

**Central Pollution Control Board
IT Division**

Sub.: List of Eligible Firms of RFP.

Reg.: eTender Reference No.: C-12012/15/2015-Tech./DC

With reference to the above mentioned eTender, all the three firms were found technically qualified by the Computer Core Committee. Copy of approved minutes of meeting is enclosed herewith. Integrity Pact has been received from all the bidders.

List of qualified eligible firms:

1. M/s Glorich India Pvt. Ltd.
2. M/s Presto Infosolutions Pvt. Ltd.
3. M/s IT Soft Communications

Date and Time for opening of Financial Bids are as below:

Date: 19/01/2018

Time: 11:00am

Anant
18-01-18
(ARCHIT UPRIT)
Sc. 'C'

Central Pollution Control Board
IT Division

Sub.: Minutes of the Computer Core Committee meeting held on 10/01/2018 – reg.

Computer Core Committee meeting held on 10/01/2018 at 4:30pm in the committee hall of IT Division chaired by Dr. Prashant Gargava and attended by the following officials:

1. Sh. Sanjay Kumar - Member
2. Sh. Nardeo Singh - Member
3. Sh. Aditya Sharma - Member
4. Sh. U. A. Ansari - Special Invitee
5. Sh. Archit Uprit - Special Invitee
6. Sh. V. N. Murthy - Special Invitee
7. Sh. Ashish Singh - Special Invitee

Agenda items taken up are as below:

1. Strengthening of Network and IT Infrastructure (C-12012/15/2015-Tech/DC Dt.05/09/2017):

IT Division prepared the technical comparative statement of RFPs received from all three eligible EoI firms and placed before the committee. IT Division informed the committee that the technical details of the bids were verified against proposed and all three firms found meeting the required criteria.

Committee accepted technical evaluation and recommended further processing. It also recommended to take concurrence of firms on **Integrity Pact** from all the three bidders before opening the financial bid and take advice of Independent External Monitor.


2. Comprehensive Annual Maintenance Contract of Computers, Printers, Scanners, UPSes etc.

As recommended by the committee in its last meeting, IT Division prepared the Tender document for Comprehensive Annual Maintenance Contract of Computers, Printers, Scanners, UPSes etc. of CPCB and placed before the committee. It was informed that the tender document is similar to previous one and inclusion of regular back-up in the scope, as suggested earlier, may not be feasible. Further, IT Division is taking necessary action for regular back-up of important databases.


For the new models/ items, CAMC charges will be decided by CPCB on the basis of rates for existing models having similar features, which will be binding on the firm. The committee recommended for further processing.

Meeting ended with thanks to the chair.


(Prashant Gargava)
Chairman, Committee


(Sanjay Kumar)
Scientist 'D'


(Nardeo Singh)
A/c Asst.


(Aditya Sharma)
Scientist 'D'

— Accepted —
26/01/18

TENDER DOCUMENT (RFP)

Strengthening of Network and IT Infrastructure at Parivesh Bhawan.



**CENTRAL POLLUTION CONTROL BOARD
PARIVESH BHAWAN
EAST ARJUN NAGAR
DELHI-110032.**

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Request for Proposal (RFP)

eTender Notice No.: C-12012/15/2015-Tech./DC

Title: Strengthening of Network and IT Infrastructure.

1. Objective

The main objective of this project is to develop future ready Data Centre (to cope up the future requirement of about 10 years) with the help of trending technologies, cost effective measures and less human intervention systems.

2. Proposed Project

The following upgrades/changes are proposed to upscale the Server Room capacity for productivity enhancement and efficient operation of servers and also as an initiative of Digital India. This project include restructuring of the server rooms (spread over two rooms) with in-situ Cooling Server Racks with all the latest features including Electrical, safety, security monitoring, DCIM and aesthetics etc. For Continuous Running of all CPCB Network, CPCB Servers as well as Real Time Data Servers require uninterrupted power supply. So, it is required to develop strong redundant Power Distribution System with auto fail over.

This document provides the technical and functional requirement for establishing IT/non-IT infrastructure at CPCB, Delhi. Bidders are required to carry out due diligence while proposing a suitable, best of class, scalable & cost effective solution for establishing the Server & NOC rooms at CPCB in line with the minimum requirement as laid out in TIA 942 specification for Data Centre.

IT Infrastructure should be designed & installed to provide highest level of physical security and also cover risks. The infrastructure once implemented should offer comprehensive protection and multi-functional security coverage for backup systems, server systems, and network and communication systems. The Successful Bidder should also ensure that all the equipment in the Server & NOC rooms is appropriately maintained and managed.

The IT infrastructure should be implemented by the Vendor as per the specification given in the document. The Blue print of the proposed area will be prepared by the successful bidder after the contract has been awarded. Vendor will undertake all the necessary activities for successful implementation of the Server & NOC rooms.

3. Eligibility Criteria

Only EoI eligible firms are eligible for bidding.

4. Project Duration

The entire project duration will be seven (7) years that is one (01) year warranty and six (6) years Comprehensive Annual Maintenance Contract (CAMC).

5. Critical Date Sheet

| Stage –I: Finalised | | |
|----------------------------|--|--|
| 1 | Starting Date of EoI for Project Tender | 05/09/2017 |
| 2 | Last Date of Submission of EoI Proposal along with eligibility criteria & Other required documents | 25/09/2017 (06/12/2017 – List of EoI Eligible firms published on CPP Portal) |
| Stage –II: Starting | | |
| 3 | Starting Date of Bid with Request for Proposal (RFP) for EoI Eligible Firms | 16/12/2017 at 9.30 |
| 4 | Last Date of Submission of Proposals/ Bids (only from the EoI eligible firms) | 01/01/2018 upto 3:00 pm |
| 5 | Date of opening of Technical Bids | 02/01/2018 at 4:00pm |
| 6 | Venue | Central Pollution Control Board IT Division, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032. |
| 7 | Release of list of technically qualified firms and opening of financial proposals | 09/01/2018 |
| 8 | EMD Value (Exemption applicable as per MSME & NSIC etc. as per Govt. of India Rules) | ₹2,40,000/- (Rupees Two Lakhs Forty Thousand only) in Favour of “CENTRAL POLLUTION CONTROL BOARD” payable at DELHI. |

6. Present Network status

| | |
|---|---------------|
| a. CISCO ROUTER-2900 Series | 01 No. |
| b. Cyberoam-750iNG | 01 No. |
| c. CISCO L3 Switches | 02 Nos. |
| d. CISCO L2 Switches | 14 Nos. |
| e. Various Rack Servers | 25 Nos. |
| f. HP Blade Server | 08 Nos. |
| g. Wireless Network Access Point | 22 Nos. |
| h. UPS Power Supply (30KVA with redundancy) | 02 Nos. |
| i. Air Conditioners (Normal window & split) | 08 Nos. |
| j. Number of network users in CPCB | 750 (approx.) |

7. Summary of Scope of work:

This RFP is based on the requirement of CPCB to meet the high availability and maintain uptime of 99.749% on an annual basis, for the IT services to keep its operations safe, secure and operational. **This means the system should have multiple supply channels for power and cooling distribution with N + 1 redundancies i.e, during maintenance also hardware should be working.** Scope of this work will also involve designing & restructuring Server Room and setting up infrastructure by considering N+1 redundancy, remote manageability, scalability and setting up the infrastructure for high efficiency containing the following elements:

- i. Server & Network racks with cooling, Monitoring and remote management system.
- ii. Replacing existing structure with fire retardant partitioning, fireproof glasses, fireproof doors etc. within the proposed area.
- iii. Safety & Security of the Server Room.

- a. Fire Detection, Alarm & Suppression System
- b. Access Control System
- c. IP based high resolution video surveillance system
- d. Rodent Repellant System
- e. Water Leak Detection System
- iv. Redundant and Modular Power Distribution System.
- v. NOC (Network Operation Center) with two cubicles to monitor BMS (Building Management System) and NMS (Network Management System).
- vi. Installation and configuration of Integrated Management Software for centralized monitoring & control of Safety, Security System and for Servers & Network Components.
- vii. Structured cabling for Network, Power etc. for the proposed area.
- viii. Obtaining Tier-II Certification for Data Centre behalf of CPCB, if CPCB desires.

The bidder has to make necessary arrangement so that the existing network does not go down, if go down then down time should not be more than 2hrs continuously. It is also required to make necessary arrangement for the repairing of existing structure, wherever damaged with matching aesthetic in the entire project duration.

CPCB invites Request for Proposal (RFP) for strengthening of its Network and IT Infrastructure with 4 Racks to be built in 560 sq.ft. (approx.) area having a room size of 40X14ft. (Length X Width) with clear height of 8 feet (Total area includes NOC and Server Room), with a load capacity of 30KW + 30KW Redundancy configuration, at IT Division, CPCB, Delhi.

The interested bidding Organizations may go through this RFP Document and submit their proposal alongwith required supporting documents for the proposed system.

8. Detailed Technical Specifications:

This section will provide the minimum requirement/ technical specification of the item that is desired under the proposal. While it is mandatory for the bidder to meet these minimum requirements, if the bidder feels that a particular requirement would need a higher category of equipment, the same should be provisioned in his/ her bid. The bidder should however provide basis for arriving at the solution being proposed as part of the bid. Such estimations or technical specifications should be stated as part of the Compliance Matrix with Statement of Deviations. The bidder should design the solution to provide scalability to CPCB. All items should be of standard and reputed brands. All IT equipment should be IPv6 compliant.

- a) Server Racks Specifications:** Racks will be used to house all the servers/network/storage devices. Rack is designed as per safety standards to withstand the modern IT infra requirement. Both front & rear door should be designed to give active high performance liquid cooling system with handle lock system.

Each Rack should include: Frame of sturdy frame section construction, consisting of 16 x folded rolled hollow frame section punched in 25mm DIN pitch pattern, PU Gasket Side panel, 1.5 mm with PU Gasket, Full Height 19", Angle, Top and Bottom Covers, Two Smart Vertical PDUs.

Rack Specifications:

| Sl. No | Parameter | Specification | Qty. |
|--------|-----------------------|--------------------------|------|
| 1 | Make | APC/RITTAL/EMERSON | 4 No |
| 2 | Rack Height | 42U | |
| 3 | Rack Width | 19" | |
| 4 | Max Height | 2000mm | |
| 5 | Max Width | 800mm | |
| 6 | Max Depth | 1200mm | |
| 7 | Color | Black / Standard Color | |
| 8 | Front Door | Glass with unique lock | |
| 9 | Rear Door | Steel | |
| 10 | Load bearing capacity | 1400 kg | |
| 11 | Standard Warranty | 1 year repair or replace | |

- Covered top and bottom
- Rear space saving split door with 3-point secure locking
- Lockable & remove able side panels
- Front door with toughened glass
- Stationary shelf-1 No/Rack
- Sliding Shelf – 2No/Rack
- Provision of fan mounting in top which does not occupy usable “U” space
- 24 Port patch panel
- Surface finish: Nano ceramic coated, electro-dip coated primed to 20 microns and powder coated with texture polyester RAL 9005/7035 to 80 to 120 microns
- Optimized for high capacity cable management system
- Cable access openings with pre-installed brushes.
- Complaint to all security & stability standards and provided integrated electrical grounding

IP Based Automatic Rear door opening system

All 04 racks of data centre should be fitted with automatic rear door opening system; the door should open automatically in case of failure of the cooling system, high temperature and fire.

Two Network Racks existing with CPCB can be used to housing Network components such as Routers, L3 Switches, Cyberoams, MUX Units, Link load balancers etc. Two smart PDUs in each Rack is required to be installed. All racks should preferably be black in color.

b) Smart PDUs for Server / Network Racks:

IP Based Smart Vertical PDUs of 32Amps capacity with Single Phase. It should have Digital Ammeter, 32A MCB, 16Nos of C13 & 04Nos of C19 Sockets, and NEMA Socket as Input. The total quantity required is 12Nos. 08Nos for Server Racks and 04Nos for Network Racks.

c) DX Based In-Rack Cooling units with Liquid Cooling Package/ System (LCP):

The Data centre should be equipped with high performance DX Gas Based In-Rack Cooling System where Hot and Cold aisle is maintained within the rack. It should have heat exchanger to remove high levels of waste heat from server enclosures and provide uniform, effective, affordable cooling for Servers and similar IT equipment (switches etc.) installed in server enclosures. Each DX Gas cooling system should be a closed unit consisting of a cooling system and cool either one or two server enclosures. The design of the unit should be optimised for use in data centres. The integrated DX Gas Based heat exchanger should guaranty a cooling output of up to 12KW, combined with standard server enclosure dimensions, the lowest possible weight and comprehensive possibilities for monitoring.

The air/Gas Based heat exchanger should be mounted on the side of the rack. LCP Rack DX Gas Based should have enclosure-based cooling separate from the room air and should also reduce the noise level. The unit should capable of providing cooling for either one or two server racks as per requirement. The hot server air should be drawn off to the rear of the server rack. After cooling, it should be expelled left and right in front of the 482.6 mm (19") level over the whole enclosure height and should be made available to the IT equipment once more.

The system should have integrated EC fan module (cooling output 12KW) to achieve maximum efficiency and minimise the electrical energy consumption. A full fan configuration should be utilised to achieve redundancy or to minimise power consumption. The system should be based on standard integrated software/controller concept which provides automatic control of the specified server air intake temperature. Infinitely variable cooling Gas Based flow rate & fan speed should be there for precise matching to the power losses of the components installed in the IT rack.

The optimum operating point should be achieved with minimum energy consumption. It should have intelligent sensor network to monitor the air and Gas Based temperatures, as well as the Gas Based flow rate and leakage management. It should incorporate three temperature sensors for the hot and cold air for redundancy with integrated fail-safe mode. The monitoring and alarm management for all physical parameters should be realised via SNMP and Ethernet.

| Parameters | Required Performance | Complied Yes/ No with Data Sheet cross reference Page No. |
|------------------------|----------------------|---|
| Air throughput of fans | 4800 m3/h | |
| Cooling output | 12 kW | |
| Duty cycle % | 100% | |
| Cooling medium | R410a | |
| Fan | EC | |
| Compressor | Speed Regulated | |
| Any other | | |

d) Inverter type Split Air Conditioners

Two no's of 1.5Tone capacity split air conditioners for each room for room cooling of Server Room, NOC/Network Room & UPS Room, with auto changeover of desired time intervals. Make: Hitachi/ Daikin/ Ogeneral, with minimum 5star rating.

e) Monitoring & Remote Management System for Server & Network Racks

Following Network management solutions for the Data Centre are required:

1. Fault Management
2. Server Management
3. Network Monitoring
4. Switch Monitoring

License to support 200 devices is to be procured (Routers, Link Load Balancers, Wireless Access Controller, switches, servers etc.)

The system should also provide following functionality:

- Auto Device Discovery
- CISCO IP SLA monitoring
- Reports and graphs for
 - Interface availability statistics
 - Interface traffic and utilization statistics
 - Interface response time
 - Interface error and discards
- WAN monitoring with CISCO IP SLA
- VoIP QoS monitoring
- Network configuration management
- Traffic and utilization monitoring
- Wireless access point, availability and uptime monitoring
- Server Management
 - Monitor CPU, memory, disk utilization
 - Services such as HTTP, SMTP, IMAP, FTP, DNS, LDAP, HTTPS etc.
 - Windows services monitoring
 - Identify servers running on low disk space
 - Active process and installed software details
 - URL & Event log monitoring
- Switch monitoring
 - Live view of discovered switches and ports
 - Port manageability
 - Detect and prevent broadcast storms in LAN
- Fault management
 - Intelligent alarm correlation and color coded alarms
 - Email notifications
 - Support SNMP traps
 - Auto execute self-healing scripts/ programs when a fault occurs
 - Auto escalate critical unresolved alarms

Monitoring should be done through an intelligent monitoring system with an Ethernet 10BaseT network connection. The priorities of the various functions are monitoring, controlling and documenting physical parameters inside the Server and Network Racks.

These functions should be managed and controlled via different protocols.

The basis of the CMC should be the processing unit (PU unit). Several input/output units (I/O unit) should be connected to one processing unit via a patch cable. This/these function module(s) should connect to the sensors via a standard plug connector. The sensors should be coded so that the function blocks recognises functions automatically as and when it is connected.

Technical specifications:

| | |
|--|---|
| Temperature Range | 0 ⁰ C to 55 ⁰ C |
| Operating humidity range | 5% to 95% relative humidity, non-condensing |
| Sensor/CAN-Bus connection units | 4 or more |
| Interfaces | Network Interface :(RJ 45): Ethernet to IEEE 802.3 via 10/100 BaseT with PoE. Mini USB for system setting. Serial interface: 1 x for connecting Display unit or GSM Unit or ISDN UNIT. User Interface: Integral WEB Server. Control room connection: Integral OPC Server. User administration: LDAP |
| Protocols | Ethernet :TCP/IPv4, TCP/IPv6, SNMPv3, Telnet , SSH, FTP, SFTP, HTTP, HTTPS , NTP, DHCP , DNS Server, SMTP, XML, Syslog, LDAP |
| Redundant power supply | Input 24V DC -1 X for connecting unit power pack. Power over Ethernet 1 x |
| Time Function | Real-Time Clock, Energy-Buffered (24h) without battery/ accumulator with NTP |
| Main sensors | NTC Temperature Sensor for Access Control Infrared Technology Sensors. |

f. Structured Cabling: Power Distribution & Network:

Power Distribution for Server & Communication Room, Electrical Points, cabling etc.:

The Server Room will be provisioned with UPS Power Distribution System along with MCBs. From the UPS distribution board, electrical cable will be drawn for distribution to the racks. The wiring will be carried out by the bidder by using fire retardant appropriate rating electrical cable, channels etc. For the cooling system, raw power is available at LT Panel (little far from the server room). The bidder is required to install distribution panel and need to connect from the LT Panel, which is used to connect the

cooling system. The bidder may need to install additional DBs, if required.

Technical specifications:

- Cables for UPS to DB: Copper, 4core, 25sq.mm
- Cables for UPS DB to PDU & other points: Copper multi strands, 3core, 4sq.mm
- Complete Single Line Diagram should be made and certified by the user before starting the work.
- The wiring will be carried out by the bidder by using fire retardant appropriate rating electrical cable.
- All power rating should be designed in consideration with all the devices involve inside server room.
- Complete distribution should not have any single point of failure.
- Complete distribution panel should be non-compartmentalized type, modular, totally shrouded.
- Bus bars should be of Electrolytic Grade Copper as per EN 13601
- Bus bar support and cover systems are fire retardant as per UL 94 V0.

Power Socket & Plug

Power Socket & Plug for Racks: Single Phase, indoor type IP 65 (latched), 35A, 3pin 2-pole + earth, Single phase 220volts, inter-locked Socket & Plug outlet similar to Lapp EPIC-Industrial connectors.

Network Cabling:

Bidder has to adopt structured cabling practices for OFC & UTP cat 6 cables while laying the cable. Proper cable trays/conduits must be used though out the routes as per industry standards. Cable tray should be used of Mild Steel of 300mm X 50mm size each for data and electrical cables. Total length of channel shall be 20mtrs (approx.). The cabling will involve data cabling for Server room, NOC, UPS room, Cooling System, BMS etc. from Network Racks/Group Area.

Cabling and Cable-Trays:

- From each network rack in the server room using Cat 6A & Multi Mode Fibre
- Along with LAN cabling, the bidder should also design and lay cable- trays for Storage System up to the racks in the Data Centre.
- Bidder should ensure that all the cable raceways are adequately grounded and fully concealed with covers. The cables should be appropriately marked and labelled.
- The Data Centre should be equipped with separate ducts for power supply distribution and data/network cable. The duct should be designed in such a way that it is possible to do the retro fitment in future. The ducts should be positioned in accordance with the racks for structured and snarl free wiring. The size of the power cable duct and NOC cable duct should be such that it must be possible to accommodate Wiring needs for Servers. Each cable is required proper dressing and marking at both the ends.

| Parameter | Specification/ Features Req'd. | Complied Yes/No |
|-----------|--------------------------------|-----------------|
|-----------|--------------------------------|-----------------|

| | | |
|--------------------|--|--|
| Cables & Conduit | The bidder shall install, terminate and connect up all cables & Conduits as per the drawing submitted/ | |
| Cables | All cables shall be FRLS (Fire Retarded Low Smoke) type | |
| Insulation | The system of wiring shall be consist of multi core PVC insulated standard copper conductor wires of suitable rating in metallic channels. All wiring shall be hidden and to be properly routed in existing false ceiling. | |
| Cable Laying | Cable shall generally be installed in ladder type; site fabricated/pre fabricated trays except for some short run in rigid/flexible conduit for protection or crossing. | |
| Cable Tag & Marker | Each Cable shall be tag with number | |
| Tagging | Cable shall be tag at the entrance and exit from any equipment and junction box | |
| Cable Termination | The termination and connection of cables shall be done strictly in accordance with the drawing and in consultancy with CPCB | |
| Channels | M.S. Channel, conduits, electrical panels and wiring, switches and sockets etc. shall be confirm of Indian standard for specifications and should be installed in consultation with CPCB | |
| Type | Electrical system shall be intelligent type to enable their integration and monitoring with BMS | |
| Earthing | Earthing of equipments, surge protector, including supply of earthing material, Lighting arrest and any other electrical safety measures, if required. | |
| Miscellaneous | All the electrical panels, Switches boxes, Sockets, wires etc. required for the Data Centre to be provided. All fittings should confirm to BIS | |

g. Safety & Security Systems:

g.i Early Fire Detection and Extinguishing Systems:

Delivery of an active extinguishing system that detects and extinguishes fires in closed server and network cabinets.

High-performance fan must extract air samples for smoke analysis into the system's measuring chamber. The integrated extinguishing system must trigger if the concentration of smoke exceeds the limits. The extinguishing process must not be electrically conducting and must be fast and residue-free. NOVEC 1230 must be employed as the extinguishing gas.

The installation frame for the active extinguishing system must be designed as a 19" component group carrier. The system's installation depth must be specified such that it may be fitted into all 19" switch, server and network cabinets that possess an inside depth of > 1000 mm.

The installation and removal of the pre-assembled equipment must be carried out without interruption to the protected system's operations.

Technical features:

The following features must be provided:

| | |
|--------------------------|--|
| Housing dimensions | : width :483 mm - 19" front plate (remaining width 445 mm) : height : 1 RU (44.45 mm), : depth : maximum 853 mm |
| Weight | : incl. extinguishing agent and propellant cartridge \leq 26 kg |
| Rated voltage | : 100/240V AC, 50/60 Hz |
| Emergency power | : must be guaranteed for at least four hours |
| Ambient temperature | : must be specified for +10°C to +35°C (operations) or better : must be specified for -10°C to +60°C (storage) or better |
| Humidity | : up to 95%, non-condensing |
| Protection type | : at least IP 20 |
| Connections | : 1 potential-free change-over contact "advance alarm" : 1 potential-free change-over contact "fire" : 1 potential-free change-over contact "extinguish" : 1 potential-free change-over contact "multiple malfunction" : 24 V -3/+5 V rated voltage / 0.5A, ohm resistive load or better |
| Displays | : 1 LCD with clear-text display for status reports : 4 LEDs for "operation", "alarm", "multiple malfunction" and : "mains/charger malfunction" |
| Sensors | : ST visual smoke alarm, approx. 2.0 – 3.9 %/m |
| (Diffused light sensors) | : HS visual smoke alarm, approx. 0.25 – 0.5 %/m |
| Air-flow monitor | : approx. +/-10% flow rate |
| Protection volume | : max. 3.0 m ³ (at air-change rate max. 10% / 20 min) |
| External devices | : connection for manual trigger : connector for door contact : connector for external signal equipment |
| Permits | : CE conformity for the extinguisher unit : in accordance with EC Directive 97/23/EC |
| Extinguisher container | : must be integrated into one RU housing : Volume when empty: at least 2.2 l : Contents: at least two litres (=3.2 kg) Novec™ 1230 |

Extinguisher discharge through pressure charge produced by propellant gas cartridge. Integrated electrical trigger unit and integrated extinguisher-loss / filling-level monitoring (displays > 15% loss)

Connect rechargeable batteries, create electrical connections, insert active extinguishing system, create basic settings, carry out response test.

Accessory – intake pipe system

The intake pipe system is part of the fire-detection system. The pipe must be installed in an air-flow-facilitating manner in the flow of cooling air, air samples are taken in above the intake openings and analysed in the measuring chamber.

The intake pipe must be attached to the cabinet frame with pipe clips, pipe connectors, brackets and T-pieces must be designed as push fit connections and it must be possible to disconnect them without tools.

Technical data:

| | |
|---------------------------|--|
| Intake pipe system | : 1 intake pipe with intake openings : (2120 mm – to be shortened as required) : 1 intake pipe (1100 mm – ditto) |
| Material / colour | : polyamide / black |
| Ambient temperature [°C] | : -25 to +75 |
| Outer/inner diameter [mm] | : 22/18 |
| Weight [kg/m] | : 0.130 |

g.ii Access Control System:

Complete solution for restricting the movement inside the server room premises for authorized persons only. The access control system based on the finger printing based biometric system for providing physical security. Records are maintained in biometric system and report file can be generated from system based on date, time and authorized id.

Hardware Specifications:

A) Intelligent Field Panel (IFP)

The panels should be with UL 294, FCC and CE regulations:

IFP Architecture:

IFP shall utilize a fully distributed intelligence controller architecture whereby access decisions are made locally at the controller.

IFP shall utilize flash firmware for easy upgrades.

IFP shall support two access points.

IFP should be capable of expanding the functionality of the two access points to two access points IN/OUT, making the IFP a 4 reader controller.

IFP shall support local means of control through system and panel links as well as reader and reader/keypad input.

IFP shall support field interface to access control readers of various types.

IFP shall support field interface to eight variously configured alarm inputs.

IFP shall control four relay and four voltage outputs.

The Server software package (host computer) shall download panel specific data, including minimum of 100 cardholders & expandable, to the IFP on the network. This data shall be stored within each panel and contain all pertinent information relating to the panel's functionality.

Host computer shall communicate global links and anti-pass back messages between panels.

Should communication with the Server software package (host computer) be lost, up to 1500 time-stamped events shall be stored in panel's buffer, until communication is restored. Upon restoration of communications all event data shall be automatically uploaded to the host computer including the actual time of occurrence.

This functionality shall enable any off-line controller to maintain full access control processing capability. A card user shall not be aware of the off line condition. Controller will have 8 Input & 8 Output.

A system that does not buffer event information when communications are lost will not be acceptable.

B) Biometric Reader with Keypad & Card

| | | |
|------------------------------------|---|--|
| Templates | : | 9,500 |
| Integrated Proximity Reader | : | 125KHz Multi-technology |
| PC to Reader /Panel to Reader | : | Ethernet (CAT5) / Wiegand (6 Cond. Shielded 18 AWG) |
| Dimensions /Weight | : | 5.7" (145 mm) Wide X 4.92" (125 mm) High X 1.3" (33 mm) Deep / 12 oz. (340 g.) |
| Operating temperature /Humidity | : | 32° F to +131° F (0° C to +55° C) / 0 - 95% RH |
| Power Requirements | : | DC 9~24V, 1A |
| Sensor (Resolution) /Template size | : | Optical (500 DPI) / 352 bytes |
| Authentication time Speed | : | ≤ 4 sec |
| False Rejection /Acceptance Rate | : | 0.01% / 0.001% |
| Features | : | LCD Display: 128 X 64 pixels; 2 LEDs; 10 number keys; 6 function keys; 1 bell button |

- Fail safe operation in case of no-power condition and abnormal condition such as fire, theft, intrusion and loss of access control etc.
- Inbuilt card reader
- Day, Date, Time and duration based access rights for user

- Adequate number of smart cards should be provided
- Interface with EM locks to manage the access to Server room

g.iii Video Surveillance System:

The bidder should propose a solution for IP enabled Closed Circuit Television System (CCTV) which will provide on-line display of video images on monitor. Cameras should be used to view specific areas of interest and create a record for post event analysis.

The system must be supplied with suitable number of cameras and Management Software to cover the server room. The system should have the facility of remote viewing over IP network and recording for at least 1 week.

Detailed specifications:

The system should be fitted with Hemispheric IP indoor camera for ceiling mounting, surveillance system for monitoring of activity outside the IT Server room. The system must be supplied with 3nos of Hemispheric camera.

| | | |
|--------------------|---|------|
| Hemispheric Camera | IP indoor camera for ceiling mounting (one on the front side & another on the rear side). The system should have Image sensor: 1/2.5” or better CMOS, 6 megapixel or better, color (day). <ul style="list-style-type: none"> • Internal DVR: 4-GB Micro SD • Integrated microphone • Temperature sensor, illumination sensor, movement sensor, Activity Sensor, Analytics • 0.5-m Ethernet patch cable • Interfaces: Ethernet 10/100 (RJ45), remote viewing over IP network and recording. | 3Nos |
|--------------------|---|------|

g.iv Rodent Repellent System:

A Rodent Repellent System solution with compact, safe, environmentally friendly and non-irritating pest repelled Very High Frequency Oscillator (VHFO) units are to be installed in Server room. The entry of Rodents and other unwanted pests should be controlled using non-chemical, non-toxic devices. Ultrasonic Frequency sound wave based replant system has been proposed at Server room. The device installed should emit intensive ultrasound that is audible and painful to rodents, but is inaudible and harmless to humans. The rodent repellents will be provided in the false flooring and ceiling to repel the pests without killing them. The installed units must withstand high temperatures in false ceilings and low temperatures in cold storages and air locks.

The pest Repellent System should consist of one master console & suitable number of satellites/transducers. The successful bidder shall make detailed working drawings and coordinate with user and other agencies at site.

Specification:

- Microcontroller based console embedded with power electronic circuits to generate a pattern of ultrasound waves at 800mW power per transducer

- Alpha numeric LCD and smart keypad
- Configurable start frequency, end frequency, sweep time, wave pattern
- Should cover the complete DC area

g.v Water Leak Detection System

Bidder should propose a water leak detection solution which should be used in the sub floors of the area to be protected. It should have tape/Cable sensors, detection module and control panel as its major components. The leak sensor should be able to detect electrically conductive fluids such as freshwater, salt water, glycol solutions etc. and should be fitted underneath water pipelines. It should be capable of

- Detection of leaks in the sub floor
- Detection of leaks from air conditioners or support piping

System Specification:

- Supply Voltage: 230V 50Hz/60Hz
- LED Indications: Power, Alarm, Fault & Isolate
- Event recording facility: > 100
- Standard metal enclosure, wall mounting holes
- 80-character alphanumeric LCD
- Soft touch membrane keypad
- Configurable site name/location
- Dedicated outputs for all zones, hooter & Fire
- Configurable sensitivity adjustment
- Date and Time display
- Password protected event log clear facility
- Configurable baud rate selection
- Support network connectivity for SNMP monitoring
- Should cover the complete DC area

h. Integrated Management software:

Integrated management software for monitoring and, where required, controlling the physical infrastructure of the data centre in the fields of cooling, power supply and distribution, as well as security.

The following functions and features must include:

- All infrastructure sensor values, bus bar value and cooling values must be readable by SNMP
- Recording of warnings and alarms by SNMP traps
- Storage of all the data in a SQL database (MSSQL or Oracle)
- Quick and easy project planning of the data centre by means of location trees, views, charts and diagrams
- Lines, pie and Gantt charts/diagrams
- Graphics for standard devices must be already stored
- Integration of existing data centre floor plans (jpg format)
- Provision of standard charts

- Calculation engine to calculate values within the software (e.g. PUE)
- Dashboard functions
- Monitoring the status of all the components via a graphical view
- Simple creation of charts and graphs based on all the available data
- Simple creation of automated processes (“what should be done if...”)
- Controlling the infrastructure by writing values via SNMP
- Connection to higher-level management systems using Management Pack (SCOM) or SNMP
- Easy configuration of the software, in the ideal case with delivery as an appliance (software or hardware). Software appliance as a VM for VMware.
- Client/server architecture, clients must be able to run on Windows Vista, 7 or 10
- Report function
- User management with roles/rights. Accurately determining “who may do what”, right down to a single sensor
- Scalability from the single-rack data centre through to large-scale data centres
- Modular licensing, simple subsequent re-licensing for expanding data centre

i. Seating Consoles & Display:

- Bidder should also have to create cubicles/ workstation (2 nos.) in the Network Group Work area and Network Operating Centre
- LCD Screens: 48 inch of 2 LED Screens should also be provisioned in each NOC room of reputed brands like LG/Samsung/Panasonic.

| Parameter | Specifications Required | Complied Yes/No |
|-------------------------|--|-----------------|
| Wooden Cubicles | Wooden Cubicles with proper arrangement of Sitting with back rest and hand rest | |
| Console System | The Console System shall be designed specifically for 7x24 mission critical environments such as System Control centres, Network Operation Centres, etc. Standard office grade, post and panel furniture will not be acceptable. | |
| Design | Console System must be of modular design, facilitating future equipment retrofits and full reconfigurations without requiring any major modification to the structure or exterior elements. | |
| LED Panel: | | |
| Panel Type | LED | |
| Panel Size | Minimum 48" diagonal | |
| Brightness | 450 NITS | |
| Digital Signage Feature | In Built, 24 x 7 operation | |
| Speaker | 10Wx2 | |
| Input/output Ports | DP, DVID, VGA, USB, RS232, LAN & Min. 2No. HDMI | |

j. Other Requirements:**a. Aesthetics:**

The bidder has to carryout changes/ demolition of required area as per required changes of site. It is proposed to replace the existing glass partition having frame structure with brick wall at bottom and top and fire rated glass at middle (wall height 3.5ft. at bottom and 2ft at top. All existing widows should be replaced with the airtight double glazed aluminum/ UPVC windows with fire rated glass. Approx. size 7X3 Feet (4 No"s.). All the partition would be of Fire rated Glass and brickwork covered with fire rated gypsum. The bidder also has to carryout changes as per aesthetics requirement of site such that the overall infrastructure looks aesthetically correct.

Fire Rated Glass:

Fire rated glass has been provisioned to give a visibility to the NOC staff into the server farm area (wherever required). The technical specifications are given below.

- Fully glazed fire rated non-load bearing partition system for 120 minutes (E 120) fire rating. The glass should be SGG Pyro swiss Extra 6mm clear 120minute fire rated (E-120) Non Wired Toughened glass having a light transmission of 89% and sound reduction of 32db and compliant to class 1C1 category of Impact Resistance as per EN 12600.
- The glass should be held in its place with the help of minimum 1.25mm GI beading which can be clamped or bolted to the fro file by 4 x 35mm steel screws at every 250m c/c and an intumescing type of the cross section of 5 x 20mm as per the test evidence. The glass panes are to be supported on non-combustible 5mm Calcium Silicate setting blocks. The maximum glazing size cannot be more than 1200 x 3000mm.

Fire Rated Gypsum Partition:

Gypsum partitions are required to divide the DC area into different zones, as per the layout design, to serve specific functions. Fire rated partitions are to be made slab to slab so as to provide an isolated, fire retardant area able to withstand fire and to prevent spread of fire to other areas.

The technical specifications are given below:

- The Gypsum board partition shall be provided to ensure their alignment by the method laid down by manufacturers, i.e. by fixing G.I. L & C section on the floor and ceiling and fixing gyp board onto them and fastening them to the walls/columns with the help of screws by the standard prescribed method, complete with sections from India.
- Gypsum finishing with tape and gypsum compound as specified by manufacturers. In double sided partition the above specification is valid with use of glass wool as insulation fill in between the gypsum boards for making the partition fire proof, acoustic and provides better degree of insulation.

Fire Rated Door: Qty. 03Nos. Door Size: 3 X7 Feet

Fire rated doors are provisioned for server farm area to provide a completely sealed fire retardant space. It will prevent fire from other areas to travel to server farm area and vice versa. The technical specifications are given below:

- Providing & Fixing of thick steel fire rated door of 120minutes fire rating fabricated.
- 1mm thick galvanized sheet with infill of fire rated proprietary insulation filler both faces of sheet with lock seam joints at stile edges and internal reinforcement at top, bottom and stile edges for fire rating.
- The door frames are manufactured from thick galvanized steel sheet pressed form to double rebate profile of size 100 x 50 mm (nominal). The door frames and door shutters are primed with etch primer. The shutter would be mounted with SS Ball Bearing Hinges of size 125mm x 75 x 3.0 mm of appropriate openings for view panel glass, if required.

Furniture and fixtures:

Room and Monitoring Room Console System:

The following specifications are the minimum requirements of the Console System. This allows for a point-by-point technical response stating compliance, taking exception or providing requested information.

- The Console System shall be designed specifically for 24x7 mission critical environments such as System Control Centres, Network Operation Centres, etc. Standard office grade, post and panel furniture will not be acceptable.
- Console System must be of modular design, facilitating future equipment retrofits and full reconfigurations without requiring any major modification to the structure or exterior elements.

The entire project is on a turnkey basis and all the miscellaneous/ necessary works/ modifications required in establishing the setup in satisfactory level are the part of the project.

b. Documentation:

1. The Bidder must submit documentation after conclusion of work on acceptance.
2. All documentations must be in A4 and/or drawings must be folded and submitted in folders arranged according to trades.
3. The documentation should comprises of
 - a. Circuit diagrams/ layout diagrams
 - b. Certification Reports
 - c. Operating and maintenance instructions
 - d. List of spare parts for wear parts
 - e. Certificates of compliance with the order
 - f. Test and approval certificates

- g. SOPs for all components
 - h. Configuration documents for each system
 - i. User manuals to run all the processes on satisfactory level.
4. The Bidder needs to Supply, Install, Test & Commission all the products specified in the technical specifications & also provide training to five designated staff of CPCB and provide three sets of manuals.

Please Note: All solutions offered should be IPv6 compliant.

GENERAL INSTRUCTIONS TO BIDDERS

Note: The bidder shall submit their bid as per Scope of RFP document.

1. **Introduction :**

CPCB has issued this documents for purchase of goods/stores/articles and related services as mentioned in “**Request for Proposal (RFP)**” which also indicate, *inter alia*, the required stores, delivery schedule, terms and place of delivery etc. This section (“General Instructions to Bidders”) provides the relevant information as well as instructions to assist the prospective Bidders in preparation and submission of Bids.

Bidders shall have to agree/accept all the terms and conditions of Bids including payment terms etc. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms, if any.

2. **Language of Bid:**

The Bid submitted by the Bidder and subsequent correspondences and documents relating to the Bid exchanged between the Bidder and CPCB shall be written in English language.

3. **Eligible Goods and Services:**

All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term “origin” used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

4. **Bidding Expenses:**

The Bidder shall bear all the costs and expenditure incurred and/or to be incurred by them in preparation, and uploading their Bid including attending the pre-bid conference and or arranging demonstration of Product/Services or Field trials that may be deemed necessary by CPCB.

5. **Amendments to Bid documents:**

At any time, prior to the deadline for submission of Bids, CPCB may, for any reason deemed fit by it, modify the Bid documents by issuing suitable amendment(s) to it. The amendment will be uploaded on CPP & CPCB website only. In order to provide reasonable time to the prospective Bidders to take necessary action in preparing their Bids as per the amendment, CPCB may, at its discretion extend the deadline for the submission of Bids and other allied time frames, which are linked with that deadline. Prospective bidders are advised to visit/see <https://eprocure.gov.in/eprocure/app> & <http://www.cpcb.nic.in> on regular basis for any change in NIT schedule, amendment/corrigendum in Bid Document including technical requirement.

6. Bidder who has downloaded the Bid from the CPCB website www.cpcb.nic.in or Central Public Procurement Portal website <https://eprocure.gov.in/eprocure/app> shall not tamper/modify the Bid form in any manner. In case, if the same is found to be tempered/ modified in any manner, Bid will be completely rejected and Bidder is liable to be banned from doing business with CPCB.
7. Intending bidders are advised to visit CPCB website www.cpcb.nic.in and CPPP website <https://eprocure.gov.in/eprocure/app> regularly till closing date of submission of bid for any corrigendum /addendum /amendment.

8. **CPCB:**

The President of India
Through Member Secretary
Central Pollution Control Board (CPCB)
Parivesh Bhawan
East Arjun Nagar, Shahdara,
Delhi – 110032.

9. **Consignee:**

Divisional Head (IT)
Central Pollution Control Board
Parivesh Bhawan
East Arjun Nagar, Shahdara,
Delhi – 110032.

10. **Documents Comprising the Bid:**

The **Two Bid System**, i.e. “Techno – Commercial Bid” and “Price Bid” prepared by the Bidder shall comprise the followings:

(1) **Techno - Commercial Bid (Un-priced Bid):**

The following documents are to be furnished by the Bidder along with their **Technical Bid**. Bidder shall upload following documents on CPP PORTAL <https://eprocure.gov.in/eprocure/app> :

- (i) Checklist Section properly filled and signed (as per Annexure-D).
- (ii) Scanned copy **EMD** in the form of **DD/ FDR/ BG/ Exemption Certificates**. Original EMD/ exemption certificate in physical form shall be submitted to Divisional Head (IT), Central Pollution Control Board, Delhi-32, on or before opening of Bid.
- (iii) Bid Acceptance Letter (as per Annexure-B)
- (iv) Commercial Terms at a glance (Annexure-E)
- (v) Technical Bid.
 - a) List of deliverables (un-priced/without price) with make & model etc. Annexure-F. **This should be exactly same as attached in price bid.**
 - b) Technical Specification and Compliance (Annexure-G)

(2) Price Bid:

- (i) All pages of the price bid should be page numbered, indexed and signed with company/ firm seal by authorized signatory.
- (ii) Price Bid shall be as per Price Bid Format (Annexure- H).
- (iii) Costing of each item, sub items offered in bidder's technical bid, shall be given with all breakup prices.
- (iv) The Bidder shall indicate on the Price Schedule specifying all components (main units and sub units etc. of each item) of prices shown therein including the unit prices and total Bid prices of the **goods (H/w & S/w), services, packing, inland transportation/ freight/ insurance to the sites, GST** etc. against the requirement.
- (v) CAMC shall be for the maintenance of complete system provided to CPCB inclusive of all parts, consumables etc. required to operate the entire system.
- (vi) Bidder shall quote prices on F.O.R destination at CPCB, Delhi.
- (vii) The Indian bidder supplying imported goods shall quote only in Indian Rupees, if purchase order to be placed to them. It is the responsibility of Indian firm to pay custom duty etc. CPCB shall not be responsible for custom clearance. Prices quoted by the Bidder shall remain firm and fixed during the currency/ validity of the contract.
- (viii) Indian Bidder /Integrator /Distributors /Stockiest shall quote in INR only for imported stores.
- (ix) Statutory levies, taxes, duties etc., if any, chargeable on the goods & services, which are mentioned in the Price Bid Format, are only payable on actual basis, as applicable.
- (x) If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.

Note: Price bid shall prima-faci rejected in case of any deviation from the technical bid, and if found that any fact is concealed or hidden in price bid/ technical bid.

11. Signing and uploading of Bid :

Bidder shall upload their proposal ONLINE through CPP Portal at <https://eprocure.gov.in/eprocure/app> as solicited bids shall only be accepted. The Bid shall not contain any erasure or overwriting, except as necessary to correct any error made by the Bidder and, if there is any such correction; the same shall be initial by the person(s) signing the Bid.

12. Alteration and Withdrawal of Bid:

No Bid should be withdrawn after the deadline for submission of Bid and before expiry of the Bid validity period. If a Bidder withdraws the Bid during this period, it will result in forfeiture of the earnest money furnished by the Bidder.

13. Opening of Bids:

Bids will be opened as per date/time and venue mentioned in the **Bid Critical Date Sheet**. In case the specified date of Bid opening falls on /is subsequently declared a holiday or closed day for CPCB, the Bids will be opened at the same time and place on the next working day. Authorized representatives of the Bidders, who have submitted Bids on time may attend the Bid opening, provided they bring with them letters of authority from the corresponding Bidders. **Two Bid** system will be as follows. The **Technical Bids** are to be

opened in the first instance, at the prescribed time and date. These Bids shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the RFP document. Thereafter, in the second stage, the Price Bids of technically qualified Bidders shall only be opened online for further scrutiny and evaluation, on a date notified after evaluation of the techno commercial Bid.

14. Scrutiny and Evaluation of Bids:

(1). Unresponsive bids:

The Bids will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the Bid document. The Bids are liable to be treated as non – responsive and will be summarily ignored, if followings are not provided along with technical bids.

- (i) Bid is unsigned.
- (ii) Checklist not enclosed (Annexure-D).
- (iii) Bid Acceptance Letter not duly signed and stamped (Annexure-B). Original Letter shall be enclosed in technical bid.
- (iv) Bid validity is shorter than the required period.
- (v) Required EMD has not been provided unless exempted.
- (vi) Bidder has not agreed to give the required performance security.

(2). Technical Evaluation:

Bids shall be scrutinized and evaluated by the committee constituted by competent authority with reference to parameters prescribed in the Bid document.

Minor Informality/ Irregularity/ Non-Conformity:

If during the preliminary examination, CPCB find any minor informality and/or irregularity and/or non-conformity in a Bid, CPCB may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the Bidders. Wherever necessary, CPCB will convey its observation on such “minor” issues to the Bidder asking the Bidder to respond by a specified date. If the Bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that Bid will be liable to be ignored.

(3) Financial evaluation:

In the second stage, the Price Bids of technically qualified Bidders shall only be opened online for further scrutiny and evaluation, on a date notified after evaluation of the techno commercial Bid.

CPCB will evaluate the technically qualified financial bids for deciding lowest bidder (L-1) on the basis of total amount. The unit price should be inclusive of all charges of insurance, freight, transportation, excise duty (if applicable) etc. No other charges will be considered/ paid.

15. Packing and Marking:

The packing for the goods to be provided by the bidder, should be strong and durable enough to withstand, without limitation, the entire journey during transit including, rough handling, open storage etc. without any damage, deterioration etc.

GENERAL CONDITIONS OF CONTRACT (GCC)

- 1. Bidders shall have to agree/accept all the terms and conditions of Bids including payment terms. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms, if any.**
2. Whenever there is any conflict between the provision in the GCC regards to specific Para under this section and that in the „RFP“, „List of requirements/ technical specifications“, the provision contained in the RFP etc. shall prevail and have an over-riding effect. Any special instructions as per RFP, will also apply for this purchase. The conditions (like qualification criteria, delivery schedule, mode of delivery & sites of delivery etc.) mentioned in “RFP” will also apply for this purchase.

3. Alternative Bids:

Alternative Bids are not permitted. However the Bidders can quote alternate models meeting the Bid specifications of same manufacturer with single EMD.

Not more than one Bid shall be submitted by one contractor or contractors having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e when one or more partner(s)/director(s) are common) be allowed to Bid for the same contract as separate competitors. A breach of this condition will render the Bids of both parties are liable to be rejected.

4. Bid Validity:

The Bids shall remain valid for acceptance for a period of 90 days from the date of Bid opening.

5. CPCB has Right to accept any Bid and to reject any or all Bids:

CPCB reserves the right to accept in part or in full any Bid or reject any Bid without assigning any reason or to cancel the Bidding process and reject all Bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected Bidder or Bidders.

6. EMD:

The Bidder shall furnish along with its Bid, earnest money of ₹2,40,000/- in the form of Demand Draft (DD)/ Bank Guarantee (BG)/ Fixed Deposit Receipt (FDR) to be issued in favour of “Central Pollution Control Board” payable at Delhi. The earnest money is required to protect CPCB against the risk of the Bidder’s unwarranted conduct. Signed and scanned copy of EMD document and any other certificate for exemption must be uploaded on CPP portal at <https://eprocure.gov.in> and Original /hardcopy of EMD in the form of DD/BG/FDR and any other certificate for exemption must be submitted to Divisional Head (IT), Central Pollution Control Board, Delhi-32 on or before opening of bids. EMD shall be valid for a period of 90 days from the date of publishing the Bid.

The Bidders who are registered with National Small Industries Corporation (NSIC) and Micro and small Enterprises specified by Ministry of Micro, Small & Medium Enterprises (MoMSME), are exempted from EMD, also known as security deposit. However, these firms are not exempted for submitting Performance Guarantee /Security (PG) and need to submit (PG), if Letter of Intent is placed to them. There is no relaxation in this regard.

Refund of EMD:

EMD of unsuccessful Bidder will be returned after expiry of the Bid validity period, without any interest. EMD of successful Bidder will be returned after receipt of performance security, without any interest.

Forfeit of EMD:

EMD of a Bidder will be forfeited, if the Bidder withdraws or amends its Bid or impairs or derogates from the Bid in any respect within the period of validity of its Bid or if it comes to notice that the information/documents furnished in its Bid is incorrect, false, misleading or forged without prejudice to other rights of CPCB.

EMD of the successful Bidder will be forfeited, without prejudice to other rights of CPCB, if bidder fails to furnish the required performance security within the specified period. Firm shall have to extend the validity of EMD, if extension of Bid validity is agreed.

7. Performance Security/ Guarantee:

1. Successful bidder shall submit performance security within 7days from the date of issue of Letter of Intent (LoI) by CPCB.
2. CPCB may consider annulment/ cancellation of supply order/ award of contract if, performance security not received in stipulated time.
3. There is no relaxation/ exemption in submitting of performance security.
4. The bidder, shall furnish performance security to CPCB for an amount equal to seven and half percent (7.5%) of the total value of the contract excluding CAMC, valid up to sixty (60) days beyond the complete duration of the project of seven (7) years (01 year warranty + 6years CAMC period).
5. **Performance Security has to be submitted irrespective of its registration NSIC/ MSME etc. There is no relaxation/ exemption in submitting of performance security to any bidder/ service provider. Submission of Performance Security is must for all bidders/ service providers.**
6. In the event of any amendment issued to the contract with mutual consent, the bidder shall complete all formalities within twenty-one (21) days of issue of the amendment.
7. CPCB will release the Performance Security, without any interest to the bidder/ service provider on completion of the bidder's all contractual obligations including the warranty and CAMC obligations (7years in this case, starting

from the date of satisfactory handing over the setup to CPCB). The bidder shall submit pre-receipt for obtaining back their security.

8. **Agreement:**

The successful bidder needs to execute an Agreement with CPCB as per Annexure-C within seven (07) days of issue of Letter of Intent, on Rs.100/- non-judicial stamp paper.

9. **Terms of Delivery:**

Goods shall be delivered by the bidder in accordance with the terms of delivery specified in the contract. Bidders should not deliver the goods without any valid delivery period. CPCB shall not be held responsible for any thing (payment and loss of stores etc.) if stores supplied without any valid delivery period as CPCB reserve the right to reject the delivery and terminate the supply order.

10. **Completion Period/Delivery Schedule:**

Entire setup has to be completed within 45 days from the date of issue of work order/ supply order. The bidder is required to submit the execution plan /time schedule within three working days from the date of issue of Letter of Intent.

11. **Force Majeure:**

Force Majeure means an event beyond the control of the bidder and not involving the bidder's fault or negligence and which is not foreseeable. Such events may include, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, and freight embargoes. If there is delay in performance or other failures by the bidder to perform its obligation under its contract due to event of a Force Majeure, the bidder shall not be held responsible for such delays/failures. If a Force Majeure situation arises, the bidder shall promptly notify CPCB in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by CPCB in writing, the bidder shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side. There may be a Force Majeure situation affecting CPCB only. In such a situation CPCB shall take up with the bidder on similar lines as above for further necessary action.

12. **Warranty:**

The IT Infrastructure setup must be installed with one year warranty from the date of satisfactory handover to CPCB. The warranty shall be **Onsite Warranty**. All stores/ items to be supplied should be free from all defects and faults in material workmanship and manufacture. They should be of the highest grade and consistent with the established and generally accepted standards for material of the type used and in full conformity with the specifications, drawings, or samples and shall, if operable, operate properly. The Bidder shall be bound to furnish a clear written warranty regarding the same. The bidder shall provide warranty

certificate from the OEM for the goods along with date of manufacturing of stores/products. During the warranty period, the Bidder or the representative of the OEM must make site visits to ascertain the reliability. During this period, unserviceable equipment/ accessories have to be replaced by the bidder free of cost.

The bidder shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on CPCB for such replaced parts/goods thereafter. Transportation cost, Octroi etc. for sending defective parts for repairs and sending back repaired or replaced one to CPCB site(s), shall be borne by the bidder itself.

Other condition under warranty clause of “List of requirements/ technical specifications” section shall also be applicable.

13. **Escalation Matrix:**

The bidder is required to submit the support escalation matrix, if work order is placed to them. It shall contain the names of the contact persons, mobile & landline numbers email addresses etc.

14. **Comprehensive Annual Maintenance Contract (CAMC):**

CPCB reserves the right to enter into Comprehensive Annual Maintenance Contract (CAMC) with the Bidder after the completion of warranty period. Prospective bidders are advised to quote accordingly and specifically. Payment for maintenance contract is made on quarterly basis after submission of invoice in triplicate and duly approved by Divisional Head (IT), after rendering satisfactory services. The bidder shall have to enter into CAMC Agreement with CPCB if required. CAMC will be renewed every year based on the performance of the bidder.

15. **Penalty**

a. **Supply, installation & handover of IT Infrastructure Setup:**

The bidder shall deliver the goods and perform the services (like installation & commissioning etc.) under the contract within 45days. The delivery date i.e. completion of the entire setup and handing over to CPCB in satisfactory working condition, shall be taken into account for penalty purpose.

CPCB shall deduct 0.5% (half percent) of total contract value per week of delay as penalty, subject to a maximum of 10% of the contract value, from the running payment to be made. In case of delay of part of the week (i.e. 1 or 2 or 3 etc. days will be considered as one week. Penalty shall not be imposed under force majeure conditions.

The Bidder shall not be held responsible for delay in delivery of stores and their installation for the followings reasons:

- (a) Delay in providing Entry permits/Road Permits (if required) to the bidder by the consignee.
- (b) Delay in providing proper site(s) by the consignee to the bidder. Site is not ready in all respect for installation of stores.

- (c) Delay in providing No Objection Certificate (NOC) if required, from any other government agency/agencies.
- (d) Any other reason for which bidder is not responsible.

Penalty shall be calculated on the purchase/contract price excluding the element of sales tax, excise duty, service tax, GST etc. mentioned in the price bids.

b. Penalty for maintenance (During warranty & CAMC Period, after handing over the setup to CPCB):

The bidder is responsible to maintain the system without breakdown. If any breakdown occurs, it has to be restored/ rectified within 04hours after lodging the complaint through email id. If any hardware failure which require repair/ replacement from outside of CPCB, it has to be repaired/ replaced within 48hours from the time of complaint lodged. If the fault/ error had not been rectified within 48hours, the penalty as mentioned below will be imposed without intimating to the bidder/firm and shall be deducted from the running payments:

| S. No. | Description | Penalty/unit per day |
|--------|--|----------------------|
| 1 | Failure of Cooling units for Server & Network Racks | 500/- |
| 2 | Failure of Power supply to servers | 100/- |
| 3 | Failure of Monitoring & Remote Management System | 100/- |
| 4 | Non-operational NOC Room (Incl. display, power , cooling etc.) | 100/- |
| 5 | Early Fire Deduction & extinguishing System | 300/- |
| 6 | Access Control System | 25/- |
| 7 | Video Surveillance System | 25/- |
| 8 | Rodent Repellent System | 25/- |
| 9 | Water Leak Detection System | 25/- |
| 10 | Integrated Management Software | 100/- |

Minimum cumulative penalty will be ₹1,000/- (Rupees one thousand only) for any failure as mentioned above irrespective of its penalty calculation per quarter. Maximum penalty during operation in a given year shall not exceed more than 25% of the annual charges. The same T & C will be applicable during warranty period for the penalty calculation.

For example: If failure of item No.7, for 12 days from the date of lodging the complaint, penalty = 12 * 25 = ₹300/-. That means ₹1,000/- shall be deducted from the running bills. In another quarter, if, failure of S.No.-1 occurs and not rectified within 03 days from the date of lodging the complaint, the penalty will be: 500*3=₹1,500/- shall be applicable.

The bidder confirms with submittal of his bid, that he guarantees for a subsequent delivery of all built in parts for the duration of at least 7 years after acceptance. This also applies to parts, which the Bidder does not manufacture, but only supplies and installs. Technical improvement modifications can be considered in the products.

16. **Inception Report:**

Before carrying out the work, the successful bidder must submit inception report within 3 days from the date of Letter of Intent, by preparing project and installation plans, in which all installation components as well as infrastructure elements are evident. The plans must be submitted for approval in good time.

17. **Mode of Payment:**

Payment, as per terms mentioned below, shall be made subject to recoveries, if any, by way of liquidated damages /penalty clause /TDS (as applicable) or any other charges as per terms & conditions of contract, if not specified elsewhere in the document.

Payment will be released as per below table:

| S. No | Description | Payment |
|-------|---|------------------------------------|
| 01 | On successful receipt of ordered material | 80% of the hardware items received |
| 02 | On successful Installation, Commissioning, Testing & handing over to CPCB | Remaining Payment |

- (i) The bidder shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date.
- (ii) Bills/invoices must be submitted in triplicate separately for stores/ items and services.
- (iii) Payment will be made through Electronic Fund Transfer System only.
- (iv) The bidder shall submit particulars of his bank account required for making payments.
 - (a) Account Number (b) Bank Name (c) Branch Name (d) Address
 - (e) IFSC code (f) MICR No. (g) Telephone No. (h) SWIFT code etc.

18. **Fall Clause**

The bidder undertakes that it has not supplied/is not supplying similar products/systems or subsystems at a price lower than that offered in the present bid in respect of Ministry/Department of the Government of India or Public Sector Unit (PSU) and if it is found at any stage that similar products/systems or subsystems was supplied by the BIDDER to any Ministry/Department of the Government of India or Public Sector Unit (PSU) at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and difference in the cost would be refunded by the BIDDER to the BUYER (Central Pollution Control Board) or it will adjusted from their bills, if the contract has already been concluded.

19. **Termination of Bid/contract by CPCB:**

From the time of submission of Bid to the time of awarding the contract, if a Bidder needs to contact CPCB for any reason relating to this Bid enquiry and / or its Bid, it should do so only in writing.

In case a Bidder attempts to influence CPCB in its decision on scrutiny, comparison & evaluation of Bids and awarding the contract, the Bid of the Bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that Bidder, as deemed fit by CPCB.

CPCB, without prejudice to any other contractual rights and remedies available to it, may, by written notice of default sent to the bidder, terminate the contract in whole or in part, if the bidder fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by CPCB. In the event of CPCB terminates the contract in whole or in part, CPCB may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the bidder shall be liable to CPCB for the extra expenditure, if any, incurred by CPCB for arranging such procurement. If the bidder becomes bankrupt or otherwise insolvent, CPCB reserves the right to terminate the contract at any time, by serving written notice to the bidder without any compensation, whatsoever, to the bidder, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to CPCB.

Annexure-A**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. Bids in hard copy form will not be accepted. 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: <https://eprocure.gov.in/eprocure/app>.

For any clarification related to this document, contact the following before submission:

- 1) Sh. Archit Uprit, Scientist „C“, archituprit.cpcb@nic.in, Mob. 9958161440
- 2) Sh. V.N.Murthy, Sr. Tech., vnmurthy.cpcb@nic.in, Mob. 9868283503

Any queries relating to the process of online bid submission or queries relating to Central Public Procurement Portal (CPP) in general may be directed to the 24*7 CPP Portal Helpdesk. The contact number for the helpdesk is: 1800 233 7315.

REGISTRATION

- i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrollment**” on the CPP Portal which is free of charge.
- ii. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- iii. 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.
- iv. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- v. 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 DSC’s to others which may lead to misuse.
- vi. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) 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.
- 2) 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.

- 3) 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

- 1) Bidder should take into account any corrigendum published for the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. 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.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can be in PDF formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, 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

- 1) Bidder 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.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Bid document.
- 3) Bidder has to select the payment option as “offline” to pay the Bid fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the Bid document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the Bid 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.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the Bid 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 coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without

changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
 - i. 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 openers public keys. Overall, the uploaded Bid documents become readable only after the Bid opening by the authorized bid openers.
 - ii. The uploaded Bid documents become readable only after the Bid opening by the authorized bid openers.
 - iii. Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
 - iv. 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.

Annexure-B

BID ACCEPTANCE LETTER
(To be given on Company Letter Head)

To,

Date:

Sub.: Acceptance of Terms & Conditions of Tender/Bid.

Tender/Bid Reference No: _____
Dear Sir,

1. I/We have downloaded/ obtained the Bid document(s) for the above mentioned „Bid/ Work“ from the website(s) namely: _____ as per your advertisement, given in the above-mentioned website(s). The corrigendum(s) issued from time to time by your department too have also been taken into consideration, while submitting this acceptance letter.
2. I/We hereby certify that I/we have read the entire terms and conditions of the Bid 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. I/We hereby unconditionally accept the Bid conditions of above mentioned Bid document(s)/ corrigendum(s) in its totality/ entirety.
4. I/We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/ Public sector undertaking.
5. I/We agree to keep our Bid valid for acceptance as required in Bid document or for subsequently extended period, if any, agreed to by us. I/We also accordingly confirm to abide by this Bid up to the aforesaid period and this Bid may be accepted any time before the expiry of the aforesaid period. I/We further confirm that, until a formal contract is executed, this Bid read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.
6. If our Bid is accepted, we undertake to supply the goods and perform the services (Installation & commissioning etc.) in conformity with your above referred document with the delivery schedule specified in the RFP.
7. I/We certify that all information furnished by the our firm is true & 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.
8. I/We further understand that you are not bound to accept the lowest or any Bid you may receive against your above-referred Bid enquiry. I/We further confirm that, if supply/ purchase order is placed to our firm, we shall provide performance security of required amount in an acceptable form for due performance of the contract.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

Annexure-C

Agreement below is to be submitted by the bidder after issue of Letter of Intent (LoI) by CPCB within Seven Days.

AGREEMENT

An agreement is made on the ____ day of _____ 20__ between Central Pollution Control Board, „Parivesh Bhawan“, East Arjun Nagar, CBD-cum-Office Complex, Delhi-32 (herein referred to as the „Board“ which expression shall unless repugnant to the context or meaning thereof be deemed to include their successor and /or assignee) of the other part.

WHEREAS the party of the first part is a statutory body, created and established under an act of the parliament known as Water (Prevention & control of pollution) Act,1974 and the rule framed there under. Member Secretary of the Board is authorized person to sign the agreement on behalf of the Board.

AND WHEREAS the main objective of the board is to control the pollution of water and air at the same time take such measures as may be necessary to prevent pollution of water and air.

AND WHEREAS the Board, in pursuance of its objective and to carry out the functions, with regard to prevention, control or abatement of water and air pollution, it is essential that all the relevant data are collected, collated and compiled in such way that these could be retrieved quickly and easily. In order to have effective IT Infrastructure, Board has decided to **Strengthening of Network and IT Infrastructure (eTender Notice No.: C-12012/15/2015-Tech./DC)** through the firm M/s _____ amounting to Rs. _____.

(Rupees only).

AND WHEREAS the party of the second part is a firm M/s _____ (herein referred to as the „firm“ which expression shall unless repugnant to the context or meaning thereof be deemed to include their successor and /or assignee).

AND WHEREAS the firm has approached the Board for the execution of the said work and have agreed to conduct and complete the work on the terms and conditions specified and agreed to between the parties hereto and as contained hereinafter.

AND NOW THEREFORE in consideration of the terms and mutual consent hereinafter mentioned, the parties hereby agree as follows:

1. DEFINITIONS

- i. Agreement means this agreement and all appendices, annexure attached, work order, and subsequent amendment, modifications and additions directed by the Board to be carried out, provided that such directions are given by the Board.
- ii. „Work“ means the total work to be conducted and completed by the firm as specified in details in the scope of work.
- iii. The Board means the Central Pollution Control Board includes its Member Secretary and any other officials authorized to act and on behalf of the Board by the Member Secretary.
- iv. The firm means M/s _____

2. OBLIGATIONS OF BOTH THE PARTIES

- i. The firm should carry out the work from the date of issue of the final work order and submit inception report within 03 days from the date of issue of Letter of Intent, as detailed in scope of work and as entrusted to them under the instructions of the Board and the firm further undertakes to give full co-operation to the Board in this regard.
- ii. The Board shall have the right to depute its representative to work with the firm and at all times such representative shall have access to the premises where and whenever the work is in progress. The work firm shall provide all facilities to the representative of the Board for inspection and/or assessment of work.
- iii. The firm shall receive fees in the manner prescribed in the payment conditions. Fees for any additional work, not included in the scope of work at the time of issuing the work order and which shall have to be carried out by firm under this agreement being due to amendments, modifications or additions as per clause 1(i) of this agreement, will be decided amicably and will be paid.
- iv. This agreement comprises of detailed and definite enumeration of the rights and duties of the parties to the contract and covers all previous correspondence or negotiations etc., which may be contrary to this agreement in any way.
- v. If one provision of this agreement should prove to be invalid or null, all remaining provisions shall remain effective without change. The contracting parties shall try to replace the invalid and null provisions by an admissible provision aiming of the same economic and legal rights.
- vi. Dimensions/standards and units wherever referred shall conform to the Indian Regulations wherever obligatory and in all other cases the same will be as per prevailing practice. If however, the Board specifies the dimensions and units of the work then same shall be final and the firm undertakes to adopt the same and to carry out the work in accordance with the instructions issued by the Board.
- vii. The firm shall not engage or employ any sub-contractor for the execution of the work under this agreement without the prior consent in writing obtained from the Board. Any possible sub-contracts, which may concluded by the firm in consent with the Board, shall be so concluded on the sole and full responsibility of the firm. The fact of sub-contracting shall not absolve the firm from his/her obligations and responsibilities under this agreement.
- viii. Subject to the provisions of this agreement, the firm shall not transfer or assign this agreement without the Board's prior consent in writing. In any case transfer or assignment that may be affected by the firm shall not modify his/her liabilities under this agreement. In the event of assignment for transfer the assignees or transferee shall be responsible for the fulfilment of the conditions of this agreement.

3. SECRECY AND COPYRIGHT

The firm hereby undertakes to treat all the data, information, drawings and details etc., received by the consultants during the execution of the work, directly or indirectly, as exclusive property of the Board.

4. EXTENSION AND TERMINATION

- i. It is agreed between the parties that the Board may grant extension of time to the firm for the completion of the work under this contract provided the Board is satisfied with the

reasons for the extension stated by the consultant in his application in writing made to the Board, such extension stated would not entitle the consultant for any additional payment whatever under clause 2 of this agreement.

- ii. It is agreed by and between the parties that the Board shall have the right to terminate this agreement without assigning any reason thereof subject, however to the condition that it shall give a notice of termination in writing to the firm.
- iii. In the event of termination of the agreement as provided herein, the firm shall cease all further work.
- iv. In the event of termination of the agreement as provided herein, the Board shall reimburse to the firm a part of fees proportionate to the work carried out pursuant to this agreement upto the date of notice of termination.
- v. The firm hereby undertakes and agrees to handover all the drawings, specifications, plans, sketches and other data and such other documents, alongwith complete information and report to the Board within 15 days of the completion of the work or the notice of termination of the contract as the case may be.
- vi. The Board has the right to terminate the contract with or without assigning any reason at any stage besides reserve its right for the damage or any claim that the Board may have against the firm.
- vii. In case of such termination by the Board, if any payment in excess has been paid to the firm, the firm hereby undertakes and agrees to repay the excess payment within 15 days of the termination of the contract.

5. INDEMINITY

- a) The firm hereby undertakes to indemnify the Board against any claim made by any person/persons or by a third party for any reason whatsoever such a claim or damage may arise because of a mistake, negligence and/or any other reason or an act of the consultant during the course of the work being carried out or after the work the work carried out by the consultant under this contract.
- b) The parties to this agreement specifically agree that the Board shall have the right to withhold the payment of fees that may be due and payable to the firm in the event of any breach committed by the firm under this agreement and the payment withheld be paid whenever such breach is rectified.

6. Comprehensive Annual Maintenance Contract (CAMC):

CPCB reserves the right to enter into Comprehensive Annual Maintenance Contract (CAMC) with the Bidder after the completion of warranty period. CAMC shall be only for the maintenance of stores (equipment and software only). Prospective bidders are advised to quote accordingly and specifically. **It should not be quoted in terms of percentage of project** as transportation, installations, documentation, training etc. are not covered in CAMC. The cost of components towards CAMC are to mentioned and added in bid by Bidders for its evaluation on overall basis to decide the ranking (L-1) of Bid. Payment for maintenance contract is made on quarterly basis after submission of invoice in triplicate and duly approved by Divisional Head (IT), after rendering satisfactory services. The bidder shall enter into agreement with CPCB if, required. CAMC will be renewed every year based on the performance of the bidder.

7. ARBITRATION CLAUSE

The parties to the agreement hereby agree and consent that all disputes, claims etc., arising out of and touching upon clause of the agreement and their interpretation shall be submitted to the sole arbitrator to be appointed in the following manner:

“The Chairman, Central Board shall appoint Director (CP Division), Ministry of Environment, Forests & Climate Change, Government of India, New Delhi, or any other

suitable person as the sole arbitrator to adjudicate and decide upon the dispute referred to him". The arbitrator shall state this decision in writing and if amount of claim in dispute is Rs.50,000/- (Rupees fifty thousand only) and above, the arbitrator shall give reasons for award.

Subject as aforesaid, the provision of the arbitration & conciliation Act, 1996 or any other statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under the clause.

It is a term of contract that party invoking the arbitration shall specify the dispute or disputes to be referred to the arbitrator under this clause together with the amount or amounts claimed in respect of each dispute.

It is also a term of contract that if any of the party do not make any demand for arbitration in respect of any claim(s) in writing within 30 days of receiving the information from the Board that final bill is ready for the payment, the claim of the contracting party(s) will be deemed to have been waived and absolutely barred and the Central Pollution Control Board will be discharged of all liabilities under the contract in respect of these claims.

The decision of the arbitrator shall be final and binding upon the parties.

IN WITNESS WHEREOF THE parties of the first and second part of this agreement have subscribed their signatures on this agreement on the day and year herein above mentioned.

For M/s. _____

(Signature behalf of Bidder)

(A. Sudhakar)
Member Secretary
Central Pollution Control Board
Parivesh Bhawan,
East Arjun Nagar, Delhi- 110032

SIGNED IN THE PRESENCE OF

1. Witness:

2. Witness:

Annexure-D

Checklist for Bidders

| S. No. | Activity | Compliance Yes/ No/ NA |
|--------|---|---------------------------|
| 1 | (i) Have you enclosed EMD (DD/Bank Guarantee /FDR) of required amount? | |
| | (ii) Is exemption certificate enclosed: vendor registered with MSME/ NSIC/ Government bodies attached for relaxation of EMD? | |
| | (iii) Is EMD valid for 90 days from the date of publishing of Bid? | |
| 2 | Have you kept validity of your bid as per the Bid document? | |
| 3 | Have you enclosed Bid Acceptance Letter duly filled and signed (i.e. terms and conditions are acceptable) with original set of Bid. Bids may be ignored if not signed. | |
| 4 | (i) Is PAN No. of bidding firm with proof attached? | |
| | (ii) Is GST number with registration certificate attached? | |

(Name & Signature with date and firm/company seal)

Annexure-E

Bill of Material (un-priced/ without price)

The bidder shall submit a list of deliverables (unpriced) for understanding the items proposed for delivery and installation to CPCB. No rate should be quoted in the blank list.

| S. No. | Description of Items | Offered Make & Model | Qty. |
|--------|--|----------------------|--------|
| 1) | 42 U Server Racks. IP Based Automatic Rear door opening system | | 4 Nos |
| 2) | Smart PDUs for Server / Network Racks | | 12 Nos |
| 3) | In-Rack Cooling units DX based for Server and Network Racks. | | 3 Nos |
| 4) | Split Air Conditioners for Server, NOC & UPS Room | | 6 Nos |
| 5) | Monitoring & Remote Management | | 1No |
| 6) | Power Distribution for Server Room & NOC Room, Electrical cabling, Power Sockets, Plugs, Earthing etc. | | 1 Set |
| 7) | Safety & Security Systems: | | |
| 7.i | Early Fire Detection System with extinguishing system. | | 1 No |
| 7.ii | Access Control System | | 3 Nos |
| 7.iii | Video Surveillance System | | 3 Nos |
| 7.iv | Rodent Repellent System | | 1 No |
| 7.v | Water Leakage Detection System | | 1 No |
| 8) | Integrated Management software | | 1 No |
| 9) | Seating, Consoles & Display. | | 1 Set |
| 10) | Other Requirement: | | |
| a | Aesthetic | | 1 Job |
| b | Documentation and Training | | 1 Job |
| 11) | CAMC charges for Six Years after warranty of one year, excluding aesthetic structure | | 1 No |
| 12) | Charges for obtaining Tier-II Certification for IT Infrastructure setup, behalf of CPCB | | 1 No |

Note: It is mandatory to mention the make and model of each offered stores.

PRICE BID FORMAT**Bid for: Strengthening of Network and IT Infrastructure.**

Details showing quantity, specification and other details of the system offered. (to be filled by the bidder and must be kept in "Price Bid" as part of the Bid)

| Sl. No. | Description of Items | Qty. | Unit Rate (Without Taxes) | Taxes | Amount (Incl. Taxes) |
|---------|---|--------|---------------------------|-------|----------------------|
| 1) | Server and Network Racks | | | | |
| | Supply | 4 Nos | | | |
| | Installation | 4 Nos | | | |
| 2) | Smart PDUs for Server /Network Racks | | | | |
| | Supply | 12 Nos | | | |
| | Installation | 12 Nos | | | |
| 3) | In-Rack Cooling units DX based for Server and Network Racks | | | | |
| | Supply | 3 Nos | | | |
| | Installation | 3 Nos | | | |
| 4) | Split Air Conditioners for Server, NOC & UPS Room | | | | |
| | Supply | 6 Nos | | | |
| | Installation | 6 Nos | | | |
| 5) | Monitoring & Remote Management System for Server & Network Racks. | | | | |
| | Supply | 1No | | | |
| | Installation | 1No | | | |
| 6) | Power Distribution for Server Room & NOC Room, Electrical cabling, Power Sockets, Plugs, Earthing etc. | 1 Set | | | |
| 7) | Safety & Security Systems: | | | | |
| 7.i | Early Fire Detection System with extinguishing system. | | | | |
| | Supply | 1 No | | | |
| | Installation | 1 No | | | |
| 7.ii | Access Control System | | | | |
| | Supply | 3 Nos | | | |
| | Installation | 3 Nos | | | |
| 7.iii | Video Surveillance System | | | | |
| | Supply | 3 Nos | | | |
| | Installation | 3 Nos | | | |

| | | | | | |
|-------------------------------------|---|-------|--|--|---|
| 7.iv | Rodent Repellent System | | | | |
| | Supply | 1 No | | | |
| | Installation | 1 No | | | |
| 7.v | Water Leakage Detection System | | | | |
| | Supply | 1 No | | | |
| | Installation | 1 No | | | |
| 8) | Integrated Management software | | | | |
| | Supply | 1 No | | | |
| | Installation | 1 No | | | |
| 9) | Seating, Consoles & Display. | | | | |
| | Supply | 1 Set | | | |
| | Installation | 1 Set | | | |
| 10) | Other Requirement: | | | | |
| 10.a | Aesthetic | 1 Job | | | |
| 10.b | Documentation & Training | 1 Job | | | |
| 11) | Other charges, if any (must specify the details) | 1 Set | | | |
| 12) | CAMC charges inclusive of every part/item except NOVEC 1230 Fire Extinguishing Gas, for Six Years after warranty of one year | 1 No | | | |
| 12.1 | CAMC charges for 1 st Year | 1 No | | | |
| 12.2 | CAMC charges for 2 nd Year | 1 No | | | |
| 12.3 | CAMC charges for 3 rd Year | 1 No | | | |
| 12.4 | CAMC charges for 4 th Year | 1 No | | | |
| 12.4 | CAMC charges for 5 th Year | 1 No | | | |
| 12.6 | CAMC charges for 6 th Year | 1 No | | | |
| 13) | Cost of NOVEC 1230 Gas Cylinder (same as installed in the system) | 4 Nos | | | |
| 14) | Charges for obtaining Tier-II Certification for IT Infrastructure Setup behalf of CPCB (CPCB may decide to obtain Certificate or not) | 1 No | | | |
| Total Amount inclusive of all Taxes | | | | | ₹ |

Total Amount in words: Rupees _____ only.

Total Amount = 1+2+3+4+5+6+7.i+7.ii+7.iii+7.iv+7.v+8+9+10.a+10.b+11+12.1+12.2+12.3+12.4+12.5+12.6+13+14, on which L-1 shall be calculated (Inclusive of all Taxes)

Note:

1. The bidder shall use their firm's letter head for quoting the prices.
2. Price shall be in above format and should not be modified. Changes if any required, should be mentioned separately.
3. Charges, if any, for Transportation /freight /insurance etc. of stores/items shall be included in the unit price.
4. All applicable taxes must be mentioned against each item in price bid. If taxes not mentioned, then it is treated that price quoted is inclusive of taxes.

5. If there is a discrepancy between the unit price and total price The Unit Price shall prevail. If there is a discrepancy in the Total Amount between Words and figures, the amount mentioned in words shall prevail.
6. Costing for each and every items and sub items which is offered in technical bid shall be done with all breakups. Charges for Trainings, installation, other services etc. are to be mentioned clearly in price bid.
7. Price Bid (in pdf format excluding note) shall be uploaded on <https://eprocure.gov.in/eprocure/app>.

(Signature with date & stamp of the bidder)