

# INDIAN INSTITUTE OF TECHNOLOGY DHARWAD

## TENDER DOCUMENT FOR

### Commissioning of IIT Dharwad Information and Communication Technology (ICT) Infrastructure (Software) and Providing Annual Maintenance

Tender No. IITDh/GA/IT/02/2018-2019



॥ सा विद्या या विमुक्तये ॥

भारतीय प्रौद्योगिकी संस्थान धारवाड  
Indian Institute of Technology Dharwad

Tender Notice for Commissioning of IIT Dharwad Information and Communication Technology (ICT) Infrastructure (Software) and Providing Annual Maintenance for IIT Dharwad

1	Last Date and Time for Submission of Tender	16 Nov 2018 at 12:00 hrs
2	Address for submission of bid documents	IIT Dharwad (for Admin Section) Next to Dharwad High court, Dharwad, Karnataka - 580011
3	Time allowed for completion of commissioning work	90 days from the date of issue of purchase order
4	Period of Maintenance	1 year from the date of completion of the commissioning
5	EMD	Rs. 60,000.00 ( Rs Sixty Thousand only)

Indian Institute of Technology Dharwad invites sealed tenders (Limited Tender enquiry under two bid system) from competent Information and Communication Technology companies for IIT Dharwad as per the Terms and Conditions & Specification given in the schedule annexed to the tender hereto.

Detailed tender notice can be downloaded from the website of the Institute at: [www.iitdh.ac.in/announcements/tenders](http://www.iitdh.ac.in/announcements/tenders).

Schedule of requirement as per the specification is enclosed at Annexure-III:

Quantities are likely to vary.

Time schedule for various bid related events:

Sl No.	Event	Time and Date
1	Last date of submission of tender	: 16 Nov 18 at 12:00 hrs
3	Schedule for opening of Commercial Bid will be intimated to the technically qualified bidders through proper mode.	

Presence of the bidder or his/her authorized representative at the time of opening of the Commercial bid is preferable.

The right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reason thereto vests with IIT Dharwad without any obligation or liability whatsoever.

Following is the procedure for submission of Tender and other important conditions to be fulfilled by the tenderer. Every page containing the said procedure for submission of tender and other important conditions are to be signed by the tenderer and to be submitted along with their Technical bids towards their acknowledgement that they have gone through all the contents in these pages and in the schedules as well and they are agreeing to comply.

**TWO BID SYSTEM:**

The offer/bids are to be submitted under a two bid system, namely (i) Technical Bid and (ii) Commercial Bid. The Technical Bid must contain all the details as specified in the tender document along with the terms and conditions whereas Commercial Bid must indicate item wise cost only. **THERE MUST NOT BE ANY PRICE ELEMENT IN THE TECHNICAL BID.**

**SEALING & MARKING OF BID:**

The tender should be submitted in a proper manner with index for easy identification i.e.:

Envelope Number	To be Super scribed as
A	E M D for Tender
B	Technical Bid
C	Commercial Bid

Envelope – A (duly sealed): should contain the Demand Draft towards Earnest Money Deposit.  
Envelope – B (duly sealed): should contain the documents as listed under Technical Bid below.  
Envelope – C (duly sealed): should contain the document as listed under Commercial Bid below.

All the above three envelopes should clearly be marked on top of envelopes about type of envelopes (i.e., A, B, & C), details of contents in envelopes, name of agency submitting the bid. The envelopes (A, B & C) including the bigger envelopes shall be addressed to:

IIT Dharwad (for Admin Section)  
Next to Dharwad High Court,  
Dharwad - 580011, Karnataka

The bigger envelopes must be sealed and must bear the following identification on top:

- a) “Tender for Commissioning of IIT Dharwad Information and Communication Technology (ICT) Infrastructure (Software) and Providing Annual Maintenance at IIT Dharwad”.
- b) Name and Address of the Bidder. (on bottom left of the envelopes)

If the outer envelope is not sealed and marked as above, the Institute will assume no responsibility for the misplacement or premature opening of Bid.

**SUBMISSION OF TENDER DOCUMENT: -**

The tender can be personally dropped in the box to be kept in on all working days (except Saturday, Sunday & Holidays) between 10.00 am and 1.00 pm in the forenoon and 3.00 pm and 5.00 pm in the afternoon session on or before the date and time as specified in the Tender

Notice. The tender can also be sent by register post to “IIT Dharwad (for Admin section), Next to Dharwad High Court, Dharwad, Karnataka, PIN–580011. Tender received after expiry of the date and time as specified on the 1<sup>st</sup> page of the tender notice will be summarily rejected.

**EARNEST MONEY DEPOSIT (EMD):**

Rs. 60,000 (Rupees Sixty Thousand only) in the form of a Demand Draft drawn in favour of “Dean, IIT Dharwad” and payable at any nationalized bank at Dharwad. Photocopy / Fax copy of the demand draft will not be accepted.

Any tender without EMD would be considered as “DISQUALIFIED” and hence would be REJECTED.

**RETURN OF EMD:**

The EMD of the unsuccessful bidders will be returned to them without any interest on receipt of written request from them within thirty days after awarding the contract to the successful bidders.

**FORFEITURE OF EMD:**

After receiving the Purchase Order, if the selected Manufacturer/Service Provider is unable to execute the order satisfactorily, the Earnest Money Deposit will be forfeited and the Institute will be constrained to take necessary action against the Agency.

**REJECTION OF TENDER:**

In the event of the following, the Technical Bid of a tenderer will not be considered / summarily rejected and all the documents will be returned on a subsequent date as would be found suitable by the Committee –

- A. If the Demand Draft towards payment of EMD is not put separately in the bigger envelopes as instructed; and/or
- B. If it is to be presumed that the Demand Draft towards EMD is kept inside the sealed envelopes containing Technical Bid/Commercial Bid; and/or
- C. If the Demand Draft towards EMD is not valid and acceptable; and/or
- D. If without breaking seal of the other envelopes it cannot be detected which envelopes contains Technical Bid; and/or
- E. If any price element is found understandable in any way from any paper other than Commercial Bid.

On verifying each and every point as mentioned above, the Technical bid will be opened to examine all the documents and to decide on all related aspects as per Institutes specification and requirements.

**Technical BID:**

The bidder must submit the following documents/information with the Technical Bid.:

1. Details of Organisation as per format enclosed at Annexure I. Filled in form must be kept on top of the documents with the Technical Bid.
2. The entire tender document duly signed on each page.

3. List of reputed Organizations/Institutes where similar orders have been executed. The bidder must have regularly engaged with MHRD funded technical institutions, in ICT related activities (hardware or software), during the last five years. Copy of the purchase orders are to be attached as per Annexure I.
4. Copy of the valid PAN Card, Goods & Sales Tax Registration. IT Return of at-least three financial years: 2015 – 16, 2016 – 17 & 2017 – 18 as per Annexure I.
5. A declaration to provide support for a minimum period of 1 Year.
6. A Certificate/Undertaking on the letter head of the Company to the effect that the bidder/ Manufacturer had not been blacklisted anywhere in India or abroad by any organization.
7. Bidder company should provide an objective write-up of less than 1000 words that the bidder company has "qualified and experienced" work-force in the field of system administration, network administration, and other required services giving statistics of qualified workforce in the specified service areas. The bidder is required to ensure that the personnel to be assigned to serve IIT Dharwad should have the required skills to meet the requirements.

### **CRITERIA FOR QUALIFICATION IN THE TECHNICAL BID**

- The tenderer must submit above documents, duly attested by them with signature and seal of the firm on each page of every document. In the event of non-receipt of any of the above documents with the Technical Bid, tenderer will be disqualified from the process. Any paper relating to the above documents will not be received during the Technical Bid meeting. Further, any separate correspondence in the matter shall also not be entertained.
- During evaluation of the Technical Bid, the Committee as would be constituted for the purpose will scrutinize the documents mentioned above and may forward any or all the documents to the concerned authorities for verification and authentication. In case of any document(s) as submitted by the tenderer found/reported to be fake, the tenderer will be out of the tendering process or at any further stage besides any legal action that may be initiated against the tenderer, as per rules. Further, the Committee may visit the factory site of the Manufacturer to inspect and assess the capability etc.
- Besides, scrutinizing the documents submitted with the Technical Bid, the tenderer may be interviewed by the Committee to assess the eligibility, capability, and suitability of the tenderer. As such, the presence of the tenderer or any authorized representative of the tenderer in the Technical Bid meeting is preferable.

### **SPECIAL CONDITIONS:**

- 1) The performance of the earlier supplies of similar nature of items to the Institute by any of prospective bidder during last three years will be kept in view for qualification in the Technical Bid.
- 2) No payment shall be made for any damage caused during the execution of work. The damages to the work will be made good by the Manufacturer at his own cost and no claim on this account shall be entertained.
- 3) The manufacturer shall at his own cost shall arrange for necessary licenses / permission / clearance etc. if required to import the material for completion of work within the stipulated period.

4) If the materials used or finished works are not found acceptable, the supplier shall arrange for the replacement of material required for re-execution of the work as per the contract.

5) The rate quoted shall be inclusive of expenditure on the requisite approval/quality assurance tests/certification to be carried out on the materials and/or work as may be decided by the Competent authority for which nothing extra shall be payable.

6) The supplier/service provider also shall provide the purchaser all necessary facilities including appliances, tools, materials, and labour at no extra cost to carry out the installation & commissioning at IIT Dharwad for inspection of the purchaser.

7) **OPENING OF COMMERCIAL BID:**

The offer/bid will be opened by a Committee, as would be constituted by the competent authority, at a pre-defined place, time and date in the presence of all such bidders and / or their authorized representatives who wish to witness the proceedings. The Commercial Bid of the Technically qualified bidder will ONLY be opened. The Commercial Bid should be submitted as per the format enclosed with the tender document on the letter Head of the Firm/Agency. The rate should be clearly submitted with breakup of Basic Price, GST, etc. Commercial Bid in any other form will not be accepted and be **SUMMARILY REJECTED.**

8) **BID VALIDITY:**

The Bid shall remain valid for the period not less than six (6) months after the last date set for bid submission. A bid submitted for a bid validity of shorter period may be rejected as non-responsive.

9) **LATE BID:**

Any bid received after the deadline as prescribed in the tender notice will be treated as late bid and will not be considered.

10) **ACCEPTANCE AND REJECTION:**

The right to shortlist/reject any or all the tenders and/or to accept the whole or any part of the tenders without assigning any reason whatsoever would vest with the management of IIT Dharwad.

11) **PERIOD FOR COMPLETION OF WORK:**

The commissioning of the listed services must be completed within 90 days from the date of Work Order.

12) **FREIGHT & INSURANCE:**

All freight and insurance should be at the cost and risk of the Manufacturer.

13) **WARRANTY DECLARATION:**

The Bidder must give comprehensive support and maintenance (software) for a period of ONE YEAR from the date of commissioning of the software infrastructure. The support must include

at least one on-site engineer. Any issue with the functioning of the existing software infrastructure (listed in Annexure IV), or the software to be commissioned as part of this tender, must be promptly resolved as per the terms mentioned in Annexure V. They must also give the warranty that the workmanship shall be of the highest quality and the commissioned systems shall be in full conformity with the specifications.

- The bidder/manufacturer need provide services as per specifications of the order and demonstrate it to the user at their own cost. The payments shall be made only after successful completion of services as per required specification to the satisfaction of the competent authority of IIT Dharwad.

14) **FAILURE OF ORDER EXECUTION:**

If a successful bidder after receiving the order fails to execute the order within the stipulated period, fails to commission the services in a satisfactory manner, or does not fulfill any of the terms and conditions in any respect, the Institute/ reserves the right to cancel the order unilaterally and forfeit the EMD amount.

15) **PAYMENT TERMS:**

90% payment shall be made after successful delivery & installation. Balance 10% of the amount will be released against submission of Warranty Bank Guarantee (WBG) to the tune of 10% of the total purchase order value. The WBG should be issued by any nationalized bank and validity of the WBG will be till expiry of warranty period & 60 days beyond the period of expiry of the warranty period. No advance is payable against part supply of any items.

16) **LIQUIDATED DAMAGES:**

The items should be delivered/dispatched to destination and ready for use not later than the delivery period specified. If the Manufacturer fails to deliver/successfully install any or all the stores or perform the service by the specified date, liquidated damages @2% per month or part thereof in respect of the value of the delayed stores will be deducted from the bill subject to a maximum of 10%.

17) **FINAL SELECTION AND AWARD CRITERIA:**

L-1 CRITERIA. The decision of the Competent authority will be final in awarding the order.

18) **DISPUTE AND JURISDICTION:**

Any legal disputes arising out of any breach of contract pertaining to the whole process of

this tender shall be settled in the court of competent jurisdiction in the district of Dharwad,  
Karnataka.

19) **ACKNOWLEDGEMENT BY THE TENDERER:**

It is hereby acknowledged that we have gone through all the schedules as well as the conditions mentioned above and we agree to abide by these.

Date: Signature of the Tenderer along with official seal.

**Place:**

**CANVASSING OR OFFER OF AN ADVANTAGE OR ANY OTHER INDUCEMENT BY ANY PERSON WITH A VIEW TO INFLUENCING ACCEPTANCE OF A BID WILL BE AN OFFENSE UNDER LAWS OF INDIA. SUCH ACTION WILL RESULT IN THE REJECTION OF BID, IN ADDITION TO OTHER PUNITIVE MEASURES. RESERVED BY THE , IIT DHARWAD WITHOUT ANY OBLIGATION OR LIABILITY WHATSOEVER.**

**Asst Registrar  
For and on behalf of IIT Dharwad**

**Encl:- Annexure I ( Table for detail of organisation )  
Annexure II ( Format for commercial bid)  
Annexure III (Format for technical Bid)  
Annexure IV ( Current ICT Infrastructure of IIT Dharwad)  
Annexure V (SLAs for ICT infrastructure maintenance)**



No.	Description	Information		
1	Name			
2	Address (with Contact number and mail ID)			
3	Address of the Organisation (with contact number)			
4	Name of the Proprietor with Mobile Number			
5	Name of the authorized Representative with designation and Mobile Number			
6	Permanent Account Number (copy to be enclosed)			
7	GST Registration Number (copy to be enclosed)			
8	Audited Statement of Accounts / Balance sheet submitted for last three years (copies to be enclosed)			
9	Proof of goods sold or services rendered to MHRD funded technical institutions in the last five years enclosed?			
10	Average annual turn-over during last three years (Rupees to be shown in crores)	2015 – 16	2016 – 17	2017– 18
11	Details of EMD	Rs. Bank : DD No. : Date :		
12	Any other information			

**Acknowledgement:** It is hereby acknowledged that I/We have gone through all the schedules as well as the terms and conditions laid down in the tender notice for procurement of furniture items for various halls of residence at IIT Dharwad.

**Declaration:** I/We do hereby declare that the above information submitted by me/us are true to the best of my/our knowledge and I/We have submitted the documents in support of all the information asked for. I/We also agree to the condition that the right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by the Competent authority of the Institute without any obligation or liability whatsoever.

Date :

Signature of the Bidder/Manufacturer

with date and seal

TO BE TYPED ON THE LETTER HEAD OF THE BIDDER/MANUFACTURER

**Commercial BID**

To,

Asst Registrar  
IIT DharwadSubject : Commissioning of IIT Dharwad Information and Communication Technology (ICT)  
Infrastructure (Software) and Providing Annual Maintenance.

Ref.: Tender Notice No. \_\_\_\_\_, Date \_\_\_\_\_.

Sir,

I/We do hereby submit our Commercial Bid for the furniture items against the tender notice under reference.

[Mention all figures in Indian Rupees, Include all charges]

PRICE SCHEDULE				
S. No.	Category	Base Price (in ₹)	Taxes	Total Price (with Currency)
1	Commissioning of Essential Software Services			
2	Total Section (A)			
3	Support and maintenance (software) for a period of 1 year (includes salaries payable to on-site engineer/s)			
4	Total Section (B)			
5	Grand Total, Section C=A+B			

Note:

All required services need to be set up, as per the technical requirements/ specifications, in a satisfactory manner, for a successful commissioning. In case of any mistake or error in calculations or any discrepancy in price quoted in word and figures, the LOWEST amount will be considered for comparison. If this lowest price is not acceptable to the bidder, their bid will be rejected. In this case, IIT Dharwad reserves the right to forfeit their EMD. L1 is calculated based on the Grand total price under section C: (Section A + Section B).

**Declaration:** I/We do hereby accept all the terms and conditions laid down in the tender notice for the above said supply. I/We also agree to the condition that the right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by the Competent authority of the Institute without any obligation or liability whatsoever.

Date:

Signature of the Bidder/Manufacturer  
With date and seal

## ANNEXURE-III

### Technical Specifications

Sl.No.	Specification Answer in (Yes/No)	Remarks
1.0	Software Services to be Commissioned	
1.1	<b><u>Kerberos and Lightweight Directory Access Protocol (LDAP)</u></b> LDAP and Kerberos profiles have to be created for all institute members -- students, faculty, and administrative staff. Access to all identified Information and Communication Technology (ICT) services, including the Internet, should be provided only after successful Kerberos authentication and LDAP authorization.	
1.2	<b><u>Network Time Protocol (NTP)</u></b> An NTP server must serve all other ICT services and keep them in synchrony.	
1.3	<b><u>Proxy Server</u></b> All users' access to the Internet must be via a proxy server. The authentication and authorization should be via the Kerberos and LDAP system. This server must support implementation of different access policies for different classes of users. For example, a student user may have a daily data transfer limit of 4GB.	
1.4	<b><u>Cloud Storage</u></b> An open source cloud storage server, such as <i>ownCloud</i> , must be provided to all institute members. The authentication and authorization should be via the Kerberos and LDAP system. The storage itself would be done on a QNAP storage server. The server should seamlessly support future extension to the amount of physical storage available. This server must support implementation of different access policies for different classes of users. For example, a student user may have a disk quota limit of 4GB. The server should be configured at a minimum RAID level of 5.	
1.5	<b><u>File Transfer Protocol (FTP)</u></b> An FTP server must be available to host resources that are useful for all institute members. This includes Linux distributions, software packages, etc. On-campus users may anonymously download the resources. Only authorized users may add resources. The authentication and authorization should be via the Kerberos and LDAP system.	
1.6	<b><u>Version Control Server</u></b> A version controlling system such as Mercurial, with a web-based front end is to be set up for use by all institute	

	members. The storage will be on the central storage server. The authentication and authorization should be via the Kerberos and LDAP system.	
1.7	<u>Back-up of critical data</u> The contents of the cloud storage must be periodically backed up. Additionally, critical machines may be periodically backed up through protocols such as <i>rsync</i> . The configurations of the different servers and network switches must also be backed up, allowing quick recovery in case of some failure.	
1.8	<u>Logging of Usage</u> The usage logs of all ICT services must be maintained. This includes accesses made to the Internet. The user identifier, the timestamp, the machine identifier (such as IP address, etc.), and service-specific logs must be recorded.	
1.9	<u>eduroam Wireless Service</u> IITDh should be registered with the eduroam service, allowing the students of IITDh to freely use the wireless networks of other partner universities, and allowing the students of other universities to freely access the wireless network when they are present in the IITDh campus.	
1.10	<u>Policy and Redundancy Configuration</u> The administrative policies that govern the above services must be according to the requirements made by the IITDh administration, which are subject to change from time-to-time. These include, and are not limited to, Internet data transfer/ bandwidth limits for different classes of users like students, staff, faculty etc., storage limits in the cloud storage, etc. Also, the services must be redundantly instantiated on multiple servers, so as to ensure high availability.	
1.11	All services except the “eduroam Wireless Service” must be set-up, tested, and commissioned within a period of three months from the date of issuing the work order. The “eduroam Wireless Service” must be set-up, tested, and commissioned within a period of six months from the date of issuing the work order.	
1.12	Except under unavoidable restrictions posed by the underlying hardware, every service must be Linux-based, and must employ open source software at all levels in the stack.	
1.13	All services, configurations, and policies must be documented in detail and presented to IITDh at the end of the commissioning period.	
2.0	<u>Comprehensive Maintenance Support:</u>	
2.1	The scope of the maintenance support includes both the existing ICT software infrastructure at IITDh, as listed in annexure IV, the new services to be commissioned as listed above, as well as	

	any new software that may be deployed / updates and extensions that may be performed. The maintenance support must be provided for a period of one year.	
2.2.1	<b><u>Monitoring</u></b> The ICT software infrastructure must be continually monitored for their health, usage, performance bottlenecks, as well as security attacks.	
2.2.2	<b><u>Maintenance</u></b> On detection of an issue, the Support Service must attend to it and provide a resolution as per the SLA terms listed in Annexure V. This also includes raising tickets with OEMs as well as ISPs. This also includes periodic backing up of configurations of various hardware and software, so as to enable a quick restore in the event of a failure.	
2.2.3	<b><u>Policy updates</u></b> During the course of support period, it may be found that certain functionalities require changes/updates/modifications. The bidder would be required to incorporate these functionalities as part of this RFP. The Support Service shall be responsible for collation of all such enhancement requests submitted by IITDh.	
2.2.4	<b><u>Reporting</u></b> Aside from continual monitoring and responding to anomalies, the Support Service are also required to present monthly reports of the health, usage, and other pertinent information regarding the ICT infrastructure.	
2.2.5	<b><u>Support</u></b> The Support Service shall also provide usage support, regarding the various ICT services, to the members of the IITDh community.	
2.3	The Support Service shall depute at least one service engineer for the support duration at IIT Dharwad. The service engineer should be available at site during working hours of the IIT. The service engineer must be proficient in basic system and network debugging, and must be able to assist any remote teams of the Support Service. The service engineer must be proficient in setting up desktop machines, and installation and configuration of different operating systems. The service engineer must have good communication skills and must be able to speak in English, provide support to the institute members as requested, and clearly communicate their requirements to the remote service team.	
2.4	The Service Provider should abide by the Service Level Agreements listed in Annexure V.	

#### Acceptance Parameters for the proposed Services

1. **Kerberos and Lightweight Directory Access Protocol (LDAP):** Every institute member must have a single credential. She/ he must be able to log in and access only those services she/ he is authorized to. She/ he must be able to change her/ his password, through a page in the campus intranet, at any point in time.
2. **Network Time Protocol (NTP):** Every system that is part of the IITDh ICT infrastructure must have their clocks synchronized.
3. **Proxy Server:** Institute members should be able to access the Internet only through the proxy, and only after successful Kerberos/ LDAP authentication and authorization. The bandwidth and other limits must be imposed. Access to the WiFi network must also be allowed only to authorized institute members.
4. **Cloud Storage:** Every institute member should be given some space on the cloud storage. Access to the storage should only be possible after successful Kerberos/ LDAP authentication and authorization. A user must be able to read from and write to files only in her/ his allocated space.
5. **File Transfer Protocol (FTP):** A central repository of free software like Linux distributions and packages, and other resources must be accessible to all institute members.
6. **Version Control Server:** All institute users must be able to create, update and share repositories with other institute users. Access to the server should only be possible after successful Kerberos/ LDAP authentication and authorization.
7. **Automated Back-up of Critical Data:** Critical machines identified should be periodically and automatically backed up in the central storage server.
8. **Log Server:** Usage of Internet and other services should be logged. Logs must contain the user identifiers, as well as details of the service availed.
9. **eduroam Wireless Service:** Visitors to the campus, who are from eduroam capable institutes, must be able to seamlessly connect to our campus WiFi network. Our institute members, when visiting eduroam capable institutes, must be able to seamlessly connect to that campus' WiFi network.

**Note:** The entire testing exercise should complete in four weeks' time from the Date of commissioning.

Annexure IV: Current ICT infrastructure of IIT Dharwad

Software Details					
Sr No	Server Details	Make & Version	OS Installed	Services Running	
1	Compute Server	HP DL 380 Gen 9 Server with 2 TB HDD	Base OS proxmox		Ceph Configured for All the three server
			VM1: Fedora 23	Archive Data	
			VM2: Windows 7	Ldap Access Machine (unconfigured)	
2	Compute Server	HP DL 380 Gen 9 Server with 2 TB HDD	Base OS proxmox		
			VM1: Fedora 23	DNS server	
			VM2: Fedora 23	Solarium	
			VM3: Fedora 23	Ldap server (unconfigured)	
3	Compute Server	HP DL 380 Gen 9 Server with 2 TB HDD	Base OS proxmox		
			VM1: Fedora 23	FTP server (unconfigured)	
			VM2: Fedora 23	Logproc server (unconfigured)	
4	Compute Server	HP DL 380 Gen 9 Server with 2 TB HDD	Base OS proxmox		
			VM1: Ubuntu 16.04	Matlab license server	
			VM2: Ubuntu 16.04	Institute Wiki	
5	Storage Device	Qnap server with 6 TB 8HDD	Qnap OS	Configured for ceph server logs and firewall logs	
6	Compute Server	HP DL 60 Gen 9 Server with 2 TB HDD	Cent OS 7	Moodle server and Lampp server for Intranet	
7	Compute Server	HP DL 160 Gen 9 Server with 2 TB HDD	Proxmox		
			VM1: ubuntu 16.04 server	Koha	
			VM2: ubuntu 16.04 server	wordpress	

8	Firewall	Fortigate 200 E Firewall	Forti OS	Security policies	
9	Cisco Controller	Cisco 5520 Contrller	Cisco Controller OS	WLC Management (100 access points connected across the campus)	
10	Cisco prime Server	Cisco prime server UCS C22o M4	VMware Vspare		
16	Web server	Server Hardware is Located at IIT Bombay	owncloud	IIT Dharwad Website	



## **Annexure V: SLAs for ICT Infrastructure Maintenance**

The following is the statement of Maintenance and Support Services for ICT software products as per the scope of this RFP:

### **1. The Supported Products**

1.1 The Support Services are provided in relation to the system software, networking, and security products at IITDh with regard to the Faults that may be reported to the Solution Partner by IITDh.

### **2. The Technical Support Services**

2.1 The Support Services are intended to provide the IITDh with Maintenance Service for faults reported by the IITDh in respect of the Software Products. The Solution Partner shall provide contact details of support engineers for reporting problems related to software servers, storage system, network and security components, and other services availed by IITDh. On receipt of a call to the support service, the support engineer of the Solution Partner will take the following actions:

2.1.1. log the call and allocate a Support Reference Number; and

2.1.2. evaluate the call and take one or more of the following actions:

2.1.2.1. resolve the matter reported;

2.1.2.2. advise that the matter reported falls outside the Solution Partner's proper control and/or responsibility;

2.1.2.3. assign a severity level to the matter reported;

2.1.2.4. for calls which cannot be immediately resolved, initiate remedial actions in accordance with allotted severity level. Remedial actions may include taking up the matter with device OEMs or ISPs.

2.2 The Support Service engineer or designated official is also responsible for including but not limited to:

2.2.1. answering ad hoc requests as to the progress of any matters which have been reported;

2.2.2. advising IITDh with an estimated time for resolution for each matter reported; and

2.2.3. arranging quarterly or as agreed "support meetings" where support issues can be discussed by the Solution Partner and IITDh.

### **3. Out-of-Hours Service**

3.1. Outside the Solution Partner Office Hours, mobile telephone support is available for Critical problems. Fax and email messages received at these times will be processed the following business day or as per the severity level assigned. Support calls Outside the Shift Hours will be assigned a Support Reference Number the following business day.

### **4. Maintenance Service**

4.1. The Maintenance Service will be activated by the support Service in the event that a matter reported cannot be immediately resolved.

4.2. The purpose of this service is to provide IITDh with a rectification service for faults identified in the Products. A "Fault" is any error, defect, malfunction or non-conformity which

shall cause the product to deviate materially from such specifications or descriptions of the operation of the products as are set forth in the documentation supplied to IITDh.

4.3. In allocating a priority to a IITDh call, the Support Service shall assess the impact of the reported incident on IITDh’s use of the products in accordance with the following criteria.

Severity Level	IITDh Impact
Critical	IITDh is unable to use the Products to perform absolutely necessary operations.
High	Although IITDh is able to use the Products to perform absolutely necessary operations, the problem causes limitations or restrictions in the use of the hardware, networking, security components/ equipments.
Medium	The problem does not cause IITDh any restrictions when using the Products but may cause IITDh to suffer inconvenience when performing day-to-day functions.
Low	The problem is of cosmetic nature and has little or no effect on IITDh’s operations.

4.4. Subject to the Severity Level described in Clause 4.3 above, the Solution Partner shall use reasonable efforts to perform the activities described in Clauses 4.5 to 4.11 below in accordance with the target times specified in the following table:

	Severity Level			
	Critical	High	Medium	Low
Workaround	8 hours	1 working day	2 working days	Not applicable
Permanent Solution	10 working days	20 working days	Next release of other fixes*	Future release of other fixes

\* “Next release of other fixes” means the next set of fixes to enter its unit testing phase.

4.5. For Critical Severity Level calls, the Solution Partner shall provide an initial response to IITDh within 60 minutes of receiving the call. The initial response will confirm that the call has been received, logged and is under investigation.

4.6. The target times assume that the Solution Partner shall be able to log in remotely to IITDh Systems and that authorised Solution Partner’s staff at IITDh Sites shall be able to log in locally to IITDh Systems.

4.7. The Support Service shall log the reported incident, provide an acknowledgment and initiate the problem investigation in accordance with the agreed Severity Level.

4.8. Provided that IITDh provides such information and assistance as the Solution Partner may reasonably request to assist in the Solution Partner's investigation, then the Solution Partner shall use reasonable efforts to correct Faults in the Products, either permanently or with a temporary procedure or "workaround" (if possible), within the target time for the agreed Severity Level as stated in Clause 4.4 above.

4.9. In the event that an underlying or latent Fault remains, then the Severity Level shall be changed in accordance with the characteristics of the Fault remaining and the problem shall be progressed in accordance with its revised Severity Level as stated in Clause 4.4 above.

4.10. The Solution Partner reserves the right to reject any reported matter that is not a Fault in the Products supplied by the Solution Partner or that falls outside the Solution Partner's proper control or responsibility. In such cases, the Solution Partner will provide a written explanation of the rejection within 3 working days of such rejection if so requested by IITDh.

4.11. The Solution Partner is required to ensure that one personnel is assigned at the site to serve IIT Dharwad and should have the necessary skills to meet the listed requirements with the help of backend remote support. Further, the Solution Partner will arrange to visit IITDh's site if warranted by the detected/ reported Fault.

4.12. Solution Partner will provide the following Maintenance Services in accordance with the following:

- a) the provision of operational support with respect to the various software to ensure it continues to comply with its warranty;
- b) the provision of Upgrades, updates, patches, bug fixes;
- c) non-operational Software support
- d) on-site assistance in case problem not resolved remotely; and
- e) the provision of amended Documentation to correct defects or errors in such Documentation or to reflect a change to the Software.

## 5. Penalty charges

5.1. If IITDh is unable to use an ICT service for 24 hrs, penalty at the rate of 0.5% of AMC charge quoted per annum, per day of unavailability, will be charged out of the bills payable to the solution partner.

5.2 An availability of over 99.5% per month is expected of all ICT services related to Internet connectivity, which includes the Firewall, DNS, DHCP, etc. The penalty for a lower availability will be up to 0.5% of AMC charge quoted per annum, per month of low availability.

Assistant Registrar  
IIT Dharwad