



भाकृअनुप-राष्ट्रीय पशुरोग जानपदिक एवं सूचना विज्ञान संस्थान  
ICAR–National Institute of Veterinary Epidemiology and Disease Informatics

रामगोंडनहल्ली, येलहंका, बेंगलुरु – 560064

Ramagondanahalli, Post Box No: 6450, Yelahanka, Bengaluru - 560064

Ph: +91 80 23093110/+ 91 80 23093111 Fax: + 91 80 23093222



---

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

Document to be submitted online  
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

रामगोंडनहल्ली, येलहंका, बेंगलुरु - 560064

Ramagondanahalli, Post Box No: 6450, Yelahanka, Bengaluru - 560064

Ph: +91 80 23093110/+ 91 80 23093111 Fax: + 91 80 23093222



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

Date: 14-12-2016

**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
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	18.00 hrs on 14-12-2016
Document Download/Sale Start Date and time	18.00 hrs on 14-12-2016
Pre Bid meeting date/time/venue	-
Bid Submission start Date and Time	15-12-2016 at 9.00 hrs
Bid Submission End Date and Time	04-01-2017 at 16.00 hrs
Date & time for opening of technical bid	05-01-2017 at 11.00 hrs
Date & time for opening of financial bid	To be intimated later
Address for Communication	Director, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, Ramagondanahalli, Yelahanka, Bengaluru-560 064

## ANNEXURE-I

### GENERAL INSTRUCTIONS TO THE BIDDERS

1. 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. The interested Firms are required to deposit (in original) Tender Fee of **Rs.500** (Non-refundable) in the shape of Demand Draft drawn in favour of **ICAR UNIT-NIVEDI A/c payable at Bengaluru** may be addressed to the Director, ICAR-NIVEDI, National Institute of Veterinary Epidemiology and Disease Informatics, Post Box No.6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064 on or before bid opening date and time as mentioned in the Critical Date Sheet.
5. The interested Firms are required to deposit (in original) an Earnest Money Deposit (EMD of **Rs. 22,000/-** in the form of **Demand Draft/FDR-TDR/Bank Guarantee** from any of the Commercial Bank in favour of **ICAR UNIT-NIVEDI A/c payable at Bengaluru** may be addressed to the Director, ICAR- National Institute of Veterinary Epidemiology and Disease Informatics, Post Box No.6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064 on or before bid opening date and time as mentioned in the Critical Date Sheet.
6. The firm should send the original brochures of the product if any and may be addressed to the Director, ICAR- National Institute of Veterinary Epidemiology and Disease Informatics, Post Box No.6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064 on or before bid opening date and time as mentioned in the Critical Date Sheet.
7. 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 Tender Fee and Earnest Money Deposit (EMD) /its exemption, if any
- (b) Scanned copy of firm's registration, Pan Card, VAT no/Service tax 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

**\*Financial Bid**

- (a) Price Bid as BoQ\_1.xls

## 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 for 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 required 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.

**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., TIN No. and Service Tax 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. The interested firms are required to deposit an Earnest Money Deposit (EMD) of Rs. 22,000 in the form of Demand Draft/FDR-TDR/Bank Guarantee from any of the Commercial Bank in favour of **ICAR UNIT-NIVEDI A/c payable at Bengaluru** may be addressed to the Director, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, Post Box No. 6450, Ramagondanahalli, Yelahanka, Bengaluru-560 064 **on or before bid opening date and time of 16.00 hrs on 05-01-2017**. No quotation shall be considered without the Tender fee and Earnest money deposit. Demand draft drawn in favour of any officer other than **ICAR Unit-NIVEDI A/c payable at Bengaluru** will not be accepted and the tender will be rejected. The earnest money will be refunded only after the finalization of the procurement and no interest will be paid on earnest money.

10. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money/performance security deposited would be forfeited.
11. The firms to whom the tender will be awarded, will have to deposit the performance security equal to 10% of the total amount within 21 days from the date of acceptance of tender.
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 his 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.

**ANNUAL OPERATION AND MAINTENANCE CONTRACT FOR HEATING, VENTILATION AND AIRCONDITIONING (HVAC) AND BUILDING MANAGEMENT SYSTEM**

**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 Performa for recording the following minimum work schedule/parameters and show to the employer to ensure proper accomplishment of these tasks.**

**Note: Details of HVAC plant and equipments are given at ANNEXURE-V**

**A. WORK TO BE DONE ON DAILY BASIS.**

1. The reading of the suction and discharging pressure, oil pressure, oil and gas level, suction and discharging pressure of pumps, compressor running time , voltmeter & Ammeters etc., shall be checked and recorded in the LOG BOOK/Sheets (provided by the firm/agency/contractor/ on hourly basis) and Necessary action is to be taken if the reading is not normal.
2. The log books /Sheets need to be certified by the Bio safety officer also soft copy of the same has to be submitted to Biosafety officer.

<b>Sl. No.</b>	<b>Daily recordings of machinery</b>	<b>Number of times a day</b>	<b>Time interval for taking readings</b>
01	Room parameters temperature, Relative Humidity & Differential Pressure	6	2AM, 6AM, 10AM, 2PM, 6PM & 10PM
02	Chiller readings	3	6AM, 2PM, & 10PM
03	Magnehelic gauge, Temp. & pressure gauge readings located in Air Handling unit manifold	3	6AM, 2PM, & 10PM

3. To check all electrical motors connections for proper contact with the terminals and their bearing for abnormal noise/heating and to take necessary action if found abnormal.

4. To check water level in the makeup water tank on terrace and check functioning of float valve, three way valve & See proper function of the circulation pumps.
5. To drain out water and clean the AC plat room/cooling tower/AHU's/chiller condensers etc. as and when required/scheduled please see the Annexure –VII.
6. The temperature of each room shall be measured for any corrective action and these are to be recorded in LOG BOOK/sheet.
7. To keep machine rooms equipments such as chilling plant area. AHU's exhausts neat and clean including their room floor, wall ceiling etc. in an orderly manner.
8. Any other work required for the equipments for proper functioning

**B. WORK TO BE DONE ON WEEKLY BASIS:**

- To check refrigerant system (chiller) for proper operation
- To clean all the strainers of AHU Manifold, Chiller water pipeline and the filters
- Filters of AHU's/fresh Air inlet etc. are to be cleaned regularly as per service maintenance Schedule (Annexure- VII).
- To check water inside the makeup tank for hardness/dirty and fill with soften water if required
- Clean of grills and diffusers.

**C. WORK TO BE DONE ON MONTHLY BASIS:**

- To check the gland /seal, coupling of pumps.
- To check the solenoid valve, safety controls mechanical, Electrical/ Electronics and inter-locking of the various equipments.
- To check all AHU ducts/insulation/proper positioning/damage and rectifying the same where ever required.
- To check and lubricate (if required) the bearing of the pumps/motors and keep the proper record.
- The check the foundation bolts of the pumps / motors and to take the necessary action if required.
- Check the quantity of Air flow from various out lets in each room/ Area as per drawings and do adjustment of dampers etc. as and when required.
- Check the performance of each equipment of HVAC plant for proper functioning
- All the equipments/installations shall always be kept in good and trouble free operating conditions.

- All the required record for break-downs/repairs and maintenance etc. shall be maintained in the form of history books and logbooks etc. as per directions.
- All the maintenance works shall be carried out in accordance with the manufacturer's specifications and instructions of the engineer in charge. However tentative schedule of maintenance shall be as per Annexure-VII.
- Agency has to perform, preventive, predictive and breakdown maintenance of the equipment/component as per the O&M manual and on the basis of breakdown frequency.

#### **D. REGULAR MAINTENANCE:**

- Clean of makeup tank, filters and strainers.
- Starting and stopping plants the plant in proper sequence
- Cleaning of equipments and tightening of belts as and when required.
- Stopping the plant whenever there is some abnormal noise with prior intimation to concerned Officer.
- Maintaining of proper record of preventive maintenance
- Maintaining of proper log sheet of running of plant
- Recording of complains received and attending the same and closing the complaint as per format supplied by the ICAR-NIVEDI
- Descaling /chemical cleaning of condenser tubes once in a year or whenever required
- Checking and setting of controls four times in a year.
- Replacement of oil and cleaning of filter
- Attending problems of any nature in compressors, motors, controls, condenser water pumps, chilled water pumps, , water make up tanks and AHU's etc.
- Carrying out off season preventive maintenance once a year
- Greasing of pumps, motors, AHU,s bearings.
- Descaling of valves and repairing coil of AHU's.
- Replacement of defective belts, pulleys, blowers, shafts, bearings, of AHU's whenever found defective.
- Calibration of room digital displays, temp. & pressure gauges need to carried out once in six months.
- Any works, other than indicated above but required for proper functioning of the Equipments need to be carried out by the bidder.
- Minor Repairs to the equipments such as Chillers, AHU blowers, AHU motors, BMS, MCCs and others shall be carried out by the bidder as and when any breakdown occurs.
- O& M service is required for 24X7 with minimum man power shown in Annexure –VI. Further the designated employees shall manage to work on shift basis to cover the 24x7 period.

- The deployed persons should have knowledge of Building Management System **software version “TREND 963”** and **“INDUSOFT”** software.
- The bidders should be in the similar field at least for 4 years.
- The Agency has to perform preventive, predictive and breakdown maintenance of the equipment/component as per the O&M manual and on the basis of breakdown frequency.
- Operational efficiency of the major equipment minimizing breakdown to 2 to 4%.



**ANNEXURE -V****Details of HVAC plant and Major Equipments**

<b>Sl. No.</b>	<b>Name of item / machinery</b>	<b>Serial No.</b>	<b>Model No.</b>	<b>Qty</b>	<b>Capacity</b>	<b>Make</b>
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	Art4428361/14W03/2 00058 Art4428361/14W03/2 00056 Art4428361/14W03/2 00057	MVI-5202	3	150GPM	WILO
04	Chilled water tank	NA	CCWS100	01	1000LTR	SINTEX
05	AHU-1	NA	NA	01	2432CF M	CITIZEN
06	AHU-2	NA	NA	01	3181CF M	CITIZEN
07	AHU-3	NA	NA	01	2945CF M	CITIZEN
08	AHU-4	NA	NA	01	2632CF M	CITIZEN
09	AHU-5	NA	NA	01	4473CF M	CITIZEN
10	AHU-6	NA	NA	01	3940CF M	CITIZEN
11	AHU-7	NA	NA	01	2290CF M	CITIZEN
12	AHU-8	NA	NA	01	2421CF M	CITIZEN
13	AHU-9	NA	NA	01	8361CF M	CITIZEN
14	BIBO HOUSING 1TO 6	NA	IHX1W	06	2000CF M	AAF
15	EXHAUST 1TO 4	NA	IAH-020	04	600CFM	ICLEAN
16	EXHAUST 5TO 6	NA	IAH-020	02	1000CF M	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 BOX 1 TO 4	ICTL/NDDDB/DPB/254/13-14 ICTL/NDDDB/DPB/257/13-14 ICTL/NDDDB/DPB/256/13-14 ICTL/NDDDB/DPB/255/13-14	ICTL/NDDB/DPB/0202	04	600X600	ICLEAN
27	DYNAMIC PASS BOX 5	ICTL/NDDDB/DPB/253/13-14	ICTL/NDDB/DPB/3333	01	1000X1000	ICLEAN
28	STATIC PASS BOX 1 TO 3	ICTL/NDDDB/DPB/274/13-14 ICTL/NDDDB/DPB/258/13-14 ICTL/NDDDB/DPB/259/13-14	ICTL/NDDB/DPB/0202	03	600X600	ICLEAN
29	TEMPERATURE GAUGES	NA	NA	30	0-100 <sup>0</sup> C	WIKA
30	PRESSURE GAUGES	NA	NA	30	0-7KG/CM <sup>2</sup>	WIKA
31	MAGNEHELIC GAUGES	NA	NA	33	0-25 0-50 0-100	DWYER

					MMWC	
32	ROOM DP DIGITAL DISPLAY	NA	NA	25	0- 100MM WC	POLMON
33	ROOM TEMP. & RH DIGITAL DISPLAY	NA	NA	25	0-60°C	POLMON
34	3 WAY VALV ACTUATOR	NA	NA	10	NA	HONEY WELL
35	MODULATI NG ACTUATOR	NA	NA	13	NA	HONEY WELL
36	ON-OFF ACTUATOR	NA	NA	16	NA	HONEY WELL
37	DP SWITCH	NA	NA	33	NA	HONEYWEL L
38	DP TRANSMITT ER	NA	NA	07	NA	HONEYWEL L
39	DUCT SMOKE SENSOR	NA	NA	06	NA	HONEYWEL L
40	DUCT T & RH SENSOR	NA	NA	05	NA	HONEEYWE LL
41	THERMOST AT CONTROLL ER	NA	NA	03	NA	HONEYWEL L
42	CCTV CAMERA	NA	SCD- 1020/1040	16	NA	SAMSUNG
43	SMOKE DETECTOR	NA	MI-PTSE- S2/MI- PTSE-S21	73	NA	HONEYWEL L
44	MANUAL CALL POINTS	NA	MI-MCP- GB	11	NA	HONEYWEL L
45	HOOTER	NA	MI-WSO	11	NA	HONEYWEL L
46	REMOTE RESPONSE INDICATOR	NA	NA	36	NA	HONEYWEL L
47	MOTION SENSORS	NA	NA	06	NA	SECURICO

48	ACCESS CONTROL SYSTEM	NA	SBL-30	04	NA	HONEYWELL
49	MCC PANEL-1	ICTL/NDDDB/ELE/TC CP-001	NA	01	NA	EMATION
50	DDC PANEL	NA	NA	07	NA	HONEYWELL TREND
51	BMS SOFTWARE COMPUTER	4CE4100K57	500-222ix	01	NA	HP
52	INDUSOFT SOFTWARE COMPUTER	4CE4100K53	500-222ix	01	NA	HP
53	DIGITAL VIDEO RECORDER	NA	SRD-1654D	01	16 CHANNEL	SAMSUNG

**Note:** Bidders are advised to visit the site for verification of complete system. Any other items which are part and parcel of the HVAC and BMS are inevitable for the satisfactory maintenance will also be part of the above.

**QUALIFICATION & EXPERIENCE OF PERSONS DEPLOYED AT SITE**

<b>Sl. No.</b>	<b>Designation</b>	<b>Qualification</b>
01	<b>Supervisor (one)</b>	<b>B.E/B.Tech in the field of Electrical/Mechanical Engineering or Diploma in the trade Electrical/Mechanical engineering with at least 5 year experience in the field of maintenance of central Air- conditioning/HVAC plants</b>
02	<b>Air-conditioning Plant operator (One)</b>	<b>Should have passed Diploma in the trade of Electrical/Mechanical engineering with at least 4 year experience in the field of maintenance of central Air- conditioning/HVAC plants.</b>
03	<b>Electrician (one)</b>	<b>Should have passed ITI in the trade of Electrician and have minimum three years' experience in the field of maintenance electrical panels and systems of central Air-conditioning plants or have 4 years of experience in maintenance of Electrical panels and systems of central Air-conditioning/HVAC plants.</b>
04	<b>Helper (one)</b>	<b>Should have basic working knowledge on industrial Air Conditioning Equipments.</b>

**ANNEXURE-VII**

**EQUIPMENT WISE MAINTENANCE SCHEDULE**

<b>SL. No.</b>	<b>Equipment Details</b>	<b>Daily maintenance</b>	<b>Weekly Maintenance</b>	<b>Monthly Maintenance</b>	<b>Yearly Maintenance</b>
01	Air Handling Units & Exhaust Units	1. Recording the Temp. & Pressure gauges readings in AHU manifold. 2. Checking the condition of Pre & fine filter	Checking the foundation bolts of the blowers & also proper contact of the electrical connections	Cleaning of Pre & fine filters	1. Air balancing 2. water balancing 3. Check all AHU ducts/insulation/proper positioning.
02	Chillers	Recording the key parameter of chiller	Cleaning of condensers	Checking the fan condition & cleaning fins	Overall service of the chiller
03	Smoke detectors	NA	NA	Cleaning of detector case of dust accumulation	Mock test of detectors for ensure of proper operation
04	Dynamic & Static Pass box	NA	NA	Checking the operation of inbuilt lights for proper operation	DOP test for dynamic pass boxes once in 6 months
05	Temp. & Pressure gauges	NA	NA	NA	Calibration required for both Temp. & pressure gauges once in 6 months
06	Room DP Digital Displays	NA	NA	NA	Calibration of Displays once in 6 months

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. No.	Description of service required	Price quoted (in 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.

## 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 &amp; Signature



TENDER ACCEPTANCE LETTER

(To be given on Company letter head)

To,

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\_\_\_\_\_ (including all documents like annexure(s), schedule(s), etc which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/clauses contained therein.

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

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

5. I/We do hereby declare that our Firm has not been blacklisted/debarred by any Govt/Department /Public sector undertaking.

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

Yours faithfully,

(Signature of the Bidder with official seal)