

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL NOTICE INVITING TENDER (N.I.T)

	(UPDATED ON 14-6-2019)
Tender Notification	NITK/FMN/doc4 dated 14-6-2019
Estimated amount put to Tender	Rs 300000/-
E M D Amount	Rs 60000/- (2% of Estimated cost)
Time for Takeover	Immediately after the issue of the Work Order (See page 10)
Last Date for submission of tender	(on or before) 15-7-2019 4PM
Address for Submission of Tender	Office of the Chairman,
	Central Computer Centre,
	NITK Surathkal ,
	Srinivasnagar PO ,
	DK, Karnataka ,
	PIN 575025
Date of opening of technical bid	17-7-2019 , 3PM
Date of opening of financial bid	Will be notified later



NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL CENTRAL COMPUTER CENTRE NOTICE INVITING TENDER (N.I.T)

The National Institute of Technology Karnataka, Surathkal (in short-NITK, Surathkal) is an autonomous body under Ministry of HRD Govt. of India, imparting Technical Education and engaged in Research Activities. It is proposed to procure the services for the departmental academic/research activities.Sealed Tenders are invited for the following services in two cover system (i.e., Technical bid and financial bid) subject to the following terms and conditions, from the reputed biidders so as to reach this office on or before scheduled date and time. The tender (Technical bid) will be opened on the specified day in the presence of bidders or their authorized agents who may choose to be present. The financial bid of only such bidders whose technical bid is accepted shall be opened later similarly on a pre-informed date.

NITK/FMN/doc4 dated 14-6-2019
Rs 3000000/-
Rs 60000/- (2% of Estimated cost)
Immediately after the issue of the Work Order (See page 10)
(on or before) 15-7-2019 4PM
Office of the Chairman,
Central Computer Centre,
NITK Surathkal ,
Srinivasnagar PO ,
DK, Karnataka ,
PIN 575025
17-7-2019 , 3PM
Will be notified later

Note: Bids will NOT be received after **the deadline of (on or before) 15-7-2019 4PM**. Bidders are hereby advised to ensure that their bids reach the address as mentioned above well before the deadline.

Sd/-Chairman Central Computer Centre

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Important Note

- 1. This version (updated on 14-6-2019) of the tender document supersedes all the previous versions if any of the tender document.
- 2. The bidders are advised to follow this document while bidding.

1 Introduction

1.1 Objective

The NITK campus network has about 20 kms of 12 core OFC using 1 Gbps & 10 Gbps backbone to the different buildings and broad band to the residences. The Data centre in CCC acts as an integration hub of OFC/backbone. It houses the Internet connection to BSNL, the link to the National Knowledge Network, associated networking equipments and sufficient hardware to handle the critical backbone network services. Main servers are connected to the data centre network. Critical services are accessible from inside and outside the network. Departments, residences (through the broadband), directorate (and administrative net), guest houses and hostels are individually connected to the core switch.

NITK wishes to identify a FACILITY MANAGER for this campus network. Sealed Tenders are invited from reputed firms for the Facility Management of the Campus Network.

1.2 Procedure

A **two-stage** procedure will be adopted for evaluation of tenders submitted in response to this Notice Inviting Tender. Minimum qualification or background in terms of revenue, work experience and technical expertise expected from the bidder to participate in the bidding process shall be as given elsewhere in this document.

The **technical bid** shall be evaluated in terms of the Service Level Agreements commitments, capability of the bidder in performing similar assignments etc.

The **commercial bid** shall contain the financials pertaining to the services required for maintaining of the network. Commercial bid of only those bidders who pass the technical bid evaluation shall be considered for evaluation.

Successful bidder shall be that bidder who has submitted the lowest qualified bid.

1.3 Need to Maintain Confidentiality

- 1. All data found in this document and associated documents are considered to be confidential information.
- 2. Further, data gathered as a result of meetings and walk-through visits is considered to be confidential information. This confidential information shall not be distributed outside of organizations directly related to the contractor without expressed, written approval from NITK Surathkal.

2 Submitting the bids

The bid should be submitted in two cover system — Technical Bid and Financial Bid as given below.

2.1 Technical Bid

The bidder should give details of their technical soundness and provide list of customers of previous services to Universities, Institutes or Government Departments/ Undertakings/ public sectors with contact details. The details of the bidder/ profile should be furnished along with the copy of all related documents. This envelope should be sealed and duly super-scribed as **Envelope No. 1**

:Technical Bid. Full name and address of the agency should also be mentioned on envelope and should be addressed to The Director, NITK, Surathkal. The following documents must be enclosed:

2.1.1 Documents needed for technical bid

- 1. Unpriced copy of the financial bid with terms and conditions.
- 2. Declaration that all items specified in tables 1, 2 and 3 are included in the bid and the specifications mentioned in 6.1 are matching. Please note that any violation to this will result in bid-rejection.
- 3. Declaration that the bidder agrees to the scope of service mentioned in section 4.
- 4. Proof that the bidder has 5 years experience (Ref 3.3.1)
- 5. Proof that the bidder is certified ISO 9001
- 6. Proof for 3 works not less than Rs 15 lakhs within the last two years
- 7. Licence certificate for supplying the goods.
- 8. List of Owner/partners of the firm and their contact numbers
- 9. Income tax PAN number.
- 10. GST Details.
- 11. Name and Contact Address of the Bidder with e-mail address
- 12. List of customers with contact details: Reference Letter /Phone Number / Contact address of three places or more where you have carried out similar work (Networking projects only).
- 13. The extract of the Balance sheet, Profit & Loss A/c., Trade or Manufacturing A/c for the last 3 years should be enclosed as proof with the relevant information highlighted.
- 14. The bidder must give the following **declaration**, **contract and certificate** in the business letter head and/or with business seal. If these are not given, the bid shall be treated as non-responsive and rejected.

a) **Declaration**

(To be provided by the bidder in the business letter head and/or with business seal) I/we have not tampered/modified the tender forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our tender will be summarily rejected and full Earnest money deposit will be forfeited and I/we am/are liable to be banned from doing business with NITK, Surathkal and/or prosecuted.

Signature of the Bidder : Name and Designation : Business Address : Seal of the Bidder's Firm Place: Date :

b) Contract Form

(To be provided by the bidder in the business letter head and/or with business seal)

i. Contract

(Name of the Supplier's Firm) hereby abide to supply the items in the delivery schedule (mentioned in the section 5 in the page 15 of the tender document) for supplying the items if the purchase order is awarded.

- ii. The items will be supplied conforming to the specifications stated in the tender document without any defect and deviations.
- iii. Warranty will be given for the items supplied for the period mentioned in the tender document and service will be rendered to the satisfaction of NITK, Surathkal during this period.

Signature of the Bidder : Name and Designation : Business Address : Seal of the Bidder's Firm Place: Date :

c) Certificate

(To be provided by the bidder in the business letter head and/or with business seal)

This is to certify that we are not blacklisted by any of the Central Government Department and any State Department / PSU / Banks & Financial institutions on account of corrupt or fraudulent practices. Further, we understand that such blacklisting if any discovered in the future shall be a disqualification and shall result in the tender being rejected irrespective of the processing status of the tenders.

Signature of the Bidder : Name and Designation : Business Address : Seal of the Bidder's Firm Place: Date :

- 15. EMD in original form valid for minimum six months, through Bank Guarantee or Demand Draft only drawn on any scheduled bank in favour of Director NITK, Surathkal, payable at Surathkal should be submitted. EMD shall bear no interest. Any bid not accompanying with EMD is liable to be treated as non-responsive and rejected *except for those firms who are eligible for exemptions as per existing rules*.
- 16. The bidder must include a print out of this tender document duly signed and stamped on all pages together with their bid.

The above documents should be furnished in the technical bid envelope.

2.2 Commercial bid

The bidder should submit their financial bid in Envelope 2 as per the price schedule format given in Section 5 in page 15 of this document. The rate should be quoted both in words and figures. All the

pages of the financial bid should be signed affixing the seal. All corrections and overwriting should be initialed. This envelope should be duly superscribed as **Envelope No. 2 : Financial bid**. Full name and address of the agency should also be mentioned on the envelope and should be addressed to **The Director, NITK, Surathkal**.

2.3 How to Submit

Both the Envelopes No. 1 and 2 should be kept in another separate envelope duly superscribed with the following details.

- 1. Tender Notification Number : NITK/FMN/doc4 dated 14-6-2019
- 2. FACILITY MANAGEMENT NETWORKS, NITK SURATHKAL
- 3. Not to Open before (Last Date for submission of tender): (on or before) 15-7-2019 4PM

Mention KIND ATTENTION : CHAIRMAN, CCC PH: 0824 2473057 and submit at the address given in the Notice Inviting Tender.

Last Date for submission of tender : (on or before) 15-7-2019 4PM

Note: NITK Surathkal will not be responsible for non-receipt /non delivery of the bids due to wrong addresses / postal delays / courier delays or any other similar reasons.

3 Important Information to the Bidder

3.1 General Instructions

- 1. The tender will be acceptable only from the actual firm bidding.In case of any default noted, the EMD will be forfeited even if pre-qualified.
- 2. Incomplete or conditional tender will be rejected. A bidder must bid for all items specified in the schedule. Partial bidding will be treated as incomplete and will be rejected.
- 3. Performance Security of 5 % of contract value in terms of Bank Guarantee by scheduled banks shall be given by the successful bidder for two quarters. *The EMD shall be released after receipt of performance security from successful bidder*.
- 4. Validity of bids: The rate quoted should be valid for the tenure of the Service Level Agreement. No claim for escalation of rate will be considered after opening the Tender.
- 5. Clarification of Tender Document:

A prospective bidder requiring any clarification of the Tender Document may communicate in writing to the email *cccprocurement@nitk.edu.in* on or before 20-6-2019. The compiled response will be uploaded as an annexe to the notification before the last date. There will not be an in person pre-bid conference. No communication will be entertained after this specified date from the bidders or their principals until the tendering process is completed. Violation of this can result in bid rejection.

The Institute can however, ask for clarifications if any, and the bidders are expected to respond. Lack of response from them will enable the Institute to arrive at its own decision about such bids.

- 6. Amendment of Tender document: At any time prior to the last date for receipt of bids, Institute reserves the right for any reason whatsoever, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the Tender document by an amendment. Such amendments if any, shall be duly uploaded to the Institute website. The bidders are hereby advised to watch the Institute website for any such updates.
- 7. Institute reserves the right to extend the last date for the receipt of bids at its own discretion.
- 8. The bids shall be written in English language and any information printed in other language shall be accompanied by an English translation, in which case for the purpose of interpretation of the bid , the English translation shall govern.
- 9. The Institute reserves the right of (i) accepting any bid other than the lowest (ii) rejecting all the bids (iii) accepting or rejecting any Bid, without assigning any reason thereof. No correspondence in this regard will be entertained. The decision of the Institute Purchase Committee shall be final in all matters of tender and purchase.
- 10. The Institute reserves the right to cancel or reduce the quantity included in the schedule of requirements at any time after acceptance of the tender without a notice. The Contractor/Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work/supply in full but he did not derive in consequence of the foreclosure of the whole or part of the works/supply.
- 11. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.
- 12. The rates quoted shall be all inclusive. However, Service charges and other levies shall be indicated clearly. GST and/or other duties legally leviable and intended to be claimed should be distinctly shown in the tender.
- 13. The Financial bid shall be in general in the format of Price Schedule (section 5 in 15) given in this document.
- 14. Details of services expected , approximate quantity and other details are mentioned elsewhere in this document.
- 15. GST Registration Number and its validity should be indicated. Documentary evidences be supplied/ attached to the tender documents.

16. Important points about bid evaluation:

- a) Conditional bids shall be summarily rejected.
- b) The bids will be examined to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
- c) All rates shall be indicated both in words and figures. Where there is difference between the rates quoted in words and figures, rate quoted in words will prevail.
- d) Errors in financial bid will disqualify the bid except when the purchase committee decides to condone such errors by resolving it as given below:

Arithmetical errors found if any will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, such bids will be rejected. If there is a discrepancy between words and figures, then amount in words will prevail.

- e) The decision to condone such errors is the prerogative of the purchase committee and no communications shall be entertained in this regard by any of the bidders or their competitors.
- f) The committee can ask for clarifications if any and the bidders may answer them. Lack of response from them will enable the committee to arrive at its own decision about such bids. No further communications shall be permitted.
- g) Bids will be evaluated mainly based on the responses to sections 5,6 & 7.

3.2 Important matters related to Financial Bid

- 1. The rates should be quoted for preferably FOR destination from supply within India.
- 2. In case of import both CIF and/ or FOB rate should be quoted. All components of expenditure to arrive at Bangalore need to be explicitly specified.
- 3. The institute is eligible for customs duty exemption
- 4. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any.
- 5. Rates quoted should be inclusive of Testing, commissioning and Installation of equipment.
- 6. Payment: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition.
- 7. Guarantee and Warranty period should be specified for the complete period conforming to the relevant sections of this tender document.
- 8. Time of supply and installation of items should be specified conforming to the relevant sections of this tender document.
- 9. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.

3.3 Bidder Eligibility Criteria

To be eligible, a bidder has to meet the following criteria.

- 1. The bidder shall have experience of at least 5 years in the field of Information Technology. This shall include specific experience in any or all of Design, Engineering, Integration, Operations, Maintenance & Consultancy in IT Networking independently, or as part of a large IT Infrastructure Project.
- 2. The bidder shall have adopted appropriate quality systems (ISO 9001) and adhere to standards and best practices. The bidder / employees of the bidder should have appropriate expertise in design, engineering, integration, operations and management of IT Information Systems / Networking Infrastructure.

- 3. The bidder shall have executed at least 3 similar works, each costing not less than Rs.15 lakhs each, during the last 2 years, in the Maintenance of Campus Wide-Area-Networks and Network Operating Centers as part of a IT Infrastructure Project belonging to Government or large Public Sector/Private Sector Organizations. In addition to these, the bidder's experience in executing similar works costing about 15 lakhs may be given as a list with details.
- 4. Bidder has to be a profit making organization in each of the last 3 years. The bidder's sales turn over in terms of earning from Design, Supply, Integration, Operation & Maintenance or Consultancy in IT Systems, Networking Solutions & related Services within India should be at least Rs.1 Crore or above in each of the last three financial years. Extract of the audited balance sheet for the last three years is required to submitted with the technical bid with the relevant information highlighted.
- 5. The bidder should be capable of executing projects involving Networking , Network troubleshooting and Network expansion.
- 6. A certificate is to be submitted by the bidder that they have not been black listed by any Govt./Semi Govt. organization or department. Please see 2.1.1.14 in page 5.
- 7. The bidder will have to submit GST details along with the technical bid.
- 8. For the items being supplied in the rate contract and AMC replacements (if any) the bidder should be an authorized partner of the manufacturer of networking products and should have adequate facilities, manpower and staff for installation, testing, commissioning and after sales service.
- 9. The bidder will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- 10. The bidder should supply a list of customers where they have carried out networking projects of this nature. Documentary proof in this regard should be submitted.

4 Schedule of Requirements,	, Specifications and Allied Details
Item(s) Name to be Procured	Facility Management
Туре	Service
Brief Specifications of the Item(s)	Please see the details listed below
Quantity	As specified in the details listed below
Any other details/requirement	As specified in the details listed below
Period required	Yearwise One year with extension upto five years subject to
	good performance and / or changes in the inventory of the
	significant items in the Rate Contract
Delivery Schedule expected	Immediately
after release of Purchase/Work order	
(in Weeks)	
EMD (in Rupees)	Rs 60000/- (2% of Estimated cost)
Performance Security to be given	5% of the Total contract value
by Successful Bidder after release of	excluding the Service Taxes
Purchase Order (in Rupees)	in the Purchase Order

4 Schedule of Requirements, Specifications and Allied Details

4.1 Terms of service

The company has to enter into a Service Level Agreement (SLA) with NITK on a stamp paper costing not less than Rs 100/- for the maintenance of NITK Campus Network. This will be at the yearly charges , inclusive of taxes and governmental levies applicable or becomes applicable later due to or under any law.

4.2 Scope of Service

- 1. The Facility Manager must provide the following services and enter into a service level agreement with NITK Surathkal under the following terms and conditions.
- 2. Ensuring the smooth operation of the Campus Network by acting as the single technical point of contact.
- 3. Accept the Layer2–Layer7 devices of our network (please see section 7 in page 23) under AMC and Provide technical and configuration support wherever necessary.
- 4. Testing the network periodically so that non–functional areas if any are detected and functioning is restored without delay.
- 5. Coordinate troubleshooting of the wired network, wireless network, broadband connections to the Campus and the Internet connections of NITK's Campus Network with BSNL and National Knowledge Network.
- 6. The Facility Manager must liaise with the following personnel (i) Student network coordinators of each hostel (ii) UPS maintainers for the UPS systems (iii) Switch maintainers for any switches that are under warranty or AMC already. (iv) CCC for any access related problems , IP allocations and Network Management and alterations if any.
- 7. Coordinate the warranty period maintenance (vendor management services for the active devices, passive network (copper and fiber) wherever these are under warranty. *Please note that for the devices under warranty, the first level of service is to be provided by the Facility Manager. Subsequently, the calls may be routed to the appropriate vendor / warranty period maintainer. This data must be collected by the Facility Manager while taking over the Facility Management.*
- 8. The devices that are coming out of warranty are to be automatically taken into AMC unless overruled by NITK. Hence the FM has to provide the rate of AMC for such devices as well, with appropriate back-to-back arrangement with the vendor. Hence, it is recommended that the bidder may take a survey of such equipments prior to the bidding. At the time of taking over the infrastructural facilities for Facility Management, the updated list of equipments for vendor management and comprehensive on-site maintenance shall be prepared by the Facility Manager and this shall be used as the basis of Facility Management after proper approval by the NITK FM Coordinator. Please see section 7 in page 23.
- 9. The Facility Managers must have an appropriate maintenance arrangement with the respective service providers or vendors of the equipments under AMC.
- 10. The Facility Manager must also do the following.

- a) Take care of the operation and maintenance of the LANs of Hostel & Main Building, where there are no unique administrative in-charges. The H–O–D¹/H–O–S² will be the administrative decision maker for LANs of the Departments and other centres.
- b) Enter into a rate contract for any repairs for the copper cabling within the campus network including the supply of active devices and passive materials (copper and fiber) and providing labour thereof ³. The recommendation such activities to bills that are not exceeding the purchase by a limit which shall be identified / enhanced by the Competent Authorities of NITK. Network expansions and repairs if necessary can also be covered under this rate contract subject to the above conditions.
- 11. If any equipment becomes unserviceable or unavailable in the market, the service provider shall obtain the information about the equivalent equipment from the original manufacturer with due certification and rates applicable for the new product must be competitive in comparison with other similar products. The Chairman, CCC shall take the final decision based on the verification of the new rates prepared by the service provider.
- 12. The Facility Manager will be provided with a room in CCC as their Office–in–Campus during the tenure of their contract.
- 13. The Facility Manager should have (i)designed, implemented network of similar quantum to that of NITK (ii)taken of AMC of such a large network system. (iii) The company should demonstrate its potential to procure spares of the network components quickly to minimise network down time.
- 14. The Facility Manager must give comprehensive on-site maintenance for the active devices and passive network (copper and fiber) wherever these are not under warranty. **Sufficient spares are to be kept by the Facility Manager for this purpose**. At least 5 nos of 48 port switches and 5 Nos of 24 port switches must be available as spares at all times.
- 15. The Facility Manager must constitute a help desk to act as a nodal point to receive Telephone Calls / E-Mails / SMS / electronic logging from the users and co-ordinate all activities of the Facility Management. There should be at least three mobile numbers which will be published in NITK for the service calls.
- 16. The Facility Manager must create an electronic complaint logging service and follow up. This should be a web site to log the call by anyone in NITK (intranet only). The logged call will have one severity which should be assigned by CCC personnel (in consultation with the logger and FM). Depending upon the severity (in the range 1-10, 10 being most severe), there will be deadline by which the problem has to be fixed failing which will attract a penalty as decided by NITK.
- 17. Preventive maintenance shall be done on at least monthly basis or as often as needed.
- 18. One internal Telephone and Office space will be provided at CCC; but telephone charges outside the intercom shall be at the firm's expense.
- 19. Unscheduled, on-demand corrective / remedial maintenance shall include parts replacement wherever necessary and applicable. Replaced parts shall be of equal or better quality and

¹Head of the Department

²Head of the Section

³as NITK's in-house System Integrator for smaller works

specifications and to the department/section's satisfaction. Repair / replacement shall be decided by the Facility Manager. When replaced, the removed parts minus the data therein become the property of the Facility Manager. Such incidents shall be duly recorded in triplicate (HoD/HoS,CCC and The Facility Manager)

- 20. Providing Site facilities , proper electrical connections (stabilized sources wherever necessary) and other environmental conditions is the responsibility of the NITK. This shall be agreed upon at the time of takeover.
- 21. NITK shall provide adequate working space and storage facilities for the test equipments and spares at NITK's premises; but they will be kept at the Facility Manager's risk. These are to be in compliance with the requirements mentioned in their quote and such other agreements arrived upon while finalizing the contract by the Purchase Finalization Committee.
- 22. Hardware and Configuration alterations shall be duly intimated by the NITK to the Facility Manager.
- 23. Damages due to fire, thefts, riots and accidents, if any, are generally excluded from this agreement. However, claims for such exceptions must be properly justified and submitted to NITK for scrutiny and decision.
- 24. Security of the infrastructural facility and the installed hardware components against theft or pilferage is the NITK's responsibility. However, the Facility Manager can take adequate precautions as deemed fit to prevent pilferages. These shall be done under intimation to and approval of the Department or Section Head and the FM Coordinator. Facility Manager shall place identification tags on systems under maintenance.
- 25. Facility Manager shall ensure the uptime of at least 95%, failing which will attract a penalty to the Facility Manager. This is enforced at the discretion of the NITK and shall be equivalent to the maintenance amount for the number of days for which the unit remained not repaired or an amount as decided by NITK depending on the inconvenience caused.
- 26. The Facility Manager cannot do any upward revision of the agreed rates at any time during the period of the agreement.
- 27. Adequate number of standby switches as needed (At least five 48 port switches and five 24 port switches) must be kept as standby at all times. These must be available for inspection by the Institute.
- 28. The transportation within the Campus for preventive maintenance and service calls shall be at the company's expense. Personnel should be provided with vehicles or fuel allowance as needed.
- 29. The team shall comprise of at least three personnel per shift , covering three shifts per day other than the call coordinator. The service shall be 24x7x365.
- 30. The team must be provided with sufficient troubleshooting tools including laptops. At least two laptops must be avaiable with the team kept in NITK.
- 31. The contract period is for ONE Year , coming into force from the first date indicated in the Service Level Agreement. Continuation into the following year shall be subject to good performance in the previous year in the continuous evaluation by the constituent departments

and sections and approval of the Competent Authorities of the Institute. Such continuation is, however, limited to a **maximum of FIVE years**. NITK shall decide on when to call fresh tender, depending on the significant changes in the overall inventory of the Rate Contract items.

- 32. The contract may be terminated with a minimum period of notice of three months by either party. Violation by the firm results in a penalty of forfeiture of balance amount due with 12% interest upon it.
- 33. Payment will be made quarterly in arrears. Advance payments are ruled out as per the NITK accounting norms. Payment will be subjected to the positive reports from the network users. Pending issues without satisfactory reason can result in payment being withheld.
- 34. The Network servicing engineers shall be highly skilled and shall possess appropriate networking certificates. Their qualification details shall be made available to NITK whenever personnel are changed.
- 35. The Facility Manager must provide sufficient service engineers and help desk coordinators for NITK who are to be stationed at NITK to cover the services in 24x7x365 basis. At least three service engineers must be available in each shift always. Sufficient personnel are to be deployed to cover peak demands.
- 36. The service engineers must have the knowledge of troubleshooting of the network and configuration of the devices. They are to be stationed at NITK. Accommodation for them if requested, will be at the expense of the firm and subject to availability and discretion of NITK.
- 37. Service and support are to be provided on **24x7x365 basis**.Sufficient number of personnel must be available in the Campus at all times to meet the demands.
- 38. The responsibility of handling the provisions of the Labour Act lies with the Facility Manager identified through this bidding process.
- 39. The Facility Manager shall station only highly skilled service engineers and skilled help desk coordinators who have proper identity cards in the NITK's premises. Names, qualifications and changes, if any, of service engineers shall be duly intimated to the NITK by the Facility Manager.
- 40. The Facility Manager will work in coordination with the Facility Manager of Computers, if any, and/or the concerned Department/Section to resolve computer or network issues in a convincing way to the users , avoiding user level inconveniences to the maximum possible extent.
- 41. NITK shall make the infrastructural facility available to the Facility Manager on a 24x7x365 basis in NITK. Whereabouts of the networks and any interdepartmental transfers (temporary or permanent) of devices will always be intimated to the Facility Manager.
- 42. Proper network troubleshooting tools including at least two laptops and cable testers shall be available with the service engineers.
- 43. Transportation (through vehicles/fuel allowance) within NITK for their service engineers shall be the responsibility of the Facility Manager. The service engineers have to cover the entire campus network spanning across the academic and residential buildings of the campus.

- 44. Additions and deletions of devices to / from the list of items under AMC are to be made on pro-rata basis and are to be intimated by the departments to the Facility Manager and FM co-ordinator, with justifications.
- 45. The Facility Manager shall give at least three mobile phone numbers, which will be published among the users of the network.

4.3 Limitations of Liability

- 1. The following are not covered under the agreement : Any service or circumstance posing as a safety or health hazard.
- 2. If the ownership of the infrastructural facility listed for FM changes from the customer , the obligation of the Facility Manager towards maintenance shall cease. Such infrastructural facility shall be removed on pro-rata basis under due intimation to HoD/HoS, CCC and FM.

5 Price Schedule

(The bidder must submit the bid in the general format shown below)

- 1. Cost must include the charges for the following:
 - a) For the services of service engineers and the helpdesk cordinators
 - b) Rate contract B-o-M as given in section 6 in page 15
 - c) AMC charges for the devices listed in section 7 in page 23 (*Please indicate the rate individually for the AMC and rate contract. Please note that pro–rata additions / deletions and rate contract based purchases are expected.*
 - d) Any other applicable charges
- 2. Service Taxes and Other Charges (*These must be shown explicitly in percentages and/or lumpsum in figures*)
- 3. Period : Yearwise One year with extension upto maximum of five years subject to good performance and / or changes in the inventory of the significant items in the Rate Contract
- 4. Name and address of the Firm for placing purchase order.
- 5. Details Signature of the Bidder : Name and Designation : Business Address : Seal of the Bidder's Firm Place: Date :

6 Rate Contract

You have to quote the rate and total cost for the following B-o-M. Please see the table given below. **Warranty for all active components shall be for 5 years**.

Table 1: Rate Contract iter	ns			
Item	Qty	Rate	Tax	Total
CAT 6A U/FTP 23 AWG solid, LSZH Sheath, 305	2 boxes			
Mtr/Roll: Cat6 A UTP Cable 305Mtr (4 Pairs In-				
dividually Foiled Twisted Pair (U/FTP) Cable 23				
AWG solid copper conductors with a frequency of				
500 MHz)				
CAT6 UTP cable , Roll of 305m : Cat6 UTP Cable	5 boxes			
305 Mtr (4 Pairs Unshielded Twisted Pair (UTP) Ca-				
ble Conductor Metal: Solid Bare Copper . 23 AWG				
copper wires).				
CAT 6 UTP RJ 45 Jack boxes (100 no in a box)	1 box			
Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully	2 Nos			
Loaded, with integrated cable manager,SL series, 1U				
Patch Panel Cat 6 UTP Keystone Type- 24 Port-	2 Nos			
Unloaded				
CAT 6 A Patch panel -Unloaded	2 Nos			
Jack Cat 6 Keystone UTP - White	25 Nos			
Jack Cat6 A keystone	20 Nos			
Face Plate - Single (Keystone Jack, square)	20 Nos			
Face Plate - Dual (Keystone Jack, square)	20 Nos			
Back Box For Single, Dual (Cat	20 Nos			
5e/Cat6/Cat6A,square)				
CAT6 UTP 24AWG PATCH CORD:2M,Plug 30U' Sna-	20 Nos			
gless				
CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Sna-	20 Nos			
gless	_01100			
CAT6 UTP 24AWG C:5M,Plug 30U' Snagless.	20 Nos			
CAT 6A 24 AWG Multi-cores, Bare Copper, High Den-	20 Nos			
sity Polyethylene :1M PATCH CORD.	201100			
24 Port 10/100/1000 BASE-T POE + 4 100/1000 MBPS	2 Nos			
COMBO PORTS	2100			
24 Ports 10/100/1000Mbps + 4 10G ports Managed	1 No			
Switch	1110			
24 Ports 10/100/1000Mbps PoE + 2 SFP ports + 2 10G	1 No			
SFP+ports Managed Switch, Power Budget 193 Watts	1110			
24 10/100/1000BASE-T+ 4 1G SFP Ports L2 Managed	2 Nos			
Switch	21105			
48 10/100/1000BASE-T+ 4 1G SFP Ports L2 Managed	2 Nos			
Switch	2 INUS			
	2 Nos			
802.11ac internal wireless access point with accessories and Support for 1 year				
sories and Support for 1 year		 		
	Con	tinued	on nex	t page

Table 1 – continued from previous	page			
Item	Qty	Rate	Tax	Total
6 U Wall mount Rack with standard internal size & external size with minimum of width:21" & depth:23" with accessories (2 fan tray,cable managers-3 nos,6 socket power strip, front glass with lock, hardware packet)	2 Nos			
9 U Wall mount Rack with standard internal size & external size with minimum of width:21" & depth:23" with accessories (2 fan tray,cable managers-3 nos,6 socket power strip, front glass with lock, hardware packet)	2 Nos			
12 U Wall mount Rack with standard internal size & external size with minimum of width:21" & depth:23" with accessories (2 fan tray,cable managers-3 nos,6 socket power strip, front glass with lock, hardware packet)	2 Nos			
17 U Floor mount rack : 17U Network Enclosure Frame-600X800-STEEL, Casters Set of 4,Adjustable Levellers set of 4,Glass Door-600-17U,Metal Door- 600-17U-Vented - Rear,QuantitySide Panels-800-17U- Vented,Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 32 Amp with Plug,Horz. Cable Manager-1U-Loop,Mounting Hardware-(Pack of 20),Fan-90CFM.	2 Nos			
22 U Floor mount rack : 22U Network Enclosure Frame-600X800-STEEL,Casters Set of 4,Adjustable Levellers set of 4,Glass Door-600-22U,Metal Door-600-22U-Vented,Side Panels-800-22U- Vented,Mounting Hardware-(Pack of 20),FHU with 2 FAN 180CFM,Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 32 Amp with Plug.	2 Nos			
42 U Floor Mount Rack: Front Glass and Steel Perforated Door Options,Rear Steel Doors With Perforation,Side Panels With Key Locks and Slam Latch,Heavy Duty Caster Wheels With Front Break Options Keyboard Tray Sliding and Rotary, .4 Cool- ing Fan For Heat dissipation, 100mm vertical cable management in all Corner.	1 No			
Rack mount 19" 1 U 12 Fiber LC type LIU with loaded adapter panel with plates	2 Nos			
Rack mount 19" 1 U 12 Fiber SC type LIU with loaded adapter panel with plates Rack mount 19" 1 U 24 Fiber LC type LIU with loaded	2 Nos 2 Nos			
adapter panel with plates		tinued o	on nev	t nage

Table	1 –	continued	from	previous	page
14010	-	continuea		previous	P ^m S ^c

Table 1 – continued from previous Item	Qty	Rate	Tax	Total
Horz. Cable Organiser	4 Nos			
1" Pvc Conduit Pipe & coupler & clamp (for open	30 m			
conducting)				
1.5 "Pvc Conduit pipe & coupler & clamp (for open	30 m			
conducting)				
2 " Pvc Conduit Pipe & coupler & clamp (for open	30 m			
conducting)				
0.5" Pvc Casing - Box type	30 m			
1 " Pvc Casing -Box type	30 m			
1.5" Pvc Casing -Box type	30 m			
2 " Pvc Casing - Box Type	30 m			
1 " Pvc Flexible Pipe	30 m			
1.5" Pvc Flexible Pipe	30 m			
2 " Pvc Flexible Pipe	30 m			
GREY CHANEL 3" -75/75	30 m			
GREY CHANEL 4" -100/100	30 m			
JE PIPE 2"	30 m			
STAY WIRE (JE WIRE)	1 roll			
Industrial Casing 2"Inch	10 m			
SC-SC Style Singlemode Duplex patch cord , 3 meter	1 No			
SC-LC Style Singlemode Duplex patch cord , 3 meter	1 No			
LC-LC Style Singlemode Duplex patch cord, 3 meter	1 No			
LX SMF GBIC Module :-port mini-GBIC LX Single-	1 No			
mode Fiber Transceiver (up to 10km, support 3.3V				
power)				
Copper - Fiber (SMF) 1 Gbps Media Converter 10km	1 No			
1000Base-T to 1000Base-LX				
6 core outdoor armoured OFC	200 m			
12 core outdoor armoured OFC	200 m			
24 core outdoor armoured OFC	200 m			
12 port LIU with SC adapter panel	1 No			
24 PORT LIU Loaded	1 No			
SC pigtails -SC SM Simplex Length , 1 meter	1 No			
SC Style Pigtail,9/125,Singlemode, 1.5 meter.	1 No			
LC Style Pigtail,9/125,Singlemode, 1.5 meter.	1 No			
SC connectors single mode.	1 No			
32mm HDPE pipe (High grade).	100 m			

Table 1 – continued from previous page

Table 1 – continued from previous	page		-	
Item	Qty	Rate	Tax	Total
Outdoor OFC Joint Kit: support min of 24 core fiber,	1 No			
2 cable entry ports, each with multi cable capability,				
vertical type of fiber optic splice clousures. Fiber optic				
splice closure kit usually includes: end plate, splice				
tray organiser, fiber splice tray , cover, cable grom-				
mets, grommet retainer, mounting bracket, closure				
mounting & misc.hardware.				
Supply of outdoor OFC Joint kit (rectangular).	1 No			
Supply & Installation of cement cable route mark-	1 No			
ers.Matter to be engraved on the marker & painting				
colour of Marker shall be decided at site as per the				
instruction of EIC.				
Cable dressing both end for marking for UTP cable	1 No			
inividual point wise				
6 U - Rack dressing	1 No			
9 U - Rack dressing	1 No			
12 U - Rack dressing	1 No			
17 U - Rack dressing	1 No			
22 U - Rack dressing	1 No			
42 U - Rack dressing	1 No			
45 U - Rack dressing	1 No			
6 U - Rack Re- dressing	1 No			
9 U - Rack Re- dressing	1 No			
12 U - Rack Re-dressing	1 No			
17 U - Rack Re-dressing	1 No			
22 U - Rack Re-dressing	1 No			
42 U - Rack Re-dressing	1 No			
45 U - Rack Re-dressing	1 No			
FIBER REMOVING	1 No			
SWITCH, RACK, JACK PANEL REMOVING	1 No			
	each			
Laying of 4-Pair, Cat6 UTP Cable, roll of 305m, Grey	1 box			
Color Boxes				
Termination of Cat 6 UTP Information Outlets	1 outlet			
Fixing of Single Port Face Plate & Surface mount Box	1 set			
Termination of Cat6 24-port loaded, Modular Jack	1 panel			
Panel, 1 U	_			
Fixing of 6 U Rack with Accessories	1 rack			
Fixing of 9 U Rack with Accessories	1 rack			
Fixing of 12 U Rack with Accessories	1 rack			
Fixing of 17 U Rack with Accessories	1 rack			
Fixing of 19 U Rack with Accessories	1 rack			
Fixing of 22 U Rack with Accessories	1 rack			
		tinued	on nex	t page
				1 0

Table 1 – continued from previous page

Table 1 – continued from previous	page			
Item	Qty	Rate	Tax	Total
Fixing of 42 U Rack with Accessories	1 rack			
Fixing of 45 U Rack with Accessories	1 rack			
Laying of Conduit Pipe/Casing/Flexible Pipe on	10 m			
trench / fall ceiling/tray/wall				
Label, Test, Document with Soft Copy Report	10 m			
Excavation of earth & refilling the same for laying	20 m			
OFC				
Laying of OFC.	20 m			
Laying of HDPE pipe	20 m			
Fixing & Mounting of LIU incuding fixing of adapter	1 LIU			
panel, dressing, marking	1 210			
Crimping of RJ45 Connector.	1 connec-			
emping of type connector.	tor			
Termination/Splicing of OFC cable per cores.	1 core			
OTDR Testing & soft documentation reports of OFC	1 core			
per core.	1 0016			
Rectification of Outdoor OFC (per single joint) in the	1 joint			
event of breakage/cable fault (includes OTDR test,	for 6-12			
necessary excavation, finding the place of breakage	core			
with necessary manpower), cable splicing/joining,				
supply and fixing of outdoor cylindrical joint enclo-				
sure kit for 6 - 12 core OFC. cable routes may be pro-				
vided by EIC.				
Laying of fiber cables in cable trays ,Trenches ,plant	10 m			
structures & building walls irrespective of the height.				
Optical fibre cable with cores upto 48 cores .Supply				
of cable is not inluded .				
Cleating of cables/HDPE on plant struc-	10 m			
tures/building walls using all hardware irrespective				
of the height with AL.Tags & Nylon Ropes .				
Laying of 40 mm GI pipe, backfilling & finishing after	10 m			
laying of supply of pipe is not included .	10 111			
Excavalation of soil for Trenches for cables & Earth	10 m			
stripes ETC.in soft soil.	10 111			
Excavalation of soil for Trenches for cables & earth	10 m			
stripes ETC.in laterite & hard soil	10 111			
Excavation of road for Trenches for cable ETC. Road	10 m			
cutting for laying of GI Pipe,	10 111			
Marker Tie (Nylon)20cm(packet).	1 packet			
Marker Tie (Nylon)10cm(packet).	1 packet			
	1			
Cable Tie (Nylon) 4 mm 15 cm (packet).	1 packet 10 m			
Race way 2"with tag, screws, top cover.				
Race way 4"with tag, screws, top cover.	10 m	tinued		

Item	Qty	Rate	Tax	Total
Accessories - FERRULES	1 packet			
TAG 250 MM	1 packet			
ELECTRICAL GUM TAPE	1 roll			
MARKER TAG 100 mm	1 packet			
ROLL PLUG 6 mm	1 No			
1.5" SCREW	1 packet			
COUPLER 1"	1 No			
COUPLER 2"	1 No			
COUPLER 1.5"	1 No			
BEND 2"	1 No			
ANCHOR BOLT 8 mm	1 No			
Saddle 1"	1 No			
Saddle 1.5"	1 No			
Saddle 2"	1 No			
0.25 "clip	1 No			
COACH BOLT	1 No			
1" Velcro for dressing	2 meters			
G.Total				

Table 1 – continued from previous page

6.1 Specifications

- **Cat6 Cable** Category 6 Unshielded Twisted Pair 4 pair 305 m cable, shall be compliant with ANSI/TIA/EIA-568-C.2 standards, UL Listed and ETL verified, 23 AWG solid bare copper conductor (4 Pair), Frequency tested up to 600MHZ, HDPE Insulation / FR PVC Sheath, operating temperature upto 70 deg C, Zero-bit error test, UL, ETL verified
- **Cat6 Keystone** Universal labels color coded for T568A/568B, suitable for 23-26 AWG stranded and solid wire, ETL verified unshielded EIA/TIA connecting hardware, Category 6, TIA568 C.2, Contact Bracket PC, UL 94V-2, Use insulation displacement connectors (IDC), IDC Housing PC+ Glass Fiber, UL 94V-2, 50 microinches gold on plug contact area, Phosphor bronze with Nickel plated IDC Contact
- **Face Plate with Backbox** Single (Square) with shutter, Screws / hole covers to supplied with face plate, labelling on transparent plastic window, Face Plate ABS, UL94-HB, Dust Cover ABS, UL94-HB with backbox
- Cat6 Patch Cord 1m Should comply to TIA/EIA-568-C.2 Standard, 24AWG stranded bare copper conductor, HDPE Insulation, Phosphor bronze Contact with Nickel Plated, 50 microinches gold on plug contact area 1m
- **Cat6 Patch Cord 2m** Should comply to TIA/EIA-568-C.2 Standard, 24AWG stranded bare copper conductor, HDPE Insulation, Phosphor bronze Contact with Nickel Plated, 50 microinches gold on plug contact area 2m

- **Cat6 Patch Panel** Powder coated steel in 24 port configurations, should support port identification numbers on the panel, IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools, Cat-6 transmission performance should be in compliance with the ANSI/TIA/EIA 568C.2 standards, 50 microinches gold on plug contact area, Phosphor bronze with nickel plated IDC Contact, RJ45 Contact Bracket PC, UL 94V-2, IDC Housing PC+Glass Fiber, UL 94V-2
- **OFC 06 Core SM Cable** 06 Core Single Mode 9/125 Micron Outdoor Fiber Optic Cable Outdoor Steel Tape Armored (STA) construction, should support moisture resistance & should have water proof layer, should be central loose tube with jelly compound, Operating temperature upto 60 deg C, Outer Sheath – HDPE, Bend radius as per IEC 60794-1-2, E6/E11, Should support ISO 11801, EIA/TIA 568-B.3 & EIA/TIA 455 standards. Max attenuation should be 0.36db/km or better @ 1310nm and 0.22 db/km or better @ 1550 nm.
- **Fiber LIU** Standard 19" Rack mountable, LIU should be constructed of 16-gauge steel, powdercoated loaded with 03 SC SM Duplex (12P) Ports, with necessary Pigtails, should have at least 2 fiber spools Removable front and rear covers for better access Mounting & termination accessories to be supplied
- **Fiber Patch Cord LC to SC** Single Mode Fiber Patch cord with LC to SC connectors Should be on min 3 meter in length, should meet all applicable standards. Compliant with TIA/EIA-568- C, IEC standards)
- **Fiber Patch Cord SC to SC** Single Mode Fiber Patch cord with SC to SC connectors Should be on min 3 meter in length, should meet all applicable standards. Compliant with TIA/EIA-568- C, IEC standards)
- **09U Rack** 09U 550X500- Wall Mount Rack Construction All Welded construction, Top and Bottom Cover - Welded to Frame, Vented and Field Cable entry exit cut outs, Front Door - Lockable Toughened Glass Door, Finish - Powder Coated, Rack Standard - DIN 41494 or better standard, Mounting Angle - 19" Mounting angles made of formed steel, Grounding and Bonding Accessories - Cable Manager, Fan, Hardware mounting kits and any other required accessories
- 17U Rack 17U 600X800-STEEL, Casters Set of 4 Adjustable Levelers set of 4 19" Reduced Channel - Loop Type, Glass Door with Lock and key, Side Panels, Mounting Hardware, FHU with 4 FANS, Vertical Power Distribution Unit with 12 x 5/15 sockets Round Pin, 230 Volts AC 32 Amp with Plug, Vertical Cable Manager-32U Loop, Horz. Cable Managers -1U-Loop, Provision for earthing, Grounding and Bonding
- Network Switch Type I 1GbE Access Switch with 26 Ports 10/100/1000Mbps + 2 SFP Ports Managed Switch with Layer 2+ Image, 50deg C operating temperature support and fanless design
- Network Switch Type II 1GbE Access Switch with 50 Ports 10/100/1000Mbps + 2 SFP Ports Managed Switch with Layer 2+ Image, 50deg C operating temperature support and fanless design
- **1GbE SM Transceiver** 1G Base LR (SM) Transceiver, Hot Pluggable, Form Factor: SFP, Duplex LC Connector, Distance Support: Min 10Km

6.2 Conditions:

1. Indoor / Outdoor access points , PoE injectors and PoE switches Preferences — Compatible with the existing setup

Switches, Routers etc Preferences — DLink, HP, Cisco, Extreme, Juniper, Brocade

Passive Materials Preferences – R&M, Systimax, AMP, Molex, D-Link

Racks Preferences — Netrack, WallRack, APW President, Rittal

Other materials from reputed brands.

The material, make and model should be explicitly specified in your bid.

- 2. Please note that this is a pseudo B-o-M and not intended for actual purchase at the specified quantities. The company shall specify the rate for the above in their bid and hold the price during the contract with NITK. The quantity is indicative and shall only be used to identify the L1.
- 3. No purchase order will be issued based on the above B-o-M.
- 4. Uses of these rates are entirely at the discretion of NITK and it is not guaranteed that purchases at these rates will be done at any time during the contract.
- 5. Work order shall be separately and explicitly issued whenever these rates are used by NITK during the contract period for any network repair or expansion within the stipulated limit decided by NITK. Minimum cost expected per such work order if any, may be explicitly indicated.
- 6. It shall be mandatory on the part of the bidder to enter into a rate contract as specified above and non-compliance of this can render your bid non-responsive and thus rejected.
- 7. Five years warranty will be given for all active devices supplied under the rate contract.

7 Devices Details - Campus Wide Networking (CWN)

- 1. Devices are to be taken into AMC including the various modules attached therein.
- 2. Drop-in replacements are expected for the devices/modules.
- 3. Proper back-to back arrangements are expected.
- 4. Minimum 95% uptime must be guaranteed and an SLA must be entered into.
- 5. Firmware updating are to be carried out where ever required & the devices are to be appropriately reconfigured as and when required.

7.1 Devices to be inlcuded in AMC- General

Please give the **AMC rates, total and tax** for all of the devices listed below (*to be taken under comprehensive maintenance onsite*). The total of this will be included for identifying the lowest bidder.

Department	Make	Model	Count	Tota
Admin	D Link	DES 3526	2	
	D Link	DES 1024D	2	
	D Link	DES 1210-52	1	
	D Link	DES 1210	2	
	D Link	Des 1224	1	
	D Link	DES 3810	1	
	EXTREME	Summit-440-48-10G	1	
	D Link	DES 3200-28	3	
	D Link	DES 3200-28	1	
				14
Library	D Link	DES 1224	1	
5	D Link	DES 3028	1	
	D Link	DES 3226-S	2	
	D Link	DES 3526	2	
	D Link	DES 3550	1	
				7
Civil Eng.	D Link	DES 1024R	2	
0	D Link	DES 3526	1	
	D Link	DES 1228	2	
	D Link	DES 3200-28	2	
	D Link	DES 3200-52	1	
	D Link	DES 3552-52	1	
	D Link	DES 3200-28	1	
	NetGear	JFS524-24	1	
	D Link	DES1016A-16	1	
	D Link	DES 3526	2	
				14
Mining Eng. Bldg.	D Link	DES 1024R	1	
	D Link	DGS 1210	2	
				3
Applied Mechanics	D Link	DES 1024R	2	0
	D Link	DES 3200-28	3	
	D Link	DES 3052	1	
		<u>D10000</u>	-	6
ССС	D Link	DES 3526	1	
	D Link	DES 3550	1	
	D Link	DES 1024D	1	
	D Link	DES 1024D DES 1210-52	4	
	D Link	DES 1210-52 DES 1024R	1	
	D Link D Link	DES 3200-52	2	
	D Link D Link	DES 3200-32 DES 3200-28	3	
	D Link	DES 3200-28	1	
		DE3 3010-20	Contin	<u> </u>

Table 2: Equipments under AMC

Department	Make	Model	Count	Tot
	Digisol	DGFS 1526	1	
	EXTREME	Summit-440-48-10G	1	
	EXTREME	Summit-440-24T	1	
	D Link	DES 3200 - 28	1	
	D Link	DES-3200-28	1	
	D Link	DES 3200-28	1	
				20
Chemical Eng.	D Link	DES 3526	1	
	D Link	DES 3052	1	
	D Link	DES 3052	1	
				3
Computer Eng.	D Link	DES 3226-S	1	
1 0	D Link	DES 3526	4	
	D Link	DES 3550	3	
	D Link	DES 1210-52	2	
	D Link	DES 1024R	2	
	D Link	DES 1024D	2	
	D Link	DES 1024D DES 1016D	2	
	D Link	DES 3200-52	1	
	Nortel	BES1010-24T	2	
	Intel	410T	1	
	CISCO	Catalyst 3560G	1	
		DGFS 4526	1	
	Digisol Digisol	DGFS 4520 DGFS 4552	1	
	CYBEROAM	CR100i	1	
	CISCO	Router 2821	1	
	D Link	DES 3200-52	1	
	D Link	DES 3200-32 DES 3200-28	2	
			2	
	D Link	DES 3552-48	2	20
E Ø E	DI!-1	DEC 1024D	1	30
E & E	D Link	DES 1024R	1	
	D Link	DES 3550	4	
	D Link	DES 1016D	1	
	D Link	DES 3052	1	_
				7
I T Dept	D Link	DES 1016D	1	
	D Link	DES 1024R	2	
	D Link	DGS 3100-48	6	
	D Link	DES 3226-S	1	
	D Link	DES 3026	2	
	D Link	DES 1008D	1	
	D Link	DES 1024D	1	
	D Link	DES 3526	1	
	DAX	DX 508PS	1	

Department	Make	Model	Count	Tot
				16
E&C	D Link	DES 3028	1	
	D Link	DES 3550	6	
	CISCO	Catalyst 2950	1	
	D Link	DES 3200-28	1	
				9
Guest House	D Link	DES 3028	1	
	D Link	DES 3200-28	1	
	D Link	DES 3526	1	
				3
School Of Management	D Link	DGS-1210-52	1	
	Digisol	DGFS 4552	1	
				2
MACS(SACA)	D Link	DES 1024D	2	
	D Link	DES 1024R	2	
	D Link	DES 1224	3	
	D Link	DES 1250G	1	
	D Link	DES 3526	2	
	D Link	DES 1210	1	
	D Link	DGS 3100	1	
				12
Metallurgy Dept	D Link	DES 3526	1	
				1
Hostels				
Block #1	D Link	DES 3052	2	
	D Link	DES 3200-52	3	
				5
Block #2	D Link	DES 3052	5	
	D Link	DES 3200-28	1	
				6
Block #3	D Link	DES 3200-52	3	
	D Link	DES 3052	3	
				6
Block #4	D Link	DES 3200-28	1	
	D Link	DES 3200-52	3	
	D Link	DES 3052	2	
				6
Block #5	D Link	DES 1024D	1	
	D Link	DES 3052	2	
	D Link	DES 3200-52	3	
				6
Block #7	D Link	DES 3200-28	2	
	D Link	DES 3052	3	
	D Link	DES 3200-52	3	

Department	Make	Model	Count	То
				8
Block #8	D Link	DES 3200-28	2	
	D Link	DES 3052	2	
	D Link	DES 3200-52	4	
				8
PG Block	D Link	DES 3200-28	1	
	D Link	DES 3200-52	6	
				7
LH Block	D Link	DES 3200-28	3	
	D Link	DES 3052	4	
	D Link	DES 3200-52	3	
				10
EnglMedHS	D Link	DES 1024D	2	
	Asus	GX1008B	1	
	D Link	DES 3200-28	1	
	Netgear	FS 608	1	
				5
Phys-Edu -sports	D Link	DES 3200-28	1	
				1
				5
Mechanical (New Bldg)	D Link	DGS 3100	21	
	D Link	DWS 3024L	1	
	Aruba	S3500-24P	1	
				23
Physics, Chemistry	D Link	DGS 3100	6	
	D Link	DWS 3024L	16	
	Aruba	S3500-24T	1	
	Aruba	S3500-24P	1	
				24
				E

Table 3: Equipments installed by CPWD

Department	Make	Model	Count	Total
Library				
	CISCO	SG- 350- 28	13	
	CISCO	Catalyst -2960 L-24TS	2	
		SFP-MINI-GBIC	8	
				23
Applied Mechanics				
	CISCO	SG -500 - 28	1	
	D Link	DGS -1510-28	4	
	D Link	SFP-SX-850nm - MM miniGBIC	5	
				10
		·	Contin	ued

Department	Make	Model	Count	Tot
Chemical Eng				
	CISCO	SG-350-28	8	
	CISCO	Catalyst 2960 X	1	
				9
LH Block 5				
	CISCO	SG 300 28	12	
	Netgear	PROSAFE 5300 28 G3	1	
				13
Mechanical (new Blg)				
	CISCO	SG-350-28	12	
	CISCO	Catalyst -2960 X	1	
	Digisol	DGGS1008PF-8PoE	2	15
Physics, Chemestry				
	CISCO	SG-350 -28	4	
				4
LHC-C	TECHROUTES	TRS2528D	4	
	TECHROUTES	TRS3740F	1	
	D link	SFP-SX-850nm - MM miniGBIC	8	
				13
CSE				
	D Link	DGS - 1210 -28P	1	
	Dlink	DGS -1024D	1	
	Digisol	Digisol 8Port	2	
		0		4
New Sports Complex				
1 1	CISCO	Catalyst -2960X-24TS-L	1	
	DIGISOL	DGGS1528-24PoE	1	
				2
		1	1	Er

7.2 Devices Under Warranty - General

(For the devices under warranty, the first level of service is to be provided by the Facility Manager. Subsequently, the calls may be routed to the appropriate vendor / warranty period maintainer. This data must be collected by you while taking over the Facility Management.

END OF DOCUMENT.