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1 DISCLAIMER

1.1 Though adequate care has been taken in the preparation of this *Request for Proposal* Document, the Bidder should satisfy himself that the Document is complete in all respects. Intimation of discrepancy, if any, should be given to the below mentioned office latest by the date mentioned in Sec.5.7. If this office receives no intimation by the date mentioned in Section 5.7, it shall be deemed that the Bidder is satisfied that the *Request for Proposal* Document is complete in all respects.

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle
Sion (E), MUMBAI – 22
Ph: 022-24014701
Fax: 022-24024068

1.2 Neither **MPCB,** nor their employees or consultants make any representation or warranty as to the accuracy, reliability or completeness of the information in this RFP nor is it possible for **MPCB** to consider the financial situation and particular needs of each party who reads or uses this RFP. **MPCB** recognizes the fact that certain prospective Bidders may have a better knowledge of the Project than others and thus encourages all prospective Bidders to conduct their own investigations and analysis and check the accuracy, reliability and completeness of the information in this RFP and obtain independent advice from appropriate sources.

1.3 Neither **MPCB** nor their employees or consultants will have any liability to any prospective Bidder or any other person under the law of contract, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this RFP, any matter deemed to form part of this RFP, the award of the Project, the information and any other information supplied by or on behalf of **MPCB** or their employees, any consultants or otherwise arising in any way from the selection process for the Project.

1.4 **MPCB** reserves the right to reject any or all of the Bids submitted in response to this *Request for Proposal* at any stage without assigning any reasons whatsoever.

1.5 **MPCB** reserves the right to change any or all of the provisions of this *Request for Proposal.* Such changes would be intimated to all parties procuring this *Request for Proposal.*

2 LIST OF ABBREVIATIONS

MPCB	Maharashtra Pollution Control Board
RO	Regional Office, MPCB
SRO	Sub-Regional Office, MPCB
HO	Head Office, MPCB
RFP	Request for Proposal
IMIS	Integrated Management Information System
NOC	Network Operations Centre
OEM	Original Equipment Manufacturer
LAN	Local Area Network
WAN	Wide Area Network
PBG	Performance Bank Guarantee
LoA	Letter of Award
SP	Solution Provider
SI	System Integretor
DC	Data Center

3 DEFINITIONS

3.1 BID
The bids submitted by the prospective Bidders in response to this Request for Proposal Document issued by **MPCB.**

3.2 BIDDER
Bidding Firm / Company that has submitted a Bid in response to this Request for Proposal Document.

3.3 DOCUMENT / BID DOCUMENT
This Request for Proposal Document.

3.4 PROJECT
To select an appropriate "**Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB"** at MPCB HQ in State of Maharashtra.

3.5 REQUEST FOR PROPOSAL
This Document being issued to the prospective Bidders, inviting their Bids.

3.6 RESPONSIVE BIDDER
Responsive Bidder is the bidder whose bid is found responsive after evaluation of the Bid as outlined in Section 5.2.

4 PROJECT CONCEPT & STRUCTURE

4.1 BACKGROUND

Maharashtra Pollution Control Board (MPCB) is an organization under the Ministry of Environment and Forests (MoEF), Government of Maharashtra. The Board is responsible for ensuring that all norms under the Pollution Control Act, as stated by the Ministry, are adhered to by all relevant establishments in Maharashtra, which can, through their operations or processes, influence the natural environmental conditions.

MPCB has 195 square feet of Well-equipped Data Center located on 4th floor of Head Quarters in Sion, Mumbai. MPCB now desires to revamp the Data Center to accommodate new technology and replace the aging, out of service life sub-systems.

4.2 CURRENT INFRASTRUCUTRE

MPCB has an on-site Data Centre facility at HQ Sion.

The relevant details of the current infrastructure are given below for the convenience of the bidders.

No	System	Item	Make	Details	Quantity	Unit
1	DC Room	Size		W x D x H	13’ x 15' x 9'	feet
		False Ceiling Drop		from actual ceiling	1.5'	feet
		Raised flooring Height		from actual floor	1.0'	feet
		Perforated tiles		for cool aisle	7	Nos.
		Dc Door		Wooden + Glass	1	Nos.
		Walls		Brick Wall	1	Side
				Gypsum Partition	3	Side

Currently all the electrical and Data cables are laid under raised floor.

4.3 OBJECTIVE OF RFP

The RFP is intended to select a capable and experienced Solution Provider to revamp the physical infrastructure of existing Data Center space into the modernized functional Data Center. The proposed data center infrastructure should function on 24(hrs) X 7(days) basis.

4.4 BRIEF SCOPE OF WORK

1. Entire work specified in this tender should be carried out on Turnkey basis.
2. Various civil, electrical, mechanical, and all other related works required for creation of state of art data center which includes supply of rated material and expert manpower.
3. Revamping Data Center raised flooring, dismantling Gypsum/ Wooden partitions and construct new brick walls, Painting all interior with fire rated paint. Replacing existing entry door with Dual door system with fire rated Glass panels.
4. Supply, install and commission of environmental control and monitoring devices.
5. Supply, installation and commissioning of fire detection and suppression devices.
6. Supply, installation and commissioning of water leak detection system
7. Supply, installation and commissioning of Rodent repellent device.
8. Supply, installation and commissioning of Surveillance and Access control system.
9. Laying Data cables (Copper and OFC) from Data Center to 4th floor network rack.
10. Laying electrical cables from UPS room to DC room and providing adequate power points in DC room
11. Repositioning of Server Racks during Re-vamp and within Data Center according to air flow design.
12. Seamless transition of exciting IT infrastructure to Revamped Data Center which includes co-ordination of various vendors involved.
13. Training on Operation and maintenance of Data Center subsystems
14. Documentation and reporting
15. Warranty / Support services for the workmanship, quality, product and solution support for a period of THREE (3) years from the date of commissioning of the solution.

4.5 PROJECT COMPLETION SCHEDULE

The SP is required to complete the supply, installation, commissioning, policy creation, implementation and testing of the Solution at MPCB Data Center within (6-8 weeks) of receipt of the LoA.

5 DESCRIPTION OF THE SELECTION PROCESS

5.1 SUBMISSION OF BIDS

The submission of Bids electronically by interested bidders in response to the Request for Proposal should be through e-Tender system only as mentioned in Annexure 4. The Bids will be

Envelope 1 / Cover 1: Technical Bid
Envelope 2 / Cover 2: Price Bid.

5.2 RESPONSIVENESS OF BID

The Bids submitted by Bidders shall be initially scrutinized to establish "Responsiveness". A Bid may be deemed "Non-responsive" if it does not satisfy any of the following conditions:

1. It is not received by the due time & date specified in the section 5.7
2. It is not accompanied by payment towards price of the RFP
3. It does not include EMD as stipulated in the RFP
4. It does not include sufficient information for it to be evaluated and/or is not in the formats specified.
5. It is not signed and / or sealed in the manner and to the extent indicated in Section 6 of this RFP Document.
6. It does not conform to the terms and conditions mentioned in the RFP

The Bids of Responsive Bidders shall be evaluated in the following two steps.

5.3 STEP 1 (COVER 1) – TECHNICAL BID EVALUATION

In the first step, MPCB will evaluate the information submitted by the Bidder in Cover 1 of the Bid. Bids of only the responsive Bidders shall be considered for the subsequent technical evaluation. The evaluation criteria for assessment of the Technical Bid are described in Section-7. MPCB, on a written demand, will return unopened, the Cover 2 of the Bid, viz: the Price Bid, to the Bidders whose Bids are not responsive.

5.4 STEP 2 (COVER 2) – PRICE BID AND PRICE BID EVALUATION

The Price Bid would seek to identify the Bidder making the most competitive price offer to MPCB. The evaluation criteria for assessment of the Price Bid are described in Section -8. The format for the Price Bid is specified in **Annexure - 3**

A ranked list of Bidders based on the results of the evaluation, as detailed in Section-8 of this Document, would be presented. The top ranked Bidder will be designated the Successful Bidder. MPCB is not bound to award a LoA to the lowest price bidder.

5.5 AWARD OF LoA

Successful Bidder would be given a Letter of Award (LoA) stipulating the conditions under which the bid has been qualified as the Successful Bid.

5.6 SIGNING OF ORDER ACCEPTANCE

The Successful Bidder would sign a copy of the Purchase / Work Order as a token of acceptance of the same.

5.7 SCHEDULE OF ACTIVITIES

Sr. No.	ACTIVITY	Date
1.	Date of Start of Sale of RFP document	**13th October 2017**
2.	Date of End of Sale of RFP document	23rd October 2017
3.	Last date for receipt of requests for clarifications	23rd October 2017 15:00 Hrs
4.	Pre-bid Conference	25th October 2017 15:00 Hrs
5.	Last time & date for receipt of e- Bids (Covers 1 & 2)	29th October 2017 17:00 Hrs
6.	Time and Date of Opening of Cover-1	1st November 2017 11:00 Hrs

Bidders are also requested to read Annexure – 4 for detailed schedule of activities related to this RFP and bid submission process.

In order to enable MPCB to meet the target dates, Bidders are expected to respond expeditiously to clarifications, if any, requested during the evaluation process. MPCB shall adhere to the above schedule to the extent possible. MPCB, however, reserves the right to modify the same. Intimation to this effect shall be given to all Bidders.

6 PROCEDURES TO BE FOLLOWED

6.1 ENQUIRIES & CLARIFICATIONS

Enquiries, if any, should be addressed to:

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema,Sion Circle,
Sion (E), MUMBAI – 400 022
Ph: 022-24014701
Fax: 022-24024068
Email : eic@mpcb.gov.in

All queries that are received on or before the date mentioned in Section 5.7 shall be addressed by MPCB in writing. MPCB shall aggregate all such queries, without specifying the source and shall prepare a response, which shall be distributed to all parties who have procured the Request for Proposal Document. It may be noted that queries in writing would be entertained only from those parties who have procured this Document.

Request for clarifications received from prospective bidders who have not paid the fee for the RFP document as defined in 6.6.1, will not be answered. Such bidders will not be allowed to attend the pre bid meeting and also to bid.

Request for clarifications received after the last date mentioned in Section 5.7, may not be addressed. Decision of the Board in the matter will be final.

The prospective Bidders shall submit the queries only in the format given below:

Sr. No	RFP Page No	RFP Clause No	Description in RFP	Clarification Sought	Additional Remark (if any)

6.2 SUBMISSION OF THE BID

1. Cover 1 – Technical Bid

   The information to be submitted by the Bidders as Cover 1 of their Bids is described in Section 7 and Annexure 4.

2. Cover 2 – Price Bid

   The Information to be submitted by the Bidders in the Price Bid (Cover 2) is described in Section 8 and Annexure 4.

3. Submission of the Bid

   The Bidders are requested to follow the Bid submission process which is detailed in Annexure 5 as per the schedule elaborated in Section 5.7 and Annexure 4.

   MPCB shall not be responsible for any delay in submission of the Bids. Any Bid received by MPCB after the due date for submission of the Bids stipulated in Section 5.7 and Annexure 5, will not be opened..

6.3 INITIALING OF THE BIDS

As prescribed in the Annexure 5, under this e-tender process the bids should be digitally signed. Any testimonials being presented should be self-attested before uploading.

6.4 INSTRUCTIONS TO BIDDERS

All Bidders should note the following:

1. Bids received after the scheduled time will not be accepted by MPCB under any circumstances. MPCB will not be responsible for any delay for any reason whatsoever.

2. Bid once submitted will be treated, as final and no further correspondence will be entertained on this. No Bids will be modified after the deadline for submission of Bids.

3. Bids that are incomplete in any respect or those that are not consistent with the requirements as specified in this *Request for Proposal* or those that do not contain the Covering Letter and other documentation as per the specified formats may be considered non-responsive and may be liable for rejection.

4. Strict adherence to formats, wherever specified, is required. Non-adherence to formats may be a ground for declaring the Bid non-responsive.

5. All communication and information should be provided in writing and in the English language only.

6. The metric system shall be followed for units.

7. The price quotations for the bid should be denominated in Indian Rupees.

8. All communication and information provided should be legible, and wherever the information is given in figures, the same should also be mentioned in words.

9. Arithmetical errors will be rectified as follows –

    a. If there is a discrepancy between the unit price and the total price that is obtained by multiplying quantities, the unit price will prevail
    b. In case of discrepancy between grand total obtained by adding various line item totals & the grand amount stated in words, the grand total will be recalculated and the same will be taken as correct.
    c. The price bid will be treated as inconsistent & non-responsive, in case if more than one type of discrepancy is observed in the price bid. Such price bid/s will be rejected summarily and considered as intentional misrepresentation and the EMD will be forfeited.

10. MPCB reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the Bid. Non-submission, incomplete submission or delayed submission of such additional information or clarifications sought by MPCB, may be a ground for rejecting the Bid.

11. The Bids shall be evaluated as per the criteria specified in this RFP Document. However, within the broad framework of the evaluation parameters as stated in this Request for Proposal, MPCB reserves the right to make modifications to the stated evaluation criteria, which would be uniformly applied across all the Bidders.

12. The Bidder should designate one person ("Contact Person" and "Authorized Representative and Signatory") authorized to represent the Bidder in its dealings with MPCB. This designated person should hold the Power of Attorney and be authorized to perform all tasks including but not limited to providing information, responding to enquiries, entering into contractual commitments on behalf of the Bidder etc. The Covering Letter submitted by the Bidder shall be signed by the Authorized Signatory and shall bear the stamp of the entity thereof.

13. The Bid (and any additional information requested subsequently) shall also bear the initials of the Authorized Signatory and stamp of the entity thereof on each page of the Bid.

14. MPCB reserves the right to reject any or all of the Bids without assigning any reason whatsoever

15. Conditional bids may be summarily rejected.

16. Mere submission of information does not entitle the Bidder to meet an eligibility criterion. MPCB reserves the right to vet and verify any or all information

submitted by the Bidder.

17. If any claim made or information provided by the Bidder in the Bid or any information provided by the Bidder in response to any subsequent query by MPCB, is found to be incorrect or is a material misrepresentation of facts, then the Bid will be liable for rejection and the Bid Security will be forfeited. Mere clerical errors or bonafide mistakes may be treated as an exception at the sole discretion of MPCB and if MPCB is adequately satisfied.

18. The Bidder shall be responsible for all the costs associated with the preparation of the Bid. MPCB shall not be responsible in any way for such costs, regardless of the conduct or outcome of this process.

19. MPCB may, at its discretion, extend this deadline for submission of Bids by amending the RFP which will be intimated through MPCB website, in which case all rights and obligations of MPCB and bidder will thereafter be subject to the deadline as extended.

6.5 VALIDITY OF THE PRICE BID

Each Bid shall indicate that it is a firm and irrevocable offer, and shall remain valid and open for a period of not less than 180 days.

Non-adherence to this requirement and other terms stipulated in the RFP document may be a ground for declaring the Bid as non-responsive. However, MPCB may solicit the Bidder's consent for extension of the period of validity if the Bidder agrees to reasonably consider such a request. The request and response shall be in writing. A Bidder accepting MPCB's request for extension of validity shall not be permitted to modify his Bid in any other respect.

MPCB, reserves the right to vary the quantities by ± 25% of the proposed quantities, add or remove locations, during the validity period of the contract. For any such changes made in quantities and the locations, the price mentioned only in the contract shall be considered. No revision in the prices, especially upwards, will be granted in the contracted prices.

6.6 FEES AND DEPOSITS TO BE PAID BY THE BIDDERS

6.6.1 Fees for Request for Proposal (RFP) document

The RFP can be purchased by making a payment (non-refundable) of Rs. 10,000/- (Rupees Ten Thousand only) through online payment. Please refer Annexure 5 of this document for the payment methodology.

It is mandatory for the bidders to display the proof of purchase of the RFP document to

attend the pre-bid meeting. Prospective bidder failing to pay the fee for the RFP during the sale of RFP document will neither be allowed to attend the pre-bid meeting nor will his bid be accepted.

6.6.2 Earnest Money Deposit (EMD)

Bidders are required to submit a Earnest Money deposit (EMD) for an amount of **Rs. 2, 00,000/- (Rupees Two Lakhs Only)**. Please refer Annexure 5 for the payment of the same. Bids of the bidders who have not paid the EMD as stipulated in this RFP, will be rejected by MPCB as non-responsive. No exemptions to this clause will be allowed.

MPCB shall reserve the right to forfeit the Bidder's EMD under the following circumstances:

1. If the Bidder withdraws his Bid at any time during the stipulated period of Bid validity as per Section 9.1 (or as may be extended).

2. If the Bidder, for the period of Bid validity:

   i) in MPCB's opinion, commits a material breach of any of the terms and / or conditions contained in the RFP Document and / or subsequent communication from MPCB in this regard and / or
   ii) fails or refuses to execute the LoA (in the event of the award of the Project to it) and/or
   iii) fails or refuses to furnish the Performance Guarantee within the stipulated time

3. Any claim made or information provided by the Bidder in the Bid or any information provided by the Bidder in response to any subsequent query by MPCB, is found to be incorrect or is a material misrepresentation of facts

In the event that any Bid is non-responsive or rejected after technical evaluation, the EMD of such Bidders shall be refunded with the unopened Cover – 2 of their Bid.

In respect of the bids after Technical Evaluation and eligible for price bid evaluation, the EMD of the unsuccessful Bidders (after opening of Cover 2) can cease to be in force after 60 days following the announcement of award of the Project to the Successful Bidder through the issue of the LoA for the same. The EMD of the Successful Bidder will be returned only on submission of SPBG that Successful Bidder will provide at the time of signing Order acceptance & the SLA. EMD of the unsuccessful bidders will be returned after 45 days of award of contract.

7 SUBMISSION OF TECHNICAL BID: COVER - 1

7.1 CRITERIA FOR MINIMUM ELIGIBILITY AND BID RESPONSIVENESS:

The Bidder shall fulfill all of the following Minimum Eligibility Criteria to participate in the bidding process. The Bidder should provide necessary documentary evidences of compliance as follows. Failure to do so for any of the Criteria mentioned below shall result in disqualification of the Bidder.

1. The Bidder can be either Proprietorship / Partnership / public or private limited company registered / incorporated under The Companies Act, 1956, and in business of IT System Integration / providing IT Security Services (i.e. in the area of implementation of Data Center Infrastructure Design, Construction for minimum FIVE (5) years would be eligible to bid for the Project. No consortiums allowed.

2. The bidder must have annual turnover of at least Rs. 3 Crores in the financial year ending 31st March 2017

3. The bidder must have ISO9000 certificate valid as on date of bidding.

4. The Bidder should have officially purchased the RFP by paying the necessary fees as per section 6.6.1 and Annexure 5 of the RFP.

5. The Bidder should submit the EMD as stipulated in section 6.6.2 and Annexure 5

6. The Bidder should have executed at least 2 turnkey basis orders for building of the Data Centers including Integration of Civil, Interior, Power, Electrical work and Supply, commissioning of Data Center IT equipments, Surveillance, Safety and environment monitoring and controlling devices.

7. The Bidder should be authorized by Manufacturers / OEM to supply, install and support the products required by MPCB being proposed for this RFP The same should be documented in the format for Manufacturer's Authorisation Form (MAF) in Exhibit-3.

7.2 COVER 1: INFORMATION FORMATS

Bidders are required to organize Cover-1 as per the following checklist -

Cover 1	Compliance to Minimum Eligibility Criteria and Technical Bid
Section 1	a) Covering Letter as per the format specified in EXHIBIT 1 b) Attested copy of Power of Attorney c) Certificate of incorporation / registration d) Certificate from CA for compliance to section 7.1 (2) e) Proof of Purchase of the RFP document for 7.1.(4) f) EMD as per section 6.6.2 g) Manufacturer's authorization form as per EXHIBIT 3 h) Declaration from OEM as per EXHIBIT 4 in compliance of section 7.1 (6)

Section 2	a) Documentary Proofs as testimony for Evaluation of Technical bids as per criteria listed in Section 7.4.1 b) Necessary technical brochure / literature, duly highlighting the relevant features / specifications required by MPCB c) Proposed Support methodology

7.3 TECHNICAL BID - COVER 1

The Cover 1 submission will also include Technical Bid of the bidder.

1. The technical bid should be in line with the scope of work as described in the Section 4.

2. Technical literature for the product and services, covering full technical specifications, principal of operation, design features, test & monitoring facilities, description of operation.

3. The bid should have all relevant testimonials, so as to ensure they score maximum marks under the evaluation system defined in section 7.4.1

7.4 TECHNICAL BID: EVALUATION CRITERIA & PROCESS

The Bidder shall necessarily submit in Cover 1 of the Bid Document, the Technical Bid detailing his credentials for executing this project and the highlights of the equipment & services offered by him with respect to scope of work defined in the Bid Document and the benefits that would accrue to MPCB. The Screening Committee appointed for this purpose will do this evaluation. The Technical Bid will contain all the information required to evaluate the bidder's suitability to MPCB for the purpose of this project.

The guidelines for evaluation have been designed to facilitate the objective evaluation of

the Technical Bid submitted by the bidder. The information furnished by the bidders in the technical bid shall be the basis for this evaluation. In case any of the information is not made available, the Committee will assign zero (0) marks to that item.

While evaluating the Technical Bid, MPCB reserves the right to seek clarifications from the Bidders. Bidders shall be required to furnish such clarifications in a timely manner.

MPCB also reserves the right to seek additions, modifications and other changes to the submitted Bid. Bidders shall be required to furnish such additions / modifications / other changes in a timely manner.

7.4.1 Evaluation of Technical Bid

The technical evaluation of the bidders will be done based on the criteria and marking system as specified as follows:

Sr. No.	Criteria	Graded Marks	Max. Marks	Testimonial to be presented
1	**Organisation constitution**		**5**	
	Proprietary	**1**		Certificate of Incorporation / Partnership deed etc.
	Partnership	**2**		
	Private Limited / Public Limited	**5**		
2	**Financial Capability**		**5**	
a	Average Turnover (AT) of the organisation for past three years ending on 31st March '17			Certificate from CA
	AT < Rs. 5.00 cr but ≥ Rs. 3.00 cr	1		
	AT < Rs. 10.00 cr but ≥ Rs. 5.00 cr	3		
	AT ≥ Rs. 10.00 crores	5		
3	**Past Performance (Orders executed in past 3 years ending 31st March 2017)**		**45**	
a	No of Turnkey basis orders for Design and Construct Data Center which includes Civil, Electrical, Network, Environment control, Access control, Fire safety (state / central / urban local bodies / PSUs) **(Order value ≥ 15 Lakh)**			Copies of the orders executed in the designated period
	Per order 5 Marks	20		
b	No of order for Design and Construct Data Center which includes Civil, Electrical, Network, Environment control, Access control, Fire safety in Private Organisations **(Order value ≥ 15 Lakh)**			
	Per order 3 Marks	15		
c	No of orders for AMC of Data Center Infrastructure **(Order value ≥ 10 Lakh)**			
	Per order 5 Marks	10		
4	**Certifications and certified professionals**		**30**	
a	Any Industry accepted certification other than ISO9000 for the organisation	**5**		Certificate valid till Date of Bidding
b	Certified PWD contractor	**5**		
c	Certified resources at-least for SIX (6) months on company roll	**20**		Declaration by bidder on company letterhead and Copies of Certificates
	Data Center Infrastructure Specialist, Data Center Engineering Specialist or equivalent certification, Uptime / TIA 942 certified Professionals **(FIVE marks per Resource)**	**15**		
	OEM Certified Resources for Fire Suppression, PAC, Access Control, Surveillance, Electrical, Networking **(ONE mark per category)**	**5**		
5	**Presentation by Bidder**	**15**	**15**	Detailed Execution methodology
	TOTAL MARKS		**100**	

Each responsive Bid will be attributed a **technical score denoted by symbol "S(t)" .** The technical score shall be out of a maximum of 100 marks.

If in MPCB's opinion, the Technical Bid does not meet the minimum technical specifications & service requirements or is otherwise materially deficient / inconsistent in any other aspect; the Bid shall be declared Technically Evaluated & Non-Responsive and shall not be considered for further evaluation.

After technical evaluation, MPCB will rank the bidders in descending order of their technical scores with the top ranked bidder having the highest technical score. If any bidder is found to be technically inadequate to the requirements of MPCB, i.e. if the technical marks are lower than 70, then that bidder's bid would be deemed non-responsive for further evaluation and would not be considered further in the bidding process.

If in case, after technical evaluation, only one bidder is found to be responsive & eligible, i.e. if the technical marks of only one bidder are more than or equal to 80, the Board will decide an acceptable price band and open Price Bid of the only eligible bidder. If the price bid of the bidder falls within the price band specified by the Board, the bidder will be declared as the SUCCESSFUL BIDDER.

8 EVALUATION OF PRICE BID: COVER 2

8.1 PRICE BID PARAMETERS

Bidders are required to offer their best prices in terms of cost of the Equipment & Services including all taxes and levies as on the last date of submission of bid (detailed break-up of all applicable taxes and levies over and above the quoted price should be mentioned)

8.2 EVALUATION OF PRICE BIDS AND RANKING

The price bids of only technically successful bidders whose technical Bids have been awarded 80 or more marks by the Committee will be opened.

The evaluation will carried out if Price bids are complete and computationally correct. For the purpose of evaluation, only the Grand Total Price Z arrived at by addition of Sub Total - X & Sub Total- Y will be considered. For the purpose of arriving at Grand Total Price Z, the locations to be covered under implementation priority -1 will only be considered. Additional and/or optional charges if any will not be considered for the purpose of price bid evaluation. Lowest Price bid (denoted by symbol "P (m)") will be allotted a Price score of 100 marks. The Price score will be denoted by the symbol "S (p)". The Price score of other bidders will be computed by measuring the respective Price bids against the lowest bid.

These Price scores will be computed as: S (p) = 100 * (P (m) / P) where P is the Price bid of the bidder whose Price score is being calculated. The Price score shall be out of a maximum of 100 marks.

8.3 COMPUTING THE FINAL SCORE

The composite score is a weighted average of the Technical and Price Scores. The weightages of the Technical vis-à-vis the Price score is 0.40 of the Technical score and 0.60 of the Price score. The composite score (S) will be derived using following formula:

$$S = (S(t) * 0.60) + (S (p) * 0.40) .$$

Thus the composite score shall be out of a maximum of 100 marks.

The responsive bidders will be ranked in descending order according to the composite score as calculated based on the above formula. The highest-ranking vendor as per the composite score will be selected. However in order to ensure that MPCB gets best solution in technical terms, MPCB reserves the right to enter into negotiation with bidder having highest technical score and place order with this bidder at a suitable price.

8.4 AWARD CRITERIA

Final choice of MPCB to award this project to a suitable bidder to execute this project shall be made on the basis of composite scoring arrived as per formula mentioned above.

8.5 NOTIFICATION OF AWARD

MPCB will notify the successful bidder in writing that his bid has been accepted. Upon the successful bidder's furnishing of performance security, MPCB will promptly notify each unsuccessful bidder and will discharge their bid security.

9 PAYMENT TERMS

9.1 The Price Bid should be valid for a minimum period of 180 days from the last date of submission of bids

9.2 Following payment terms will be offered to the successful Bidder:

1. Within 15 days of signing the Purchase Order / Work Order Acceptance the Successful bidder will submit to MPCB a PBG for 5% of the value of the contract. The PBG shall be in the form of a guarantee of a Nationalised Bank(s) acceptable to the MPCB and shall be valid till 38 months from the date of the Purchase Order / Work Order acceptance.

2. An amount equivalent to 90% of the cost of the equipment value will be paid on supply, installation and commissioning of all the equipments with all the features to MPCB's satisfaction.

3. Balance amount of the total order value will be paid upon successful and incident

free operations for 30 days from the date of CoOP.

4. All payments will be made after deduction of penalties if any, vide a crossed cheque payable in Mumbai and within 30 days of submission of invoice.

9.3 Liquidity Damages and Penalty:

For any delay in installation and commissioning beyond EIGHT (8) weeks from the date LoA / Purchase Order, the Board reserves the right to charge an LD (Liquidated Damages) at the rate of 1% of the total contract value for the delay of every week or part thereof, subject to a maximum of 10% of the total contract value.

10 INDEMNIFICATION

The bidder hereby agrees and undertakes that, during the Term of the Contract, it shall indemnify and keep indemnified and otherwise save harmless, MPCB from any third party suits instituted against MPCB which are proved to be because of a direct consequence of the installation and / or use of equipment & services provided by the successful bidder.

11 ASSIGNABILITY

The successful bidder will not assign its rights, title or interest in the contract in favour of any third party without prior written consent of MPCB. MPCB reserves its rights to grant such consent on such terms and conditions, as it deems fits and proper. MPCB's decision to grant such consent or refusal to grant such consent shall be final.

12 CONFIDENTIALITY

Successful Bidder shall hold data and information about MPCB, obtained during the execution of its responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of MPCB.

Successful Bidder and MPCB shall maintain in confidence any information relating to the terms and conditions of this contract, information received from each other hereto in connection with this agreement as well as the business operations and affairs of MPCB or the successful bidder and their affiliates and shall not provide access to such information to any third party. This obligation shall expire 2 years after completion of the contract.

13 CORRUPT & FRAUDULENT PRACTICES

MPCB requires that the bidder under this RFP document maintains highest standards of ethics during procurement and execution of this project. In pursuance of this policy the board defines the terms set forth as follows

"corrupt practice" means offering, giving, receiving or soliciting of anything of value to influence the action or decision making of public official in the procurement process or execution of the project.

"fraudulent practice" means misrepresentation of facts in order to influence the action or decision making of public official in the procurement process or execution of the project to the detriment of the board, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the board the benefits of free & open competition.

If it is determined that bidder / s are engaged in corrupt & fraudulent practices their bid/s will be rejected and also will be declared ineligible for indefinite period or a stated period to time to participate in any future RFP floated by MPCB.

14 ARBITRATION

All disputes, differences, claims and demands arising under or pursuant to or touching this document shall be settled by arbitration of sole arbitrator to be appointed by both the parties and failing such agreement, by two arbitrators, one to be appointed by each party to disputes. All arbitrations shall be held at Mumbai location.

15 LEGAL JURISDICTION

All legal disputes are subject to jurisdiction of Mumbai courts only.

16 EXHIBIT 1: FORMAT OF THE COVERING LETTER

***(The covering letter is to be submitted by the* Bidder *along with the Cover 1 of the* Bid)**

Date:
Place:

To,

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema,Sion Circle,
Sion (E), Mumbai – 22

Dear Sir,

Sub: Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB

Please find enclosed our Bid for "Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB" in response to the Request for Proposal (RFP) Document issued by **MPCB** dated ……..

We hereby confirm the following:

1. The Bid is being submitted by *(name of the* Bidder) who is the Bidder in accordance with the conditions stipulated in the RFP.
2. We have examined in detail and have understood the terms and conditions stipulated in the RFP Document issued by **MPCB** and in any subsequent communication sent by **MPCB.** We agree and undertake to abide by all these terms and conditions. Our Bid is consistent with all the requirements of submission as stated in the RFP or in any of the subsequent communications from **MPCB**.
3. We have paid the EMD as per the RFP terms.
4. The information submitted in our Bid is complete, is strictly as per the requirements as stipulated in the RFP, and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid.
5. We as the Bidder, designate Mr/Ms (mention name, designation, contact address, phone no., fax no., etc.), as our Authorized Representative and Signatory who is authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments etc. on behalf of us in respect of the Project.

For and on behalf of:
Signature:
(Authorized Representative and Signatory)
Name & Designation of the Person:

17 EXHIBIT – 2

FORMAT FOR COVERING LETTER SUBMISSION- WITH PRICE BID

(The Price Bid should be submitted along with the following cover letter. Format of Price Bid is given in **Annexure - 3**)

Date:
Place:

To,

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Dear Sir,

Sub: Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB

As a part of the Bid, we hereby make the following price offer to the MPCB.

The cost of the Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB and support for the same for THREE (3) years is mentioned in the Price Bid as per Annexure – 3 of the RFP.

We agree to bind by this offer if we are selected as the Successful Bidder.

For and on behalf of:

Signature (Authorized Representative and Signatory of the Bidder):

Name of the Person:
Designation:

18 EXHIBIT – 3

MANUFACTURER'S AUTHORISATION FORM

(This letter of authority must be on the letterhead of the Manufacturer, must be signed by a person competent and having the power of attorney to bind the Producer, and must be included by the Bidder in its bid as specified in the Instructions to Bidders.)

Date:
Place:

To,

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Sub: Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB. RFP Ref <RFP reference No.>

Dear Sir,

WHEREAS <Name and address of the Manufacturer> who are official producers of < Name of the product and product code > do hereby authorize <name of the Bidder> located at <Address of the Bidder> (hereinafter, the "Bidder") to submit a bid of the following Products produced by us, for the Supply Requirements associated with the above Invitation for Bids. When resold by Name of the Bidder>, these products are subject to our applicable standard end- user warranty terms.

We assure you that in the event of <Name of the Bidder>, not being able to fulfil its obligation as our Service Provider in respect of our standard Warranty Terms we would continue to meet our Warranty Terms through alternate arrangements.

We also confirm that <Name of the Bidder> is our authorized Service Provider / System Integrator and can hence provide maintenance and upgrade support for our products.

Name
In the capacity of
Signed
Duly authorized to sign the authorization for and on behalf of : _____
Dated :.

19 EXHIBIT – 4

MANUFACTURER'S DECLARATION ABOUT TECHNICAL COMPLAINCE

(This declaration must be on the letterhead of the Manufacturer, must be signed by a person competent and having the power of attorney to bind the Producer, and must be included by the Bidder in its bid as specified in the Instructions to Bidders.)

Date:
Place:

To,

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Sub: Declaration of 100% Technical compliance as required by your RFP <RFP reference No.> Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB.

Dear Sir,

WHEREAS <Name and address of the Manufacturer> who are official producers of <Name of the product and product code> do hereby solemnly declare that

1. We have read and understood the technical specifications mentioned in Annexure 2 of this RFP and our product <Name of the product and product code> is 100% compliant to every specification mentioned therein.

We understand that if any of the points in this declaration is found to be incorrect, the bid will be declared as non-responsive and will not be considered for further evaluation.

Name
In the capacity of
Signed
Duly authorized to sign the authorization for and on behalf of : _____
Dated :.

20 ANNEXURE – 1

LOCATION OF MPCB OFFICE

The Firewall solution should be deployed, configured and commissioned at the infrastructure available at the Data Center at following location.

Sr. No.	Office	Location
1	Head Office	Maharashtra Pollution Control Board Kalpataru Point, 4th floor, Opp. Cine Planet Cinema, Sion Circle Sion (E), MUMBAI – 22

21 ANNEXURE – 2

TECHNICAL SPECIFICATIONS and COMPLIANCE

SPECIFICATIONS and COMPLIANCE

(This format must be filled completely clearly indicating the feature-wise compliances and deviations, if any, with respect to the product proposed to be supplied. The form needs to be printed on the letterhead of the Manufacturer / OEM, must be signed by a person competent and having the power of attorney to bind the Producer, and must be included by the Bidder in its bid.)

COMPLIANCE SHEET				
Sr No.	**Equipment**	**Name of Product Proposed and Product Code**	**Compliance (Yes / No)**	**Deviation If Any**
A	**PRECISION AIR CONDITIONING**			
B	**FIRE DETECTION SYSTEM**			
C	**FIRE SUPPRESSION SYSTEM**			
D	**RODENT REPELLANT SYSTEM**			
E	**WATER LEAKAGE DETECTION SYSTEM**			
F	**TEMPERATURE AND HUMIDITY DETECTION SYSTEM**			
G	**BIOMETRIC ACCESS CONTROL SYSTEM**			
H	**IP SURVEILLANCE SYSTEM**			
I	**PAINTING**			
J	**EARTHING**			

A. PRECISION AIR CONDITIONING

Technical requirement of Precision Air Conditioning are:

1. **Capacity sizing should be calculated taking in to account the (Approximate BTU/hr = 50000 considering maximum load of 15 KW)**

2. **Precision air conditioner shall be high sensible cooling capacity and high SHR, Cooling capacity - 5.5TR, Room temp - 22 +/- 1 0C / 50 +/- 5% RH, ambient temp - 40 0C**

3. **No of compressor per unit: One hermetic scroll compressor**

4. **Type of discharge: Bottom Discharge & Top Suction**

5. **Redundancy: N + 1**

6. **Panels shall be coated with grey epoxy-polyester paint, which guarantees the long-term durability of their original features.**

7. **The PACs should be of Double skin side panel construction. Insulation shall be polyurethane sheet with minimum 15mm thickness having better thermal & acoustic properties**

8. **Fans**
   Direct driven forward curved blades fan with very less power consumption. (Note: Fans with belt driven mechanism will not acceptable)

9. **Evaporator coil**
   Heat exchanger (evaporator coil) shall be designed with an ample front surface area in order to ensure a low air flow velocity through the exchanger so as to prevent the entrainment of droplets of condensation, reduce the air side losses and ensure a more efficient heat exchange during both the cooling and the dehumidifying processes.

   The exchanger is composed of copper tubes mechanically expanded on aluminum fins complete with a Blue Fin hydrophilic treatment to reduce the surface tension between the water and the metal surface, thus favoring film-wise condensation.

   The exchanger is situated upstream from the fans to ensure unhindered air distribution and is complete with a stainless steel condensate tray with a flexible conduit for its drainage and an incorporated trap. Coils should be fully accessible

from front.

10. Filtration

EU-2 Air filters of box type, made of self-extinguishing, artificial-fiber cellular material. The frame containing the filter material is made of metal. Low airflow and clogged filter alarm sensors consisting of two pressure switches for controlling the operating conditions of the fans and the build-up of dirt on the air filters inside the unit.

11. Compressor

PAC should be equipped with Latest-generation hermetic scroll compressors (air-cooled DX versions), characterized by a high COP (coefficient of performance) and consequently also a high energy efficiency. The PAC should work on CFC Eco Friendly R 407C refrigerant.

12. Refrigerating circuit

Each circuit is composed of as standard, a fluid intake complete with a Rotalock on-off cock and safety valve, a dehydrating filter and flow sensor. The former enables the refrigerating circuit to be kept free of humidity (thus increasing the life of all the circuit's components), while the latter enables a rapid check on whether the system is charged with refrigerant correctly and whether it contains any humidity.

13. Electrical Heating

Electric heating with aluminum-finned heating elements, complete with safety thermostat for manual resetting to cut off the power supply and trigger the alarm in the event of overheating. Thanks to the low surface temperature of the heating elements, the air ionization effects are also limited. This heating system serves a dual purpose:

- heating the air in order to reach and maintain the set point;
- reheating in the dehumidifying phase, so as to restore the air temperature to the set point. As a result, the installed heating capacity is sufficient to maintain the dry bulb temperature in the room during operation in dehumidifier mode.

Humidifier

Immersed-electrode humidifier should be suitable for modulating sterile steam production with the automatic regulation of the concentration of salts in the boiler to allow for the use of untreated water. Proportional control of the humidifier's operation (achieved by controlling the electric current allowed to pass through the cylinder's electrodes) and the periodic flushing cycle (controlled by continuously monitoring the water's conductivity) guarantee a perfect efficiency of the system, a low energy consumption and a greater durability of the components.

Dehumidification

The PID microprocessor system should provide dehumidification by achieving lower ADP, whenever the return RH goes above set point threshold. The dehumidification should be achieved without reduction in cooling air flow.

14. Switch Board

Switchboard shall be situated in a compartment separated from the air flow and the main characteristics are 24Vac low-voltage secondary circuit with isolation transformer, plastic insulating screen for protection from live components, general isolator with mechanical interlock, thermo magnetic circuit-breakers for protection, terminal board for no-voltage signal and control contacts. All the units must undergo a safety test cycle to check the continuity of the protection circuit and the insulation resistance, and a voltage (dielectric strength) test.

15. Microprocessor control system

The microprocessor controller manages the unit operations autonomously. Units have been designed and developed to interact with all the most widely used Building Management Systems, exchanging data via the most common communication protocols through serial connections.

The user terminal is fitted with a backlit 11x15 pixel LCD display and 6 backlit keys to move between and change parameters. It can be situated on board the machine or, on request, with a kit for wall mounting for the remote control of the unit. By means of the user terminal, you can set the air-conditioners operating parameters, monitor the trend of the main working parameters and read any alarm messages.

By means of the user terminal, you can set the air-conditioners operating parameters, monitor the trend of the main working parameters and read any alarm messages.

a. Modes of operation (cooling, heating, humidification, de-humidification,).
b. Displays of actual temperature and actual Relative Humidity.
c. Date, time and unit identification display.
d. System component Auto / Manual status display on the controller screen.

16. ALARM

e. Visual system alarm indication (along with mutable audio alarm as well).
f. Alarm display menu (incorporating various system alarms like temperature high/low, humidity high / low, Compressor HP/LP, Wet floor and loss of air flow conditions).
g. The unit should show the settings & operating parameters of the other units
h. Programmable services interval indication display / alarm.

i. Display the units are switched off by supervision system, thru timer, by inversion cycle, switched off by fire/smoke, switched off by flooding etc.

17. Safety Protections

The unit shall also incorporate the following protections:

j. High pressure trip- Manual reset for each compressor
k. Low pressure trip- Manual reset for each compressor.
l. Single phasing preventers.
m. Reverse phasing
n. Phase imbalancing
o. Phase failure
p. Overload tripping (MPCB) of all components

Safety Interlocks

Operation of heaters & humidifiers shall be possible only when blower fan is in operation.

18. Microprocessor Controls

Following information shall be available on the display on the units:

q. Room temperature and humidity.
r. Supply fan working status.
s. Compressor working status.
t. Electric heaters working status.
u. Manual / Auto unit status.
v. Temperature set point.
w. Humidity set point.
x. Working hours of main component i.e. Compressor, fan, heater, humidifier.
y. Unit working hours.
z. Current date and time.
aa. Type of alarm (with automatic reset or block)
bb. The last 100 intervened alarms.

The Microprocessor shall be able to perform following functions:

a. Testing of the working of display system.
b. Password for unit calibration values modification.
c. Automatic reset of program.
d. Cooling capacity control.
e. Compressor starting timer.
f. Humidifier capacity limitation.
g. Date & time of last intervened alarm.
h. Wrong password alarm.
i. Start / Stop status storage

Following alarms shall be displayed on screen of microprocessor unit:

a. Airflow loss.
b. Compressor low pressure.
c. Compressor high pressure.
d. High / low room temperature.
e. High / low room humidity.
f. Filter Clog alarm

19. Sequencing:

The units should have sequencing as an inbuilt feature. The unit shall be designed to work for equal no of run hours also in case of fault the stand by unit should start. The units should have weekly programmer.

20. The microprocessor control system can be supplied with the following optional cards:

- RS485 serial adapter for data transfer to a central supervisor system with STD protocol or MODBUS protocol

- Water Leak Detector comprising a control module installed on the electric switchboard and an external sensor.

- Footprint: PAC footprint shall not exceed 1200W x 450D x 1740H

B. FIRE DETECTION SYSTEM

A smoke detection system in the data center must be installed for detecting smoke in the data center. The smoke detection system should have multi zone detection system with fail proof wiring.

Fire Alarm Control Panel

- Certification: UL Listed
- Power: AC Power: 230 VAC, 50 Hz, 3.0 A. or 240 VAC, 50 Hz, 1.5 A.
- Wire size: minimum 14 AWG (2.00 mm2) with 600 V insulation. Non-power-limited, supervised.
- Battery: Two 12 V 18 AH TU SMF batteries.
- Battery Charger Capacity: 7-18AH (cabinet holds maximum of two 18 AH batteries.)

Specifications of Manual Fire Alarm Pull Stations

1. Certification: UL/ FM Approved.
2. Switch contact ratings: gold-plated; rating 0.25 A @ 30 VAC or VDC.
3. Manual Fire Alarm Stations shall be non-code, with a key- or hex-operated reset lock in order that they may be tested, and so designed that after actual Emergency Operation, they cannot be restored to normal except by use of a key or hex.
4. An operated station shall automatically condition itself so as to be visually detected as activated. Manual stations shall be constructed of red colored LEXAN (or polycarbonate equivalent) with clearly visible operating instructions provided on the cover. The word FIRE shall appear on the front of the stations in white letters, 1.00 inches (2.54 cm) or larger.

Specifications of Photoelectric Smoke Detectors

1. Certification: UL Listed FM Approved
2. Voltage range: 15 – 32 VDC (peak).
3. Standby current: 300 µA @ 24 VDC.
4. LED current: 6.5 mA @ 24 VDC (latched “ON”).
5. Air velocity: 4,000 ft. /min. (20 m/sec.) maximum.
6. Diameter: 6.1" (15.5 cm) installed in B350LP base.
7. Height: 2.1" (5.33 cm) installed in B350LP base.
8. Weight: 3.6 oz. (102 g).
9. Operating temperature range: 0°C to 49°C (32°F to 120°F) or 0°C to 38°C (32°F to 100°F).
10. Temperature: 0°C – 49°C (32°F – 120°F).
11. Relative humidity: 10% – 93%, non-condensing.

Specifications of HOOTER/ Mini-Horns

1. Certification: UL and ULC Listed CSFM , MEA and FM Approved
2. Operating Temperature Range: 0°C to 49°C (32°F to 120°F).
3. Mounting: Surface: Deep single-gang backbox (2-3/4" deep)

ELECTRICAL SPECIFICATIONS

a. Input Terminals: 12 to 18 AWG
b. Nominal Voltage: Regulated 12DC/FWR or 24DC/FWR
c. Operating Voltage: 8-33
d. Operating Voltage with MDL3R/W: 9-33

Specifications of Control Module

1. Certification: UL Listed FM Approved
2. Normal operating voltage: 15 to 32 VDC.
3. Maximum SLC current draw: 6.5 mA (LED on).
4. Average operating current: 350 µA direct poll (CLIP mode), 375 µA group poll (Lite Speed mode) with LED flashing.
5. External supply voltage: maximum 80 volts (RMS or DC).
6. Drain on external supply: 2 mA maximum (using internal EOL relay).EOL resistance: 47K ohms.
7. Temperature range: 32°F to 120°F (0°C to 49°C).
8. Humidity range: 10% to 93% non-condensing.

Specifications of Gas Release Panel

1. Powder coated finish. Operates on 220V, A.C supply Battery backup with built in charging. LCD Dot Matrix Display.
2. Evacuate and Key pad Enable, Disable Facility.
3. Low battery visual warning with audible tone.
4. Relay output for actuators.
5. Remote fire indication with Audible Tone.
6. Should be compatible to all types of conventional detectors. Three 24V Hooter Output (Fire, after Cross zone, after gas release).
7. Two mode operation facility (Auto / Manual).
8. Programmable FAP input selection Facility. Programmable Solenoid Output with On and OFF Timer. Main / Standby Cylinder output Facility

Desired Specificaions:

- Gas Inhibition and Instant release facility.
- Manual Gas Release with or without timer.
- Actuator pressure low sensing facility.
- Pressures switch facility.

C. FIRE SUPPRESSION SYSTEM

Mandatory Requirements:

1. OEM for NOVEC 1230 equipment authorized and certified to install and market NOVEC 1230 Fire protection only can be quoted. Any other product without system approvals shall not be qualified for this RFP.

2. The OEM shall arrange for the storage container required for their respective systems offered.

Mandatory Technical Requirements:

1. The Storage Container offered shall be of seamless type. Welded cylinders are not permitted.
2. The NOVEC 1230 valve, operating actuators shall be an Electric (Solenoid) type, and should be capable of resetting manually. Provision should be provided on the Electric Control Head for a Manual Lever for over-ride in case of failure of the Electrical components. The Electric Control Head (Actuator) shall operate at 24 VDC. Vendors are required to submit confirmation for the same and provide the technical data sheet for the same. The Electric Control Head should be capable of being functionally tested for periodic servicing requirements, and without any need to replace consumable parts.
3. The system flow calculations shall be carried out on certified software, suitable for the particular container being offered for this project. Such System flow calculations carried out for this project shall be further vetted by the OEM for its accuracy, and the only such vetted calculations shall be admissible for approval.

General Technical Requirements:

1. The designer shall consider and address possible Fire hazards within the protected volume at the design stage. The delivery of the Novec 1230 system shall provide for the highest degree of protection and minimum extinguishing time. The design shall be as per NFPA standard NFPA 2001.

2. Sub floor and the ceiling void also to be included in the protected volume.

3. The NOVEC 1230 Fire Suppression System shall include a detection and control switch provision for both pre-alarm and automatic agent release.

4. The Novec 1230 System to be supplied by the vendor must be strictly in accordance with OEM’s product design criteria.

5. The detection and control system that shall be used to trigger the NOVEC 1230 suppression shall employ photoelectric and ionization smoke detectors. A single detector in one zone activated, shall cause an alarm signal to be generated.

6. Another detector in the second zone activated, shall generate a pre-discharge signal and start the pre-discharge condition.

7. The discharge nozzles shall be located in the protected volume in compliance to the limitation with regard to the spacing, floor and ceiling coverage etc. The nozzle locations shall be such that the design concentration will be established in all parts of the protected volumes. The final number of the discharge nozzles shall be according to the OEM approved software, OEM Product manual and the OEM vetted programmable pressure loss & flow calculation for this particular project.

8. The Cylinders shall be equipped with differential pressure valves & No replacement parts shall be necessary to recharge the NOVEC1230 containers.

9. NOVEC 1230 shall be discharge through the operation of an Electric (Solenoid) operated device which releases the agent through a differential pressure valve. Systems that employ explosive or pyrotechnic device shall not be permitted.

10. All system components shall be New and of Current manufacture and shall be installed in accordance with local codes. The Buyer, or the End user of this system reserves the Exclusive Rights to unconditionally reject any and all such components which may not be, or are suspected not to be of current manufacture; and / or on the grounds of authenticity of the system components and designs.

11. The vendor shall provide IN ORIGINAL all documentation such as Cylinder Manufacturing Certificates, Test and Inspection Certificates & Fill Density Certificates.

The extinguishing system shall include the following components:

1. Agent storage container with cylinder valve.
2. NOVEC 1230 agent.
3. Discharge nozzle (s).
4. Mounting brackets.
5. Discharge hoses.
6. Systems containing component that have a dated life span and must be periodically replaced shall not be acceptable.
7. The releasing device shall also be capable of direct mechanical actuation, providing a means of discharge in the event of total electrical malfunction.
8. Provided with a manual lever and a faceplate with clear instruction of how to mechanically activate the system. In all cases, Novec 1230 cylinders

shall be fitted with a manual mechanical operating facility that requires two-action actuation to prevent accidental actuation.

9. Release of NOVEC 1230 agent shall be accomplished by an electrical output from the Novec 1230 Gas Release Panel to the Electric control head release device and shall be in accordance with the requirements set forth in the current edition of the National Fire Protection Association Standard 2001.

D. RODENT REPELLANT SYSTEM

Description:

- Ultrasonic Pest Repellent shall be electronic transmitters of high frequency sound waves (well above the 20 KHz frequency which is beyond limit of the hearing range of the human ear.) They should emit intensive sound at high decibel levels (sound pressure) that is audible and painful to pests, but inaudible and harmless to humans.

- System shall consist of Master Console with corresponding Satellites/ Transducers. The Master Console shall be installed in the main control room/ server room, and the satellites in the problematic areas i.e. above and below false ceiling and below raised access flooring.

- The Master console shall be powered through a 230 VAC, 5 A quality supplies.

- Each Satellite shall cover an open area of 300 sq ft given the average height of the ceiling is 10 ft. Installed in the false ceilings or false floorings, it shall be capable of covering an minimum area of 150 sq ft.

TECHNICAL INFORMATION

Visible Hexagonal, Triangle exciter – Centre damp horizontal line exciters.
Frequency: Peak frequency responses of the satellites should be,

21.6 KHz +/- 3 KHz
31.6 KHz +/- 3 KHz
54.4 KHz +/- 3 KHz
60 KHz +/- 3 KHz

The sound waves propagated by the satellites shall be linear sine waves with constantly varying frequencies.

Specifications

Configuration Operating frequency Sound output Power output Power consumption Power supply Mounting

- One master console with satellites/ transducers
- Above 20 KHz (variable)
- 80 dB to 110 dB
- 800 mW per satellite
- 15 W approximately

- 230 V AC 50 Hz
- Wall/ table mounting

1. The system shall be designed for server room and Transducers which emit UHF sound waves are placed in the desired location to cover the entire room including the false ceiling and false flooring area. These transducers are connected to the main controller which controls the entire operation of the system.

2. The system should be as per the PETA approved standard.

3. The system should have test facility to check the functionality of all the installed satellite transducers.

E. WATER LEAKAGE DETECTION SYSTEM

1. Water Leak detection Module.

Water Leak detection module with Web interface for viewing conditions and modifying configurations, Optimal scalability sensing cable Easy integration with existing systems via Modbus, BACnet, MTP, NMP and/or dry contact outputs, Highly precise pinpointing and displaying in feet or meters, Logging capabilities of event and trend data, Simple installation with NO calibration required, Compact and light-weight, Supervised system with facility to map with Graphic Display on PC. RoHS compliant, UL-Approved. And SMS / Email alert facility through the DCIM System.

2. WLD sensor cables.

Digital Addressable Water leak detection cable sensor with Non- conductive polymers used in the leak detection cable's construction. This helps eliminate irritating alarms that could result from contact with metal, such as raised floor pedestals. An abrasion resistant polymer core increases the strength of the able. Pressure on the sensing cable will not create a false alarm, with Pre Connected Connectors, Dries quickly without external drying devices, Complete - Plenum rated, UL listed, & RoHS compliant.

3. Pre laminated Leak detection reference plan / Map

Pre laminated Leak detection reference plan / Map to indentify the actual location of any water leak detection in the protected area. The leak detection plan / map shall identify protected room layout, cable routing and distance shall be marked in feet or meters.

Water Leak Detection System

General

- The Bidder shall be responsible to supply, deliver, install, test, commission and maintain of a proven technology and industry standard solution for a water detection system in the Data Center.

- The complete system shall include electronic alarm panel, sensing cable, 4x20 alphanumeric display, and auxiliary equipment, as indicated on the design drawings. The system shall simultaneously detect the presence of water at any point along the cable's length and switch the module's leak alarm relays.

- The sensing cable shall be of such construction by using Non-conductive polymers in the leak detection cable's construction. The Sensing Cable shall be an abrasion resistant polymer cores to increases the strength of the cable. Pressure on the sensing cable shall not create a false alarm.

- The Digital Sensor Cable shall be provided with pre-connectorised sensing cable components.

Alarm Panel

- The alarm panel shall be capable of monitoring up to (30 meters) of sensing cable.

- The alarm Panel shall have LEDs indicating "power" (green), "alarm" (red), and “continuity" (yellow). The system shall sound an audible alarm upon sensing a leak. The unit can then continue to monitor and will re-alarm if there are any major changes. Once the alarm condition has been cleared, the panel is reset with a single keystroke. The panel shall have 4x20 alpha numeric display with adjustable contrast.

Basic Features of the alarm panel

- In addition to detecting leaks, the system shall warn of fault conditions and indicates when service is required.

- An event history log allows leaks (and other events) to be tracked.

- Both the events history log and any user settings are held in non-volatile memory. Event log shall stores 50 date and time stamped alarm.

- The alarm module will be powered by 230 VAC. The panel shall have a pair of contacts open on an alarm, and a pair of contacts close on an alarm. These contacts shall be used to actuate other alarms and shall be capable of switching 10 amps at 250 VAC.

- In additions, the panel shall be provided with RS-485 series port for connection to third party/DCIM controller & shall have slave Modbus RTU protocol or should support NO/NC/DI for monitoring

- The module enclosure shall be NEMA 1, constructed of 18-gauge steel with Siemens gray colour Powder Coated. The enclosure shall be capable of either semi flush of surface mounting.

- Sensing Cable

  The water sensing cable shall detect the presence of water and other conductive fluids. The sensing technology shall be very low current AC signal and not DC signal to avoid corrosion when subject to wetness for long period. Accessories

Complete system accessories (leader cable, end terminations, etc.) shall be provided by the system manufacturer

F. TEMPERATURE AND HUMIDITY DETECTION SYSTEM

1. Temperature and relative humidity Detection system with internal logging with option of data off loading / recycling feature after a reasonable number of stored records for a reasonable number of periods. Capability to get integrated with the infrastructure management system is needed.

2. The system should be capable to accommodate one to two numbers of external temperature and humidity probe. The system should be able to take reasonably accurate reading when installed in a PAC air handling unit near air intake / output path.

3. Monitoring System must be compatible with Modbus, Bacnet, SNMP, DCIM and Building Management System Compatible.

4. The system should be able to display current real time temperature and humidity simultaneously for the target room. The display should indicate average reading if more than one probe is used.

5. The temperature range to be monitored shall be -5C to + 50 C with resolution of 0.5C. The humidity monitoring range should be 0 – 100% none condensing.

6. Sampling frequency should be user selectable from 1 second to 12 hours. The system should be configurable to raise visual and audible alarm if the temperature and humidity threshold is exceeded then the set level.

7. System should allow alarm on / off, data reset, system reset, data off load and system sampling start stop operation.The system should keep record of the temperature and humidity sampling with date and time record. The system date time should be user adjustable and accuracy of 1 min (Plus Minus) in one month when operated between 18-25C.

8. The internal memory should be non-volatile type to retain the threshold and operational parameter setting and sampling data during battery outage and replacement situation. A system with minimum power consumption and long battery replacement duration shall be preferred. The system should be able to interface with building / infrastructure management system.

G. BIOMETRIC ACCESS CONTROL SYSTEM

Technical Specifications

- 500 fingerprints or higher
- 30,000 Event buffers or higher
- FAR (False Acceptance Rate) with less than 0.0001% FRR (False Rejection Rate) with less than 0.1%
- Language Support: English,
- Voltage:3A/12V DC Standard Current:50mA Operating Current:400m

General description

1. The access control system should be finger print reader type with built-in key pad for PIN input and programming, with optional proximity card reader. The finger print reader with input keypad shall be installed at the entry point of each of the above doors separately.

2. Biometric Access Controller must be compatible with Modbus, Bacnet, SNMP, DCIM and Building Management System Compatible.

3. The system should have network communication capability to communicate for activity recording, data upload down loaf for system in built register. It would be preferable if the system has direct either net connectivity for communication and external power (PoE).

4. The system should be sturdy, compact and long life manufactured by a good company with ISO certification for their production and quality checking environment. It should have power level indicator, successful read and failure/ error indicator apart from other indicator/display used for programming with beep/ audio indicator.

5. The system should have built in battery backup system to operate. The system centralized software should have user proper authentication (user name and password control). The system should be able to support complex passwords and enforce it. The system should allow menu based control for the access of add/modify / enable / disable etc required functions and should have provision to assign specific functionality to specific or group or users.

6. The centralized system should be able to keep log of the access / exit activity by recording in / out activity with date, time stamp and duration. It should be able to generate formatted report for daily / monthly activity along with system audit trials and other relevant required reports.

7. The access control system should be able to support minimum 100 users and 10000 transactions. The centralized software administration function should allow users with different functionality.

6. It will be preferable if the system has web based administration interface with some light weight database accepting SQL command. The data base should hold the data in encrypted form.

H. IP SURVEILLANCE SYSTEM

The Network Standalone system to monitor the activities around and inside the data center. The system should have facility to record real time monitoring and recording the activity. The system should play back the footage as and when required. The system should integrate with existing system.

Dome Camera:

The Dome camera unit should be 1/3" CCD type Network Signal Processor Color Camera. The camera must have Auto Gain Control and Back Light Compensation. The complete unit shall be housed in a dome and base unit, both made from the material suitable for required fire grade. The camera should be tamperproof. It shall be possible to adjust the camera head inside the dome in both the planes so that it can be wall or ceiling mounted.

Other important features of the camera should be as follows:-	
Product Parameters:	
Horizontal Resolution	340 TV Lines
Focal Length	f = 3.6 mm
Sensitivity	2.0 lux / F=1.2
Gamma Correction	>0.45
Back light	Yes
Auto Gain Control	On
Auto White Balance	Yes
IRIS Level	Adjustable
S/N Ratio	>48dB

Network Video Recorder (NVR):

1. The Network Video Recorder (NVR) shall be offering Triplex Operations for Simultaneous Viewing Live, Playback and Recording.

2. The NVR must be Non-PC based standalone equipment with its own proprietary Non Windows based Software.

3. The NVR must have built in with unlimited Play Back Viewing and a LAN/ISDN/Modem network connectivity simultaneous user access for both Live and System configuration settings.

4. No additional software should be required in order to watch the NVR from a remote location.

I. Painting:

Anti-dust type painting shall be used for data centre. Gypsum / Plaster of Paris paste of thickness 5-8 mm punning over cement plaster shall be provided so as to ensure a level and smooth texture to the exposed walls and columns. The existing surfaces are to be cleaned and scratched and markers are kept before the application of punning material. After the material has dried upon application it is to be smoothened by means of rubbing it with sandpaper. Upon this smoothened surface one coat of primer and two coats of plastic emulsion paint of approved make & shade is to be applied. This will be applicable for all vertical plane surfaces. Server room shall additionally be applied with painting putty to level & plumb and painting with 2 coats of fire retardant painting.

J. Earthing:

- All metallic components shall be earthed to a common electrical earth point. It shall be terminated by an adequate terminal intended for connection to the earth system of the installation, by way of flexible jumpers/strips & Lug arrangement. The continuity of the earth system shall be ensured taking into account the thermal & mechanical stresses caused by the current it may have to carry.

22 ANNEXURE – 3

SCOPE OF WORK

1.0 SCOPE OF WORK

Entire work specified in this tender should be carried out on Turnkey basis.

- Re-vamp a Data Center for the proposed works mentioned in this tender. It is recommended and advised that the bidder should verify the design dimensions by his own technical group to ensure the accuracy and for appropriate corrections if any.
- As the contract is on Turnkey solution basis, any other miscellaneous requirements related to the scope mentioned below should be provided by the successful vendor even if those items are not mentioned explicitly in this tender.
- The bidder should ensure that there should not be any structural damage to the original building structure

1.1 Civil and Carpentry Work

False ceiling

- Inspect and repair any damages. Replace damaged tiles

Raised Flooring

- Raised floor needs to be totally revamped. Replace any damaged floor supports and tiles. Actual flooring needs to be waterproofed against water leakages.

Walls

- Inspect all the walls for any damages. Brick wall needs to be checked for any water seepage and waterproofed if any leakages are found. Gypsum partitions to be dismantled and construct 4 inch thick new brick walls.

Door

- Replace existing entry door with dual door entry system to minimize entry of dust particles in DC room. Door material must be fire rated.

POP Finishing and Painting

- Anti dust type fire retardant quality painting shall be used in all areas of the Data Center. Gypsum / Plaster of Paris paste of thickness 5-8 mm punning over cement plaster shall be provided so as to ensure a level and smooth texture to the exposed walls and columns. The existing surfaces are to be scratched, cleaned and markers are kept before the application of punning material. After the material has dried upon application, it is to be smoothened by means of rubbing it with sandpaper. Over this smoothened surface one coat of primer and two coats of fire rated paint of approved make & shade is to be applied. This will be applicable for all vertical plane surfaces.

Cleaning

- Cleaning and deodorising entire DC room area to be done and seal all the water leakages, if any.

- Removing of existing wall paneling, partitions, false ceiling, electrical fixtures, any other unwanted items and carting away all debris from site and cleaning of site.
- Removing of all existing Electrical Fittings including the cabling, wiring, panels, and distribution boards and carting away all debris from site to the identified location.
- Any other unwanted old materials / fixtures in the floor area.

1.2 Power and Electrical Work

Electrical work involves supply of all materials, fixing and wiring of all Distribution boards, Associated Cabling and Cable terminations, Lighting fixtures, Point wiring, Earthing System, Cable raceways, other and miscellaneous items as per the data center design. All power, communication, data cablings should be concealed and in suitable PVC conduit pipes in the false ceiling and raised floor area. Suitable capping and casing should be used in case of routing the cable in an exposed area.

1.3 Cabling

All cables (Power & Data) should be carried under the raised flooring in separate raceways. A proper structured cable ducting should be provided for the electrical and networking cables which are separately placed with a minimum distance of 400 to 500 mm. Below the raised floor area, from UPS distribution panel electrical power cables to all racks and network cables between servers rack, service provider interface box location, should be laid through the suitable cable tray arrangement. Required number of PVC pipes from raised floor to ceiling should be provided for at the optical fiber interface units for routing all incoming Leased /fiber cables from service provider. All copper Data Cablings should be of CAT 6 and 12 core Multimode Optical fiber. All electrical cables should be of copper and fire rated of proper current ratings. Estimated length of cables - 8 segments x 100 meters CAT6, 12 core x 100 meters Multimode OFC

1.4 Data Center Environmental Sub-system

- The Bidder shall supply, install, test and put in operation Precision Air Conditioning system. The bidder shall include all auxiliary works like ducting, inlet and drain piping, piping between indoor and outdoor, cabling, acoustic and thermal insulation (Duct and floor for server room), etc with related civil works etc as per the site requirements.

1.5 Fire Alarm

- The scope of work under this head shall include design, supply, and installation of Fire Alarm System with Smoke Sensors, Main Control Panel, Repeater Panel, Sounders, Manual Pull Stations, Modules, relays etc. for interfacing with other systems. It shall also include lying of cabling, necessary for installation of the system.

1.6 Fire Suppression

- The Bidder shall supply, install, test and put in operation gas based fire suppression system. The fire suppression system shall include and not be limited to gas release control panel, COE approved seamless Master Cylinders complete with Valve Assembly for supervisory Switch connection for monitoring cylinder pressure, Pressure Gauge, Electrically operated Solenoid Control Head with manual lever, Flexible discharge hose, Safety signs, discharge pipes, discharge nozzles, armored cable and all other accessories required to provide a complete operation system.

1.7 Rodent Repellent

- The Bidder shall supply, install, test and put in operation Ultrasonic pest repellents to control the entry of Rodents and other unwanted pests in the false flooring to repel the pests without killing them.

1.8 Access Control

- The Access Control System with respective application software for access control system and biometric reader shall be supplied and deployed with the objective of allowing entry to authorized personnel only. The system deployed shall be based on Proximity as well as Biometric Technology. An access control system consisting of a central PC, intelligent controllers, proximity readers, power supplies, and all associated accessories is required to make a fully operational on line access control system. Access control shall be provided for doors. These doors shall be provided with electric locks, and shall operate on fail-safe principle. Exit shall be using a push button installed in the secure area. The system shall monitor the status of the doors through magnetic reed contacts.

1.9 Surveillance

- The Bidder shall supply, install, test and put in operation a CCTV System is to effectively monitor & record movement of people inside the Data Centre). Closed Circuit Television System (CCTV system) for 24 x 7 continuous monitoring of the inside of facility (minimum 2 HD cameras with night vision) and its external (minimum 1 HD cameras with night vision) surroundings is to be installed. It should enable recording of the events at each of the surveillance points.

1.10 Water leakage detection

- The water leak detector shall be installed to detect any seepage of water into the critical area and alert the Security Control for such leakage. It shall consist of water leak detection cable and an alarm module. The cable shall be installed in the floor areas round the periphery.

1.11 Warranty

- Warranty / Support services for the workmanship, quality, product and solution support for a period of THREE (3) years from the date of commissioning of the solution.

1.12 Documentation

The successful vendor should provide the following documents to MPCB on completion of the work.

- All Design Documents including Detailed Project Report with Initial, working and Final Drawings for Access Control System, CCTV, Fire Detection and Alarm System, Fire Suppression system, Rodent Repellent, Water Leak detection etc. shall be provided by the Vendor after the completion of the work duly certified thereof.
- Electrical Drawings: Schematic Layout Diagrams with LT Scheme, logic circuits, Power Distribution Scheme, Cable Schedule, Cable Raceways Layouts, Cutout Details, Electrical Earth Systems, Equipment Layout, Lighting Layout, and Wiring Diagrams
- Civil Layouts: Server Room Layouts, DC Floor Layouts, Cross Sectional Areas, Individual Areas Layout.
- Drawings for Access Control System, CCTV, Fire Detection and Alarm System, Fire Suppression system, Rodent Repellent, Water Leak detection
- Operations and Maintenance manuals of the equipment's installed in the Data Centre, including Standard Operating Procedures, Equipment Handling and fault analysis techniques, AMC Scheduling, Data Centre Monitoring, Reporting and Escalation Matrix for all the areas, Preventive and Predictive Maintenance Scheduling Formats.

1.13 Site Preparation:

- The Data Center area should be revamped as per the approved design layout with non-combustible material in server room area and should provide an aesthetic, lasting and technically superior infrastructure.

- Site Preparation in terms of the civil, electrical and mechanical work, supply of all necessary materials and to construct the proposed raised floor, ramp, false ceiling, partitions, doors, raceway design for data and power cabling of the Data Centre, electrical wiring with distribution panels, ducting, conduits for Power and Data cables and each units allied accessories related work. All construction materials including electrical cables to be used in the construction of Data Center server room should be of non-combustible, fire retardant quality. The scope also includes painting, thermal insulations and any other miscellaneous work as per site requirements

MPCB Responsibility

1. Facilitate access and information availability to the Project Management Consultant (PMC) and the Solution Provider (SP)
2. Acceptance of the Implementation schedule provided by SP after due review with MPCB / PMC.
3. Ensuring availability of the downtime based on the implementation schedule on reasonable notice given by the SP after consultation with PMC.
4. Ensuring data backup for the servers and storage.
5. Ensuring support availability from the respective Vendors for the Hardware, Networking, UPS, Application Software whenever required during revamp.
6. Ensuring availability of various vendors such as Civil and Electrical Contractors, Network Contractors, Security Contractors, MPLS Service Providers, Application development partners, current Service Providers, FMS service providers and any other agency – internal and / or external, as may be required.
7. Issue of CoOP upon receipt of satisfactory project implementation and documentation.

23 ANNEXURE – 4

PRICE BID FORMAT-A

Note: ***Commercial Offer has to be entered online only. An Online Form, similar to the Commercial format given below, will be available to the bidders in Commercial Envelope (C1) during Online Bid Preparation stage where bidders would quote their offer.***

The bidders should strictly follow the format given below for submitting the price –bids

Sr. No	Description	Basic Material Price w/o GST (Rs.) A	GST Rs.	One time Installation / Setup Cost w/o GST (Rs.) B	GST Rs.
1	Interior work including Civil, Electrical, Cable laying, Carpentry, Water proofing, Painting				
2	Fire alarm with fire suppression solution				
3	PAC solution				
4	Water leakage detection solution				
5	Rodent repellent solution				
6	Access control solution				
7	CCTV and Surveillance solution				
8	Other (please specify)				
Sub Totals Rs.		A		B	
GRAND TOTAL T=(A+B) Rs.					

Grand Total Amount in Words Rs.: _____

Note: **1.** ***The prices quoted are for the scope as mentioned in Annexure 3 and for a period of 3 year AMC***
2. The prices are valid for 180 days from the date of bid.
3. Orders will be released in accordance with GST norms for Goods and Services (Breakup of TAX structure to be given Item-wise by the bidder)

For and on behalf of:

Signature (Authorized Representative and Signatory of the Bidder):

Name of the Person:
Designation:
Date:

Price Bid Format – PART B

Note: ***Commercial Offer has to be entered online. An Online Form, similar to the Commercial format given below, will be available to the bidders in Commercial Envelope (C1) during Online Bid Preparation stage where bidders would quote their offer. Additionally, the Bidder should also submit a softcopy of their price bid in the format mentioned below duly printed on their Company Letterhead and signed and sealed as mentioned in the RFP. Commercial Bids not received in this manner / in any other format will be considered as non-responsive and hence may not be evaluated.***

Sr. No.	Description	Basic Material Price w/o GST (Rs.)	One time Installation / Setup / Laying Cost w/o GST (Rs.)
		A	B
1	ONE (1) sq meter Brick wall construction with cement plastering		
2	ONE (1) sq meter smooth wall finishing with 6-8 mm POP and 2 coats of fire rated paint with base coat on brick wall		
3	ONE (1) sq meter false ceiling with fire rated tiles		
4	ONE (1) sq meter raised flooring with fire rated tiles		
5	Ventilated (Grill) floor tiles (metal) per tile		
6	Per meter 3 core armoured electrical cable for 100 A rating		
7	Per meter 3 core indoor jelly filled electrical cable for 50 A rating		
8	Per meter running CAT 6 cable with PVC conduiting / casing		
9	Per meter running 12 core multimode indoor jelly filled cable with PVC conduiting / casing		
10	Per square meter 10 mm fire rated Glass		
11	CAT 6 Termination		
12	OFC Termination		
13	12 port LIU		
14	24 Port Jack Panel		
15	1' x 1' LED ceiling fitting		

Note:

1. The prices are valid for 180 days from the date of bid.
2. MPCB may ask the Service Provider to render the above services from time –to – time and payment for the activity will be settled after completion of work against the necessary documentation and invoice.
3. PLEASE NOTE : PRICES QUOTED IN PART A of the PRICE BID WILL BE CONSIDERED FOR PRICEBID EVALUATION. PRICES IN PART B ARE FOR COMPARITIVE PURPOSES ONLY

For and on behalf of:

Signature (Authorized Representative and Signatory of the Bidder):

Name of the Person:

Designation:
Date:

24 ANNEXURE – 5

DETAILS FOR E-TENDER PROCEDURE

NOTICE DETAILS

Tender Reference no.	RFP No. 4125 Date : **12/10/2017**
Name of Work / Item	Selection of Solution Provider (SP) for Supply, Installation and Commissioning of Data Center Passive components and Revamp of DC at MPCB
Cost of tender document & Mode of Payment	**Rs. 10,000/- (Rupees Ten Thousand Only) (Non Refundable) to be paid through Online Payment Modes i.e. Net Banking, Debit Card and Credit Card during Tender Document Download Stage.**
EMD Amount & Mode of Payment	**Rs.2,00,000/- (Rupees Two Lakhs Only) to be paid through Online Payment Modes i.e. Net Banking, Debit Card, Credit Card and NEFT/RTGS during Bid Preparation Stage.**
Date ,Time and Place of Pre Bid Meeting	**25th October 2017 15:00** Hrs at MPCB Conference Hall,Kalpataru Point, 4th Floor, Sion Matunga Scheme Road No.8,Opp. Sion Circle. Sion (E), **Mumbai-400 022**
Venue of online opening of tender	MPCB Conference Hall, Kalpataru Point, 4th Floor, Sion Matunga Scheme Road No.8,Opp. Sion Circle. Sion (East), **Mumbai - 400 022**
Address for Communication	Member Secretary MPC Board, Kalpataru Point, 4th Floor, Sion Matunga Scheme Road No.8,Opp. Sion Circle. Sion (East), **Mumbai - 400 022**
Contact Telephone & Fax Numbers	Tel.No. - 022- 240 87 295, 022- 240 10437 Fax - 022- 240 87 295 Email - eic@mpcb.gov.in
e-Tendering Helpline Support: **Monday-Friday: 09:00 AM - 08:00 PM** **Saturday - 09:00 AM - 06:00 PM**	**Telephone:** **020 - 3018 7500** **Email: support.gom@nextenders.com**

e-TENDER TIME SCHEDULE

Please Note: All bid related activities (Process) like Tender Document Download, Bid Preparation, and Bid Submission will be governed by the time schedule given under Key Dates below:

Sr. No.	Activity	Performed by	Start		Expiry	
			Date	Time	Date	Time
1	***Release of Tender***	***Department***	***13-10-2017***	***11:00***	***13-10-2017***	***17:00***
2	**Tender Download**	**Bidders**	***13-10-2017***	**10:00**	**23-10-2017**	**17:00**
3	**Bid Preparation**		***13-10-2017***	**10:00**	**29-10-2017**	**17:00**
4	***Superhash Generation & Bid Lock***	***Department***	***30-10-2017***	***11:00***	***30-10-2017***	***13:00***
5	**Control Transfer of Bid**	**Bidders**	***30-10-2017***	**13:01**	***31-10-2017***	**17:00**
6	***Envelope 1 Opening***	***Department***	***01-11-2017***	***15:00***	***01-11-2017***	***17:00***
7	***Envelope 2 Opening***		***07-11-2017***	***15:00***	***07-11-2017***	***17:00***

** Dates mentioned here, are scheduled dates for Bid Opening Activities**. Any changes in dates of opening of technical and commercial bids shall be notified in 'Press Notice / Corrigendum' section on the e-Tendering sub portal of the department before opening of the same.*

INSTRUCTIONS TO BIDDERS FOR e-Tendering

GENERAL INSTRUCTIONS:

The bidders are requested to familiarize themselves with the use of the e-Tendering portal of Government of Maharashtra well in advance

To view- Tender Notice, Detailed Time Schedule, Tender Document for this Tender and subsequently purchase the Tender Document and its supporting documents, kindly visit following e-Tendering website of **Government of Maharashtra**: https://maharashtra.etenders.in

The Contractors participating first time for e-Tenders on GoM e-tendering portal will have to complete the Online Registration Process for the e-Tendering portal. A link for enrollment of new bidders has been provided on **https://maharashtra.etenders.in**

All bidders interested in participating in the online e-Tendering process are required to procure Class II or Class III Digital e-Token having 2 certificates inside it, one for Signing/Verification purpose and another for Encryption/Decryption purpose. The tender should be prepared & submitted online using individual's Digital e-Token.

e-Tendering Tool Kit for Bidders (detailed Help documents, designed for bidders) has been provided on e-Tendering website in order to guide them through different stages involved during e-Tendering such as online procedure for Tender Document Purchase, Bid Preparation, Bid Submission.

Bidders will have to pay cost of Tender Document through online modes of payment such as **Net Banking, Debit Card and Credit Card** during **Tender Document Download stage**. This payment will not be accepted by the department through any offline modes such as Cash, Cheque or Demand Draft.

Similarly, Bidders will have to pay Earnest Money Deposit through online modes of payment such as **Net Banking, Debit Card, Credit Card and NEFT/RTGS** during **Bid Preparation stage**. This payment will not be accepted by the department through any offline modes such as Cash, Cheque or Demand Draft.

The interested contractors / bidders will have to make online payment (using credit card/debit card/net banking) of Rs. **1054/-** (inclusive of all taxes) per bid per tender to online service provider of e-Tendering system (Sify NexTenders) at the time of entering **Online Bid Submission** stage of the tender schedule.

If any assistance is required regarding e-Tendering (registration / upload / download) please contact GoM e-Tendering Help Desk on number: **020 – 3018 7500 (Pune Helpline), Email: support.gom@nextenders.com**

For a bidder, online bidding process consists of following 3 stages:

1. Online Tender Document Purchase and Download
2. Online Bid Preparation
3. Online Bid Submission

All of 3 stages are mandatory in order for bidders to successfully complete Online Bidding Process.

TENDER DOCUMENT PURCHASE AND DOWNLOAD:

The tender document is uploaded / released on Government of Maharashtra, (GOM) e-tendering website https://maharashtra.etenders.in. Tender document and supporting documents may be purchased and downloaded from following link of Maharashtra Pollution Control Board on e-Tendering website of Government of Maharashtra, https://allgom.maharashtra.etenders.in by making payment through **Online Payment Modes i.e. Net Banking, Debit Card and Credit Card**.

If for any reason a bidder fails to make this payment through online modes, system won't allow the bidder proceed further for next stage resulting in his/her elimination from Online Bidding Process.

This payment will not be accepted by the department through any offline modes such as Cash, Cheque or Demand Draft.

Subsequently, bid has to be prepared and submitted online ONLY as per the schedule.

The Tender form will be available online only. Tender forms will not be sold / issued manually from M.P.C.Board office

The bidders are required to download the tender document within the pre-scribed date & time mentioned in online tender schedule. After expiry of the date and time for tender document download, Department / Corporation will not be responsible for any such failure on account of bidders for not downloading the document within the schedule even though they have paid the cost of the tender to the Department / Corporation. In such case the cost of the tender paid by the bidders will not be refunded.

PREPARATION & SUBMISSION OF BIDS

Both the Bids (Technical as well as Commercial) shall have to be prepared and subsequently submitted online only. Bids not submitted online will not be entertained.

Online Bid Preparation

EARNEST MONEY DEPOSIT (EMD)

Bidders are required to pay Earnest Money Deposit (if applicable) through Online Payment modes i.e. **Net Banking, Debit Card, Credit Card and NEFT/RTGS** during Bid Preparation Stage.

This payment will not be accepted by the department through any offline modes such as Cash, Cheque or Demand Draft.

If for any reason a bidder fails to make this payment through online modes, system won't allow the bidder to complete Bid Preparation stage resulting in his/her elimination from Online Bidding Process.

In case EMD is mandatory to all the bidders for a tender, offers made without EMD shall be rejected.

In Bid Preparation stage, bidders get access to Online Technical and Commercial Envelopes where they require uploading documents related to technical eligibility criteria and quote commercial offer for the work / item in respective online envelopes.

TECHNICAL BID

Following documents should be uploaded in Online Technical Envelope (T1) in PDF format, if required can be zipped as well and then uploaded during **Online Bid Preparation stage**.

The list of documents for Technical Envelope is as follows:

Sr. No.	List of Documents	Compulsory / Additional
1	Covering Letter As per Format in EXHIBIT 1	Compulsory
2	Attested copy of Power of Attorney	Compulsory
3	Proof of Purchase of RFP	Compulsory
4	EMD as per Section 6.6.2	Compulsory
5	Certificate of incorporation / Registration Service Tax registration certificate	Compulsory
6	Documentary Proofs as testimony for Evaluation of Technical bids as per criteria listed in Section 7.4.1	Compulsory
7	Technical Proposal as mentioned in section 7.2 PART 2 (b)	Compulsory
8	Covering Letter As per Format in EXHIBIT 2	Compulsory
9	Manufacturer's Authorisation Form as per EXHIBIT 3	Compulsory
10	Manufacturer's Declaration about Technical Compliance as per EXHIBIT 4	Compulsory
11	Duly filled Technical Compliance form as per Annexure 2	Compulsory

COMMERCIAL BID

All commercial offers must be prepared online (An online form will be provided for this purpose in Online Commercial Envelope (C1), during **Online Bid Preparation** stage).

Any bidder should not quote his offer any where directly or indirectly in Technical Envelope (T1), failing which the Commercial Envelope (C1) shall not be opened and his tender shall stand rejected.

Note: During Online Bid Preparation stage, bidders are allowed to make any changes or modifications in the bid data uploaded by them in Technical (T1) as well as Commercial (C1) envelope.
Towards the end of Bid Preparation, once verification of EMD payment is successful, bidder completes the Bid Preparation stage by generating the Hash Values for T1 and C1. Post this, system won't allow him/her to make any further changes or modifications

in the bid data.

Online Bid Submission

In this stage, bidders who have successfully completed their Bid Preparation stage are required to transfer the data, already uploaded by them during Bid Preparation stage, from their custody to department's custody.

Note: During this stage, bidders won't have any capability to make any kind of changes or editing into technical as well as commercial data.

INSTRUCTION TO BIDDERS FOR ONLINE BID PREPARATION & SUBMISSION

Bidders are required to pay Earnest Money Deposit (if applicable to them) through Online Payment modes i.e. **Net Banking, Debit Card, Credit Card and NEFT/RTGS** during Bid Preparation Stage.

If for any reason a bidder fails to make this payment through online modes, system won't allow the bidder to complete Bid Preparation stage resulting in his/her elimination from Online Bidding Process.

Hence, it is strongly recommended to bidders to initiate this payment well in advance prior to expiry of Bid Preparation stage in order to avoid elimination from Online Bidding Process on grounds of failure to make this payment.

During the activity of **Bid Preparation**, bidders are required to upload all the documents of the technical bid by scanning the documents and uploading those in the PDF format. This apart, bidders will have to quote commercial offer for the work / item, for which bids are invited, in an online form made available to them in Commercial Envelope. This activity of **Bid Preparation** should be completed within the pre-scribed schedule given for bid preparation.

After **Bid Preparation**, the bidders are required to complete **Bid Submission** activity within pre-scribed schedule without which the tender will not be submitted.

Interested contractors / bidders will have to make online payment (using credit card/debit card/net banking/Cash Card) of Rs. **1054**/- (inclusive of all taxes) per bid per tender to online service provider of e-Tendering system (Sify NexTenders) at the time of commencing **Online Bid Submission** stage of the tender schedule.

Non-payment of processing fees will result in non submission of the tender and Department will not be responsible if the tenderer is not able to submit their offer due to non- payment of processing fees to the e-tendering agency.

Detailed list of different modes of online payment to e-tendering service provider **(E-Payment Options)** has been provided under **E-Tendering Toolkit for Bidders** section of **https://maharashtra.etenders.in** .

The date and time for online preparation followed by submission of envelopes shall strictly apply in all cases. The tenderers should ensure that their tender is prepared online before the expiry of the scheduled date and time and then submitted online before the expiry of the scheduled date and time. No delay on account of any cause will be entertained. Offers not submitted online will not be entertained.

If for any reason, any interested bidder fails to complete any of online stages during the complete tender cycle, department shall not be responsible for that and any grievance regarding that shall not be entertained.

Any amendment to the tender will be placed on sub portal of the Department, who have invited the bids, on e-tendering portal of the Govt. of Maharashtra. The tenderer will not be communicated separately regarding the amendment.

OPENING OF BIDS:

The bids that are submitted online successfully shall be opened online as per date and time given in detailed tender schedule (if possible), through e-Tendering procedure only in the presence of bidders (if possible).

Bids shall be opened either in the presence of bidders or it's duly authorised representatives. The bidder representatives who are present shall sign a register evidencing their attendance. Only one representative per applicant shall be permitted to be present at the time of opening the tender.

TECHNICAL ENVELOPE (T1):

First of all, Technical Envelope of the tenderer will be opened online through e-Tendering procedure to verify its contents as per requirements.

At the time of opening of technical bid the tenderer should bring all the original documents that have been uploaded in the Online Technical Envelope (T1) so that same can be verified at the time of opening of technical bid.

If the tenderer fails to produce the original documents at the time of opening of technical bid then the decision of the committee taken on the basis of document uploaded will be final and binding on the tenderer.

If the various documents contained in this envelope do not meet the requirements, a note will be recorded accordingly by the tender opening authority and the said tenderer's Commercial Envelope will not be considered for further action but the same will be recorded.

Decision of the tender opening authority shall be final in this regard.

The right to accept or reject any or all tenders in part or whole without assigning any reason thereof is reserved with Tender Opening Authority and his decision(s) on the matter will be final and binding to all.

The commercial bids shall not be opened till the completion of evaluation of technical bids.

The commercial Bids of only technically qualified Bidders as mentioned above will be opened.

COMMERCIAL ENVELOPE (C1):

This envelope shall be opened online as per the date and time given in detailed tender schedule (if possible), through e-Tendering procedure only,

PRICE SCHEDULE

Note: ***Commercial Offer has to be entered online only. An Online Form, similar to the Commercial format given below, will be available to the bidders in Commercial Envelope (C1) during Online Bid Preparation stage where bidders would quote their offer.***

Final List of Documents to be uploaded Online:

The following documents should be uploaded by the bidders in the form of PDF Files in the same order as mentioned below, on the e-Tendering website during **Online Bid Preparation** stage.

Sr. No.	List of Documents	Compulsory / Additional
	FOR TECHNICAL BID	
1	Covering Letter As per Format in EXHIBIT 1	Compulsory
2	Attested copy of Power of Attorney	Compulsory
3	Proof of Purchase of RFP	Compulsory
4	EMD as per Section 6.6.2	Compulsory
5	Certificate of incorporation / Registration Service Tax registration certificate	Compulsory
6	Documentary Proofs as testimony for Evaluation of Technical bids as per criteria listed in Section 7.4.1	Compulsory
7	Technical Proposal as mentioned in section 7.2 PART 2 (b)	Compulsory
8	Covering Letter As per Format in EXHIBIT 2	Compulsory
9	Manufacturer's Authorisation Form as per EXHIBIT 3	Compulsory
10	Manufacturer's Declaration about Technical Compliance as per EXHIBIT 4	Compulsory
11	Duly filled Technical Compliance form as per Annexure 2	Compulsory
	FOR COMMERCIAL / PRICE BID	
1	Covering Letter As per Format in EXHIBIT 2	Compulsory
2	Price Bid in the format given in Annexure 3, duly signed	Compulsory
3		

Note: *During **Online Bid Preparation**, apart from the above mentioned documents, if any need arises to upload additional documents in Technical Envelope, an option of '**Upload Additional Documents**' has been provided in the e-Tendering software which will be available to bidders during **Online Bid Preparation** stage.*