



NIT No. **053/EDM/FTIIPUNE/2022-23**<u>Estimated cost</u>: ₹. **20,57,728**/-

PRASAR BHARATI
(INDIA'S PUBLIC SERVICE BROADCASTER)
EXECUTIVE ENGINEER (ELECTRICAL)
CIVIL CONSTRUCTION WING:
1st Floor New Broad Casting House,
All India Radio, H T Parikh Marg,
Opposite MLAs Hostel, Mumbai- 400020

E-mail: ccwelect.airmum@nic.in ccwelect@rediffmail.com

CONTACT 022-20821161

Name of Work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune



INDEX

Name of work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

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INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE

The Executive Engineer (E), Civil Construction Wing, All India Radio, Mumbai-20, on behalf of President of India invites e-tender in two cover system [Cover-1: Qualification of agencies as per eligibility criteria & Cover-2: Price bid] from approved and eligible contractors from of CPWD and those on appropriate list of BSNL. MES, Railways, Department of Post, Maharashtra State PWD and all eligible manufacturers and experienced specialized agencies dealing in Networking System in the appropriate class for the work:

NIT Number	053/EDM/FTIIPUNE/2022-23					
Name of work:	Extending of Internet Network conconstructed Girls Hostel building at	nnectivity including Local Area Networking to newly FTII Pune				
Estimated Cost put	to Tender	₹.20,57,728=00				
Earnest Money De	posit	₹. 41,155=00				
Period of completion	on	21 (Twenty One) Days				
Last date and time of submission of Tender		Up to 12:00 Hrs. on 06/04/2023				
Time and date of o	pening of Cover-1	12:30 Hrs. of 06/04/2023				

- 1. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all documents required.
- 2. Information and instructions for bidders posted on website shall form part of bid document.
- 3. The bid document consisting of plans, specifications, schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from the website https://air.ewizard.in/ free of cost.
- 4. But the bid can only be submitted after depositing Processing Fee in favour of M/s. ITI Limited and deposition of original EMD online through E-Wizard portal within the period of bid submission and other documents as specified
- 5. Detailed procedure can be seen in the CPWD-6 for e-Tendering
- 6. Contractors, who are not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the said website
- 7. The intending bidder must have valid Class-III Digital Signature to submit the bid.
- 8. On the date of opening of the Bid, the bidder can login and see the bid opening process. After opening of Bids he will receive the competitor bid sheets.
- 9. Bidder can upload documents in the JPG or PDF format.
- 10. SC/ST bidders enlisted under Class-V category are exempted from processing fee of e-Tender payable to M/s. ITI Ltd.
- 11. The Technical Bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.
- 12. The Bidder submit the following document at the time of submission of Bid: (a) Authorization certificate from the OEM. (b) The OEM is unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/ Comprehensive Maintenance Contract for the useful life of the system, and (c) OEM is provided all the spares required for healthy functioning of the equipment for at least Five years from the date of supply of equipment
 - 13. Pre Bid conference shall be held in the chamber of O/o EE (E), CCW, AIR, Mumbai on ______ at Mumbai _____ am/pm to clear the doubt of intending bidders if any. The intending bidders shall send their queries if any on or before _____ Hrs. of _____ by email to ccwelect.airmum@nic.in or ccwelect@rediffmail.com

List o

f docu	ments to be scanned and uploaded within the period of bid submission:
1	EMD payment will be online through E-Wizard portal.
2	Certificate of Registration for GST or UNDERTAKING If work is awarded to me, I/we shall obtain GST registration certificate as applicable within one month from the date of receipt of award letter or before release of any payment by CCW AIR, whichever is earlier, failing which I/we
	shall be responsible for any delay in payments which will be due towards me/us on account of
_	the work executed and/or for any action taken by CCW AIR or GST department in this regard.
3	Certificates of Work Experience, of similar nature in Para 1.2 of Form CPWD-6. (Not applicable for CPWD enlisted contractors of appropriate class.)
	The agency should have experience of having successfully completed in Central Government,
	State Government, PSUs and other Government Local bodies during last seven years ending last
	day of the month previous to the one in which applications are invited.
	Three similar completed works each of value not less than 40% of the estimated cost put to
	tender OR Two similar completed works each of value not less than 60% of the estimated cost
	put to tender OR One similar completed work of value not less than 80% of the estimated cost
	put to tender. All amounts rounded off to a convenient figure.
	Attested copies of completion certificate issued by the officer of the client department of the rank of Executive Engineer or equivalent will have to be furnished along with the application,
	the completion certificate must clearly indicate:
	Name of work:
	2. Value of work:
	3. The date of completion of work:
	4. Performance of the work:
	The agency should submit schedule of work against the completion certificate to assess the nature
	of similar work as per NIT
4	Affidavit as specified in Para 10 of Form CPWD-6 on non-judicial stamp paper of Rs. 100/-
	duly notarized
5	Valid Enlistment Order of the Contractor.
6	Valid Electrical Contractors license
7	Certificate or Registration of EPF and ESI should be uploaded or in case the contractor feels that
	the EPF and ESI Acts are not applicable in his case and such registration certificates are not required for the work he shall upload the necessary undertaking to this effect
	Note:
	Tenderer shall be allowed to enter into the agreement only on production of Indemnity bond in
	favor of CCW-AIR against any EPF and ESI liability with a copy of PAN card. (In the event of
	failure on the part of the contractor, to comply with condition stated above, full EMD will be
	forfeited in favor of CCW-AIR and no claim what so ever shall be entertained on this account)
8	(a) Authorization certificate from the OEM.
	(b) The OEM is unconditionally support the lowest tenderer technically throughout the execution
	of contract as well as for Maintenance/Comprehensive Maintenance Contract for the useful life
	of the system, and (c) OFM is provided all the spares required for healthy functioning of the equipment for at least
	(c) OEM is provided all the spares required for healthy functioning of the equipment for at least Five years from the date of supply of equipment
	Tive years from the date of supply of equipment

EXECUTIVE ENGINEER (ELECTRICAL) CCW AIR PB (IPSB) MUMBAI-20

Date: 28/03/2023

No.EE (E)/MUM/CCW/NIT-052/2022-23/

- The Superintending Engineer (Elect.), CCW, AIR Nagpur
- The Executive Engineer (Civil), CCW, AIR Mumbai/Pune/Vadodara.
- The Assistant Engineer (Civil.) I/II, CCW, AIR MUMBAI/Pune/Vadodara/Ahmedabad/Rajkot.
- The Assistant Engineer (E) CCW, AIR, MUMBAI/Pune. 4.
- Notice Board. 5.
- By mail to webupdates.pbns@gmail.com for uploading on Prasar Bharati Web site.

EXECUTIVE ENGINEER (ELECTRICAL)

PRASAR BHARATI

(India's Public Service Broadcaster)

CIVIL CONSTRUCTION WING, ALL INDIA RADIO

NOTICE INVITING e-TENDER

1. The Executive Engineer (E), Civil Construction Wing, All India Radio, Mumbai-20, on behalf of President of India invites e-tender in two cover system [Cover-1: Qualification of agencies as per eligibility criteria & Cover-2: Price bid] from approved and eligible contractors from of CPWD and those on appropriate list of BSNL. MES, Railways, Department of Post, Maharashtra State PWD and all eligible manufacturers and experienced specialized agencies dealing in Networking System in the appropriate class for the work:

Extending of Internet Network connectivity including Local Area Networking to newly

Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

The enlistment of the contractors should be valid on the last date of sale of tenders.

Definition of Similar Work: SITC of Local Area Networking System

- 1.1 The work is estimated to cost ₹. 20,57,728/- This estimate, however, is given merely as a rough guide.
- 1.1.1. The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids. For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.
- 1.2. Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority i.e. not below the rank of Executive Engineer, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works (<u>similar work means SITC of Local Area Networking System</u>), in the last seven years ending in Central Government, State Government, PSUs and other Government Local bodies. The works completed up to previous day of last date of submission of tender shall also be considered.

Criteria of eligibility for submission of bid documents

1.2.1. Conditions for Non-CPWD registered contractors only, if bids are also open to non-CPWD Contractors

For works estimated cost up to tendering limit of class -I Buildings & Roads (erstwhile Composite/Building/infrastructure) category Contractor (However, for Horticulture category, it may be modified as per bidding limit of CPWD class I contractors of Horticulture category).

- (i) Three similar completed works each of value not less than 40% of the estimated cost put to tender OR Two similar completed works each of value not less than 60% of the estimated cost put to tender OR One similar completed work of value not less than 80% of the estimated cost put to tender
- (ii) For EPC tender under Mode- I/II only (Applicable for CPWD enlisted contractors of appropriate class also).

One completed work costing not less than Rs.______ executed with the structural system technology as proposed by bidder in the letter of transmittal during the last 7 years ending last day of the month previous to the one in which tenders are invited. This work can be part of eligible work at 1.2.1 (i) above or as a separate work

Note:-

For works costing above tendering limit of class -II Buildings & Roads(erstwhile Composite/ Building/ infrastructure)category contractors but up to tendering limit of Class-I Buildings & Roads(erstwhile Composite/ Building/ infrastructure)category Contractor (However, for Horticulture category, it may be modified as per bidding limit of CPWD class II and CPWD Class I contractors respectively of Horticulture

Category) when bids are open to non-CPWD contractors also, then class II contractors of CPWD registered shall also be eligible if they satisfy the eligibility criteria specified in 1.2.1 above

1.2.2. Criteria of eligibility for CPWD as well as non-CPWD contractors,

For works estimated to cost above the tendering limit of class -I (Super) Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However for Horticulture category, it may be modified as per bidding limit of CPWD class I contractors of Horticulture Category).

(ii) For EPC tender under Mode- I/II only (Applicable for CPWD enlisted contractors of appropriate class also).

One completed work costing not less than Rs._____ executed with the structural system technology as proposed by bidder in the letter of transmittal during the last 7 years ending last day of the month previous to the one in which tenders are invited. This work can be part of eligible work at 1.2.1 (i) above or as a separate work

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid. This is applicable for 1.2.1 as well as 1.2.2 (Para 1.2.1(i) and Para 1.2.2(i) are not applicable for CPWD enlisted contractors of appropriate class. Para 1.2.1(ii) and Para 1.2.2(ii) are also applicable for CPWD enlisted contractors of appropriate class).

To become eligible for issue of bid, the bidders shall have to furnish an <u>undertaking</u> as under (<u>Applicable if</u> <u>work experience is stipulated in para 1.2 above</u>):

"I/We undertake and confirm that eligible similar work/s has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in CCW-AIR in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee." (Scanned copy is to be uploaded at the time of submission of bid).

- 1.2.3. When bids are invited from non CPWD contractors and CPWD class II contractors as per provisions of clause 1.2.1 above, it will be mandatory for non CPWD contractors and CPWD class-II contractors to upload the work experience certificate(s) and the affidavit as per the provisions of clause 1.2.2. But for such bids, Class-I contractors of CPWD are eligible to submit the bids without submission of work experience certificate and affidavit. Therefore, CPWD class-I contractors shall upload two separate letters for experience certificate and affidavit that these documents are not required to be submitted by them. Uploading of these two letters is mandatory otherwise system will not clear mandatory fields
 - 2. Agreement shall be drawn with the successful tenderer on prescribed Form No. 7, which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
 - 3. The time allowed for carrying out the work will be <u>21 (Twenty One) Days</u> from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
 - 4. The site for the work is available.
 - 5. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen from website https://air.ewizard.in/ free of cost.
 - 6. After submission of the Tender the contractor can re-submit revised tender any number of times but before last time and date of submission of tender as notified.
 - 7. While submitting the revised tender, contractor can revise the rate of one or more item/s any number of times (he need not re-enter rate of all items) but before last time and date of submission of tender as notified.
 - 8. When tenders are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.

9. Earnest Money of ₹. 41,155=00 in the form of online.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/ three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

Interested contractor who wish to participate in the bid has also to make following payments within the period of bid submission:

E-Tender Processing Fee admissible shall be payable to M/s. ITI Limited through their e-gateway by credit/debit card, internet banking or RTGS/NEFT facility.

Copy of Enlistment Order and certificates of work experience and other documents as specified in the tender/press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in the tender notice shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority.

Online bid documents submitted by intending bidders shall be opened only of those bidders, who have deposited e-Tender Processing Fee with M/s. ITI Limited and EMD within the period of bid submission and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 12:30 Hrs. on 06/04/2023

- 10. The bid submitted shall become invalid and e-Tender Processing Fee shall not be refunded, if:
 - (i) The bidder is found ineligible;
 - (ii) The bidder does not upload all the documents (including GST) as stipulated in the bid document including online EMD
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest tenderer in the office of tendering opening authority;
- 11. The contractor whose tender is accepted will be required to furnish Performance Guarantee of 3% (Three percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in
 - Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 12. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may requisite and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 13. The competent authority on behalf of President of India does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.

- 14. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to tender for works in the CCW AIR PB(BCI) Circle (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Civil Construction Wing of All India Radio or in the Ministry of Information & Broadcasting. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 17. No Engineer of Gazette rank or other Gazette officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of two years after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 18. The tender for the works shall remain open for acceptance for a period of 30 (Thirty) days from the date of opening of Price Bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the Department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.
- 19. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 7 days from the stipulated date of start of the work sign the contract consisting of:
 - a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b) Standard C.P.W.D. Form No. 7.

EXECUTIVE ENGINEER (E) CCW AIR PB (IPSB) MUMBAI-20

PRASAR BHARATI (INDIAS PUBLIC SERVICE BROADCASTER) CIVIL CONSTRUCTION WING, ALL INDIA RADIO

Percentage rate Tender & Contract for Works

Name of work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

- (i) To be submitted online through the website https://air.ewizard.in/ by 12:00 hours on 06/04/2023 to the Executive Engineer (E), Civil Construction Wing, All India Radio, Prasar Bharati (IPSB), Mumbai-20.
- (ii) To be opened online at the website https://air.ewizard.in/ in presence of tenderers who may be present online at 12:30 hours on 06/04/2023 in the office of the Executive Engineer (E), Civil Construction Wing, All India Radio, Prasar Bharati (IPSB), Mumbai-20.

Tender submitted online at the website https://air.ewizard.in/ by the contractor

TENDER.

I/We have read and examined the notice inviting tender, schedule A, B, C, D, E & F, specifications applicable, drawings & designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F', viz. Schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for <u>30 (Thirty) days</u> from the Opening of <u>Price Bid</u> thereof and not to make any modifications in its terms and conditions.

A sum of ₹ 41,155=00 in the form of online as EMD is submitted. If I/we, fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said President of India or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence the work specified I/we agree that the said President of India or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/we agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/we shall be debarred for participation in the retendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:	Signature of Contractor al Address:
Witness: Address:	
Occupation:	
<u>A (</u>	C C E P T A N C E
The above tender (as modified by you as p	provided in the letters mentioned hereunder) is accepted by
me for and on behalf of the President of	f India for a sum of ₹
(Rupees	
)
The letters referred to below shall form part of	this contract Agreement:
i)	
ii)	
iii)	
	For and on behalf of the President of India,
Dated:	Signature:
	Designation: Executive Engineer (E) Civil Construction Wing All India Radio, PB (IPSB)

MUMBAI-400 020.

SCHEDULES

Name of work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

SCHEDULE 'A'

Schedule of quantities - As per "schedule of quantity" from Page No. 35

SCHEDULE 'D'

Extra Schedule for specific	Additional Commercial Conditions /documents &
requirements/documents for the work, if any.	Technical Specifications attached

SCHEDULE 'E'

Reference to General Conditions of Contract:-	GCC 2020 for Construction works with
	amendments up to last date of submission of Bid.

Name of Work	Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune			
i)	Estimated cost work	Rs 20,57,728=00		
ii)	Earnest Money	Rs 41,155=00		
iii)	Performance Guarantee	3% of Tendered Amount		
iv)	Security Deposit	2.5% of tendered value Plus 50% of stipulated P.G		

SCHEDULE 'F'

General Rules & Directions:

Officer i	inviting Tender	:	Executive Engineer (E),CCW, AIR, PB (IPSB), Mumbai-20
execute accorda	m percentage for quantity of items of work to be d beyond which rates are to be determined in nce with Clauses 12.2 & 12.3	:	As per Clause 12
Definition	ons:		
2(v)	Engineer-in-Charge	:	Executive Engineer (E),CCW, AIR, PB (IPSB), Mumbai-20
2 (viii)	Accepting Authority	:	Executive Engineer (E), CCW AIR Mumbai
2 (x)	Percentage on cost of materials and labor to cover all overheads and profits	:	15%
2 (xi)	Standard schedule of Rates	:	CPWD DSR 2022 with amendments up to last date of submission of Bid
2 (xii)	Department	:	Civil Construction Wing, All India Radio
9 (ii)	Standard CPWD contract form	:	CPWD form 7 (Percentage rate) with amendments up to last date of submission of Bid

date of issue of Progress) and a ESIC, and BOCV from the date o	r submission of Performance Gua letter of acceptance, Program (pplicable labor licenses, registro W welfare Board or proof of a f issue of letter of acceptance.	Chart ition pplyi	t (Time a with EPF ing there	ind O, eof	:	07 days
	able extension with late fee 0. varantee amount beyond the per				:	05 days
Clause 2						
Authority for fix under clause – 2	ing compensation			:		perintending Engineer (E) Civi Instruction Wing, All India Radio, Nagpu
Clause 2A				П		
Whether Clause applicable	2A shall be			:	YE	S / NO
Clause 5						
	from the date of issue ptance for reckoning			:	07	(Seven) Days
	AS PER TABLE GIVEN BELOW Table	of M	lilestone	e (s)		
S.N Descript o.	ion of Milestone (Physical)	in (ne allov days(fro te of sta	m		Amount to be with-held in case of non achievement of mile stone
1						
2						
3						
4						
Time allowed fo	r execution of work			:	21	(Twenty One) Days
Authority to Dec	ide:					
1. Extension of t	ime	:			•	neer (E) Civil Construction Wing, All Numbai
2. Rescheduling of mile stones		:	Execut	Executive Engineer (E) Civil Construction Wing, All India Radio, Mumbai		
•	3. Shifting of date of start in case of delay in handing over of site		Execut	Executive Engineer (E) Civil Construction Wing, All India Radio, Mumbai		
Clause 7 Gross work to		pavr		:		per terms of payment mentioned in
•	be done together with net dvances for material collected, i ment for being eligible to interi	f any	y, since		Со	mmercial and additional conditions
•	dvances for material collected, i	f any	y, since		Со	mmercial and additional conditions

11

application labour licenses, registration with EPFO, ESIC and BOCW welfare board which ever applicable are submitted

by the contractor to the Engineer-in-Charge.

Clause 8 A

Authority to decide compensation on account if contractor	:	Engineer-in-Charge
fails to submit completion plans		
Clause 10 A		
Clause 10 A List of testing equipment to be provided by the contractor	:	As per instruction of Engineer-in-

Clause 10-B (ii)

Whether clause 10-B(ii) shall be	:	No
applicable		

Clause 10-C.

Component of labour expressed as percent of value of	:	20%
work		

Clause 10 CA Applicable Not Applicable

S. No	Materials this clause	covered	under	· · · · · · · · · · · · · · · · · · ·	Base price of all the materials covered under clause 10CA
				Wholesale price index to be followed	
1					
2					
3					

Clause 10CC

Clause 10CC to be applicable in contracts with stipulated		More Than 12 Months
period of completion exceeding the period shown in next		
column.		
Schedule of component of other Materials,		Not Applicable
Labour, POL etc. for price escalation.		

Component of civil (Except materials covered under clause 10 CA)/ Electrical construction materials expressed		
as percent of total value of work. Component of labour expressed as percent of total value of work.		Not Applicable
Component of POL expressed as percent of total value of work	Z	

Clause 11

Specifications to be followed for execution of	:	CPWD General Specifications for Electrical
work		works Part-I & II with up to date amendments
		and additional commercial & technical
		conditions attached.

Clause 12

Authority to decide deviation up to $1.5\ \text{times}$ of tendered amount $\ : \ \text{Engineer-in Charge}$

Type of Work	:	ORIGINAL/ MAINTENANCE
12.2. & 12.3		
(i) Deviation limit beyond which clauses 12.2 & 12.3 shall	:	100%/ No Limit
apply for foundation work (except earth work)		
(ii) Deviation Limit for items in earth work sub head of DSR	:	Not applicable
or related items		

Clause 16

Competent authority for deciding reduced rates	:	Superintending Engineer (E)
		Civil Construction Wing,
		All India Radio, PB(IPSB),
		Nagpur

Clause 18

List of mandatory machinery, tools & plants to be	:	As per requirement at site
deployed by the contractor at site.		

Clause 19C

Authority to decide penalty for each default Clause	: Engineer-in Charge

Clause 19D

1		1	
	Authority to decide penalty for each default Clause	:	Engineer-in Charge

Clause 19G

Authority to decide penalty for each default Clause	: Engineer-in Charge
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Clause 19K

- 1			
	Authority to decide penalty for each defa	I. CI	Engineer-in Charge
	Authority to decide bendity for each deta	nuit (Iause — I • I	Fnaineer-in (harae
	The decide penally for each acre	ion classe	Linguice: in charge

Clause 25

Constitution of Dispute Redressal Committee (DRC)

For all claims in dispute

Chairman-	
Member-1	
Member-2	

Clause 32

Requirement of Technical Representative(s) and recovery Rate

		<u> </u>			
Cost of work	Requirement of Qualification	Technical Staff Number (of	Minimum experience	Designation Technical staff	Rate at which recovery shall be
(Rs. in crores)		Major + Minor component)	(Years)		made from the contractors in the
					event of not fulfilling
More	Graduate	1 of major	2 or 5	Project Manager	Rs. 15,000/- per
than 15	Engineer	component	respectively	Cum planning/	Month per person
lakh to	or Diploma			quality/ site/	
1.5 crore	Engineer			billing Engineer	
	(E&M)				

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10 year relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 38

- i. (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of N.A. printed by CPWD
- ii. Variation permissible on theoretical quantities:

a) Cement for works with estimated cost put	:	Not Applicable
to tender not more than Rs. 5 lakhs		
for works with estimated cost put to tender	:	Not Applicable
more than Rs 5 lakh		
b) Bitumen for all works.	:	Not Applicable
c) Steel Reinforcement and structural steel	:	Not Applicable
sections for each diameter, section and		
category.		
d) All other materials	:	Nil

INTEGRITY PACT

To,
,
,
Sub: NIT No 053/EDM/FTIIPUNE/2022-23 for the work Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune
Dear Sir,
It is here by declared that CCW AIR is committed to follow the principle of transparency, equity and competitiveness in public procurement.
The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.
This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CCW AIR.
Yours faithfully
Executive Engineer

INTEGRITY PACT

To, Executive Engineer (Electrical), Civil Construction Wing, All India Radio, Mumbai

Sub: Submission of Tender for the work of Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

Dear Sir,

I/We acknowledge that CCW AIR is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process.

I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CCW AIR.

I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CCW AIR shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of CCW AIR.

INTEGRITY AGREEMENT

This Integrity Agreement is made at Mumbai on this
BETWEEN
President of India represented through Executive Engineer (E) CCW AIR Mumbai, (Hereinafter ref

President of India represented through Executive Engineer (E) CCW AIR Mumbai, (Hereinafter referred as the (Address of Sub Division) 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND	
(Name and Addre	ess of
the Individual/firm/Company) through (Herein	
referred to as the (Details of duly authorized signatory) "Bidder/Contractor" and which expression	shall
unless repugnant to the meaning or context hereof include its successors and permitted assigns)	

Preamble

WHEREAS the Principal / Owner have floated the Tender (NIT No. 053/EDM/FTIIPUNE/2022-23) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune

Hereinafter referred to as the "Contract". AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- 1. The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- 2. The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 3. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures

Article 2: Commitment of the Bidder(s)/Contractor(s)

- It is required that each Bidder/Contractor (including their respective officers, employees and agents)
 adhere to the highest ethical standards, and report to the Government / Department all suspected acts
 of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the
 tendering process and throughout the negotiation or award of a contract.
- 2. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/ Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically
 - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item
 - e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences
- 4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

- 2. Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3. Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender
 process or action can be taken for banning of business dealings/ holiday listing of the
 Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors
- The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors
- 3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CCW AIR.

Article 7- Other Provisions

- 1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2. Changes and supplements need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner) EXECUTIVE ENGINEER (E) CCW AIR MUMBAI				
(For and on behalf of Bidder/Contractor)				
WITNESSES:				
1				
2(Signature, name and address) Place:				
Dated:				

(On Non Judicial stamp paper of minimum Rs. 100)

(Guarantee offered by Bank to CCW AIR in connection with the execution of contracts)

Form of Bank Guarantee for Earnest Money Deposit / Performance Guarantee / Security Deposit/Mobilization Advance

1.	Whereas the Executive Engineer (Electrical) CCW AIR Mumbai on behalf of the President of India (hereinafter called "The Government") has invited bids under NIT No.053/EDM/FTIIPUNE/2022-23
	for Extending of Internet Network connectivity including Local Area Networking to newly
	constructed Girls Hostel building at FTII Pune
2	The Government has further agreed to accept irrevocable Bank Guarantee for Rs
	(Rupees date)* as Earnest Money Deposit
	from (Name and address of contractor) '' (hereinafter called "the
	contractor") for compliance of his obligations in accordance with the terms and conditions of the said
	NIT.
	<u>OR</u>
1.	Whereas the Executive Engineer (Electrical) CCW AIR Mumbai on behalf of the President of India
	(hereinafter called "The Government") has invited bids under NIT NO 053/EDM/FTIIPUNE/2022-23
	for Extending of Internet Network connectivity including Local Area Networking to newly
_	constructed Girls Hostel building at FTII Pune
2.	The Government has further agreed to accept irrevocable Bank Guarantee for Rs
	(Rupees only) valid up to (Date)* as Performance Guarantee/ Security
	Deposit/Mobilization Advance from(Name and address of contractor)
	"" (Hereinafter called "the contractor") for compliance of his obligations in
2	accordance with the terms and conditions of the said NIT.
3.	We (Bank) (hereinafter referred to as "the Bank") hereby undertake to
	pay to the Government an amount not exceeding Rs (Rupees
1	only) on demand by the Government.
4.	We (Bank) do hereby undertake to pay the amounts due and payable under
	this Guarantee without any demure, merely on demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any
	such demand made on the Bank shall be conclusive as regards the amount due and payable by the
	bank under this Guarantee. However, our liability under this guarantee shall be restricted to an
	amount not exceeding Rs (Rupees only).
5	We, the said bank further undertake to pay to the Government any money so demanded
٥.	notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending
	before any court or tribunal relating thereto, our liability under this present being absolute and
	unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability
	for payment thereunder and the contractor(s) shall have no claim against us for making such payment.
6.	We (Bank) further agree with the Government that the Government shall have the
•	fullest liberty without our consent and without effecting in any manner our obligations hereunder to
	vary any of the terms and conditions of the said agreement or to extend time of performance by the
	said contractor(s) from time to time or to postpone for any time or from time to time any of the powers
	exercisable by the Government against the said contractor(s) and to for-bear or enforce any of the
	terms and conditions relating to the said agreement and we shall not be relieved from our liability
	by reason of any such variation, or extension being granted to the said contractor(s) or for any for-
	bearance, act of omission on the part of the Government or any indulgence by the Government to
	the said contractor(s) or by any such matter or thing whatsoever which under the law relating to
	sureties would, but for this provision, have effect of so relieving us.
7.	We (Bank) further agree that the Government at its option shall be entitled to
	enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding
	against the contractor and notwithstanding any security or other guarantee the Government may
	have in relation to the Contractor's liabilities
8.	This guarantee will not be discharged due to the change in the constitution of the Bank or the
	contractor(s).
9.	We (Bank) lastly undertake not to revoke this guarantee except with the previous
	consent of the Government in writing.

	Government. Notwithstanding anything n restricted to Rs (Rupees lodged with us within six months of the contractions of	unless extended on demand by nentioned above, our liability against this guarantee is only) and unless a claim in writing is date of expiry or the extended date of expiry of this
	guarantee all our liabilities under this guar	antee shall stand discharged.
	Date:	
	Witnesses:	Authorized signatory
		Name:
		Designation:
1	Signature	Staff Code No:
	Name and Address	Bank Seal
_	0.	

² Signature Name and Address

^{*}Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

^{**}In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance, as the case may be

TERMINATION OF CONTRACT ON DEATH

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Divisional Officer on behalf of the President of India shall have the option of terminating the contract without compensation to the contractor.

Whenever any claim, against the contractor from the payment of sum money arises out or under the contractor, Government shall be entitled to recover such by appropriating. In part or whole, the security deposit of the contractor and he shall any Government promise notes, etc. forming the whole or part of such security. In the event of the security being insufficient or if no sum recoverable as the case may be shall be deducted from any sum then due which at any time. where after may become due from the contractor under this or any other contract with Government should this sum be not sufficient to cover the full amount recoverable the contractor shall be to Government on demand the balance remaining due.

Government shall have the right to cause any audit and technical examination of the works and the bill of the contractor including all supporting vouchers, abstracts etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by him under contract and found not to have been executed the contractor shall be liable to refund the amount cover the same from him the manner prescribed in sub-clause(1) of this clause or in any other manner legally permissible and if as result of audit and technical examination it is found that the contractor was paid less than that was due to him under if the amount of such under payment shall be fully paid by the Government to the contractor.

Provided the Government shall not entitled to recover any such overpaid, nor the contractor shall be entitled to payment of any such paid short where as payment has been agreed upon between the Superintending Engineer or Executive Engineer on the one hand and the contractor on the other hand under any term of the contract permitting payment of work after assessment by the Superintending Engineer or the Executive Engineer.

EXECUTIVE ENGINEER (ELECT)

Scope of Work

New installation and integration with existing LAN setup includes but not limited to the following tentative work

- 1. Indoor UTP Cable Laying through PVC Pipe, Casing including all materials
- 2. Preparation of Actual Bill of Material based on Survey and CCW AIR's requirements.
- 3. Installation of IO/Crimping/Patch Panel/ Rack/ Switch and System Integration
- 4. Laying and Termination of existing available and new CAT6 UTP Cable including necessary splicing and crimping. All cabling must be "structured"
- 5. Network Documentation (on Paper and CD) All the floppy-disc., CD's, operational manuals, stationery and similar accessories made available by Equipment vendor would be handed over by the Contractor to CCW AIR after installation work is over.
- 6. Labelling of Cables, I/O, Jack Panel, Switches for new connections
- 7. Repair/Refurnishing work owing to damage caused due to cabling or any other work related to this Project. There should not be any hanging or uncovered wire.
- 8. Patch cord should be branded and factory crimped.
- 9. Equipment furnished shall be complete in every respect with all mountings, fittings, fixtures and standard accessories normally provided with such equipment's and/or needed for erection, completion and safe operation of the equipment's as required by applicable codes though they may not have been specifically detailed in the tender document, unless included in the list of exclusions. All similar standard components/parts of similar standard equipment's provided, shall be interchangeable with one another.
- 10. The Bidder shall be responsible for providing all materials, equipment's, and services, specified or otherwise, which are required to fulfil the intent of ensuring operability, maintainability, and reliability of the complete equipment covered under this specification within his quoted price. This work shall be in compliance with all applicable standards, statutory regulations and safety requirements in force of the date of award of this contract.
- 11. The bidder shall also be responsible for deputing qualified personnel for installation, testing, commissioning and other services under his scope of work as per this specification. All required tools and tackles for completing the scope of work as per the specification is also the responsibility of the bidder.
- 12. The installation of equipments shall be accepted only after installation tests are over.
- 13. The bidder should ensure while installation of LAN, day-to-day functioning of official work and existing network setup/connectivity/internet connectivity should not get disrupted.
- 14. The bidder's proposal shall include the list of tools (such as crimping tool, Krone punch tool) and other accessories, which are required for installation of the connection. No separate charges for fixing/crimping/other connection charges would be paid by CCW AIR
- 15. The switches proposed by the bidders must be compatible to the existing network.
- 16. Scope of Work shall also include
 - a) Powering on equipment after ensuring correctness of terminations interfaces and power supply and making the system ready for testing and commissioning.
 - b) Testing of LAN Cables after laying, terminations and ferruling at both the ends. All testing tools and instruments shall be brought by the bidder and taken back after the testing.
 - c) Configuration of the equipment as per the requirements of CCW AIR including
 - d) Network segmentation and Network Monitoring though network management s/w.
 - e) Site acceptance tests to establish satisfactory performance of the equipment's as per specs.
 - f) Assistance for familiarization and operation of the installed system & services for 12 months after acceptance of system.
 - g) Onsite warranty for all Installation and Hardware delivered for minimum one year and extended as per OEM guarantee/warranty offered

COMMERCIAL AND ADDITIONAL CONDITIONS

- 1. The work is to be executed for newly constructed Girls Hostel building at FTII Pune
- 2. The work shall be executed as per CPWD General Specifications for Electrical Works Part I, II and as amended up to date, relevant I.E. Rules, BIS, IEC and as per directions of Engineer in –Charge. These additional Specifications are to be read in conjunction with above and in case of variations; specifications give in this Additional condition shall apply. However, nothing extra shall be paid on account of these additional specifications & conditions as the same to be read along with schedule of quantities for the work.
- 3. The tenderers should, in their own interest, visit the site and familiarizes themselves with the site conditions before tendering.
- 4. No T & P shall be issued by the Department and nothing extra shall be paid on account of this.
- 5. The tenders are advised not to deviate from the technical specifications / items, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- 6. The price bids of only prequalified firm shall be opened. The time and date of opening of price bid shall be intimately later on.
- 7. The Bidder has to submit authorization certificates from the OEM of Active Components authorizing the Bidder to quote for this tender with stating the specific Name of work with Tender Number. Without OEM MAF, tender will not be considered
- 8. The Bidder has to submit authorization certificates from the OEM of Passive Cabling Components authorizing the Bidder to quote for this tender with stating the specific Name of work with Tender Number. Without OEM MAF, tender will not be considered. Bidder must be certified Cabling System Integrator specific from the respective OEM whose authorization he is submitting with the tender (necessary Certified Cabling SI Certificate must be submitted with the tender). After completion of work, contractor has to submit all Copper Test Fluke Penta scanner reports to the department with 20/25 years of Performance Warranty Certificate of Copper Points from respective OEM
- The Bidder has to submit authorization certificates from the OEM, authorizing the Bidder to quote for this tender with stating the specific Name of work with Tender Number. Without OEM MAF, tender will not be considered
- 10. In case it is found that the tender of any of tenderer is not in line with NIT Specification, requirements or contains many deviations, the department reserves the right to reject the tender of such firm(s) without making any reference to the tenderers(s).
- 11. The tenders will be opened by the Executive Engineer (E), Civil Construction Wing, All India Radio, Mumbai in the presence of the interested representatives of the tenderers who wish to be present on due date as decided.
- 12. The department reserves the right to reject any or all the tenders and call for fresh tenders as the case may be without assigning any reason.

13. Terms of Payment:-

As per Clause 7 mentioned in SCHEDULE 'F' of PWD -7

OR

- i) 80% of the Contract value against delivery, pro-rata of the value of goods delivered after checking of the same at the site of the work by the Engineer-in-Charge and certified all these(materials and goods) in good condition without any defect and worth use in work.
- ii) 10% on completion of installation work duly certified by the Engineer-in-Charge (done without defect &as per specification).
- iii) 10% will be paid after testing, commissioning and handing over to the department for beneficial use.

A sum @ 2.5% of the gross amount of the bill shall be deducted from each running bill as well as final bill of the contractor. Such deductions shall be made unless the contractor has deposited the amount of security at the rate mentioned in cash or Government securities or Fixed Deposit Receipts. This is in addition to the performance guarantee that the contractor is required to deposit.

14. **Rates:-**

The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including GST), duties and levies and all charges for packing, forwarding, insurance, freight & delivery, installation, testing, commissioning etc. at site including temporary constructional storage, risk, overhead charges, general liabilities / obligations and clearance from local authorities, if any. However, the fee for these inspections shall be borne by the department. The department will not issue any exemption certificate.

15. Completeness of tender:-

All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections and all other items which are useful & necessary for efficient assembly and installation of equipment & components of the work shall be deemed to have been included in the tender irrespectively of the fact whether such items are specifically mentioned in the tender documents or not.

16. Care of the building :-

Care shall be taken by the contractor while handling and installing the various equipment's and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

17. Completion Period:-

The completion period of **21** (**Twenty One**) **Days** indicated in the tender documents is for the entire work of planning, designing, supplying, and installation, testing, commissioning and handing over the entire system to the satisfaction of the Engineer-in-charge.

18. Performance Guarantee:-

The successful tenderer shall submit an irrevocable performance guarantee of 3% of the tendered amount in addition to the other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement within 15 days of issue of letter of intent. This guarantee shall be in the form of government securities or fixed deposit receipts or guarantee bonds of any scheduled bank or the State Bank of India in the specified format. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 (sixty) beyond. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority.

19. Guarantee:-

All the equipment's shall be guaranteed for a period of 12 (twelve) months from the date of taking over the installation by the department against unsatisfactory performance and / or breakdown due to defective design, workmanship of materials. The equipment's or components or any past thereof, so found defective during guarantee period shall be forthwith repaired or replaced with cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in-charge in this regard shall be final.

20. Power Supply:-

Electric service connection of 415 V.3 phase, 4 Wire, 50 Hz, AC supply shall be provided by the department for installation purpose free of charge.

21. Water supply:-

Water supply shall be made available by the department at one point in the campus free of cost.

22. Data Manual and Drawings to be furnished by the tenderers.

With tender:- The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data for appraisal and evaluation of the offer.

23. After award of work:-

The successful tenderer should furnish well in advance three copies of detailed instructions and manuals of manufacturer for all items of equipment's regarding installation and maintenance including preventive maintenance and troubleshooting together with all the relevant date sheet, spare part catalogue and workshop procedure for repairs, assembly and adjustment etc. all in triplicate. Extent of work

i. The work shall comprise of entire labour including supervision and all material necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete not only mean major items of the plant and equipment's covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender documents in connection with this contract.

- ii. Minor building works, necessary for installation of equipment's, foundation, making opening in walls or in floors and restoring to their original condition, finish and necessary grouting etc. as required.
- iii. The work is turnkey project. Any item required for completion of the project but left inadvertently shall be executed within the quoted rates.

24. Inspection and testing:-

Copies of all documents of routine and type test certificate of the equipment's, carried out at the manufacturer's premises, shall be furnished to the Engineer-in-Charge and consignee. After completion of the work in all respect, the contractor shall offer the installation for testing and operation.

25. Validity:-

Tender shall be valid for acceptance for a period of <u>30 (Thirty) days</u> from the date of opening of Price Bid.

- 26. Compliance with Regulations & Indian Standards: All work shall be carried out in accordance with relevant regulation, both statutory and those specified by Indian Standards related to the works covered by this specification. In particular the equipment and installation will comply with the following.
 - i. Factories Act with update amendments.
 - ii. Indian Electricity Rules with update amendments.
 - iii. IS & BS Standards as applicable with update amendments.
 - iv. Workmen's compensation Act with update amendments.
 - v. Statutory norms prescribed by any local bodies like power Supply Company etc.
- 27. Nothing in the specification shall be construed to relieve the successful tenderer of his responsibilities for design manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulation and safety codes.
- 28. Successful tenderer shall arrange for compliance with statutory provisions for safely regulation and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirements would make the tenderer liable for penalty of Rs. 500.00 for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

29. Indemnity:-

The successful tenderer shall at all times indemnify the department consequent on this works contract. The successful tenderer shall be liable in accordance with the Indian Law and Regulation for any accident occurring due to any cause and the department shall not be responsible for any accident or damage incurred or claims arising there from during the period of erecting, construction and putting into operation the equipment and ancillary equipment's under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer due to the above.

30. Erection Tools:-

No tools and tackles either for unloading or for shifting the equipment's for erection purpose would be made available by the department. The successful tenderer shall make his own arrangements for all these facilities.

31. Cooperation with other agencies:-

The successful tenderer shall coordinate with other contractors and agencies engaged in the construction of the building, if any, and exchange freely all technical information so as to make the execution of this works contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonably hindrance is caused to other agencies and any completed portion of the work has to be dismantled and redone for want of cooperation and coordination by the successful tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the successful tenderer himself. The work will be carried out with least disturbance during shifting and shut down taken in consultation with client department.

32. Mobilization Advance: -

No mobilization advance for this work shall be paid.

33. Insurance and storage:-

All consignments are to be duly insured up to the destination from warehouse at the cost of the supplier. The insurance cover shall be valid till the equipment is handed over duly installed, tested and commissioned.

34. Verification of correctness of Equipment at destination:-

The contractor shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

35. Painting:-

This shall include cost of painting of entire installation before dispatch to the site. However, angle iron post, steel fabric, supports etc. shall be painted with required shade including painting with the costs of anticorrosive primer paint at site.

36. Maintenance:-

Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation.

37. Interpreting Specifications:-

In interpreting the specifications, the following order of decreasing importance shall be followed in case of contradictions.

- i. Description of Schedule of quantities.
- ii. Particular specification and special condition.
- iii. Drawings.
- iv. CPWD Specifications.
- v. Relevant BIS or other international code in case BIS Code is not available/ ASHRAE standards.

Executive Engineer (E)

Technical Specifications

		hnical Specifications		
Sr. NO.	Detail			
1	Aruba 6100 24 Port 4 SFP+ Swit	rch		
	Description	24x ports 10/100/1000BASE-T Ports, 4x 1G/10G SFP ports, 1x USB-C Console Port, 1x USB Type-A Host port		
	Power supply and Fans	Fixed power supply and fans		
	CPU	Dual Core ARM Cortex A9 @ 1016 Mhz or above		
	Memory and Flash	4 GB DDR3 16 GB eMMC		
	Packet Buffer	12.38MB (4.5MB Ingress/7.875MB Egress)		
	Model Switching Capacity	176 Gbps or above		
	Model Throughput Capacity	98.6 Mpps		
	* ' ' '	1 Gbps: 1.9 μSec , 10 Gbps: 1.8 μSec		
	Switched Virtual Interfaces (dual stack)	16		
	IPv4 Host Table (ARP)	1024		
	IPv6 Host Table (ND)	512		
	IPv4 Unicast Routes	512		
	IPv6 Unicast Routes	512		
	MAC Table Capacity	8192		
	IGMP Groups	512		
	MLD Groups	512		
	IPv4/IPv6/MAC ACL Entries (ingress)	256 / 128 / 256		
	Operating Temperature	32°F to 113°F (0°C to 45°C) up to 5000 ft		
	Operating Relative Humidity	15% to 95% at 104°F (40°C) non- condensing		
	Non-Operating	-40°F to 158°F (-40°C to 70°C) up to 15000 ft (4.6 km)		
	Non-Operating Storage Relative Humidity	15% to 90% @ 149°F (65°C) non- condensing		
	Acoustic	Sound Power, LWAd = 3.6 Bel Sound Pressure, LpAm (Bystander) = 24.6 dB		
	Primary Airflow	Side-to-side		
	Frequency	50 / 60 Hz		
	AC Voltage	100-127 VAC / 200-240 VAC		
	Current	0.8 A / 0.5 A		
	Power Consumption (230 VAC)	ldle: 20.6W Max Power (w/o PoE): 44.2W		

	Safety	UL 60950-1; IEC 60950-1;
	odiei,	EN 60950-1; CAN/CSA-C22.2 No. 60950-1;
		EN 60825-1 UL 62368-1 Ed. 2;
		IEC 62368-1 Ed. 2; EN 62368-1:2014
	Emissions	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6
		Class A; FCC CFR 47
		Part 15, Class A;
		EN 55032: 2015 +AC:2016 / CISPR-32, Class A
	Lasers	EN 60825-1:2007 / IEC 60825-
	Lasers	1:2007 Class 1
		Class 1 Laser Products / Laser Klasse 1
		(Applicable for accessories - Optical Transceivers only)
	Mounting and Enclosure	Mounts in an EIA-standard 19-inch rack or equipment cabinet
	, and the second	(rack-mounting)
	Additional Terms	Compatible to existing HP Core Network of HP Switch 5800 series
		Five years NBD support for Switch
		Including training from OEM / Certified engineer
2	Aruba 6100 48 Port 4 SFP+ Sw	itch
	Description	48x ports 10/100/1000BASE-T Ports, 4x 1G/10G SFP
		ports,
		1x USB-C Console Port, 1x USB Type-A Host port
	Power supply and Fans	Fixed power supply and fans
	CPU	Dual Core ARM Cortex A9 @ 1016 Mhz or above
	Memory and Flash	4 GB DDR3 16 GB eMMC
	Packet Buffer	12.38MB (4.5MB Ingress/7.875MB
		Egress)
	Model Switching Capacity	176 Gbps or above
	Model Throughput Capacity	98.6 Mpps
	Average Latency (LIFO-64- bytes packets)	1 Gbps: 1.9 μSec , 10 Gbps: 1.8 μSec
	Switched Virtual	16
	Interfaces (dual stack)	
	IPv4 Host Table (ARP)	1024
	IPv6 Host Table (ND)	512
	IPv4 Unicast Routes	512
	IPv6 Unicast Routes	512
	MAC Table Capacity	8192
	IGMP Groups	512
	MLD Groups	512
	IPv4/IPv6/MAC ACL	256 / 128 / 256
	Entries (ingress)	
	Operating Temperature	32°F to 113°F (0°C to 45°C) up to 5000 ft
	Operating Relative Humidity	15% to 95% at 104°F (40°C) non- condensing
	Non-Operating	-40°F to 158°F (-40°C to 70°C) up to 15000 ft (4.6 km)
	Non-Operating Storage	15% to 90% @ 149°F (65°C) non-
	Relative Humidity	condensing

	Acoustic	Sound Power, LWAd = 3.6 Bel Sound Pressure, LpAm (Bystander) = 24.6 dB
	Primary Airflow	Side-to-side
	Frequency	50 / 60 Hz
	AC Voltage	100-127 VAC / 200-240 VAC
	Current	0.8 A / 0.5 A
	Power Consumption (230	Idle: 20.6W
	VAC)	Max Power (w/o PoE): 44.2W
	Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014
	Emissions	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A
	Lasers	EN 60825-1:2007 / IEC 60825- 1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
	Mounting and Enclosure	Mounts in an EIA-standard 19-inch rack or equipment cabinet (rack-mounting)
	Additional Terms	Compatible to existing HP Core Network of HP Switch 5800 series
		Five years NBD support for Switch
		Including training from OEM / Certified engineer
3	10G SFP+ LC LR Transceiver	Aruba 10G SFP+ LC LR 10km SMF Transceiver
4	Patch cord	a) Wiring: 24 AWG Stranded, Unshielded Polycarbonate plug, Gold over Nickel Contacts b) Wire Insulation: SFS PE c) Jacket: Low Smoke Zero Halogen (LSZH) d) Bend Radius: 23mm without load e) Flame Test: IEC 60332-1 f) Other Rating: IEC 60754, IEC 61034 g) Tensile Strength: 96N min h) Durability: 1000 Mating Cycles i) Propagation Delay: 1-250MHz: < 25 ns/100m j) Standards Compliance: k) ANSI/TIA-568-C.2 and ISO/IEC-11801 (2nd Edition), IEC 61156-2, EN 50173; EN 50288-6-2 Category 6 standard l) Certification: CE

5	CAT6 UTP Cable, 23 AWG	a)	Unshielded Twisted Pair, Category 6, TIA / EIA 568-
	Specification		C.2 & ISO/IEC 11801,
		c)	23 AWG solid bare copper, High Density Polyethylene Insulation,
			FRPVC Jacket,
		e)	
		f)	-10 °C to +65 °C Operating temperature
			Tested up to Minimum 250 MHz Frequency,
		h)	UL,CE,ETL,ETL Channel Test Certification, Standard
			Compliance: ANSI/TIA-568 C.2 category 6, ISO/IEC-11801, Class E/ IEC 61156-5: category 6,
		i)	Mutual Capacitance: 5.6 nF MAX /100 Mtr,
6	UPS	a)	
			Rectifier True Online Double Conversion,
		b)	Wide input voltage range: 60~300VAC @ 100%,
		- \	load(linearly derating to 50% load @
		c) d)	• •
		4,	window
		e)	Double Conversion Efficiency >91% & ECO mode
		T/	efficiency up to 98%
		f)	100% load @ 0~40C operating temp. Active Input Power Factor Correction 0.99.
		h)	,
		,	long backup model)
		i)	Inbuilt OVCD (Over Voltage Cut-off device)
		j)	Fully conform coated PCBA adaptable to harsh
		k)	environment Offer terminal blocker on 2K/3K rating to connect to
		",	big capacity equipment
		I)	Digital Charger Technology provide 02-10 A
		m)	charging current Easy understanding LCD for convenient installation
		"")	setup. Total 16 Nos, 12V / 26AH SMF Battery with
			battery stand and interlink cable
		n)	WINPOWER software support virtualization transfer
			application Intelligent Monitoring options
7	Wall Mounted Rack	a)	Rack Standard: Conforms to DIN 41494 or
		b)	equivalent standard Construction: Welded Frame
		c)	Front Door: Lockable Toughened Glass Door, Steel
			Single, Steel Dual
		d)	
		e)	
		f)	/ Direct M6 Tap Mounting Angle: 19" Mounting angles made of
		''	formed steel
		g)	
		h)	
		i)	Top and Bottom Cover: Welded to Frame, Vented and Field Cable entry exit cut outs
		j)	Mounting Option: Castor wheels (Front 2 wheels with
		1/	Brakes and rear without brakes) Or Levelers Or
			Base Plinth Standard
		k)	Color: Black or Grey
		l)	Static Load: 500+ Kgs

8	SC Pigtails PC Simplex Single	a)	Type: SC Single mode , 1.5 meter
	Mode 9/125um	b)	Fiber Type: Single Mode OS2, ITU-T G.652.D
	,	c)	Tight buffered: 900µm
		d)	Jacket: Low Smoke Zero Halogen (LSZH)
		e)	Flame Test: IEC 60332-1
		f)	Other LSZH standard: IEC 60754, IEC 61034
		g)	Crush Load: 800 N
		h)	Impact: 0.2 Nm
		i)	Bend Radius: 50mm (min)
		i)	Operating Temperature: -10°c to +70°c
		k)	Max attenuation: <=0.34 dB per km@1310 nm, <=
			0.20 dB per km@ 1550nm
		I)	Standard Compliance: ITU-T G.652.D Fibre, ISO/IEC
			11801, EN50173 -1, ANSI TIA/EIA 568B
		m)	Certification: CE

Special Condition for Internal Electrical Installation works

- 1) All material required to be used on work shall be got approved from the Engineer-In-Charge, we in advance.
- 2) Earthing, Cable laying, Cement concrete works and testing of the installation shall be done in presence of the Engineer-In-Charge or his authorized representative.
- 3) On completion of work the Contractor shall test the installation and produce Test Certificate along with completion plan in accordance with the CPWD specification failing which a recovery shall be made from the bill of the Contractor as per Clause 8B.
- 4) Description of items underlined in the Schedule of work shall be used for abbreviation nomenclature of items for measurement and running account bills only.
- 5) All debris at site shall have to be removed by the contractor before handing over the installation to the Department.
- 6) The Main board shall be fabricated in consultation with the Engineer-In-Charge. Adequate space for providing energy meter, Cut out for providing Energy Meter, Cut out for providing Service Connection shall also be made on the Main Board.
- 7) The Successful tendered shall be making his own arrangement for storage and watch and ward of materials whether the same brought by him or supplied by the department. He shall remain responsible for watch and ward of installation and other fitting till these are commissioned and handed over to the department.
- 8) Cement required for the work shall have to be procured by the Contractor himself.
- 9) Electrical contractor will make recess in-brick work by cutting chases for provision of Electrical conduit and metal box according to the electric drawings for electrical services. Electrical Contractor will fix the conduits and boxes and there after close the chases up to the surface of masonry work in cement mortar 1:4 (1 Cement 4 Sand). There after surface of chases shall be plastered and finished by the Contractor (Civil Contractor) with mix and specification same as for plaster to ensure smooth and even surface. Nothing extra shall be paid to the contractor for above operations irrespective of whether the chases are not before or after plastering of the Wall.
- 10) All the fitting and fans should be proper Earthed.
- 11) Termination of wiring inside the DB's and Main Board should be by crimped connection. For which no extra payment shall be made.
- 12) The brass batten angle holder should be ISI marked.
- 13) The agency will have to return back the dismantled material if any except as specified in the item, to the concerned AE (E)/JE (E) at his store, for which no extra cartage shall be paid.
- 14) Before starting the fabrication. The Contractor shall prepare drawing of the Main Board, shall be got approved from the Engineer-In-Charge.
- 15) Following makes for use in the work are preferred. Prior approval of Engineer in charge is necessary for deviation from the preferred makes.
- 16) The contractor or his representative is bound to sign the site order book as and when required by the Engineer-in-Charge and to comply with the remarks therein
- 17) The entire installation shall be at the risk and responsibility of the contractor until these are tested and handed over to the department. However if there is any delay in construction from the department side, the installation may be taken over in parts, but the decision on the same shall rest with Engineer-in-Charge which shall be a binding on the contractor.
- 18) No claim for idle labour shall be entertained.
- 19) The connection, inter connection, earthing and inter earthing shall be done by the contractor wherever required and nothing extra shall be paid on this account.
- 20) Any accident liabilities will be the responsibility of the Contractor.
- 21) No T & P will be issued to the Contractor

<u>List of Acceptable make</u>

1	M.S./PVC Conduit Pipe (ISI Marked- ERW)	:	BEC/AKG/NIC/Supreme/Tarun/Precision		
2	PVC insulated copper FRLS conductor wires /Armoured cable (ISI marked)	:	Finolex/ Polycab /Havells / L&T/KEI/ Ralison/ ar ISI Marked		
3	Lugs/Ferrules	:	Dowells/Jainson.		
4	Brass compression gland (Heavy duty)	:	Commex/Gripwell/Hansel/Braco		
5	MCB/MCB DB /TPN DB/ Isolator	:	Legrand/ABB/Siemens/Schneider/L&T		
6	MCCB (ICS = 100% ICU)	:	Legrand/ABB/Siemens/Schneider/L&T		
7	DWC/HDPE Pipe	:	REX/Duraline/Gemini pipe/Ashish		
8	Modular type switch & Accessories (ISI Marked)	:	Legrand Mosaic/ Crabtree/ North West/Anchor		
9	24 Port 4 SFP+ Switch/48 Port 4 SFP+ Switch/10G SFP+ LC LR Transceiver	:	As per Technical specification and Make considering compatibility with existing networking system		
10	L2/L3/POE switch	:	CISCO/Fortinet/Juniper/Zyxel/ Extreme/Allied- Telesis/Compatible with existing networking system		
11	MS Rack	:	Rittal/ Poweride /Comrack/ Vallrack/ Dynamic/ Rackom/ Compatible with existing networking system		
12	12/24 Port Fiber Panels (LIU) fully loaded with Pigtails, Couplers, Splice Trays and Other Mounting Accessories	:	Belden / Penduit / Molex / Siemon/Digilink/ D-Link/Xysel/ Compatible with existing networking system		
13	12/24 Port Patch Panel available in 1U 12/24 Port density	:	Belden / Penduit / Molex / Siemon/DLink/ Digilink/Xysel/ Compatible with existing networking system		
14	Fiber / Cat / FTP cable	:	Belden / Penduit / Molex / Siemon/ DLink/ Digilink/Digisol/ Compatible with existing networking system		
15	UPVC bus trunking	:	MK/Legrand/ Poweride/OBO/Precision		
16	Online UPS	:	APC/Emerson/ DELTA/ Numeric/Consul/Eaton		
17	Changeover Switch	:	Havells/L&T/ABB/C&S/HPL Socomec		

Note:

- a) Materials specified in the List of Acceptable Makes for Electrical Materials shall be got approved from Engineer-in-charge before use on work. Decision of Engineer-in-charge shall be final regarding selection of the makes.
- b) Materials not specified in the List of Acceptable Makes for Electrical Materials shall be got approved from Engineer-in-charge before use on work. Decision of Engineer-in charge shall be final in this respect.

CONTRACTOR

EXECUTIVE ENGINEER (ELECT)
CCW: ALL INDIA RADIO: MUMBAI

SCHEDULE OF WORK (PRICE BID)

NIT No. 053/EDM/FTIIPUNE/2022-23

Name of Work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune.

S.No	Description of Item	Qty		Rate	Amount
1	Supplying, fixing, and configuring 24 ports + (4 SFP+) ports Managed Layer 2 switch of and web View/CLI, 6KV surge protection on Ethernet port and console port for management as per specification complete., (Make: HP, Compatible to existing HP Core Network of HP Switch 5800 series)	4	Each	1,07,938.00	4,31,752.00
2	Supplying, fixing, and configuring 48 ports managed gigabit switch Layer 2 with 48 10/100/1000 Base-T ports management switch with 4 10GE SFP+ ports erected in provided rack complete. (Make: HP, Compatible to existing HP Core Network of HP Switch 5800 series)	2	Each	2,44,569.00	4,89,138.00
3	Supplying, fixing, and configuring 10G Base -SR/LR (SFP+) simplex MM/SM transceiver erected in provided rack complete	11	Each	35,201.00	3,87,211.00
4	Supplying and fixing 24 port patch panel with tool-less keystone jacks in provided U Rack complete as per specification.	8	Each	12,874.00	1,02,992.00
5	Supplying and fixing 1 meter length, UTP patch cord of Cat 6 type in position as per specification No. WG-COC/PC	150	Each	283.00	42,450.00
6	Supplying and fixing 24 ports light guide unloaded interconnect unit, rack mounted type, with adapter panel for termination of optical fibre cables in provided U rack complete as per specification.	6	Each	6,467.00	38,802.00
7	Supplying and fixing SC/LC type single mode duplex adapter to couple two connectors between OFC & Fibre switch /Fibre module as per specification.	72	Each	671.00	48,312.00
8	Supplying and fixing SC/LC type Single mode pigtails for LIU to terminate OFC in LIU as per specification.	144	Each	946.00	1,36,224.00

	T		1	1	1
9	Supplying and installing 3 m fibre patch cord duplex single mode for OS1 / OS2 complete as per specification.	12	Each	2,955.00	35,460.00
10	Supplying and fixing 9U wall mount rack as per specification.	6	Each	10,994.00	65,964.00
11	Supplying and installing armoured single mode optical fibre cable with 12 fibre in provided underground HDPE pipe complete.	200	Meter	136.00	27,200.00
12	Supplying, erecting, testing and commissioning of 6kVA capacity online pure sine wave with backup time of 30 minutes. PWM & IGBT based UPS with 0.9 to unity output pf, single phase input & 1 phase output complete with all protections as per specification including Supplying and erecting 16 Nos, 12V / 26AH SMF Battery bank for 30 minutes with Suitable size heavy duty rack & open rack links for maintenance free batteries etc. complete as required.	1	Each	2,05,885.00	2,05,885.00
13	Supplying and laying (including excavation of suitable width & depth) 50 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete.	55	Meter	255.00	14,025.00
14	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
15	8 way , Double door Supplying and fixing 5 A to 32	1	Each	2,736.00	2,736.00
	A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
а	Single pole	6	Each	272.00	1,632.00
b	Single pole and neutral	1	Each	637.00	637.00

16	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	6	Each	623.00	3,738.00
17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required.				
а	3 x 2.5 sq. mm	75	Meter	146.00	10,950.00
b	3 x 6 sq. mm	20	Meter	323.00	6,460.00
18	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
а	25 mm	40	Meter	154.00	6,160.00
				TOTAL	20,57,728.00
	Name of the Contracto	r			
S.No	Description of Items	Estimated cost(Rs.)	Percentage above or below the estimated cost	% in Figures	Total (Rs)
1	Name of Work: Extending of Internet Network connectivity including Local Area Networking to newly constructed Girls Hostel building at FTII Pune.	20,57,728.00			-