depth)	Schneider Electric/Rittal/A PW	9	Nos.	
14	CAT 6 UTP Patch Cord (1 mtr)	Molex/R&M/ Systimax	200	Nos.	
15	CAT 6 UTP Patch Cord (3 mtr)	Molex/R&M/ Systimax	200	Nos.	
16	PVC Conduit Pipe 1" with accessories	ISI Mark	4000	Mtrs.	
17	PVC Conduit Pipe 3/4" with accessories	ISI Mark	2000	Mtrs.	
18	HDPE Pipe 32mm with accessories	ISI Mark	650	Mtrs.	
19	Laying of Fibre Cable	NA	750	Mtrs.	
20	Fixing of LIU	NA	4	Nos.	
21	Splicing of OFC	NA	72	Nos.	

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Labour/Installation Charges					
22	Termination & Testing of IO on User side and proper marking of each point	NA	200	Nos.	
23	Termination and testing of I/O on Rack Side and proper marking	NA	200	Nos.	
24	Rack Installation	NA	20	Nos.	
25	Laying of UTP Cable	NA	10370	Mtrs.	
26	Laying of PVC Conduit Pipe 1" with all accessories	NA	4000	Mtrs.	
27	Laying of PVC Conduit Pipe 3/4" with all accessories	NA	2000	Mtrs.	
28	Laying of 32 mm PLB- HDPE Pipe in Trench	NA	650	Mtrs.	
29	Soft Digging and leveling for optical fibre laying with sand & warning bricks (Depth of 75 cm)	NA	700	Mtrs.	
30	Hard Digging and leveling for optical fibre laying (Depth of 50 cm)	NA	50	Mtrs.	
31	Uninstallation of Old Rack	NA	1	Nos.	
32	Penta scanning reports of exting Node circuit		250	Nos	
Other Items					
33	Supplying and fixing of light class G.I. pipe of 80 mm dia. (nominal) 3 metres length along the pole for protection of under ground cable as required.		48	Each	
34	Supplying and fixing cable route marker with 10 cm X 10 cm X 5mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.		20	Each	
35	Supplying & laying of uPVC mini/maxi trunking profile of size 75mmx50mm (BxH) on the surface including required civil work etc. for fixing complete in all respect & making good to the damage.	Precision, Legrand, Polyplast, Diplast, MK, ISI	200	Mtr.	
36	Supplying & fixing of uPVC mini/maxi trunking profile fittings of size 75 x 50 mm namely-	Precision, Legrand, Polyplast, Diplast, MK, ISI	20	Nos.	
	a) Elbow				
	b) Tee				
	c) End cap		10		

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(Annexure-B)

Schedule of Quantities for Financial Bid

Sr. No.	Item	Make	Qty.	MOU	Unit Price (Approx.) including Tax	Amount (In Rs.) including Tax
Supply of PASSIVE Components						
1	CAT-6 UTP Cable(305m roll)	Molex/R&M/ Systimax	34	Roll		
2	1000BASE-LX/LH SFP Module	Cisco	8	Nos.		
3	Armored Optical fibre cable (SM 12 Core-9/125 micron)	Molex/R&M/ Systimax	500	Mtr		
4	Armored Optical fibre cable (SM 6 Core-9/125 micron)	Molex/R&M/ Systimax	250	Mtr		
5	12 Port Rack Mount LIU (Fully Loaded)	Molex/R&M/ Systimax	4	Nos		
6	6 Port Rack Mount LIU (Fully Loaded)	Molex/R&M/ Systimax	2	Nos		
7	CAT-6 24 port Jack Panel Populated	Molex/R&M/ Systimax	19	Nos.		
8	Optical Fibre Patch Cord SC to LC (SM Duplex 1 Mtrs)	Molex/R&M/ Systimax	8	Nos.		
9	Optical Fibre Patch Cord LC to LC (Duplex 1 Mtrs)	Molex/R&M/ Systimax	2	Nos.		
10	I/O with SMB & Faceplate	Molex/R&M/ Systimax	200	Nos.		
11	15U Wall Mount Rack with cable manager & all accessories.(minimum 600mm depth)	Schneider Electric/Rittal/A PW	1	Nos.		
12	12U Wall Mount Rack with cable manager & all accessories.(5/15 Amp PDU,minimum 500mm depth)	Schneider Electric/Rittal/A PW	10	Nos.		
13	6U Wall Mount Rack with cable manager & all accessories.(minimum 500mm depth)	Schneider Electric/Rittal/A PW	9	Nos.		
14	CAT 6 UTP Patch Cord (1 mtr)	Molex/R&M/ Systimax	200	Nos.		
15	CAT 6 UTP Patch Cord (3 mtr)	Molex/R&M/ Systimax	200	Nos.		
16	PVC Conduit Pipe 1" with accessories	ISI Mark	4000	Mtrs.		
17	PVC Conduit Pipe 3/4" with accessories	ISI Mark	2000	Mtrs.		
18	HDPE Pipe 32mm with accessories	ISI Mark	650	Mtrs.		
Labour/Installation Charges						
19	Laying of Fibre Cable	NA	750	Mtrs.		
20	Fixing of LIU	NA	4	Nos.		
21	Splicing of OFC	NA	72	Nos.		

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22	Termination & Testing of IO on User side and proper marking of each point	NA	200	Nos.		
23	Termination and testing of I/O on Rack Side and proper marking	NA	200	Nos.		
24	Rack Installation	NA	20	Nos.		
25	Laying of UTP Cable	NA	10370	Mtrs.		
26	Laying of PVC Conduit Pipe 1" with all accessories	NA	4000	Mtrs.		
27	Laying of PVC Conduit Pipe 3/4" with all accessories	NA	2000	Mtrs.		
28	Laying of 32 mm PLB- HDPE Pipe in Trench	NA	650	Mtrs.		
29	Soft Digging and leveling for optical fibre laying with sand & warning bricks (Depth of 75 cm)	NA	700	Mtrs.		
30	Hard Digging and leveling for optical fibre laying (Depth of 50 cm)	NA	50	Mtrs.		
31	Uninstallation of Old Rack	NA	1	Nos.		
32	Penta scanning reports of exting Node circuit		250	Nos		
Other Items						
33	Supplying and fixing of light class G.I. pipe of 80 mm dia. (nominal) 3 metres length along the pole for protection of under ground cable as required.		48	Each		
34	Supplying and fixing cable route marker with 10 cm X 10 cm X 5mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.		20	Each		
35	Supplying & laying of uPVC mini/maxi trunking profile of size 75mmx50mm (BxH) on the surface including required civil work etc. for fixing complete in all respect & making good to the damage.	Precision, Legrand, Polyplast, Diplast, MK, ISI	200	Mtr.		
36	Supplying & fixing of uPVC mini/maxi trunking profile fittings of size 75 x 50 mm namely-	Precision, Legrand, Polyplast, Diplast, MK, ISI	20	Nos.		
	a) Elbow					
	b) Tee					
	c) End cap		10			
Total (Rs.)						

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Terms & Conditions

1. The Contractors should quote in figures as well as in word the rates and amount tendered by them. The amount for each item should be worked out the requisite totals given.
 2. i) An item rate tender containing percentage below/above will be summarily rejected. However where a quotation voluntarily offers a rebate, this may be considered.
ii) Quotations shall be strictly as per the condition of work, conditional quotations are liable to be rejected.
 3. i) Special care should be taken to write the rate and amounts in figures as well as in words in such a way that interpolation is not possible. The total amount should be written before the figure of Rupees and word paisa should be written at the end (unless the rates in whole rupees) and followed by the word only. It should invariably to upto two decimal places. While quoting the rates in schedule of quantities, the word only should be written closely following the amount and it should not be written in the next line.
ii) In case of any discrepancy between the rates quoted in figures and words that rate on which the amount has been worked out shall be taken as correct. In case of any discrepancy between the rate quoted and the amount worked out the rate quoted in figures and words shall be taken as correct.
 4. The quotation for works shall remain open for acceptance for a period of ninety days from date of opening of tenders. If any contract withdraws his quotation before the said period or makes any modification in the terms and conditions of the quotation which are not acceptable to the Institute.
 5. The acceptance of a tender will rest with the Director, SLIET who does not bind himself to accept the lowest quotation, and reserves to himself the authority to reject any or all of the quotations received without the assignment of any reason. All quotations in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
 6. On acceptance of the quotation, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-charge shall be intimated to the undersigned.
- 7. Security Deposit**
10% will be deducted from each RA bill of contractor as a security deposit subject to maximum 3% of the contract value. This will be released after satisfactory completion of defect liability period (which is one year from the date of completion of work) & completion of all contractual obligations, submission of relevant complete documents and NOC from Labour Commissioner.
- In case contractor claims first & final bill, the bidder has to submit performance security @3% of contract value subject to minimum 5000/- in the form of BG/FD/DD favouring Director SLIET Longowal valid upto defect liability period (which is one year from the date of completion of work). This will be release after satisfactory completion of defect liability period and completion of all contractual obligations on the submission of all relevant documents.
8. The EMD shall be refunded to the successful bidder beyond 60 days after the successful completion of work upto the entire satisfaction of Engineer In-Charge & on the submission of Performance Security/Security Deposit whichever is eariler.
 9. The contractor shall also ensure compliance of the EPF & MP Act, 1952 by the Sub-contractor, if any engaged by the contractor for the said work and any sub-contractor engaged should also have Provident Fund Code.
 10. Canvassing in connection with quotation is strictly prohibited and the quotation submitted by the contractors who resort to canvassing will be liable to rejection.
 11. The Contractor shall not be permitted to quotation for work in the SLIET responsible for award and execution of contractors in which his near relative is posted as Accountant or as an Officer in any capacity between the grades of Faculty In-charge (Electrical) and Assistant Engineer (both inclusive). He shall also intimate the names of persons who are working with in any capacity or are subsequently employed by him and who are near relatives to any of the officers in the Institute. Any breach of this condition by the Contractor would render him liable to be removed from the approved list of contractors of this Institute.
 12. GST or any other tax on material in respect of the contract shall be payable by the contractor and Institute will not entertain any claim whatsoever.
 13. The payment will be made within 30 days after completion of work & on the submission of Tax invoice with GST no, RTGS/NEFT bank detail & other relevant documents (if any) subject to the fully satisfaction of the department about the quality of work.

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SCOPE OF WORK

The description of scope of work to be done is as mentioned below. Please note that the quantity for cables and excavation work are approximate. **After award of work the bidder will work out the exact quantity of material by visiting and inspecting site in person and accordingly will submit the bill of material.**

Further, the successful Bidder (L1) shall visit our Institute (Sant Longowal Institute of Engineering & Technology, Longowal (SLIET)) during office hours between 10.00 AM to 04 PM on all working days except Saturday, Sunday and holidays and shall take note of the actual work to be carried out.

Optical fibre will be laid from Cisco Distribution Switch installed in Electronic Block to newly constructed Electrical & Electronics Building, Cisco Distribution Switch installed in Mechanical Block to newly constructed EDP building.

Laying of Fibre Cable

1. Excavation and Backfilling for Open Cut Trenching

The Contractor shall carry out excavation and backfilling of trenches in all kinds of soil strata such as soil (Soil means normal soil, soil with pebbles, soft rock), concrete/bitumen road for laying Pre-lubricated high-density polyethylene plastic pipe (PLB HDPE Pipe). The Contractor shall also make suitable arrangements for laying PLB HDPE pipes.

a. Excavation

The cable trenches shall be dug as per route plan and detail trench drawings (indicating various dimensions and other details of the trench) approved by the purchase finalizing committee of SLIET. The Contractor shall take due care and precaution during excavation to avoid possible damage of other underground plants/facilities in the proposed underground fiber optic cable route and shall indemnify the Owner/Employer for all damages and shall be solely responsible for all the damages and losses.

Depth of trench shall be at least **75 cm** in soil. However, for road crossings/Concreted area the trench depth shall be at least **50 cm**. The width of trench at the top and bottom shall be adequate for proper installation of PLB HDPE pipes, (GI pipes if required), warning Brick etc. as per requirement. The trench depth shall be measured from the bottom of the trench. Trench shall be located at the lowest point of lower area if possible. Trench shall preferably be constructed along the roadsides not through filed boundary or field crossing. In case of uneven ground, the Contractor must ensure that the bottom of the trench is not uneven, the Contractor shall maintain minimum depth of the trench as per specifications and may increase the depth at some locations, if required and provide a suitable gradient in the trench.

The Contractor shall also be responsible for supporting the exposed plant/facilities of other utilities such as water, electric, telephone or fiber optic cables etc to avoid any possible damage. The Contractor shall also be responsible for any dewatering of the trench during digging and installation of pipes.

b. Backfilling

After installation of PLB HDPE pipes, the backfilling of the trench shall be done.

The PLB HDPE pipes shall be sandwiched with sand. Backfilling shall normally be done with the excavated soil, unless it consists of large boulders/stone in which case the boulders/stone shall have to be broken to a maximum size of 80mm. The backfilling should be clean and free from organic matter or other foreign material. The earth filling is done with a suitable amount to allow for any shrinking of soil at the later date. In case of regular footpath, temporary reinstatement shall be done after backfilling. The left out earth if any has to be disposed by the Contractor to a suitable location as indicated by SLIET authorities at his own cost. It is advisable to start backfilling of the trench from one end or after padding of the pipe to avoid uplifting. The backfilling of the remaining portion shall be done as stipulated for normal soil.

c. Warning Brick

Bricks (non-modular) class of the actual size 225 mm (Length) x 111mm (Width) x 70 mm (Thick) shall be laid immediately above and sides of the sand layer in which PLB HDPE pipe is installed. Brick of size other than above may also be used. Warning bricks shall be used throughout the length (except road crossing and concreted.)

2. Installations of PLB HDPE Pipe

One PLB HDPE pipe shall be laid at bottom of the trench after making the surface smooth and providing 50 mm of sieved stone free sand bedding. After laying the pipe additional sieved sand shall be added to increase the height of the sand layer to a total of 250 mm hence positioning the PLB HDPE pipe in the middle of the layer. Other important steps are described as under:

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- a. PLB HDPE Pipe shall be laid in a flat bottom trench free from stones , sharp edged debris.
 - b. The pipe shall be placed in trenches as straight as possible. Minimum bending radius of pipe and fibre optic cable shall always to be taken into account.
 - c. The ends of pipes shall always be closed with end plugs to avoid ingress of mud , water or dust i.e. all pipes opening shall be sealed to avoid entry of foreign material.
 - d. The pipes shall be joined tightly & properly through plastic coupler and the joint shall be smooth and free from steps. The joints shall be made properly. All joints shall be assembled with proper tools only.
 - e. Coupler shall not be placed along the bend portion of the pipe
 - f. PLB HDPE pipes shall be installed in manner that fibre optic cable can be pulled without damaging the fibre optic cable due to stresses.
- All conduit and joints shall be inspected by the committee before carrying out the backfilling. Joints shall be visually inspected and checked for tightness.

3. Reinstatement

Reinstatement of the all the excavated area to restore the excavated area to original quality and shape is included in the scope of this job. Temporary reinstatement of footpath, Bitumen Road, concreted area stipulated in this section shall be carried out as a part of backfilling. The bidder shall be responsible for carrying out reinstatement work irrespective of area or type as mentioned above. The Final reinstatement of Bitumen road and concreted area is not in the scope of this bidder.

Other Terms & Conditions

(1) SLIET, upon evaluation of the bids submitted, will award the contract to the **lowest** bidder. Net Bundled Prices will be considered, individual prices of each item will not be considered. However, if prices for each and every item are not quoted, Net-bundled price offered shall not be accepted.

(2) The successful Bidder (L1) shall be intimated of his selection through the Letter of Award which shall be sent to him through e-mail, courier, fax or registered mail. Such successful Bidder shall be required to tender acceptance within three days from the date of receipt of such Letter of Award as the case may be, failing which the same shall stand cancelled and the EMD shall be forfeited.

(3) Two copies of drawing of laying of optical fibre should be submitted.

(4) Proper dressing of UTP cable in Rack & I/O with identification mark has to be carried out by successful bidder.

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