

भाकृअनुप–राष्ट्रीय पशुरोग जानपदिक एवं सूचना विज्ञान संस्थान ICAR–National Institute of Veterinary Epidemiology and Disease Informatics भारतीयकृषिअनुसन्धान परिषद्, रामगोंडनहल्ली, येलहंका, बेंगलुरू – 560064



ICAR Campus, Ramagondanahalli, Post Box No: 6450, Yelahanka, Bengaluru - 560064 Ph: +91 80 23093110 Fax: + 91 80 23093222, Email: director.nivedi@icar.gov.in GST No.29AAAGI0142J1ZK

NOTICE INVITING TENDER THROUGH E-PROCUREMENT FOR ANNUAL MAINTENANCE CONTRACT FOR HEATING, VENTILATION AND AIR CONDITIONING (HVAC) AND BUILDING MANAGEMENT SYSTEM(BMS)

Document to be submitted <u>online</u>
for
(Technical & Financial Bid as per Schedule of requirement)



भाकृअनुप–राष्ट्रीय पशुरोग जानपदिक एवं सूचना विज्ञान संस्थान

ICAR-National Institute of Veterinary Epidemiology and Disease Informatics

भारतीयकृषिअनुसन्धान परिषद्, रामगोंडनहल्ली, येलहंका, बेंगलुरू – 560064 ICAR Campus, Ramagondanahalli, Post Box No: 6450, Yelahanka, Bengaluru - 560064

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F.No.5-414/P&S/NIVEDI/2016-17/Vol-II



Date: 01.04.2021

NOTICE INVITING TENDER THROUGH EPROCUREMENT FOR ANNUAL OPERATION AND MAINTENANCE OF HEATING, VENTILATION AND AIR CONDITIONING AND BUILDING MANAGEMENT SYSTEM.

National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) is a public funded Research Organization under Indian Council of Agricultural Research, Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India.

Online bids are invited from interested firms under two bid system for Annual Operation and Maintenance of Heating, Ventilation and Air conditioning (HVAC) and Building Management System at ICAR-NIVEDI, Post Box No. 6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064. Manual bids shall not be entertained.

Tender documents may be downloaded from eProcurement website of CPPP http://eprocure.gov.in/eprocure/app as per the schedule as given in CRITICAL DATE SHEET as under.

CRITICAL DATE SHEET

Tender No	No.5-414/P&S/NIVEDI/2016-17/Vol-II
Name of organization	ICAR-National Institute of Veterinary Epidemiology
	and Disease Informatics, Post Box no. 6450,
	Ramagondanahalli, Yelahanka, Bengaluru-560 064
Date and Time for Issue/Publishing	16.00 hrs on 01.04.2021
Document Download/Sale Start Date	16.00 hrs on 01.04.2021
and time	
Pre Bid meeting date/time/venue	•
Bid Submission start Date and Time	01.04.2021 at16.00 hrs
Bid Submission End Date and Time	22.04.2021 at 13.00 hrs
Date & time for opening of technical	23.04.2021 at 14.00 hrs
bid	
Date & time for opening of financial	To be intimated later
bid	
Address for Communication	Director, ICAR-National Institute of Veterinary
	Epidemiology and Disease Informatics,
	Ramagondanahalli, Yelahanka, Bengaluru-560 064

GENERAL INSTRUCTIONSTO THE BIDDERS

- The Tender form/bid documents may be downloaded from the website: http://eprocure.gov.in/eprocure/app Online submission of Bids through Central Public Procurement Portal (http://eprocure.gov.in/eprocure/app) is mandatory. Manual/Offline bids shall not be accepted under any circumstances.
- 2. Tenderers/bidders are requested to visit the website http://eprocure.gov.in/eprocure/app. regularly. Any changes /modifications in tender enquiry will be intimated by corrigendum through this website only.
- 3. In case, any holiday is declared by the Government on the date of opening, the tenders will be opened on the next working day at the same time. The Council reserves the right to accept or reject any or all the tenders.
- 4. An earnest money deposit (also known as bid security) of Rs.30,000/- must be deposited in the form of Demand draft/Pay order (not cheque) payable to "ICAR Unit, NIVEDI" Payable at Bengaluru on or before the last date/time of filing/submission of the online bids on the portal. The tenders will not be considered if the earnest money deposit is not enclosed with the tender. The original demand draft should be submitted to the Administrative Officer on or before the due date. However, the bidder has to upload scan copies of Pay orders/Demand draft of Earnest money deposit with online e-ender. The online tenders received without scan copies of prescribed EMD will not be considered. The bidder has to submit earnest money deposit (also known as bid security) except those who are registered with the National Small Industries Corporation (NSIC). The EMD of all the unsuccessful bidders will be refunded after the contract has been awarded to the successful bidder without any interest thereon. The earnest money will be liable to be forfeited in case the successful bidder refuses to accept the contract immediately.
- 5. The bidders may note that ONLINE bids will only be accepted. All the requisite supporting documents as mentioned in the bid document should and must be uploaded Online http://eprocure.gov.in/eprocure/app. The bids sent through Email, FAX, by hand and/or by post shall not be accepted/processed, in any case.
- 6. Bidder need not to come at the time of Technical as well as Financial bid opening at ICAR-NIVEDI Bengaluru. They can view live bid opening tender after log in on CPPP eProcurement Portal at their remote end. If bidder wants to join bid opening event at ICAR-NIVEDI, Bengaluru they have to come with bid acknowledgement slip that generated after successful submission of online bid.

The Firms are also required to upload copies of the following documents:-

*Technical Bid

- (a) Scanned copy of Earnest Money Deposit (EMD) /its exemption, if any
- (b) Scanned copy of firm's registration, Pan Card No, GST No.
- (c) Tender Acceptance Letter (Annexure-X)
- (d) Scanned copy of Income Tax Statement for the last three years
- (e) Scanned Copy of Terms and conditions and Details of the firm (Annexure –III and IX)
- (f) Scanned copy of Client List/Satisfactory service certificates
- (g) Self-declaration certificate stating that the firm is not currently banned/ blacklisted by any Ministry/Dept. of Central Govt. autonomous body or any State Government.
- (h) Scanned copy of documentary proof regarding firms existence over four years in the trade.

*Financial Bid

(a) Price Bid as BoQ_l.xls

ANNEXURE-II

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP-Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at http://eprocure.gov.in/eprocure/app).

REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: http://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal is free of charge.
- During enrolment /registration, the bidders should provide the correct/true information including valid email-id & mobile no. Bidders are advised to register their valid email address and mobile numbers as part of the registration process.
 These would be used for any communication from the CPP Portal.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- For e-tendering, possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / e-Mudra etc.) on e-Token/Smart Card.
- Upon enrolment on CPP Portal tor e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders
 are responsible to ensure that they do not lend their DSCs to others which may
 lead to misuse and ensure safety of the same.
- Bidder can then log in to the site through the secured log-in by entering their userID / password and the password of the DSC /eToken.

SEARCHING FOR TENDER DOCUMENTS

- There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- Once the bidders have selected the tenders they are interested in, they may
 download the required documents/tender schedules. These tenders can be
 moved to the respective 'My Tenders' folder. This would enable the CPP Portal to
 intimate the bidders through SMS/e-mail in case there is any corrigendum issued
 to the tender document.
- The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

PREPARATION OF BIDS

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- Please go through the tender advertisement and the tender document carefully to
 understand the documents required to be submitted as part of the bid. Please note
 the number of covers in which the bid documents have to be submitted, the
 number of documents-including the names and content of each of the document
 that need to be submitted. Any deviations from these may lead to rejection of the
 bid.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can in PDF/XLS./RAR/DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents(e.g. PAN card copy, annual reports, auditor certificates etc) has been provided to the bidders. Bidders can use "My space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- The bidders should log into the site well in advance for bid submission so that they
 can upload the bid in time i.e. on or before the bid submission time. Bidder will be
 responsible for any delay due to other issues.
- The bidder has to digitally sign and upload the require bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as "offline" to pay the tender fee/EMD as applicable and enter details of the instrument.
- Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be sent through post/courier/deliver in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD any other accepted instrument, physically sent should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- Bidders are requested to note that they should necessarily submit their financial bids in this format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- All the documents being submitted by the bidders would be encrypted using PKI
 encryption techniques to ensure the secrecy of the data. The data entered cannot
 be viewed by unauthorized persons until the time of bid opening. The
 confidentiality of the bids is maintained using the secured Socket Layer 128 bit
 encryption technology. Data storage encryption of sensitive fields is done. Any
 bid document that is uploaded to the server is subjected to symmetric encryption

using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date and time of submission of the bid with all other relevant details.
- The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS.

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

ANNEXURE-III

Terms & Conditions

- 1. The tenderer shall quote rates which will include the service charges and other incidental changes if any. Taxes, if any should be indicated separately.
- 2. The rates should be quoted as per BoQ uploaded on the CPP Portal (reference may be obtained from Annexure-VIII). Taxes if any should be indicated separately. It must be noted that the contract shall be awarded to the firm which fulfils all the required terms and conditions and remains L-1.
- 3. The firm must also possess valid PAN No., GST No. registration number and a copy of the same must also be enclosed with the tender document.
- 4. Copy of previous three years Income tax statement shall be furnished.
- 5. The firm should be in existence for over 04 years in the trade. Documents to this effect shall be furnished.
- 6. Modification in the tender documents after the closing date is not permissible.
- 7. The successful firm shall be required to start the operation and maintenance of the HVAC and BMS systems within one week from the date of confirmed work order failing which EMD shall be forfeited. The rates quoted shall be valid for one year from the date of opening of tender.
- 8. Mere quoting of lowest rates does not mean that order shall be given to that firm. The competent authority will finally decide on the basis of their previous performances.
- 9. An earnest money deposit (also known as bid security) of Rs.30,000/- must be deposited in the form of Demand draft/Pay order (not cheque) payable to "ICAR Unit, NIVEDI" Payable at Bengaluru on or before the last date/time of filing/submission of the online bids on the portal. The tenders will not be considered if the earnest money deposit is not enclosed with the tender. The original demand draft should be submitted to the Administrative Officer on or before the due date. However, the bidder has to upload scan copies of Pay orders/Demand draft of Earnest money deposit with online ender. The online tenders received without scan copies of prescribed EMD will not be considered. The bidder has to submit earnest money deposit (also known as bid security) except those who are registered with the National Small Industries Corporation (NSIC)

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- 10. In case, the successful bidder shows inability at any stage, after the contract if finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money/performance security deposited would be forfeited.
- 11. An amount equivalent to 10% of the annual contract value as a Performance security deposit for the contract is to be deposited by the selected agency/successful tenderer only after receiving a communication from the Institute in any of the following forms within 21 days from the date of issue of work order
- (a) Demand draft/Fixed deposit receipt on any scheduled commercial bank in India, to be drawn in favour of ICAR Unit: NIVEDI A/C payable at Bengaluru.
- (b) Bank guarantee issued by any scheduled Commercial Bank in India which shall be valid upto 60 (sixty) days after the date of completion of all contractual obligations (total 14 months). The original bank guarantee should be sent directly to the purchaser by registered post (A.D) by the issuing bank.
- 12. If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security.
- 13. If any dispute(s) arises between ICAR-NIVEDI and the firm with reference to the contract, the Director, ICAR-NIVEDI will decide it and his decision will be binding on the firms.
- 14. Bid validity: 90 days
- 15. No advance payment will be allowed for providing the service, however the payment will be made on monthly basis on submission of bill duly certified by the concerned officer. Payment will be released through internet banking only. The details of bank account etc as per Annexure-IX may be provided.
- 16. Payment will be made according to the rate accepted and mentioned in the award of contract which should be valid for a period of one year from the date of award of contract and no price revision in rate will be accepted during the period of AMC.
- 17. The contract can be extended for another year subject to the satisfactory service with mutual consent.
- 18. The contract shall be terminated with an advance notice of two months from either side.
- 19. The bidder shall submit self-declaration certificate stating that the firm is not currently banned/ blacklisted by any Ministry/Dept. of Central Govt. autonomous body or any State Government.
- 20. The bidder shall submit a client list where they are providing the similar services for

the last two years along with the experience certificate.

- 21. The persons so provided by the agency under this contract will not be the employee of the Council and there will be no employer-employee relationship between the ICAR-NIVEDI and the person so engaged by the Agency in the aforesaid services.
- 22. The Agency will discharge all their legal obligations in respect of the workers/supervisors to be employed /deployed by him for the execution of the work in respect of their wages and service conditions and shall also comply with all the rules and regulations and provisions of law in force that may be applicable to them from time to time. The contractor shall indemnify and keep indemnified the Council from any claims, loss or damages that may be caused to it on account of any failure to comply with the obligations under various laws. In case of any dispute, the decision of Director, ICAR-NIVEDI shall be final and binding on the contractor.
- 23. All the rights to accept or reject whole or part of the tender without assigning any reason thereof is reserved by the Director, ICAR-NIVEDI.
- 24. The TDS provision under Income Tax/TDS provision under GST or any other tax at the applicable rates shall be deducted at source from monthly bills of the successful bidder, as per rules/Instructions made applicable from time to time by the Government.

ANNUAL NON COMPREHENSIVE MAINTENANCE CONTRACT FOR HEATING VENTILATION AND AIR CONDITIONING (HVAC) AND BUILDING MANAGEMENT SYSTEM (BMS)

I. SCOPE OF WORK:

The scope of work as mentioned below are the minimum expected from the firm / agency / contractor apart from break down maintenance and any other work required for operation and maintenance in proper way as per the operation and maintenance manuals of respective equipment and as per good engineering practices will be required to be done under this scope of work.

Successful bidder will make Proforma for recording the following minimum work schedule/parameters and to show the employer to ensure proper accomplishment of these tasks.

Note: Brief details of HVAC Plant and equipments are given at ANNEXURE-V

A. WORK TO BE DONE ON DAILY BASIS.

- 1. Adjustment in the system to achieve required Temperature, room Pressure & Relative Humidity level as per Laboratory Requirements. Release of air locks /blocks in the system.
- 2. The chiller key parameters like, compressor running status, suction & discharge pressure, evaporator water flow, expansion valve position, chiller running time etc., shall be checked and recorded in the LOG BOOK/Sheets (provided by the firm/agency/contractor/ on hourly basis) if the readings are found abnormal intimate to concerned Engineer-Incharge.
- 3. To check all electrical motors connections for proper contact with the terminals and their bearings for abnormal noise/heating and to take necessary action if found abnormal.
- 4. To check water level in the chiller makeup water tank located near terrace and check functioning of float valve, three way valve & See proper function of the circulation pumps.
- 5. Updating of all relevant documents, log books, Service/Troubleshooting works Register etc.,
- 6. Reporting day to day work & Progress to concerned Engineer-In charge.
- 7. Stopping the plant with prior intimation to the officer incharge whenever there is some abnormal noise in Air handling unit or if any equipment failure issues occur.
- 8. Recording complaints received and attending the same and closing the complaint as per format.
- 9. Replacement of defective belts, pulleys, blowers, shafts, bearings, windings etc., in AHU's whenever found defective.
- 10. Replacement of defective/unserviceable items like MCB's, switches, fuses, sockets, contactors, starters, indicating lamps, overload relays, controls, wires and lugs in control panel as well as in distribution boards (PDB, LDB, UPSPDB & UPSLDB) whenever found defective.

- 11. Any works, other than indicated above but required essentially for proper functioning of the Equipments need to be carried out by the bidder.
- 12. Minor Repairs to the Equipments such as Chillers, AHU blowers, AHU motors, BMS, MCC, DDC Panels and others shall be carried out by the bidder as and when any breakdown occurs.
- 13. Cleaning of dust on AHU Panel's, chiller panel's area on weekly basis.
- 14. Cleaning of dust in Treated fresh Air unit on weekly basis.
- 15. Painting work for rusted areas such as valves, strainers, motors, ss railing areas, etc., on as and when required.
- 16. Operation & Maintenance Service is required for 24 X 7 with minimum manpower shown in Annexure-VI. The designated employees shall manage to work on shift basis to cover the 24x 7 period.

Maintenance schedule for room Parameters:

Sl.No.	Reading of machinery	Number of times a day	Time Intervals for
			Taking Readings
1.	Room parameters temperature,	6	2 AM, 6AM,
	Relative Humidity & Differential		10AM,2PM,6PM,10PM
	Pressure		
2.	Chiller readings	4	6AM,2PM,6PM,10PM
3.	Magnehelic gauge, Temperature.	4	6AM,2PM,6PM,10PM
	& Pressure gauge readings		
	located in Air Handling unit		
	manifold		

B. WORK TO BE DONE ON MONTHLY BASIS:

- 1. To clean all the strainers and the filters on monthly basis.
- 2. Cleaning, drying and packing of Pre & fine filters of AHU's as per service maintenance schedule.
- 3. To check water inside the makeup tank for hardness/dirty and fill with soft water if required.
- 4. To check the gland /seal, coupling of pumps.
- 5. To check safety controls mechanical, Electrical inter-locks of the various equipments.
- 6. To check all AHU ducts/insulation/proper positioning/damage and rectifying the same where ever required.
- 7. To check and lubricate (if required) the bearing of the pumps/motors and keep the proper record.
- 8. To check the foundation bolts of the pumps / motors and to take the necessary action if required.
- 9. Check the quantity of Air flow from various out lets in each room/Area as per room data sheet and do adjustment of dampers etc as and when required.
- 10. Check the performance of each equipment of HVAC plant for proper functioning.
- 11. All the equipments/installations shall always be kept in good and trouble free operating Conditions.
- 12. All the required records for break-downs/repairs and maintenance etc. shall be maintained in the form of history books and complaint logbooks etc. as per directions.

- 13. Open up the electrical control panel, inspect for any blackening of contacts, loosening of connections, component condition, cleaning of dust and replacement of cooling fan in control panel if found damaged & rectify if any abnormality is noticed.
- 14. Check the fan belts for proper tension, and replace if necessary, and examine the fans for correct alignment.
- 15. Checking of Fire alarm panels/Hooters/smoke detectors/Building Management system software issues for any pending alarms and rectifying the same if any abnormality noticed.
- 16. Replacement of malfunctioned hooters, smoke detectors whenever found defective.
- 17. Regular cleaning of walk on ceiling system & light fixtures as and when required.
- 18. All the maintenance works shall be carried out in accordance with the manufacturer's specifications and instructions of the engineer in charge.

C. WORK TO BE DONE ON QUARTERLY BASIS:

- 1. To drain out water and clean the AC plant room/cooling tower/AHU/chiller condensers etc. as and when required/scheduled.
- 2. Inspect the conditions of the Temperature & Pressure gauges for proper function and replace the same if found defective.
- 3. Check for proper operation of control & safety devices like Thermostat, Humidistat, 3 way actuating valves etc., and reset if required.
- 4. Entire AHU Room to be thoroughly cleaned with vacuum cleaner/blower & to be made dust free.
- 5. Cleaning of ducting system having diffusers, Grills, Dampers etc.,
- 6. Clean the water strainers in AHU manifold and chilled water system.
- 7. Conducting Mock test for firefighting system to ensure proper operation.

BREAKDOWN MAINTENANCE:

parameters shall be checked & recorded.

- 1. In case of any Breakdown complaint should be brought to the notice of concerned incharge and attended immediately to avoid inconvenience to research activities.
- 2. The contractor should provide necessary tools required to attend any breakdown.

 After attending to breakdowns, the unit shall be closely observed & monitored few days &

NOTE:

- 1. Contractor should supply basic materials like suitable grade of grease/lubricant, cotton waste, cleaning brush, paint, rust sprays etc., to carry out servicing without any extra cost.
- 2. Chiller condenser fins, filters etc., are to be thoroughly cleaned to achieve desired air and water flow rates.
- 3. Necessary care should be taken while carrying out all types of maintenance/ servicing of equipment to avoid damages. Any damages of equipment /equipment parts has to be replaced free of cost.
- 4. Any accidents occurred due to negligence/inexperience during work is purely the responsibility of the contractor.
- **5.** The deployed persons should have computer knowledge of Building Management system Software version "TREND 963 "&" INDUSOFT" software.
- 6. It is fully responsibility of the contractor to deploy qualified staff with hands on experience, relevant License/Permits to handle electrical, Air conditioning works.
- 7. For the purpose of Continuous monitoring and maintenance of the system throughout the year, contractor has to deploy adequate number of qualified and experienced staff members as mentioned in (Annexure-VI) at site on everyday basis to carry out the dedicated work.
- 8. Any other issues regarding site condition may be communicated to concerned incharge through Emails.

ANNEXURE -V

Sl. No.	Name of item / machinery	Serial No.	Model No.	Qty	Capacity	Make
01	Air Cooled Chiller-1	392081/1	ECGAM-080	01	60TR	Trane
02	Air Cooled Chiller-2	392081/2	ECGAM-080	01	60TR	Trane
03	Chilled Water Pumps	Art4428361/14W03/20 0058 Art4428361/14W03/20 0056 Art4428361/14W03/20 0057	MVI-5202	3	150GPM	WILO
04	Chilled water tank	NA	CCWS100	01	1000LTR	SINTEX
05	AHU-1	NA	NA	01	2432CFM	CITIZEN
06	AHU-2	NA	NA	01	3181CFM	CITIZEN
07	AHU-3	NA	NA	01	2945CFM	CITIZEN
08	AHU-4	NA	NA	01	2632CFM	CITIZEN
09	AHU-5	NA	NA	01	4473CFM	CITIZEN
10	AHU-6	NA	NA	01	3940CFM	CITIZEN
11	AHU-7	NA	NA	01	2290CFM	CITIZEN
12	AHU-8	NA	NA	01	2421CFM	CITIZEN
13	AHU-9	NA	NA	01	8361CFM	CITIZEN
14	BIBO HOUSING 1TO 6	NA	IHX1W	06	2000CFM	AAF
15	EXHAUST 1TO 4	NA	IAH-020	04	600CFM	ICLEAN
16	EXHAUST 5TO 6	NA	IAH-020	02	1000CFM	ICLEAN
17	EXHAUST-7	NA	IAH-020	01	2200CFM	ICLEAN
18	EXHAUST-8	NA	IAH-020	01	2241CFM	ICLEAN
19	VENTILATION UNIT-1	NA	NA	01	1669CFM	CITIZEN
20	VENTILATION UNIT-2	NA	IAH-020	01	800CFM	ICLEAN
21	VENTILATION UNIT-3	NA	IAH-020	01	356CFM	ICLEAN
22	EHAUST FOR VENT-1	NA	NA	01	1701CFM	CITIZEN
23	EHAUST FOR VENT-2	NA	NA	01	1000CFM	ICLEAN
24	EHAUST FOR VENT-3	NA	NA	01	576CFM	ICLEAN
25	TFA	NA	NA	01	8361CFM	CITIZEN
26	DYNAMIC PASS	ICTL/NDDB/DPB/254/1	ICTL/NDDB	04	600X600	ICLEAN

	BOX 1 TO 4	3-14	/DPB/0202			
	DOX 1 10 4	ICTL/NDDB/DPB/257/1	/ DI D/ 0202			
		3-14				
		ICTL/NDDB/DPB/256/1				
		3-14				
		ICTL/NDDB/DPB/255/1				
		3-14				
27	DYNAMIC PASS	ICTL/NDDB/DPB/253/1	ICTL/NDDB	01	1000X100	ICLEAN
	BOX 5	3-14	/DPB/3333		0	
28	STATIC PASS	ICTL/NDDB/DPB/274/1	ICTL/NDDB	03	600X600	ICLEAN
	BOX 1 TO 3	3-14	/DPB/0202			
		ICTL/NDDB/DPB/258/1				
		3-14				
		ICTL/NDDB/DPB/259/1				
		3-14				
29	TEMPERATURE	NA	NA	30	0-100°C	WIKA
	GAUGES					
30	PRESSURE	NA	NA	30	0-	WIKA
0.4	GAUGES	37.1	27.4		7KG/CM ²	
31	MAGNEHELIC	NA	NA	33	0-25	DWYER
	GAUGES				0-50	
					0-100	
32	DOOM DD	NA	NA	25	MMWC 0-	POLMON
32	ROOM DP DIGITAL	NA NA	NA	25	100MMWC	POLMON
	DISPLAY				TOOMINIVIC	
33	ROOM TEMP. &	NA	NA	25	0-60°C	POLMON
33	RH DIGITAL	IVA	IVA	23	0-00 C	1 OLMON
	DISPLAY					
34	3 WAY VALV	NA	NA	10	NA	HONEY WELL
	ACTUATOR	141	1411	10	1411	HONET WEEL
35	MODULATING	NA	NA	13	NA	HONEY WELL
	ACTUATOR					
36	ON-OFF	NA	NA	16	NA	HONEY WELL
	ACTUATOR					
37	DP SWITCH	NA	NA	33	NA	HONEYWELL
38	DP	NA	NA	07	NA	HONEYWELL
	TRANSMITTER					
39	DUCT SMOKE	NA	NA	06	NA	HONEYWELL
	SENSOR					
40	DUCT T & RH	NA	NA	05	NA	HONEEYWEL
	SENSOR					L
41	THERMOSTAT	NA	NA	03	NA	HONEYWELL
	CONTROLLER					
42	CCTV CAMERA	NA	SCD-	16	NA	SAMSUNG
	g		1020/1040			
43	SMOKE	NA	MI-PTSE-	73	NA	HONEYWELL
	DETECTOR		S2/MI-			
	MANUAL CALL	NT A	PTSE-S21	1.1	NY 4	HONESMARK
44	MANUAL CALL	NA	MI-MCP-GB	11	NA	HONEYWELL
	POINTS					

45	HOOTER	NA	MI-WSO	11	NA	HONEYWELL
46	REMOTE	NA	NA	36	NA	HONEYWELL
	RESPONSE					
	INDICATOR					
47	MOTION	NA	NA	06	NA	SECURICO
	SENSORS					
48	ACCESS	NA	SBL-30	04	NA	HONEYWELL
	CONTROL					
	SYSTEM					
49	MCC PANEL-1	ICTL/NDDB/ELE/TCP-	NA	01	NA	EMATION
		001				
50	DDC PANEL	NA	NA	07	NA	HONEYWELL
						TREND
51	BMS	4CE4100K57	500-222ix	01	NA	HP
	SOFTWARE					
	COMPUTER					
52	INDUSOFT	4CE4100K53	500-222ix	01	NA	HP
	SOFTWARE					
	COMPUTER					
53	DIGITAL VIDEO	NA	SRD-1654D	01	16	SAMSUNG
	RECORDER				CHANNEL	

Annexure-VI

QUALIFICATIONS AND EXPERIENCE OF PERSONS DEPLOYED AT SITE

S.No	Designation	Qualification & Experience
1	Supervisor (High Skilled- one)	B.E/B.Tech in the field of Electrical/Mechanical Engineering with at least 5 years of experience in the field of Maintenance of central Air-Conditioning/HVAC Plants.
2	Air-conditioning Technician (Skilled- one)	Should have passed Diploma in the Trade of Electrical/Mechanical Engineering with at least 4 years of Experience in the field of maintenance of Central Air – Conditioning/HVAC Plants.
3	Electrical Technician (Skilled - one)	Should have passed ITI in the trade of Electrician and have minimum three years experience in the field of maintenance electrical control panels and system of central Air-conditioning plants (or)have 4 years of experience in maintenance of Electrical panels and systems of Central Air conditioning /HVAC Plants
4	Helper (Unskilled- one)	Should have basic working knowledge on Industrial Air-conditioning Equipments preferably with 2 years of HVAC Maintenance Experience.

NOTE:

- 1. Any of the staff member appointed by contractor is found to be 'Not competent', he has to replace by a right person within a stipulated time as given by Concerned Officer, ICAR-NIVEDI.
- 2. In case any staff member deployed by the contractor is found to be leaving the job, (At least minimum one month prior notice to be given to concerned Incharge). Further it is the responsibility of the contractor to fill the vacant position within stipulated time.
- 3. It is purely contractor's responsibility to get his staff acquainted with the site condition, Operation & Maintenance procedures, Equipment details, Safety devices, Scope of work etc.,
- 4. Site Manager should visit the site for overall inspection of site at least once in a month (or)as and when concerned officer demand his presence. If found irregular, Penalty may be charged for the same.
- 5. All the staff deployed on shifts should attend work as per their allotted shifts/timings compulsorily, if found irregularity in shifts, necessary action will be taken.
- 6. Alternative arrangement should be provided in case of plant supervisor goes on leave apart from the technician's staff working in the shifts.
- 7. If day shift working Technician goes on leave, it is mandatory to provide one reliever in his place apart from the supervisor or technicians staff working in the shifts.
- 8. In case of any staff seeking for leaves, it is necessary to inform two days earlier to concerned incharge and also it is mandatory to submit leave application to incharge.
- 9. All the staff deployed on site is eligible leaves as per the organization policy.

ANNEXURE-VII

EQUIPMENT WISE MAINTENANCE SCHEDULE

Sl.No	Equipment Details	Daily	Weekly	Monthly	Yearly Maintenance
		Maintenance	Maintenance	Maintenance	
1	Air Handling Units & Exhaust Units	1. Recording the Temperature & Pressure gauges readings in AHU manifold. 2. Checking the condition of pre & fine filters	Checking the foundation bolts of the blowers & also proper contact of the electrical connections	Cleaning of Pre Filters (10 microns) & fine filters (3 microns)	1.Air balancing 2.Water balancing 3. Check all AHU ducts/insulation/pro per positioning.
2	Chillers	Recording the key parameters of chillers	Cleaning of condensers, panels	Checking the fan condition & cleaning of fins, strainers & dust in chiller units.	Overall service of the chiller
3	Smoke detectors	NA	NA	Cleaning of smoke detector case of dust accumulation	Mock Test of detectors for ensure of proper operation
4	Dynamic & Static pass boxes	Check the running status	NA	Checking the operation of inbuilt lights for proper operation	DOP/PAO Test for dynamic pass boxes once in 6 months
5	Temperature & Pressure gauges	Monitoring the parameters	NA	NA	Calibration required for both Temperature & pressure gauges once in 6 months*
6	Room Digital Displays	Monitoring the parameters	NA	NA	Calibration of Transmitter Displays once in 6 months *

st Note: Calibration of Temperature and pressure gauges and room Transmitter displays to be strictly carried out once in 6 months, through authorized NABL accredited labs.

ANNEXURE-VIII

(Reference for BoQ) (To be quoted in format provided on CPP Portal)

Price bid for Annual Operation and maintenance of HVAC and BMS system at ICAR-NIVEDI, BENGALURU

Sl.	Description of service required	Price	quote	d	(in
No.		figure/	words	as	per
		BoQ)			
1.	Annual Operation and maintenance of Heating, Ventilation and Air conditioning system (HVAC) and Building Management System				

• Taxes & duties as applicable should be indicated separately in the column provided.

Note: The above mentioned financial Proposal/Commercial bid format is provided as BoQ_1.xls along with this tender document at http://eprocure.gov.in/eprocure/app. Bidders are advised to download this BoQ_1.xls as it is and quote their offer/rates in the permitted column and upload the same in the Financial bid. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with ICAR-NIVEDI.

ANNEXURE-IX

DETAILS OF FIRM

1. Name of the firm	
2. Registered/Postal Address	
3. Permanent account No.(PAN)	
4. Service Tax Registration No.	
5. VAT registration No	
6. Bank details	
a) Bank name	
b) Address of bank	
c) Account No.	
d) Type of Account(Current/Savings)	
e) MICR No.	
f) RTGS/NEFT Code	

Date:	Name of the Authorized Signatory
Place:	Stamp & Signature

TENDER ACCEPTANCE LETTER

(To be given on Company letter head)

То,
The Director, ICAR-NIVEDI, Post Box No. 6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064
Sub: Acceptance of Terms and Conditions of tender
Tender reference No:
Dear Sir,
1. I/We have downloaded/obtained the tender document(s) for the abovementioned tender/work from the website(s) namely:
As per your advertisement, given in the above mentioned website(s) 2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No to

(Signature of the Bidder with official seal)

Advance tender search in Central Public Procurement Portal Website

URL:http://eprocure.gov.in/eprocure/app



