

**`OPEN TENDER -CLASS I & II LOCAL SUPPLIER.**

**CAMPUS DEVELOPMENT PROJECT OF INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD (IITH) FROM JICA FUNDING (Japan International Cooperation Agency)**

Tender Ref. No: IITH/CSE/SRIJITH/5(6)2020/T022

Date: 18/02/2021

Indian Institute of Technology Hyderabad invites online bids (e-tender) in two bids systems, from OEM/Authorized distributors/Authorized dealer of the following categories for the following item

Category of Suppliers invited for this Tender

- i) Class I local Supplier – has local content equal to more than 50%
- ii) Class II local Supplier – has local content more than 20% but less than 50%

Item Description	Estimate Cost of Tender (Rs).	EMD (Rs)
Installation and deployment of a Modular Prefabricated Intelligent Integrated infrastructure	NA	NA

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com>. OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>

The bid is to be submitted online only through the E-procurement portal of <https://mhrd.euniwizarde.com> up to the last date and time of submission of tender.

**Schedule of Dates**

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	18.02.2021	1230 hrs
2	Bid Submission Start Date	18.02.2021	1235 hrs
3	Bid Submission Close Date	11.03.2021	1700 hrs
4	Opening of Technical Bids	12.03.2021	1100 hrs

No manual bids will be accepted. All quotation (both Technical and Financial) should be submitted online through E-procurement portal of <https://mhrd.euniwizarde.com>

Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support - Phone No. 011-49606060. Mail id: - [helpdeskeuniwizarde@gmail.com](mailto:helpdeskeuniwizarde@gmail.com)

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## INSTRUCTIONS FOR ONLINE BID SUBMISSION

The Tender Document can be downloaded from <https://mhrd.euniwizarde.co>. OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>.

The bidders are required to submit soft copies of their bids electronically on the <https://mhrd.euniwizarde.com>. using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Portal, prepare their bids in accordance with the requirements and submitting their bids online.

More information useful for submitting online bids may be obtained at: <https://mhrd.euniwizarde.com>

### GUIDELINES FOR REGISTRATION:

1. Bidders are required to enrol on the e-Procurement Portal with clicking on the link “Online Bidder Enrolment” on the e-tender Portal by paying the Registration fee of Rs.2000/- +Applicable GST.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile. Or bidders can contact help desk for getting the DSC.
5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.
7. The scanned copies of all original documents should be uploaded in pdf format on portal <https://mhrd.euniwizarde.com>
8. After completion of registration payment, bidders need to send their acknowledgement copy on help desk mail id [helpdeskeuniwizarde@gmail.com](mailto:helpdeskeuniwizarde@gmail.com) for activation of their account.

### SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.
2. Once the bidders have selected the tenders they are interested in, you can pay the form fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through e-mail in case there is any corrigendum issued to the tender document.

## **PREPARATION OF BIDS**

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
5. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## **SUBMISSION OF BIDS**

1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by IIT Hyderabad.
3. Bidder has to select the payment option as “e-payment” to pay the tender fee / EMD as applicable and enter details of the instrument.
4. In case of Bank Guarantee (BG) bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official of IIT Hyd before the Online Opening of Technical Bid. In case of non-receipt of BG in original by the said time, the uploaded bid will be summarily rejected.
5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
6. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bid click “Complete” (i.e. after Clicking “Submit” in the portal <https://mhrd.euniwizarde.com>), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.
9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

### **For any clarification in using <https://mhrd.euniwizarde.com>**

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact euniwizard helpdesk (as given below) for any query related to etendering -  
Phone No. 011-49606060. Mail id: - [helpdeskeuniwizarde@gmail.com/](mailto:helpdeskeuniwizarde@gmail.com) Mr.Vijay -  
08448288989/Mr.Gagan-8448288987

## CHAPTER-1 INVITATION FOR TENDER OFFERS

Indian Institute of Technology Hyderabad invites online bids (e-tender) in two bids systems, from OEM/Authorized distributors/Authorized dealer of the following categories for the following item

**Item: Supply, Installation, Commissioning and deployment of a Modular Prefabricated Intelligent Integrated infrastructure**

### Category of Suppliers invited for this Tender

- Class I local Supplier – has local content equal to more than 50%
- Class II local Supplier – has local content more than 20% but less than 50%

1. The Bidders are requested to give detailed tender in two Bids i.e.

- Part - I: Technical Bid.
- Part - II: Commercial Bid.

### 2. Date & Time Schedule

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	18.02.2021	1230 hrs
2	Bid Submission Start Date	18.02.2021	1235 hrs
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Supply means: “Supply, Installation, Commissioning and satisfactory demonstration of the whole system and training”. If any charges extra are payable for Installation, Commissioning and training, the same should be specified in the commercial offer.

### 3. Availability of Tender:

The Tender Document can be downloaded from <https://mhrd.euniwizarde.co>. OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>.

### 4. Envelope 1- Technical Bid:

4.1. The online envelope clearly marked as "**Technical Bid - Envelope No. 1**" shall contain the all scanned copies of originals documents in PDF Format.

- Compliance statement/questionnaire of tender terms and conditions as per **Annexure-‘A’**.
- Compliance statement of specifications as per **Annexure- ‘B’**.
- Bid Securing Declaration Form as per **Annexure- ‘C’**.
- Manufacturer authorization as per **Annexure – ‘D’**.
- Previous Supply Order List Format as per **Annexure – ‘E’**.
- Bidder Information Form as per **Annexure – ‘F’**.
- Declaration Regarding Clean Track/No Legal Action as per **Annexure –‘G’**.

- h) Annual Maintenance Contract as per **Annexure- ‘H’**
- i) Acceptance of Tender Terms as per **Annexure – ‘I’**
- j) Relation Certificate – as per **Annexure – ‘J’**
- k) Local Content Declaration as per **Annexure – ‘K’**
- l) Certificate as per DPIIT Order – as per **Annexure ‘L’**
- m) Solvency certificates (not older than twelve months) issued by Scheduled/Nationalized bank with which BIDDER holds the Bank account.
- o) Copy of GST/ PAN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration and a copy of NISC/MSME registration wherever it is applicable should also be provided in Technical Bid.
- p) Technical literature/ leaflets and complete specifications of quoted model(s) along with commercial terms and conditions.
- q) Undertaking that the successful BIDDER agrees to give a security deposit amounting to 3% of the purchase order value by way of Demand Draft / Bank Guarantee in favor of The Director, IIT Hyd.
- r) In case of exemption from submission of Bid security, proof of registration with NSIC/MSME or appropriate authority.
- s) Details of supplies of similar Works/Supplies along with photocopies of previous Purchase orders and details of place of supply along with contact details
- t) Check List

**4.2. Earnest Money Deposit (EMD) -** The Bidders are required to sign a Bid Securing Declaration as per Annexure ‘C’ accepting that if they withdraw or modify their bids during the period of validity, or if they are awarded the contract and they fail to sign the contract or submit a Performance Security, they will be suspended for the period of 2 years.

**The firm registered with NSIC/MSME must give proof of registration along with their quotation failing which the bid will not be considered.**

Exemption from submission of Bid Securing Declaration against valid and relevant NSIC /MSME Certification is permitted, however it shall be subject to scrutiny by the IITH and if during scrutiny, it is found that the NSIC Certificate is invalid and/or irrelevant, then that bid is liable to be rejected as “not-accompanying EMD”. Therefore, Bidders claiming exemption from EMD/Bid Securing Declaration against NSIC certificate, should ensure the same carefully, while submission of their bids.

Note: If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient



documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

Bids submitted without Bid Security Declaration or relevant Certificates for exemption will stand rejected.

- i) The BIDDER who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote or submit Performa invoice of their principals for this tender.
- ii) The successful BIDDER, on award of contract / order, must send the contract / order acceptance in writing, within 15 days of award of contract.
- iii) Bids submitted without Bid Securing Declaration / relevant MSME/NSIC Certificates will be rejected & no correspondence in this regard shall be entertained.

#### **4.3. Technical Specifications:**

It must be ensured that the offers must be strictly as per our specifications. At the same time, it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore, the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.

#### **4.4. Compliance Statements:**

- i) Bidders must furnish a Compliance Statement of each and every required Specification of our tender in the format at ANNEXURE– ‘B’. The deviations, if any, from the tendered specifications should be clearly brought out in the statement. Technical literature/leaflet showing the compliance of the specification may also be attached with the quotation.
- ii) Similarly, the Compliance Statement/questionnaire for Terms & Conditions of the tender may be furnished, as per the enclosed format at Annexure – ‘A’, along with quotation (with techno- commercial bid in case of two bid tender system).
- iii) The firms are advised to submit both the compliance statements essentially along with their quotation failing which their offer may not be considered.

#### **5. Envelope 2: “Commercial Bid” shall contain:**

- i.) Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only.

ii) The BIDDERS are requested to quote for Educational Institutional Price for Equipment and software, since IITH is an educational institution of national importance and is entitled for the concessional price.

iii) The prices should be shown against each item for the purpose of Insurance claims / replacements if any.

iv) List of deliverables / Bill of materials and services.

v) Annual Maintenance Certificate as per Annexure – ‘H

vi) In case of foreign quote, the address of Principal’s / Manufacturer’s and their Banker’s details should be furnished.

Note:

(i) No request for extension of due date will be considered under any circumstances.

(ii) No sub-contracting is allowed with regard to installation, commissioning, training, warranty maintenance and after sales service. This is the sole responsibility of the Principals’/their authorized agents

6. IIT Hyd may issue corrigendum to tender documents before due date of Submission of bid. The bidder is required to read the tender documents in conjunction with the corrigendum, if any, issued by IIT Hyd.

## **7. Bid Opening and Evaluation Process:**

a. Technical Bids will be opened as per the Date Schedule & Time.

b. Financial Bids/Commercial Bids of the eligible bidders will be opened on a later date. The date and time for opening of Financial Bids /Commercial will be announced later.

c. Bids would be summarily rejected, if tender is submitted other than through online portal. The Bid is to be submitted within stipulated date / time.

## **8. Technical Committee**

(i) On the due date the Technical bids will be opened and referred to a duly constituted technical committee which is duly constituted. The committee will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee is the final and binding on all the parties.

(ii) The technical evaluation will be an assessment of the Technical Bid. IIT Hyd representatives will proceed through a detailed evaluation of the Technical Bids as defined in Chapter IV (Schedule of requirements, specifications and allied technical details), in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IIT Hyd will examine the information supplied by the BIDDERS, and shall evaluate the same as per the specifications mentioned in this tender.

- (iii) The technical committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IIT Hyd and these criteria/recommendation will also form as a part of short-listing of the firms.
- (iv) The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IIT Hyd or from other Institutes, these feedbacks will be considered for technical evaluation, the bidders will also be called for technical presentations if it is required so.
- (v) The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.
- (vi) After the technical evaluation is completed and approved, IIT Hyd shall inform to the BIDDERS whose bids have been rejected technically with the reasons for rejection.
- (vii) The successful BIDDERS will be informed regarding the date and time of Commercial bid opening.
- (viii) In the event of seeking any clarification from various BIDDERS by IIT Hyd , the BIDDERS are required to furnish only technical clarifications that are asked for. No amendment to commercial bid will be entertained at that stage. In case if a BIDDER fails to quote for a particular item it amounts to non-compliance and hence such bid will not be considered for further evaluation. Further during this process if any BIDDER indicates the price during the clarification such bids also will not be considered for further evaluation.

## **9. Commercial Bid Evaluation:**

Based on results of the Technical evaluation IIT Hyd evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

a) IIT Hyd shall be free to correct arithmetical errors on the following basis:

- (i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.
- (ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (iii) If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

b) Selling exchange rate/equivalent to Indian currency will be as on the date of bid opening in the case of single bidding and the rate on the date of opening of the Techno-Commerical bids i.e. Technical Bid in the case of two-part bidding.

c) The bids shall be evaluated on the basis of final landing cost as per format given in Price Schedule in case of import / indigenous items.

d) The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However, the CIF/CIP prices quoted by any foreign bidders shall be loaded further as under:

- Towards customs duty and other statutory levies-as per applicable rates.
- Towards custom clearance, inland transportation etc. – 2% of the CIF/CIP value.

e) Where the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF/CIP basis only.

f) The Vague terms like “packing, forwarding, transportation..... etc. extra” without mentioning the specific amount/percentage of these charges will not be accepted. Such offers shall be treated as incomplete and rejected.

g) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.

10. The Director, IIT Hyd reserves the right to accept the offer in full or in parts or reject summarily or partly.

## CHAPTER-2: INSTRUCTIONS TO BIDDERS

### 1. PREPARATION AND SUBMISSION OF OFFERS:

a) Quotation should be submitted directly by the original manufacturer/supplier or its sole authorized distributor/dealer/ Agent. In case of bid by authorized dealer/distributor/ Agent, the manufacturer authorization should be attached with the technical bid as per **Annexure- 'D'**.

**One Agent can participate in a tender on behalf of one manufacturer only. No offer will be entertained if the same Agent is representing another manufacturer for the same item.**

**Bids from only one authorized distributor/retailer/reseller will be entertained, who has authorization from the company to quote for this tender. Multiple bids from various distributors from the same manufacturer will not be entertained & the company / principle providing multiple authorizations will be rejected from the tender.**

b) The bidder shall bear all costs associated with the preparation and submission of its bid irrespective of the conduct or outcome of the bidding process.

c) The bidder should not indulge in any corrupt, fraudulent, collusive, coercive practices during the entire process of procurement and execution of contract/order.

d) Before the deadline for submission of the bid, IIT Hyd reserves the right to modify the bidding document and to extend or not to extend the date of submission. Such amendment/modification will be hosted on e-Procurement portal (<https://mhrd.euniwizarde.co>.) and on IIT Hyd website.

f) Conditional tenders will be summarily rejected.

### 2. Delivery Period / Timeliness: The delivery and installation period must be specified in quotation

***Delivery: Delivery period will be counted from the date of receipt of Concurrence from JICA for INR Orders and Letter of Credit from Bank of India Tokyo for Foreign Orders. Once the Concurrence/LC is received the same will be intimated to the vendor. Delivery to be executed only after receipt of the Concurrence/LC as the case may be. No Delivery will be accepted before concurrence from JICA.***

### 3. Security Deposit:

a. Within fifteen (15) days from the receipt of Concurrence from JICA, the vendor shall furnish a Security Deposit amounting to **3%** of the purchase order value in the form of Demand Draft/Bank Guarantee (**from scheduled Bank only**) favouring the Director, IIT Hyd.

b. The IIT Hyd will forfeit the 3% security deposit if vendor fails to execute the order as per the Purchase Order.

c. The Security Deposit should be valid for warranty period + 60 days, as the same will extend the same as Performance Bank Guarantee. Hence while preparing the BG, the time period required for delivery and installation and warranty + 60 days needs to be accounted for to cover the BG validity period.

d) This Security Deposit will be refunded to the vendor only on satisfactory completion of all contractual obligations as per this Tender and Purchase Order issued against this Tender.

e. **Bank Guarantee wherever mentioned in this document may be read as “Bank Guarantee from any Scheduled Bank” only.**

#### **4. Amalgamation/Acquisition etc.:**

In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the BUYER/Successor of the Principal Company are liable for execution of the contract and also fulfilment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. while submitting your bid, you may confirm this condition.

#### **5. Bid Validity Period:**

- a. The prices must be valid at least for a period of **120 days** from the date of opening of the Tender. No changes in prices will be acceptable in any condition after opening of tender till the validity of the offer or execution of the order whichever is later
- b. IIT Hyd may ask for the BIDDER's consent to extend the period of validity. Such request and the response shall be made in writing only. The BIDDER is free not to accept such request. A BIDDER agreeing to the request for extension will not be permitted to modify his bid.
- c. Bid evaluation will be based on the bid prices without taking into consideration the above corrections

#### **6. AWARD OF CONTRACT:**

- a. IIT Hyd, shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.
- b. If more than one BIDDER happens to quote the same lowest price, IIT Hyd reserves the right to award the contract to more than one BIDDER or any BIDDER.

#### **7. IIT Hyd reserves the right to vary quantities at the time of Award:**

- a. IIT Hyd reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the tender document without any change in unit price or other terms and conditions. Further, at the discretion of IIT Hyd, the quantities in the contract may be enhanced by 25% within the delivery period.
- b. Firms which have already supplied similar equipment to IIT Hyd and have not completed required installation/commissioning/after sales service/warranty replacements etc. such firms offer will not be considered for further evaluation and no enquiries thereafter will be entertained.

#### **8. Cargo Consolidation and Customs Clearance:**

IIT Hyd has appointed its own Freight Forwarder and Custom House Agent for all the imports. Please note that all the consignments have to be routed through their associates only. The address and contact details will be provided at the time of placing the Purchase Order.

## **9. Fraud and Corruption:**

IIT Hyd requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,

(a) The terms set forth below are defined as follows:

- (i) **“Corrupt practice”** means the offering, giving, receiving, or soliciting, directly or in directly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (ii) **“Fraudulent practice”** means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) **“Collusive practice”** means a scheme or arrangement between two or more bidders, designed to establish bid prices at artificial, non -competitive levels; and
- (iv) **Coercive practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract

(b) IIT Hyd will reject a proposal for award if it determines that Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent collusive or coercive practices in competing for the Contract in question

## **10. Interpretation of the clauses in the Tender Document / Contract Document**

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, Director, IIT Hyd's interpretation of the clauses shall be final and binding on all parties.



## CHAPTER - 3: CONDITIONS OF CONTRACT

### 1. Prices:

Bid prices should be filled in the appropriate format as mentioned in Price Schedule. All the bidders should quote prices for each and every item/accessories separately

#### **A. Bidders Quoting in Indian Rupees (INR) - For Goods with Local Content in the range of not less than 20 %**

- (i) The price of the goods must be as per the BoQ.
- (ii) The price mentioned in BoQ must be inclusive of transportation, Insurance, loading and unloading and any other local service required for delivering the goods for the desired destination as decided by IIT Hyd. Loading and unloading is strictly in vendor scope. IIT Hyd will not provide any manpower support towards the same.
- (iii) The installation, commissioning and training charges (If any) must be mentioned as per the BoQ (if requested separately in BoQ) else the price quoted will be taken as inclusive of installation, commissioning and training.
- (iv) The institute will not be responsible in case of the bidders failing to include any of the above mentioned prices in their bid. The price mentioned in the BoQ will be final and the bidder has to comply with that, if awarded the tender.
- (v) Unloading of the goods at IIT Hyd is strictly in the scope of the bidder, no manpower will be provided by IIT Hyd.
- (vi) As per Ministry of Finance Notification 45/2017 & 47/2017, concessional GST at 5% is applicable to IITH.

#### **B. Bidders Quoting in Foreign Currency - For Goods with Local Content in the range of not less than 20 %**

- (i) The mode of shipment must be CIP.
- (ii) Courier mode of shipments will not be acceptable. The Shipments must be dispatched under Cargo Mode only.
- (iii) The mode of shipment once mentioned cannot be changes without the consent of IIT Hyd .
- (iv) Any financial implication leading to change of mode of shipment or any deviation from the bid submitted shall be borne by the bidder.
- (v) The charges towards insurance and transportation of the goods and must be clearly mentioned.



(vi) The installation, commissioning and training charges (If any) must be mentioned as per the BoQ (if requested separately in BoQ) else the price quoted will be taken as inclusive of installation, commissioning and training.

(vii) The institute will not be responsible in case of the bidders failing to include any of the above mentioned prices in their bid. The price mentioned in the BoQ will be final and the bidder has to comply with that, if awarded the tender.

C. IIT Hyd is exempted from payment of Customs Duty under notification No.51/96 dated 23.07.1996. No other charges than those mentioned clearly in the quotation will be paid.

## **2. Bank Charges:**

All Bank charges, including opening of LC, to IIT Hyd Account and all charges outside India to Beneficiary's Account only. In case the BIDDER seeks confirmation of LC such confirmation charges are to the Beneficiary's account.

## **3. Agency Commission & Services:**

a) No Agency commission will be payable by IITH to the Indian Agent.

4. **Currency of Payment** - The contract price will be paid in the currency/currencies in which the price is stated in the contract.

5. **Performance Bank Guarantee:** The 3% Security Deposit which is mentioned above (Chapter 2 Point No 3) will be extended as Performance Bank Guarantee for a period of warranty period.

6. **Pre-installation:** The BIDDER has to state in detail the Electrical Power/UPS requirements, floor Space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system and to run the tests. i.e. pre-installation facilities required for installation may please be intimated in the technical bid. Subsequently, before the consignment lands in IIT Hyd the bidder shall confirm that the pre-installation requirements are sufficient for installation of the equipment. The BIDDER should continuously monitor the pre-installation requirements and see that everything is ready before the consignment is taken to the site for installation.

## **7. Installation:**

a) BIDDER shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter.

b) Installation demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the equipment at site, unless otherwise instructed by the Institute

c) After successful installation what will be the minimum down time of equipment/instrument in case of breakdown. If the identified firm or person fails to put the system into working condition what is the further alternative course of action suggested to adhere to minimum down time should be covered in the Technical Bid.

## **8. Inspection:**

- a) The inspection of the system will be done by our technical expert /Scientist in the presence of firm's representative.
- b) In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the IIT Hyd.

**9. Training:** Wherever needed, Scientist/Technical persons of the Institute should be trained by the supplier at the project site free of cost. In case the person is to be trained at supplier's site abroad or in India it should be mentioned in the quotation clearly. The supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges.

## **10. Warranty / Support:**

- a) The items covered by the schedule of requirement shall carry minimum 03 years of comprehensive warranty from the date of acceptance of the equipment by IIT Hyd. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The comprehensive warranty includes onsite warranty with parts.
- b) The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, local taxes if any should be borne by the beneficiary or his agent. No cost will be borne by IIT Hyd.
- c) The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.
- d) The Bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- e) The equipment must be supported by a Service Centre in India manned by the technical support engineers. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail. The support through this Centre must be available during all working days and hours.
- f) The manufacturer/OEM is should facilitate the bidder/Agent on regular basis with technology / product updates & extend support for the warranty as well.
- g) The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- h) The principal vendor must have a local logistics support by maintaining a spares in the country of deployment of the equipment, with the Indian Agent. This is to ensure immediate delivery of spares parts from Principal Vendor of equipment to its channel partner/system integrator.
- i) Details of the agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In

case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer

j) **Commencement of Warranty Period:** The warranty period of an item shall commence from the date of successful installation, commissioning and demonstration at IIT Hyd. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

11. **Reasonability of Prices:** The prices quoted must be the prices applicable for a premiere Educational and Research Institute of national importance. The bidder must give details of identical or similar equipment, if any, supplied to other IITs/ IISERs/ CSIR lab/ CFTI's during last three years along with the final price paid and Performance certificate from them

12. **Annual Maintenance Contract:** The bidder must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period. This is mandatory to mention, wherever applicable. No sub-contracting will be allowed for installation or maintaining system/ equipment / instrument during or after warranty period.

13. **Indemnity:** The vendor shall indemnify, protect and save IIT Hyd against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipment's supplied by the bidder/OEM.

**14. Freight & Insurance:**

- a) **Imports:** In case of imports the freight & insurance will be paid by IIT Hyd , as the consignments are shipped through the IIT Hyd nominated freight forwarder (applicable only cases of FCA/FOB shipments).
- b) **Indigenous:** The equipment'/items to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at IIT Hyd site in case of Rupee transaction.

**15. PAYMENT: - NO ADVANCE PAYMENTS ARE ALLOWED.**

**A) INDIGENIOUS (INR Orders)**

For Indigenous Orders, 90% payment shall be made against delivery, balance 10% on installation, commissioning and demonstration of the whole system to the satisfaction of the Institute/ Scientist/Technologist/Indentor/Professor etc. If the PBG, submitted as per Chapter 2 Clause No 3, requires extension to cover the Warranty Period the same will be done before release of the balance 10% Payment.

**Note: The Contract as per Annexure M, to be signed between successful vendor and the IITH, shall be the basis for this procurement, since the funding Agency in this procurement is JICA-ODA. The Contract along with the Purchase Order will be forwarded to the JICA & CAAA for approval. The Purchase Order will be subject to Concurrence from JICA. The delivery is to be executed only after receipt of Concurrence from JICA.**

## B) IMPORT

In case of import supplies the payment will be made only through Letter of Credit 90% payment will be released against delivery and 10% after installation wherever the installation is applicable. If the PBG, submitted as per Chapter 2 Clause No 3, requires extension to cover the Warranty Period the same will be done before release of the balance 10% Payment.

**Note: The Contract as per Annexure M, to be signed between successful vendor and the IITH, shall be the basis for opening of Letter of Credit. Since the funding Agency in this case is JICA-ODA, the Contract along with the Purchase Order will be forwarded to the JICA & CAAA for approval. The delivery is to be executed only after receipt of Letter of Credit from Bank of India Tokyo. The procedure for establishing of Letter of Credit (LC) shall be as follows-**

- a) Upon communication from IITH, the Min. of Finance, GoI, would forward the documents under intimation to JICA, New Delhi, to the designated Bank of India, Tokyo to initiate the process to open the LC.
  - b) The Bank of India, Tokyo, in its turn, as required under the rules of procedure of JICA, when it finds that everything is in order, would open LC and forward the same and other documents to JICA, Tokyo, for a Letter of Commitment(LCOM) to be issued to Bank of India to establish LC.
  - c) Upon receipt of Letter of Commitment (LCOM) from JICA, Tokyo, the LC becomes effective and then the Bank of India would send LC to the supplier through its Authorised bank, as per the contract. Simultaneously, a copy would be sent to IITH by the Bank of India, Tokyo.
  - d) When proper shipment documents are received by Bank of India, Tokyo, the bank will release yen equivalent of the contract value of the consignment to the Bank of India, Tokyo for releasing further payment to the supplier.
- ii) The payment of local currency portion if any shall be payable in Indian Rupees, within 30 days after the receipt of the equipment in good condition and after satisfactory installation and commissioning and demonstration.

## 16. Liquidity Damage for delayed Services

- i) As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to, failing which, IIT Hyd will forfeit SD and also LD clause will be applicable /enforced.
- ii) If the supplier fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

iii) IIT Hyd reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.

#### **17. Public Procurement (Preference to Make in India), Order 2017:**

a) IIT Hyd shall compare all substantially responsive bids to determine the lowest valued bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E. II dated 15th June 2017 and its subsequent amendments. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.

b) As per the above order and its subsequent amendments “Local Content” means the amount of value added in India which shall be value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all the custom duties) as a proportion of the total value, in percent. Accordingly, the suppliers will be classified in following categories.

- i) Class I local Supplier – has local content equal to more than 50%
- ii) Class II local Supplier – has local content more than 20% but less than 50%

c) **Verification of Local Content:** The Class I Local Supplier /Class II Local Supplier at the time of bidding shall be required to indicate the percentage of local content and provide **self-certification as per Annexure K** that the items offered meet the local content requirement. The details of the location(s) at which the local value addition is made also needs to be specified.

In case of procurement in excess of Rs.10 crores, the suppliers shall be required to provide the certificate from the Statutory auditor or cost auditor of the company giving the percentage of local content.

**The bidders can be debarred for a period up to two years as, per Rule 151(iii) of GFR 2017, in case of false declaration.**

**18. Requirement of registration:** Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

i. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).

ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means:

- a) An entity incorporated, established or registered in such a country; or
- b) A subsidiary of an entity incorporated, established or registered in such a country; or

- c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d) An entity whose beneficial owner is situated in such a country; or
- e) An Indian (or other) agent of such an entity; or
- f) A natural person who is a citizen of such a country; or
- g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

For details about registration procedures please visit the above mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates as **per Annexure 'L'** for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

**19. Force Majeure:** IIT Hyd may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the Contract, is the result of a Force Majeure.

Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.) acts of states, the direct and indirect consequences of wars (declared or undeclared) hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises.

## **20. Dispute Settlement:**

IIT Hyd and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the IIT Hyd or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration.

Arbitration may be commenced prior to or after delivery of the Goods under the Contract. The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

(a) In case of Dispute or difference arising between the IIT Hyd and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director IIT Hyd, if he is unable/ unwilling to act, to the sole arbitration of some other person appointed by his willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

(b) In the case of a dispute between the Purchase and a Foreign supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations

Commission on International Trade Law) Arbitration Rules. The venue of the arbitration shall be the place from where the purchase order or contract is issued.

21. **Jurisdiction:** The disputes, legal matters, court matters, if any, shall be subject to Hyderabad Jurisdiction only.

Assistant Registrar (S&P)



## CHAPTER 4 SCHEDULE OF REQUIREMENTS, SPECIFICATIONS & ALLIED TECHNICAL DETAILS

### **PART A GENERAL REQUIREMENT**

#### **1.1 Summary**

M/s Indian Institute of Technology (IIT Hyderabad), would like to install and deploy a Modular infrastructure which shall be able to host critical IT technology hardware to run the application. It should be designed in a way that it offers scalability over a period. The design should consider redundancy, scalability and maintainability.

In order to meet above requirements, M/s Indian Institute of Technology (IIT Hyderabad), wishes to deploy Integrated Data Center Infrastructure/ Intelligent Racks which should deliver the following features and benefits.

These specifications describe requirements for a fully integrated and intelligent Datacenter. The system will be designed to provide precision cooling, Uninterruptible Power System (UPS), Remote Monitoring solution with Biometric Access control for Security and Novec 1230 Fire Suppression system for critical IT components inside the rack.

#### **1.2 Design Requirements / Scope of work**

S. No	Description of Requirements	Bidder shall state as: Fully Compliant/ Non-Compliant
1.2	<b>Scope of Work</b>	
1.2.1	This specification covers intelligent integrated/inbuilt infrastructure, standalone system design, engineering, manufacture, assembly, testing at manufacturer's works, supply, delivery at site, unloading, handling, proper storage at site, erection, testing and commissioning at site of complete infrastructure for the proposed Data Centre to be installed at IIT Hyderabad, as detailed in the specification, complete with all accessories required for efficient and trouble free operations.	



1.2.2	Modular and scalable design for power and cooling : All the components used to design the system should be redundant and in the Events of failure the components can be maintained easily. All the components of the infrastructure should be such that it can be easily dismantled and Relocated to different location.	
2	<b>Requirements</b>	
2.1	Integrated Data Center Infrastructure Solution ( <b>hereafter referred as ‘Smart DC Solution’</b> ) with Prefabricated Cold and Hot aisle containment of 06 racks of 600mm x1800mm should cater IT load of minimum 40 kVA	
2.2	The Intelligent Integrated Infrastructure essentially includes internal redundant or backup power supplies, environmental controls (e.g., precision air conditioning, fire suppression, smoke detection, water leak detection, humidity sensor, intelligent monitoring system, security devices, etc.) Air-conditioning system is to have 100 % reliability on 24 x 7 basis with adequate standby for system redundancy. ( <b>Failure of any single unit; still to meet the total cooling requirement</b> ). <b>The ambient temperature considered for the calculation of total tonnage requirement should be 45 Degrees</b>	
2.3	The detail specifications of the DC Solution, standalone system shall be in adherence to standard Data Centre guidelines thus shall be composed of multiple active power and cooling distribution paths, but only one path active. Shall have redundant components.	

3	<b>Solution shall have following components: -</b>	
3.1	<b>In-Row closed loop Air-Conditioning</b>	
3.1.1	Data center server and network racks should be equipped with cooling units to provide closed loop precision cooling system which should be able to cool the equipment’s uniformly.	

3.1.2	<p>Precision Air Cooling solution should be of 2x35kW capacity with standby (N+N Redundancy)</p> <p><b>Precision Air Conditioner should have following Features:</b></p> <ol style="list-style-type: none"> <li>1. Cooling System should be DX type in N+N topology.</li> <li>2. Inbuilt Heater / Humidifier to cater IT load up to 35kW</li> <li>3. Outdoor Unit</li> </ol>	
3.2	<b>UPS System</b>	
3.2.1	<p>UPS System (For IT load of Integrated data centre - Primary power source)</p> <p>UPS should be of 2 nos. 40 kVA with pf up to 0.9 and efficiency up to 95%, Other features of UPS system are as follows:</p> <ol style="list-style-type: none"> <li>1. True On-line UPS with Widest input range (305V-477V)</li> <li>2. Double conversion and IGBT technology: Full IGBT Rectifier /Battery Charger and IGBT based Inverter</li> <li>3. Facility for remote monitoring</li> </ol>	
3.3	<b>Power Distribution</b>	
3.3.1	Basic rack PDU Vertical Socket strip with 12 nos of IEC C13 Sockets & 4 nos of IEC C19 Socket with 2.5 mtr power chord with 32A MCB , 1 phase (each rack having two PDU's)	
3.4	<b>Main Electrical Panel and Cabling</b>	
3.4.1	DB panel should be mounted on to utility rack with all internal cabling integrated into the same. Essential MCB/MCCB should be provided with electrical system. All the PDUs inside all racks should be connected by the UPS. DB panel mounted on Utility rack shall be covered with Novec 1230 Gas based fire suppression system.	
3.4.2	Any extra electrical points and data points required in the server room shall have to be provided by the vendor at his own cost.	

3.5	<b>Fire Detection and Suppression</b>	
3.5.1	Fire detection and suppression system should be mounted in panel adjacent to Smart Racks to avoid consumption of any usable U space an In-rack built-in feature of solution. It should have Fire alarm and fire suppression unit and the fire suppression agent should be NOVEC 1230 Gas as per NFPA guidelines.	
3.6	<b>Environmental Controls</b>	
3.6.1	Smart Racks should include basic environmental controls: minimum 6 Nos. Temperature/ Humidity Sensors at multiple point temperature sensing on each rack.	
3.7	<b>Racks and U Space</b>	
3.7.1	6 Nos. of 42 U racks of dimension minimum of 600 mm x 1000 mm and maximum upto 600 mm x 1200 mm with additional containment of 400mm for Cold and 400mm for Hot Aisle containment. (Server Rack)	
3.7.2	Solution should have Min 230 U (total) space available for IT and network equipment. (Battery External)	
3.7.3	Blanking Panel: 50% each for all the supplied Racks.	
3.8	<b>Monitoring</b>	
3.8.1	Each set of Integrated racks should have IP based monitoring facility of all the passive parameters inside racks.	
3.8.2	Capable for sending Email Alerts	
3.8.3	Access and monitor the status critical components through mobile app/browser.	

3.8.4	Monitoring unit should occupy maximum 1 U space of rack height	
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3.9	<b>Other features:</b>	
3.9.1	The Intelligent integrated infrastructure would provide much functionality and some of the key functionalities are – Both Cold aisle & hot aisle containment should be of minimum 300mm each for airflow, Air tight Thermally insulated cabinet, remote Management.	
3.9.2	DC Solution would have provision to add extra racks in future. It should be flexible, adaptable, controllable infrastructure.	
3.9.3	Rack based Biometric access control system provided should be controlled by access control panel with access control for both front as well as rear doors. IP based Access control with user exclusive authentication	
3.9.4	Critical Component's for Integrated Server Racks system should be from same & single OEM for Seamless Integration & better Service Supports	
3.9.5	Monitoring SNMP Enablement feature to connect to any 3rd party BMS over SNMP	
3.9.6	Electrical Distribution board within Utility Cabinet to have fire detection & Novec Based Fire Suppression system	
3.9.7	Status based LED Lights within Smart Racks	
3.9.8	HMI – Graphical User Interface for Smart Racks monitoring	

## **PART B PRODUCT TECHNICAL SPECIFICATIONS**

<b>4</b>	<b>Uninterrupted Power Supply (UPS) System</b>	
<b>4.1</b>	<b>UPS System</b>	
<b>4.1.1</b>	<b>General Description:</b>	
	Supply, install, test and commissioning of true online, double conversion, high efficiency, and high power factor Uninterruptible Power Systems (UPS) rated at 40 KVA x 2 nos with battery backup support for 10 minutes per UPS on full load. UPS shall be rack mountable & The backup batteries should be supplied with the necessary arrangements to mount outside the cabinet.	
	Configuration: 40kVA x 2 Nos	
<b>4.1.2</b>	<b>Scope</b>	
<b>4.1.2.1</b>	<ul style="list-style-type: none"> <li>The scope shall include design, supply, installation, testing and commissioning of the complete UPS system and related accessories including:</li> <li>All systems should be tested in factory as per the manufactures recommended procedure for all operating parameters and the test results should be provided during the installation.</li> <li>Delivery at site, unloading, handling, installation of complete system including interconnection from the UPS system to batteries and to input / output panels switches. All interconnections shall be done using multi-strand Flexible Copper conductor cables of appropriate sizes.</li> <li>Scope includes battery bank connections and providing safety barriers for all bus bars and cable connection leads on battery racks.</li> <li>Energizing of UPS and Battery bank commissioning.</li> <li>UPS control parameters setting and complete testing of system on load.</li> <li>Service backup by engineer till system is fully operational and subsequently training is to be provided to the concerned persons</li> <li>Any upgrade of the system hardware and associated other software during the warranty period should be supplied at free of charge.</li> </ul>	

	<ul style="list-style-type: none"> <li>Acceptance tests will be carried out after installation and the systems will be taken over only after successful completion of the acceptance tests.</li> <li>Operation and service manuals of the systems containing technical / Electronic drawings / circuit diagrams complete in all respects should be supplied.</li> </ul>		
4.1.2.2	<b>Specification / features of the Each UPS system are as follows:</b> <ul style="list-style-type: none"> <li>Widest input range.</li> <li>Double conversion and IGBT technology.</li> <li>Full IGBT Rectifier / Battery charger</li> <li>IGBT based Inverter</li> <li>Batteries to support 60minutes full load backup per UPS</li> <li>Power distribution panels</li> <li>Facility for remote viewing</li> <li>Easy to expand in a cost-effective way</li> </ul>		
4.1.3	<b>UPS other technical specification</b>		
4.1.3.1	<b>General</b>		
	UPS type	ON-LINE	
	Model Name	Bidder to specify	
	Rating (VA/W)	40,000 VA / 36,000 W	
	Make	EMERSON / Liebert	
	Technology	IGBT with PWM Switching	
	Crest Factor	3:1	
	Invert efficiency	Upto 95 %	
	Eco Mode efficiency	98.5 %	
4.1.3.2	<b>INPUT RATINGS</b>		
	Nominal Input Voltage	380/400/415Vac (3-phase)	
	Permissible input voltage variation at full load	305 V – 477 VAC	
	Nominal input frequency	50 Hz	
	Permissible input frequencies variation	40 Hz to 70 Hz	
	Input power factor at full	> 0.99 at full load	

	load		
	Input socket	Anderson connectors	
4.1.3.3	<b>OUTPUT RATINGS</b>		
	Nominal output voltage	380/400/415Vac (3-phase)	
	Output Voltage regulation	< +/- 1%	
	Output voltage distortion	<2% total harmonic distortion (THD) for 100% linear loads <5% THD for 100% non linear loads.	
	Nominal output frequency	50 Hz	
	Waveform	Pure Sine wave	
	Power factor	0.9 lagging	
	Over load capability	125% for 5 minutes, 150% of full load for 1 minute, with automatic transfer to bypass	
	Output sockets	Anderson connectors	
	Transient recovery time	Within 20 milliseconds to +/- 1%	
4.1.3.4	<b>BYPASS</b>		
	Voltage Range	+15% -20%	
	Frequency	50/ 60Hz	
	Frequency Range	+/-20%	
4.1.3.5	<b>BATTERY PARAMETERS</b>		
	Type	SMF	
	No. of battery blocks	32-40	
	Battery nominal voltage	12V	
	Battery Voltage	384-480Vdc	
4.1.3.6	<b>ENVIRONMENTAL PARAMETERS</b>		

	Operating temperature	0 to 45 deg. Centigrade	
	Storage temperature	-15 to 45 deg. Centigrade	
	Relative Humidity	95% RH non condensing	
	Altitude	1000 meters	
	Temperature de-rating	30-40deg de-rating	
	Altitude de-rating	< 1000m; derating according to GB/T3859.2 when higher than 1000m	
	Noise level	<58db	
4.1.3.7	<b>MECHANICAL PARAMETERS</b>		
	Height X width X Depth (MM)	173 X 435 X 800	
	Weight	Bidder to Specify	
	Ventilation	Forced - Air cooled	
	Cable Entry	terminal block	
	Color / Panel finish	EG7021	
	Protection	IP20	
4.1.3.8	<b>MONITORING SOFTWARE</b>	SNMP, Dry contact card, site monitoring / shutdown for multiple servers	
4.1.4	Installation and Configuration		
	<ol style="list-style-type: none"> <li>1. The entire system shall be installed as per manufacturer's recommendations &amp; instructions including all interconnections for supply &amp; control circuits.</li> <li>2. All components shall be clearly identified using labels including battery cells individually.</li> </ol> <p>Services of authorized representative or manufacturer for supervision of installation, connections, testing, &amp; adjustments shall be provided.</p>		
4.1.5	Testing and Commissioning		



	<ol style="list-style-type: none"> <li>1. Under supervision of manufacturer's representative all system functions, operations, protective features shall be checked &amp; pre-set to ensure compliance or specifications.</li> <li>2. Test the system as per recommendations &amp; test listed below using pre-calibrated instruments.</li> <li>3. Simulation of malfunctions to verify protective device operations.</li> <li>4. Duration of supply on emergency. Low battery voltage alarm &amp; shutdown, transfer &amp; restoration of normal supply.</li> <li>5. Remote status &amp; alarm tests.</li> </ol> <p>In case of test any shortfalls / faults, the same shall be rectified &amp; test procedure shall be again repeated to establish satisfactory performance.</p>	
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5	<b>Precision Air Conditioning System of 35kW Capacity</b>	
5.1	<b>Configuration</b>	
	<p>Supply, installation, testing and commissioning of DX Type floor mount Row Based Air-conditioning units designed specifically for high sensible heat ratio with variable cooling technique to match the low latent loads of systems to be installed adjacent to cabinet for effective and uniform distribution of cooling. Ambient air design temperature to be considered is 45 Deg C.</p> <p>It shall be specifically designed for service from the front and rear of the unit; the unit shall be capable to be mounted between the racks or at the end of row. The unit shall modulate cooling capacity and</p>	
5.2	<b>Direct Expansion</b>	
5.2.1	<p><b>Cooling Circuits</b></p> <ul style="list-style-type: none"> <li>• One refrigeration circuit, incorporating a high efficiency, fully hermetic variable capacity compressor with crankcase heater, safety valve, filter drier, moisture indicating sight glass, liquid line solenoid valve and an electronics expansion valve.</li> <li>• Each compressor is equipped with pre-set high and low pressure switches for protection against high condensing and low evaporating temperatures. The low pressure switch features an automatic reset (with an adjustable delay for winter start-up).</li> </ul>	

	<ul style="list-style-type: none"> <li>The unit shall be provided with additional protection against high ambient temperature. When the temperature goes over the design conditions, the unit remains in operation with partial load (20% decrease against required). If such protection is not sufficient High Pressure switch shall generate an high pressure alarm and the unit shuts down - manual reset shall be required</li> <li>The inclined evaporator coil is manufactured from copper tubes, mechanically bonded to hydrophilic painted aluminum fins, with a stainless-steel condensate drain pan. The large face area/low velocity coil allows precise control of temperature and humidity* during cooling and dehumidification and is designed to optimize fluid velocity and minimize pressure drop</li> <li>The moisture indicating sight glass, liquid line solenoid valve and expansion valve for each circuit should be as per OEM design.</li> </ul>	
5.2.2	<b>Fan Section</b> <ul style="list-style-type: none"> <li>Units should be offered with atleast two plug EC Direct Drive Fan, High efficiency, EC motor with integrated electronics, Maintenance free design and construction. The fan section shall be designed for higher air flow. Each PAC unit should be capable of delivering 80-100 CFM per kW. The fan shall be protected from over temperature of motor, electronics, locked rotor protection, short circuit of motor output. Fans are IP54, Protection class F</li> </ul>	
5.2.3	<b>Cabinet and Frame</b> <ul style="list-style-type: none"> <li>The unit shall be powder painted panels with ½” (or 10mm) insulation. A hinged control access panel opens to a second front panel which is a protection enclosure for high voltage components. Or as per OEM design.</li> <li>The frame is painted with a powder coat finish to protect against corrosion. The unit is totally front and rear accessible including any component removal.</li> </ul>	
5.2.4	<b>Air Filtration</b> <ul style="list-style-type: none"> <li>The filter cells are made of two deep pleated 4” filters rated MERV8 following ASHRAE 52.2 (45% by ASHRAE 52.1) or G4 following EN779, located within the cabinet, and accessible from the rear of the unit. Frame of the filter shall be made of GI/Aluminium.</li> <li>Clogged filter alarm must be available for standard.</li> </ul>	
5.2.5	<b>Refrigerant</b> <ul style="list-style-type: none"> <li>All units equipped with direct expansion circuit are suitable for R410A refrigerant.</li> </ul>	

5.2.6	<p><b>Microprocessor Controller</b></p> <ul style="list-style-type: none"> <li>• Air conditioning models should be controlled by microprocessor based controller. It can be programmed to control the function of every device within the unit via I/O</li> <li>• The controller shall allow setting and monitoring of the room parameters. Unit utilizes multiple temperature sensors placed at the rack inlet, to ensure management and control of temperature by rack. The controller should allow setting and monitoring of parameters:</li> <li>• The controller should allow setting and monitoring of the following space parameters: <ul style="list-style-type: none"> <li>○ Air inlet Temperature</li> <li>○ Air supply Temperature (remote sensors at rack inlet)</li> <li>○ Return Temperature set-point</li> <li>○ Supply Temperature set-point</li> <li>○ Return Temperature band</li> <li>○ Supply Temperature band</li> <li>○ Humidity (inlet)</li> <li>○ Humidity set-point</li> <li>○ Humidity band</li> </ul> </li> <li>• The example of available warnings / alarms: <ul style="list-style-type: none"> <li>○ High supply temperature, Low supply temperature</li> <li>○ High return humidity Low return humidity</li> <li>○ Loss of airflow</li> <li>○ Compressor Low Pressure, Compressor High Pressure</li> <li>○ Electrical heater high temperature (When applicable)</li> <li>○ Clogged filter</li> <li>○ LP transducer fail, Call service (customer input)</li> <li>○ Unit hours exceeded</li> <li>○ Compressor hours exceed</li> <li>○ Humidifier hours exceed</li> <li>○ Supply sensor failure</li> <li>○ Network failure</li> <li>○ Humidifier problem</li> <li>○ Smoke detected</li> <li>○ Fire alarm</li> <li>○ Rack sensor failure</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"> <li>Following features should be incorporated in the controller: <ul style="list-style-type: none"> <li>Input for remote on-off and volt-free contacts for simple remote monitoring of low and high priority alarms: high/low temperature, high/low refrigerant pressure, fan/control failure, compressor/control failure and others are available</li> <li>LAN management: functions provided as standard include stand- by (in case of failure of the unit in operation, the second one starts automatically), and automatic rotation</li> <li>Automatic restart must be provided after a power failure</li> </ul> </li> </ul>	
5.2.7	<p><b>Monitoring</b></p> <ol style="list-style-type: none"> <li>There should be SNMP and HTTP/Web-management capability for enhanced communications and control of HPM systems. The cards make use of an Ethernet network (100Mbit/1Gbit) to monitor and control a wide range of operating parameters, alarms and notifications to a standard web browser (Internet Explorer). OR as per OEM standard.</li> <li>The unit shall also include input volt-free contacts for simple remote monitoring of low and high priority alarms: high/low temperature, high/low refrigerant pressure, fan/control failure, compressor/control failure and others are available.</li> </ol>	
5.2.8	<p><b>Condenser</b></p> <ul style="list-style-type: none"> <li>The condenser should be with fan speed controller designed &amp; set for usages of R410A refrigerant. Condenser should work at 0 deg C to 45 deg C ambient temperature. The motorized fan shall be IP54, protection class F</li> </ul>	
5.2.9	<p><b>Humidifier</b></p> <ul style="list-style-type: none"> <li>The unit is fitted with a canister type steam humidifier suitable for use with water of varying degrees of hardness, provided that the water is not treated or demineralized (Conductivity range 125-500<math>\mu</math>S/cm). The humidifier is complete with a water inlet valve, water outlet valve and a maximum water level sensor, disposable cylinder, steam distributor and electronic controls. Humidifier control is of the ON-OFF type, can be also disabled by remote contact (Optional - humidifier and reheat lockout). Humidifier is removable from the rear of the cabinet.</li> </ul>	
6	<b>Racks &amp; Accessories</b>	

6.1	Rack Containment Frame is 42 U, 19" mounting type with standard Rack + Cold & Hot Aisle Containment	
6.2	Rack frame is, scalable and modular with safe load carrying capacity of 1000 Kg	
6.3	Color shade of Rack is RAL 7021 / RAL 7035 / RAL 9005 or as per OEM Standard.	
6.4	Base plinth with 100 mm height	
6.5	Cable entry provision from top & bottom both side of rack	
6.6	Cut outs with rubber grommet on top and bottom cover of rack for cable entry	
6.7	Vertical Cable manager on both LHS & RHS on rear side	
6.8	Front glass door for complete 42U height visibility & Rear Split Steel door	
6.9	Thermally insulated cold aisle chamber	
6.10	Blanking panels to prevent air mixing	
6.11	Fixed Shelf to be provided with each rack	
6.12	Plastic Cable duct on vertical LH & RH section of racks for cable routing	
6.13	Front Rack doors to be provided with Biometric Access Control with 02 nos. of Electromagnetic lock per door	
6.14	Gas spring to be provided on front doors of racks	
6.15	Status based LED light to be provided on each rack	

<b>7</b>	<b>Safety and Security Systems</b>	
<b>7.1</b>	<p><b>Fire Alarm and Fire Suppression System with VESDA</b></p> <p>The integrated infrastructure solution should be designed as a complete stand-alone unit with security, fire detection and fire suppression systems with VESDA. Each of the systems is inter-operable and inter connected.</p>	

	<p>Environmentally friendly NOVEC 1230 agent should be used to ensure that no harm to human beings and environment is caused. Following systems should be installed.</p> <ol style="list-style-type: none"> <li>1) NOVEC 1230 Clean Agent for fire suppression system</li> <li>2) Fire detection and alarm systems, with detectors and panel.</li> <li>3) Protected area: The entire volume of the server racks shall be protected with fire detection and fire suppression system. The doors should be secured by Access Control system</li> <li>5) The NOVEC 1230 system shall be designed and installed as per NFPA 2001-2012 Edition. SMPV, Petroleum and Safety Explosives Organization (PESO) approved cylinder filled with NOVEC 1230 is installed.</li> </ol>	
<b>7.2</b>	<b>Rodent Repellent System</b>	
7.2.1	The proposed Smart Racks/cabinets should be covered by Rodent Repellent System.	
<b>7.3</b>	<b>Biometric Based Access Control</b>	
	<p>The IP based Access Control System shall be used to serve the objective of allowing access to authorized personnel only. The system deployed will be based on Biometric Technology. The front &amp; rear rack doors will be provided with magnetic locks, and will operate on fail-safe principle through one common Biometric access control system</p> <p>The system would be designed and implemented to provide following functionality:</p> <ul style="list-style-type: none"> <li>• Configurable system for user defined access</li> <li>• Built-in Real Time Clock (RTC), calendar; complete Database stored locally and shall be capable of operating offline on standalone mode</li> <li>• Record, report and archive each and every activity (permission granted and / or rejected) with log formats</li> <li>• Fail safe operation in case of no-power condition and abnormal condition such as fire, theft, intrusion, loss of access control, etc.</li> <li>• At the biometric reader, user presents the finger to the biometric reader which is unique to each employee. The pattern is read and compared with stored data to grant / deny access</li> </ul>	
<b>7.4</b>	<b>Water Leak Detection System</b>	
7.4.1	The proposed Smart Racks should be covered by WLD	

<b>8</b>	<b>Remote Monitoring</b>	
	Supply and installation rack mountable monitoring system with Sensors & notification system. The system shall continuously collect critical information from network connected devices such as, UPS System, Cooling Units, temperature & humidity sensors, door sensors, Water Leak sensor and other dry contact monitoring. Beacon & Buzzer-Sound and Flash Led Alarm. Based on pre-set parameters, automated email alerts are sent to the intended recipients.	
	1) Intelligent Rack environment remote monitoring	
	2) Modbus 485 Communications	
	3) SNMP Communication	
	4) Single window for monitoring all sensors	
	5) Data and logs of historical information of alarms and notification	
	6) Temperature & Humidity Sensor, Door Sensor, WLD Sensor, Smoke Detection sensor. Alarm device with LED flash and sound option	

<b>9</b>	<b>HMI – Smart Racks Graphical Interface</b>	
	Smart Racks should have functionality to graphically monitor the passive infrastructure ----  1) 9-inch wide touch screen HMI display with a very user-friendly interface 2) It should be menu driven system, Thermal management, Power supply environmental quantities, alarms, logs, and provided a total of menu items, breakdown of the sub-menu item the next menu level, 3) First authorization on LCD, is only authorized once, authorized system will automatically skip the authorization page while booting 4) System Configuration page includes integrated cabinet configuration 5) Home page presents system function information (Such as Date & Time ex.), system performance parameters and critical system parameters	
	<b>System performance parameters:</b> a) Enclosures: thermal path average temperature, the IT load cabinet single cabinet (configured for an intelligent PDU). b) Air conditioning: return air temperature, supply air temperature c) All the components (Intelligent PDUs ext.) shall be graphically represented on HMI. d) Real time PUE monitoring.	
	<b>Critical system parameters:</b> a) UPS operation: AC mode/bypass mode/Battery mode/standby mode, The	

	<p>system load factor</p> <p>b) HVAC Operation – Animated fan during Run &amp; Compressor status display IT racks parameters – Temp. &amp; Humidity Parameters are highlighted for normal &amp; abnormal values</p>	
	<p><b><i>Thermal Management:</i></b></p> <p>a) Return air temperature profile cross-ordinate</p> <p>b) cooling fan state to the operating state, the corresponding icon is animated; alarm flood state is, icon animation. Door status icon static display, the door opened and closed the door to a different style static icon.</p>	
	<p><b><i>Supply &amp; Distribution:</i></b></p> <p>a) UPS page displays for the distribution parameters and real-time power system operating mode</p> <p>b) UPS working state: AC mode / bypass mode / Battery mode / standby mode</p> <p>c) The operating state of the system: Single / 1 + 1 parallel / 2N double bus</p> <p>d) For each PDU distribution -PDU page displays the total current and power component</p> <p>e) when the PDU voltage value, the current value exceeds the set range, the system will generate a corresponding alarm; on the contrary, the alarm disappears</p>	
	<p><b><i>Environmental Amount: (The amount of ambient acquisition)</i></b></p> <p>a) acquisition and display status of the current environmental data amount of the rack, comprising: a real-time value of the respective collection point temperature and humidity sensors, front and rear door state, hot/cold aisles average temperature curve moisture profile</p> <p>b) When the air conditioning is working properly, hot and cold airflow patterns dynamic channel is turned on when the air conditioning is not working, dynamic airflow patterns hot and cold aisles disappear</p> <p>c) Door status icon static display, the door opened and closed the door to a different style static icon</p> <p>d) when the passage of hot / cold temperature and humidity sensor measured value exceeds the set range, the system will generate a corresponding alarm; conversely, when the hot / cold aisles temperature and humidity sensor measurement range is set to fall the alarm disappears</p>	
	<p><b><i>Warning – Alarm-Current Alarm:</i></b></p> <p>a) Displays the Current Alarms Page</p> <p>b) The current alarm is divided into emergency alarms, major alarms and general alarms</p> <p>c) When the current alarms and buzzers system in the normal mode, the</p>	



	LCD buzzer will sound an alarm, and for 5 minutes, the duration of the latest alarm generation time from a timer In maintenance mode, the buzzer will not sound an alarm. After the lifting of maintenance mode, buzzer return to normal mode	
	<p><b>Alarm - historical alarm:</b></p> <ol style="list-style-type: none"> <li>Alarm History page provides a display system and screening history alarms</li> <li>LCD page provides only historical records up to 100 within the system one week. For longer or more the number of alarm history, Web pages can be viewed in alarm management</li> </ol>	
<b>10</b>	<b>Cleaning</b>	
	<ol style="list-style-type: none"> <li>On completion of installation, testing of the system all components, cabinets etc. shall be cleaned &amp; unwanted material, debris shall be removed from site</li> <li>Scratches dents if any shall be cleaned &amp; touched up to match the original finish</li> <li>Cable and electric wire should be arranged in a way that minimize the physical tempering with the existing infrastructure and should be properly managed maintaining the aesthetics</li> </ol>	
<b>11</b>	<b>Maintenance and Support</b>	
	<p><b>After Sale Service</b></p> <ol style="list-style-type: none"> <li>Service shall be guaranteed by supplier during defect liability period / guarantee period.</li> <li>Product OEM shall offer the Data Centre with 24 x 7 services through their authorized service engineer for a period of at least 1 year.</li> <li>Product OEM shall provide ON SITE warranty for from the date of taking over of the equipment after the acceptance tests. Three years onsite warranty should be provided on items specifically written in this tender.</li> <li>Basic training and operational training to be provided after the successful installation of DC</li> <li>Quarterly PM to be carried out during the warranty &amp; CMC period</li> </ol>	

## **PART C: MINIMUM ELIGIBILITY CRITERIA FOR OEM and BIDDERS**

12. Proposals not complying with minimum eligibility criteria, as enumerated below, will be rejected and will not be considered for evaluation of technical bid. The proposal should adhere to the following minimum eligibility criteria:
- 12.1 Critical Component's for Integrated Server Racks system should be from same & single OEM for Seamless Integration & better Service Supports
  - 12.2 The OEM/Bidder of the proposed solution should have at least 5 years of experience in executing similar works (Similar works means – "SITC of Modular Integrated Data Centre infrastructure") in Central/State/PSU Organizations.
  - 12.3 The OEM/Bidder must have designed and executed minimum three Data Centre projects on a turnkey basis with Tier compliance for a third-party customer, adhering to Data centre standards during the last 5 years from the of bid submission date
  - 12.4 OEM Service Support for Major Equipments : OEM or Manufacturer should have its own service centre.
  - 12.5 Each OEM should quote with only one Authorized Partner
  - 12.6 Bidder must have executed minimum 5 similar solutions from last 5 years.
  - 12.7 The OEM should have at least three qualified and experienced DC certified professionals like CDCP/CDCS/CDCE/ATD on their company payroll with minimum 3 years' experience in Data Centre designing and implementation
  - 12.8 OEM or Manufacturer should be ISO 9001: 2000, ISO 14001, ISO/IEC 27001:2013 and ISO 45001 certified.
  - 12.9 The Project Manager proposed from bidder must have a minimum 5 years of experience in executing & managing Data centre projects. (CV along with Client reference to be provided)
  - 12.10 OEM shall be present in IDC (International Data Corporation) Market Space in leader position for Data Centre Infrastructure Management.
  - 12.11 OEM or Manufacturer of the offered goods/ equipment's should be a company registered under the companies Act since last 10 years. Valid company registration certificate should be submitted

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## **PART D SCOPE OF WORK AND OTHER SERVICES**

### **13. Submittals**

The bidder is responsible for managing the entire project from commencement to the final handing over of the facility to the client. The bidder is required to provide detailed architectural diagrams and other illustrations like conceptual architectural plan, civil work details, electrical layouts and network cabling design layouts, 3D view of data center etc., for the envisaged DC.

Submittals will be provided with the proposal and will include:

- Descriptions of equipment to be furnished
- System GA
- Detailed layouts w.r.t smart solutions positioning in the server room.
- Site Pre-requisites
- Size and weight of shipping units

### **13.1 Warranty**

The system will be provided with a warranty against defects in material and workmanship.

### **13.2 Quality Assurance**

The specified system will be factory-tested before shipment. The system will be designed and manufactured according to world-class quality standards and will be factory tested before the shipment. The manufacturer will be ISO 9001 certified

### **13.3 Scope of Installation, Configuration and Integration**

- Physical installation and deployment of an Integrated Modular Data Centre Infrastructure Solution to cater requirement as per current/additional critical hardware and Networking devices.
- Proper marking of cable, Safety Sign board/Route marker to be installed for cable laid underground and other miscellaneous work.
- Any structure, permanent or temporary, dismantled or destroyed during the execution of the work shall, will be refill/remake or restore to its previous condition by the bidder at its own cost.
- Any extra electrical points required in the server room shall have to be provided by the network vendor at his own cost.

### **13.4 Scope of Acceptance testing and commissioning**

- After installation and configuration of each subsystem, integrating various systems and providing various services, tests shall be conducted for system performance.
- Commissioning shall mean end-to-end commissioning of the Data Center on turn key basis with testing of every subsystem. Test parameters, commitments etc. shall be submitted along with implementation plan, which is shall be approved by Engineer-In-Charge of the client.
- In the event, the test parameters, commitments are not submitted or not accepted explicitly in writing/minutes by bidder, the Test parameters, commitments etc. as decided by Engineer in Charge will be final and binding.

- Upon Self testing and Commissioning, the system shall be offered for inspection by bidder to Engineer in Charge
- The successful Bidder, along with Engineer in Charge shall prepare an inspection and acceptance schedule with details of each activity.
- Scope of Documentation
  - a. Providing original manuals of all hardware items supplied.
  - b. Implementation plan, to be approved by Engineer in Charge before initializing the installation and configuration activity
  - c. Test parameters, commitments etc. for acceptance testing to be enclosed along with implementation plan.
  - d. Operator manual for shutdown/start of the active resources.
  - e. Drawings and specifications for equipment:
    - i. Capacity data
    - ii. Electrical data
    - iii. Electrical connection drawing
    - iv. Piping connection drawing
    - v. Bill of materials
    - vi. Product catalog sheets or equipment brochures
    - vii. Product guide specifications
    - viii. Installation information, including, but not limited to, weights and dimensions.
    - ix. Information about terminal locations for power and control connections.
    - x. Drawings for requested optional accessories.
    - xi. Wiring diagrams (Lighting, Fire)
    - xii. Installation manual
    - xiii. Operation and maintenance manual
    - xiv. Compliance statements

### **13.5 Scope of Services required during warranty and CMC period**

The brief scope of services and obligations to be performed by the Tenderer notwithstanding to those mentioned in the periodic maintenance checklist/maintenance plan are the following.

- Quarterly checking and servicing the entire data center (Quarterly preventive maintenance)
- Attending to the service call as per SLA
- Repairing/overhauling the components of the equipment at site/in service station, including replacement of worn out parts when found necessary.
- Replenishing refrigerant required because of a leak in the system arising out of wear and tear.
- Lubricating the bearings of motor, pumps and fans, when found necessary.
- Replacing of damaged electrical parts before restarting the system after breakdown.
- Check control system and devices for evidence of improper operation. Repair, adjust or replace components to ensure proper operation.
- Check for proper operation of the cooling coil. Clean, restore or replace as required.
- Check the motor contactor for pitting or other signs of damage. Repair or replace as needed.
- Check fan blades. Clean, repair or replace as needed.
- Check refrigerant system temperatures. If outside recommended levels, find cause, repair

and adjust refrigerant to achieve optimal operating levels.

- Check the integrity of all panels on equipment. Replace fasteners as needed to ensure proper integrity and fit finish of equipment.
- Check drain pan, drain line and coil for biological growth. Clean as needed.
- Visually inspect areas of moisture accumulation for biological growth. If present, clean or disinfect as needed.
- Check compressor oil level and or pressure on refrigerant systems having oil level and or pressure measurement means. Repair, replace or adjust as needed to ensure proper control.
- Check temperature transmitters for accuracy.
- Visually inspect external piping for insulation and vapor barrier for integrity. Correct as needed.
- Records are to be maintained for all the above tasks and submitted to clients as and when required

### 13.6 Scope of Training

- Practical Training for in-house staff should be provided. The training should cover all the aspects of functioning, maintenance and monitoring of the Data Center.
- Course material for the above (one copy each per participant) to be provided

#### **For any technical query related to enquiry you may to contact**

Dr. Srijith PK - Dept of CSE - Email: [srijith@cse.iith.ac.in](mailto:srijith@cse.iith.ac.in)

#### **For Commercial query**

Mr. Suresh Nair – Assistant Registrar Email : [ar.purchase@iith.ac.in](mailto:ar.purchase@iith.ac.in)

Mr. Jagadeesh B – Deputy Registrar Email : [dr.snp@iith.ac.in](mailto:dr.snp@iith.ac.in)

With CC: [office.stores@iith.ac.in](mailto:office.stores@iith.ac.in)

## CHAPTER-5 BILL OF MATERIALS

Name of the Bidder \_\_\_\_\_

Tender No. \_\_\_\_\_

Sr.No	Item Description	Country of Origin	Qty
1			
2			
3			
4			
5			

ANNEXURE – A

FORMAT/QUESTIONNAIRE FOR COMPLIANCE OF TERMS AND CONDITIONS

NOTE:

1. Quotation will not be considered without submission of this form.
2. If a particular question is not at all applicable please write NA in compliance part in Col. No. 4 below.
3. Kindly see the relevant terms & conditions of the tender document in each question before replying to the questions mentioned in Col. 2 below.

S. No	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No'))	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
1	a.) Whether quotation is direct from Principal supplier/manufacturer or their own office in India		
	b) Whether quotation is being submitted by Indian Agent/authorized distributor/ dealer		
2	Whether techno-commercial Bid contains Bid Securing Declaration , technical literature/leaflets, detailed specifications & commercial terms & conditions etc. as applicable		
3	a) If the prices are on Ex-Works /FOB, FCA/ or CIF, CIP basis for foreign currency bids		
	b) Whether specific amounts or percentage of expenses like packing, forwarding, handling, freight, insurance, documentation etc. have been mentioned in quotation separately in clear terms.		
4	a) Whether prevailing rates of GST & other govt. levies (for indigenous supplies) have been given in quotation		
5	The validity period of the quotation/bid as per our requirements is specified		
6	Whether copies of previous supply orders of the same item from other customers have been attached with the quotation		
7	Whether rates/amount of AMC after the warranty period is over has been mentioned		

8	Whether the Make/Brand, Model number and name of manufacturer has been mentioned in the quotation and Printed technical literature/ leaflets of quoted items have been submitted		
9	Whether compliance statement of specifications has been attached with the Technical Bid.		
10	Whether the delivery period for supply of the items has been mentioned		
11	Do you agree to the submission of Security Deposit /Performance Bank Guarantee as per the terms of the Tender		
12	Do you agree about the date of commencement of warranty period & its extension is necessary.		
13	Who will install/commission and demonstrate the equipment at IIT Hyd. i.e Indian Agent or OEM		
14	Has Certificate about the availability of Spare parts submitted with the Technical Bid.		
15	b) Whether quotation has been signed and designation & name of signatory mentioned.		

Signature of the Bidder

Name

Stamp



FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS

**The Bidders to Give Compliance or Non Compliance in the Column Provided in Chapter4 - 1.2  
Design Requirements / Scope of work**

ANNEXURE – C

**Bid Securing Declaration Form**

Date: \_\_\_\_\_

Tender No. \_\_\_\_\_

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of two year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: \_\_\_\_\_ (insert signature of person whose name and capacity are shown)  
in the capacity of \_\_\_\_\_ (insert legal capacity of person signing the Bid Securing Declaration)

Name: \_\_\_\_\_ (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

ANNEXURE – D

MANUFACTURER’S AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer]

Date: [Insert date (as Day, month and year) of Bid submission]

Tender No.: [Insert number from Invitation for Bids]

To: [Insert complete name and address of Purchaser]

WHEREAS

We [insert completer name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer’s factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on \_\_\_\_\_ day of \_\_\_\_\_ [insert date of signing]

ANNEXURE – E

PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by <i>{Full address of Purchaser}</i>	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily? <i>(Attach a certificate from the Purchaser/ Consigner)</i>	Contact Person along with Telephone no., Fax no. and e-mail address.

Signature and Seal of the Manufacturer/ bidder .....

Place:

Date:

ANNEXURE – F

**BIDDER INFORMATION FORM**

Company Name : \_\_\_\_\_

Registration Number : \_\_\_\_\_

Registered Address : \_\_\_\_\_

\_\_\_\_\_

Name of Partners /Director: \_\_\_\_\_

\_\_\_\_\_

City : \_\_\_\_\_

Postal Code : \_\_\_\_\_

Company's Establishment Year: \_\_\_\_\_

Company's Nature of Business: \_\_\_\_\_

Company's Legal Status 1) Limited Company

(tick on appropriate option) 2) Undertaking

3) Joint Venture

4) Partnership

5) Others (In case of Others please specify)

Company Category 1) Micro Unit as per MSME

2) Small Unit as per MSME

3) Medium Unit as per MSME

4) Ancillary Unit

5) SSI

6) Others (In case of Others please specify)

**CONTACT DETAILS**

Contact Name : \_\_\_\_\_

Email Id : \_\_\_\_\_

Designation : \_\_\_\_\_

Phone No : ( \_\_\_\_\_ ) \_\_\_\_\_

Mobile No: \_\_\_\_\_

**BANK DETAILS**

Name of Beneficiary : \_\_\_\_\_

A/c. No. CC/CD/SB/OD: \_\_\_\_\_

Name of Bank : \_\_\_\_\_

IFSC NO. (Bank) : \_\_\_\_\_

Branch Address and Branch Code: \_\_\_\_\_

\_\_\_\_\_

**Other Details**

Vendor's PAN No. \_\_\_\_\_

Vendor's GST \_\_\_\_\_

ANNEXURE – G

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely \_\_\_\_\_ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNEXURE – H

ANNUAL MAINTENANCE CONTRACT

We hereby certify that the Annual Maintenance Contract for the equipment, after expiry of warranty period will be charged as follows:

For Comprehensive AMC

- 1) 1<sup>st</sup> year \_\_\_\_ % of the equipment value
- 2) 2<sup>nd</sup> year \_\_\_\_% of the equipment value
- 3) 3<sup>rd</sup> year \_\_\_\_% of the equipment value.

For Non - Comprehensive AMC

- 1) 1<sup>st</sup> year \_\_\_\_ % of the equipment value
- 2) 2<sup>nd</sup> year \_\_\_\_% of the equipment value
- 3) 3<sup>rd</sup> year \_\_\_\_% of the equipment value.

We also certify that the spares for the equipment will be available for the equipment for \_\_\_\_ years.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:



ANNEXURE – I

**ACCEPTANCE OF TENDER TERMS**  
(To be given on Company Letter Head)

Date: DD/MM/YYYY

To,

The Director  
Indian Institute of Technology Hyderabad  
Kandi – 502 285.Telangana, India

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: \_\_\_\_\_

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender' from the web site(s) namely \_\_\_\_\_ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

ANNEXURE – J

**NO RELATIONSHIP CERTIFICATE**

(On Company Letterhead)

1. I/We hereby certify that I/We\* am/are\* related/not related (\*) to any officer of IIT Hyderabad. (If Related provide the details of the employee)
2. I/We\* am/are\* aware that, if the facts subsequently proved to be false, my/our\* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We\* shall be liable to make good the loss or damage resulting from such cancellation.
3. I/We also note that, non-submission of this certificate will render my / our tender liable for rejection.

Date:

Authorized Signatory  
Name:

Place:

Designation:

Contact No.:

**Declaration for Local Content**

**(To be given on Company Letter Head - For tender value below Rs.10 Crores)  
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value  
above Rs.10 Crores)**

Date: \_\_\_\_\_

To,  
The Director,  
Indian Institute of Technology Hyderabad,  
Kandi, Sangareddy 502285

Sub: Declaration of Local content

Tender Reference No: \_\_\_\_\_

Name of Tender / Work: - \_\_\_\_\_

1. Country of Origin of Goods being offered: \_\_\_\_\_

2. We hereby declare that items offered has \_\_\_\_% local content.

3. Details of location at which local value addition will be made / made: (Complete address to be mentioned) \_\_\_\_\_

\_\_\_\_\_  
“**Local Content**” means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

“**\*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.**”

**Yours Faithfully,  
(Signature of the Bidder, with Official Seal)**

ANNEXURE –L

**CERTIFICATE  
ON COMPANY LETTERHEAD**

**CERTIFICATE BY BIDDER- DPIIT REGISTRATION**

“I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, / if from such a county, has been registered with the Competent Authority (copy of the Registration Certificate enclosed). I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

Signature with Date and Stamp  
Of the Bidder

ANNEXURE –M

**CONTRACT FOR PROCUREMENT OF EQUIPMENT  
UNDER IITH-JAPAN COLLABORATION**

This CONTRACT is signed by and between the **Indian Institute of Technology, Hyderabad**, an Institute of National Importance established by the Government of India, under the Institutes of Technology Act, 1961, of the Parliament of India, with its office at Kandi, Sangareddy, Hyderabad, in the State of Telangana, India. (hereinafter referred to as "IITH), M/s. \_\_\_\_\_ (herein after referred to as "Company" which include its successors, executors, administrators and permitted assigns), on this \_\_\_\_\_ being the effective date when this CONTRACT comes into force.

**Now, therefore,** in consideration of the mutual covenants and promises contained herein,

**PREAMBLE**

- a. Whereas IITH has undertaken the Project called 'IIT Hyderabad-Japan Collaboration' under the broader Indo-Japan Collaboration of the Government of India for implementation with an Overseas Development Loan from the Japan International Cooperation Agency (hereinafter referred to as JICA) and also partial funds from the Government of India.
- b. Whereas as part of the project, IITH has invited bid for Procurement of Research Equipment for conducting Research at IITH as per the details given in Annexure 1 (Tender Ref: - \_\_\_\_\_).
- c. Whereas the Company has offered to supply the Equipment as described in the aforesaid Annexure 1 (hereinafter referred to as 'Supply')
- d. WHEREAS after a scrutiny and review of the offer, IITH has decided to award the Order of supply of the Equipment to the Company as mentioned in the Annexure 2 along with the mode of payment and under the specific terms and conditions as shown in the said Annexure 2 (PO.No. \_\_\_\_\_).

**NOW, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:**

1. The Company shall supply the Equipment as per the details given in the Annexure 2 along with the mode of payment and under the specific terms and conditions as shown in the said Annexure 2.
2. No modification / changes in the scope of the Work shall be made except based only on mutual discussions between the parties and prior written approval of IITH.

**1. ASSIGNMENT OR TRANSFER OF THE WORK**

The Company shall not assign or transfer the Work or any part thereof to any third party without the explicit prior written consent of IITH.

## **2. DISPUTE RESOLUTION**

Any dispute or controversy arising out of or relating to this Contract, or its actual or alleged breach will first be decided by the mediation. If that does not result in a resolution of such dispute or controversy, it will be finally decided by an appropriate method of alternate dispute resolution, including without limitation, Arbitration, conducted in the city of Mumbai, at the Mumbai Centre for International Arbitration(MCIA), at Mumbai, India.

## **3. GENERAL**

- a. This Contract constitutes the entire and only Contract between the parties for the SUPPLY ONLY and all other prior negotiations, representations, agreements, and understandings are hereby superseded.
- b. This Contract will be construed and enforced in accordance with the laws of India in the city of Mumbai (India) having the Mumbai Centre for International Arbitration(MCIA).

## **4. TERM AND TERMINATION**

- a. Any term of this Contract may be amended only with the mutual written consent of both the parties.
- b. Any notice required or permitted by this Contract shall be in writing and correspondence shall be in English language only between the authorized persons of IITH and Company
- c. The parties hereto also agree to all the clauses and sub clauses along with the Annexures attached hereof.

**IN WITNESS WHEREOF**, the parties have executed this agreement effective as of the date first written below-

For

Indian Institute of Technology Hyderabad

For

Company

Name:

Designation

Date

Name:

Designation

Date

Witness

Name

Witness

Name

### Checklist for BIDDERS

BIDDERS to indicate whether the following are enclosed/mentioned by striking out the non-relevant option

Envelope-1(Technical-Bid)				
(Following documents to be provided as single PDF file)				
Sl. No.	Documents	Content	File Types	Document Attached
1		Format/Questionnaire for compliance as per Annexure-‘A’	.PDF	( Yes /No )
2		Format of compliance statement of specification as per Annexure-‘B’	.PDF	( Yes /No )
3		Bid Securing Declaration as per Annexure-‘C’(as applicable)	.PDF	( Yes /No )
4		Manufacturer’s Authorization Form as per Annexure-‘D’	.PDF	( Yes /No )
5		Previous supply order format as per Annexure-‘E’	.PDF	( Yes /No )
6		Bidder Information form as per Annexure-‘F’	.PDF	( Yes /No )
7		Declaration Regarding Clean Track/No Legal Action as per Annexure-‘G’	.PDF	( Yes /No )
8		AMC as per Annexure-‘H’	.PDF	( Yes /No )
9		Acceptance Of Tender Terms as per Annexure- ‘I’	.PDF	( Yes /No )
10		Relation Certificate as per Annexure- ‘J’	.PDF	( Yes /No )
11		Local Content Declaration as per Annexure ‘K’		
12		Certificate For DPIIT Registration as per Annexure – ‘L’	.PDF	( Yes /No )
13		Bill of Material as Per Chapter 5	. PDF	(Yes /No )
14		List of deliverables as per Chapter- 4, along with the Technical Brochures and Commercial Terms and Conditions	.PDF	( Yes /No )
15		All other documents as per Chapter 1 Point No - 4.1.	.PDF	( Yes /No )
Envelope-2(Financial-Bid)				
Sl. No.	Documents	Content	File Types	Document Attached
1	Financial Bid	Price bid should be submitted in excel as per BoQ	.PDF	( Yes /No )