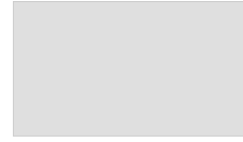


Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar
Shahdara, Delhi-110032



Telephones:43102030

Gram: _____

Tlx: 011-22304812

THE SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VIDEO CONFERENCING SYSTEM IN CPCB

BID REFERENCE : CPCB/05/2011-12

DATE OF COMMENCEMENT OF
SALE OF BIDDING DOCUMENT : 31.10.2011

LAST DATE FOR SALE OF
BIDDING DOCUMENT : 12.12.2011

LAST DATE AND TIME FOR
RECEIPT OF BIDS : 13.12.2011 upto 3.00 p.m

TIME AND DATE OF OPENING
OF BIDS : 13.12.2011 at 3.30 p.m

DATE OF PRE- BID MEETING : 22.11.2011 at 11.00 a.m. in the Training hall, Ground
Floor, Central Pollution Control Board, Parivesh
Bhawan, East Arjun Nagar, Delhi

PLACE OF OPENING OF BIDS : TRAINING HALL, CPCB

ADDRESS FOR COMMUNICATION : Central Pollution Control Board, Parivesh Bhawan,
East Arjun Nagar, Delhi

SECTION I: INVITATION FOR BIDS (IFB)

**NATIONAL COMPETITIVE BIDDING FOR
SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VIDEO CONFERENCING SYSTEM IN CPCB**

SECTION I. INVITATION FOR BIDS (IFB)

Date : 31.10.2011

Loan No. : LN : 4749-IN

IFB No. :CPCB/05/2011-12

1. The Government of India has received a Loan (Loan : 4749 IN) from the International Bank for Reconstruction and Development in various currencies towards the cost of —Hydrology Project (Phase-II) and it is intended that part of the proceeds of this credit/loan will be applied to eligible payments under the contracts for which this Invitation for Bids is issued.
2. The Member Secretary, Central Pollution Control Board now invites sealed bids from eligible bidders for National Competitive Bidding for procurement of goods- supply, installation, testing and commission of Video conferencing system as listed below:

1	Bid Security	Quantity	Delivery
1	2	3	4
"Supply, installation, testing and commissioning of video conferencing system in CPCB" offices at New Delhi, Bangalore , and Vadodara	Rs. Three lakh Fifty Thousand only	One Complete system covering all At each location.	Consignee :- (1). Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi -110032 (2). Central Pollution Control Board, 1st & 2nd Floors, Nisarga Bhavan A-Block, Thimmaiah Main Road 7th D Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru -560 010 (3). Central Pollution Control Board, Parivesh Bhawan Opp. VMC Ward Office No. 10, Subhanpura Vadodara-390 023

3. Interested eligible Bidders may obtain further information from and inspect the bidding documents at the office of the I/c, Building, CPCB India.
4. A complete set of bidding documents may be purchased by any interested eligible bidder on the submission of a written application to the above office and upon payment of a non-refundable fee as indicated below in the form of a Demand Draft in favour of Central Pollution Control Board payable at Delhi.
5. The provisions in the Instructions to Bidders and in the General Conditions of contract are based on the provisions of the World Bank Standard Bidding Document - Procurement of Goods.
6. The bidding document may be obtained from the office of I/c, Building, CPCB during office hours namely, from 10.00 hrs to 16.00 hrs, Indian Standard Time" (IST) on all working days either in person or by post.

(a) Price of bidding document (non-refundable) : Rs. 1000/-

(b) Postal charges, inland : Rs. 200/-

(c) Postal charges, overseas : Rs. 500/-

(d) Date of commencement of : 31.10.2011

sale of bidding document

- (e) Last date for sale of bidding document : 12.12.2011
- (f) Last date and time for receipt of bids : 13.12.2011 upto 3.00 p.m. "Indian Standard Time" (IST)"
- (g) Time and date of opening of bids : 13.12.2011 at 3.30 p.m. "Indian Standard Time" (IST)"
- (h) Pre –Bid meeting : 22.11.2011 at 11.00 a.m. "Indian Standard Time" (IST)" in the Training hall, Ground floor Central Pollution Control Board Parivesh Bhawan, East Arjun Nagar, Delhi -110032
- (i) Place of opening of bids : Training Hall, Central Pollution Control Board Parivesh Bhawan, East Arjun Nagar, Delhi -110032
- (j) Address for Communication : Paritosh Kumar, I/c, Building Central Pollution Control Board Parivesh Bhawan, East Arjun Nagar, Delhi -110032

7. All bids must be accompanied by a bid security as specified in the bid document and must be delivered to the above office at the date and time indicated above.
8. Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time.
9. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

"Bidding documents requested by Post will be dispatched by registered/speed post on payment of an extra amount as indicated. The Purchaser will not be held responsible for the postal delay if any, in the delivery of the documents or non-receipt of the same", as prospective bidders may request for bidding documents.

SECTION II: INSTRUCTIONS TO BIDDER

SECTION II: INSTRUCTIONS TO BIDDERS

TABLE OF CLAUSES

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A. Introduction

1. Source of Funds

- 1.1 The Government of India has received/applied for a Credit/Loan from the International Development Association/International Bank for Reconstruction and Development (hereinafter called Bank) in various currencies equivalent to US Dollars 105 million towards the cost of the "Hydrology -2 Project " and intends to apply part of the proceeds of this Credit/Loan to eligible payments under the Contract(s) for which this Invitation for Bid is issued.
- 1.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Credit/Loan Agreement, and will be subject in all respects to the terms and conditions of that agreement. The Credit/Loan Agreement prohibits a withdrawal from the Credit/Loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Credit/Loan Agreement or have any claim to the Credit/Loan proceeds.

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all suppliers from eligible source countries as defined in *Guidelines: Procurement under IBRD Loans and IDA Credits*, May 2004 revised October 2006 revised May 2010, hereinafter referred as the *IBRD Guidelines for Procurement*, except as provided hereinafter.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.
- 2.3 Government-owned enterprises in the Purchaser's country may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Purchaser.
- 2.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Bank in accordance with ITB Clause 36.1.

3. Eligible Goods and Services

- 3.1 All goods and ancillary services to be supplied under the Contract shall have their origin in eligible source countries, defined in the IBRD Guidelines for Procurement and all expenditures made under the Contract will be limited to such goods and services.
- 3.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced or from which the ancillary services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of Bidding

- 4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and **CPCB**, hereinafter referred to as "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

- 5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:
 - (a) Instruction to Bidders (ITB) ;
 - (b) General Conditions of Contract (GCC) ;
 - (c) Special Conditions of Contract (SCC) ;

- (d) Schedule of Requirements;
- (e) Technical Specifications;
- (f) Bid Form and Price Schedules;
- (g) Bid Security Form;
- (h) Contract Form;
- (i) Performance Security Form;
- (j) Performance Statement Form;
- (k) Manufacturer's Authorization Form;
- (l) Bank Guarantee for Advance Payment Form; and
- (m) Equipment and Quality Control Form.

5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

6. Clarification of Bidding Documents

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing or by telex or cable or fax at the Purchaser's mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of the bidding documents which it receives no later than 15 days prior to the deadline for submission of bids prescribed by the Purchaser. Written copies of the Purchaser's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders which have received the bidding documents.

6.2 Pre-bid meeting

The bidder or his official representative is invited to attend a pre-bid meeting which will take place at Training hall at Ground floor in Central Pollution Control Board Parivesh Bhawan, East Arjun Nagar, Delhi -110032 on 22.11.2011 at 11.00 AM "Indian Standard Time" (IST)"

6.3 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

6.4 The bidder is requested to submit any questions in writing by e-mail/fax/post to reach the purchaser not later than one week before the meeting.

6.5 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 5.1 which may become necessary as a result of the pre-bid meeting shall be made by the purchaser exclusively through the issue of an Addendum pursuant to Clause 7 and not through the minutes of the pre-bid meeting.

6.6 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

7. Amendment of Bidding Documents

7.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

7.2 All prospective bidders who have received the bidding documents will be notified of the amendment in writing or by cable or by fax, and will be binding on them.

7.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid

8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.

9. Documents Constituting the Bid

9.1 The bid prepared by the Bidder shall comprise the following components:

- (a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11 and 12;
- (b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
- (c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
- (d) bid security furnished in accordance with ITB Clause 15.

10. Bid Form

10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity and prices.

11. Bid Prices

11.1 The Bidder shall indicate on the Price Schedule the unit prices and total bid prices of the goods it proposes to supply under the Contract. To this end, the Bidders are allowed the option to submit the bids for any one or more schedules specified in the 'Schedule of Requirements' and to offer discounts for combined schedules. However, Bidders shall quote for the complete requirement of goods and services specified under each schedule on a single responsibility basis, failing which such bids will not be taken into account for evaluation and will not be considered for award.

11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner:

- (i) the price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable:
 - a. on components and raw material used in the manufacture or assembly of goods quoted ex-works or ex-factory; or
 - b. on the previously imported goods of foreign origin quoted ex-showroom, ex-warehouse or off-the-shelf.
- (ii) any Indian duties, sales and other taxes which will be payable on the goods if this Contract is awarded;
- (iii) the price for inland transportation, insurance and other local costs incidental to delivery of the goods to their final destination; and
- (iv) the price of other incidental services listed in Clause 8 of the Special Conditions of Contract.

11.3 The Bidder's separation of the price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of the terms offered.

11.4 Fixed Price. Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to ITB Clause 24.

12. Bid Currencies

12.1 Prices shall be quoted in Indian Rupees:

13. Documents Establishing Bidder's Eligibility and Qualifications

13.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the Contract if its bid is accepted.

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.

13.3 The documentary evidence of the Bidder's qualifications to perform the Contract if its bid is accepted, shall establish to the Purchaser's satisfaction:

(a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized (as per authorization form in Section XII) by the goods' Manufacturer or producer to supply the goods in India.

[Note: Supplies for any particular item in each schedule of the bid should be from one manufacturer only. Bids from agents offering supplies from different manufacturer's for the same item of the schedule in the bid will be treated as non-responsive.]

(b) that the Bidder has the financial, technical, and production capability necessary to perform the Contract and meets the criteria outlined in the Qualification requirements specified in Section VI-A. To this end, all bids submitted shall include the following information:

(i) The legal status, place of registration and principal place of business of the company or firm or partnership, etc.;

(ii) Details of experience and past performance of the bidder on equipment offered and on those of similar nature within the past three/five years and details of current contracts in hand and other commitments (suggested proforma given in Section XI);

14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

14.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.

14.2 The documentary evidence of the goods and services eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings and data, and shall consist of :

a detailed description of the essential technical and performance characteristics of the goods ;

a list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two years, following commencement of the use of the goods by the Purchaser; and

an item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.

14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security in the amount as specified in Section-V - Schedule of Requirements.

15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.

15.3 The bid security shall be denominated in Indian Rupees and shall:

(a) at the bidder's option, be in the form of either a certified check, letter of credit, a demand draft, or a bank guarantee from a nationalized/Scheduled Bank located in India or by a reputable banking institution selected by the bidder and located abroad in any eligible country;

(b) be substantially in accordance with one of the form of bid security included in Section VIII or other form approved by the Purchaser prior to bid submission;

- (c) be payable promptly upon written demand by the Purchaser in case any of the conditions listed in ITB Clause 15.7 are invoked;
 - (d) be submitted in its original form; copies will not be accepted; and
 - (e) remain valid for a period of 45 days beyond the original validity period of bids, or beyond any period of extension subsequently requested under ITB Clause 16.2.
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 above will be rejected by the Purchaser as non-responsive, pursuant to ITB Clause 24.
- 15.5 Unsuccessful bidder's bid securities will be discharged/returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the Purchaser, pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the Contract, pursuant to ITB Clause 34, and furnishing the performance security, pursuant to ITB Clause 35.
- 15.7 The bid security may be forfeited:
- (a) if a Bidder (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or (ii) does not accept the correction of errors pursuant to ITB Clause 24.2; or
 - (b) in case of a successful Bidder, if the Bidder fails:
 - (i) to sign the Contract in accordance with ITB Clause 34; or
 - (ii) to furnish performance security in accordance with ITB Clause 35.

16. Period of Validity of Bids

- 16.1 Bids shall remain valid for 90 days after the deadline for submission of bids prescribed by the Purchaser, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable or telex or fax). The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in ITB Clause 16.3 hereinafter.
- 16.3 In the case of fixed prices contracts, in the event that the Purchaser requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows :
The price shall be increased by the factor (value of factor B)¹ for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful Bidder.
- 16.4 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

17. Format and Signing of Bid

- 17.1 The Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

18. Sealing and Marking of Bids

- 18.1 The Bidders shall seal the original and each copy of the bid in separate inner envelopes, duly marking the envelopes as "original" and "copy". He shall then place all the inner envelopes in an outer envelope.
- 18.2 The inner and outer envelopes shall:
- (a) be addressed to the Purchaser at the following address:- The Member Secretary , Central Pollution Control Board **Parivesh Bhawan, East Arjun** Nagar, Delhi -110032, mentioning on top Procurement of goods- SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF VIDEO CONFERENCING SYSTEM IN CPCB, IFB No. CPCB/05/2011-12.

(b) bear the Project Name, the Invitation for Bids(IFB) title and number, and a statement "Do not open before 15.30 hours "Indian Standard Time" (IST)" on 13.12.2011."

18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late".

18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

18.5 Telex, cable or facsimile bids will be rejected.

19. Deadline for Submission of Bids

19.1 Bids must be received by the Purchaser at the address specified under ITB Clause 18.2 (a) no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received upto the appointed time on the next working day.

19.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with ITB Clause 7, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to ITB Clause 19, will be rejected and/or returned unopened to the Bidder.

21. Modification and Withdrawal of Bids

21.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.

21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of ITB Clause 18. A withdrawal notice may also be sent by telex or cable or fax but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.

21.3 No bid may be modified subsequent to the deadline for submission of bids.

21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to ITB Clause 15.7.

E. Bid Opening and Evaluation of Bids

22. Opening of Bids by the Purchaser

22.1 The Purchaser will open all bids, in the presence of Bidders' representatives who choose to attend, at 15.30 hours "Indian Standard Time" (IST)" on 13.12.2011 and in the following location: Training Hall, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032

The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

22.2 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.

22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

22.4 The Purchaser will prepare minutes of the bid opening.

23. Clarification of Bids

- 23.1 During evaluation of bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

24. Preliminary Examination

- 24.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from Agents, without proper authorization from the manufacturer as per Section XII, shall be treated as non-responsive.
- 24.1.1 Where the Bidder has quoted for more than one schedule, if the bid security furnished is inadequate for all the schedules, the Purchaser shall take the price bid into account only to the extent the bid is secured. For this purpose, the extent to which the bid is secured shall be determined by evaluating the requirement of bid security to be furnished for the schedule included in the bid (offer) in the serial order of the Schedule of Requirements of the Bidding document.
- 24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the supplier does not accept the correction of errors, its bid will be rejected and its bid security may be forfeited.
- 24.3 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder.
- 24.4 Prior to the detailed evaluation, pursuant to ITB Clause 26, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 7), Warranty (GCC Clause 15), Force Majeure (GCC Clause 25), Limitation of liability (GCC Clause 29), Applicable law (GCC Clause 31), and Taxes & Duties (GCC Clause 33) will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

25. Deleted

26. Evaluation and Comparison of Bids

- 26.1 The Purchaser will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24 for each schedule separately. No bid will be considered if the complete requirements covered in the schedule is not included in the bid. However, as stated in Para 11, Bidders are allowed the option to bid for any one or more schedules and to offer discounts for combined schedules. These discounts will be taken into account in the evaluation of the bids so as to determine the bid or combination of bids offering the lowest evaluated cost for the Purchaser in deciding award(s) for each schedule.
- 26.2 The Purchaser's evaluation of a bid will exclude and not take into account:
in the case of goods manufactured in India or goods of foreign origin already located in India, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
any allowance for price adjustment during the period of execution of the Contract, if provided in the bid.
- 26.3 Deleted.
- 26.4 The Purchaser's evaluation of a bid will take into account, in addition to the bid price (Ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and Excise duty on the finished goods, if payable) and price of incidental services, the following factors, in the manner and to the extent indicated in ITB Clause 26.5 and in the Technical Specifications:

- (a) cost of inland transportation, insurance and other costs within India incidental to the delivery of the goods to their final destination;
- (b) delivery schedule offered in the bid;
- (c) deleted.;
- (d) deleted;
- (e) the availability in India of spare parts and after-sales services for the goods / equipment offered in the bid;
- (f) the projected operating and maintenance costs during the life of the equipment; and
- (g) the performance and productivity of the equipment offered.

26.5 Pursuant to ITB Clause 26.4, one or more of the following evaluation methods will be applied:

(a) *Inland Transportation, Insurance and Incidentals:*

- (i) Inland transportation, insurance and other incidentals for delivery of goods to the final destination as stated in ITB Clause 11.2 (iii).

The above costs will be added to the bid price.

(b) *Delivery Schedule:*

- (i) The Purchaser requires that the goods under the Invitation for Bids shall be delivered at the time specified in the Schedule of Requirements. The estimated time of arrival of the goods at the project site should be calculated for each bid after allowing for reasonable transportation time. Treating the date as per schedule of requirements as the base, a delivery "adjustment" will be calculated for other bids at 2% of the ex-factory price including excise duty for each month of delay beyond the base and this will be added to the bid price for evaluation. No credit will be given to earlier deliveries and bids offering delivery beyond one month of stipulated delivery period will be treated as unresponsive.

(c) *Deviation in Payment Schedule:*

Deleted.

(d) *Cost of Spare Parts:* Deleted

(e) *Spare Parts and After Sales Service Facilities in India:*

The cost to the Purchaser of establishing the minimum service facilities and parts inventories, as outlined elsewhere in the bidding documents, if quoted separately, shall be added to the bid price.

(f) *Operating and Maintenance Costs:* Deleted

(g) *Performance and Productivity of the Equipment:*

Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in performance or efficiency below the norm of 100, an adjustment of Rs.50,000/- will be added to the bid price, representing the capitalized cost of additional operating costs over the life of the plant using the methodology specified in the Technical Specifications.

27. Deleted.

28. Contacting the Purchaser

28.1 Subject to ITB Clause 23, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the purchaser, it should do so in writing.

28.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

E. Award of Contract

29. Post qualification

29.1 In the absence of prequalification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid meets the criteria specified in ITB Clause 13.3 (b) and is qualified to perform the contract satisfactorily.

29.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13, as well as such other information as the Purchaser deems necessary and appropriate.

29.3 An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform the contract satisfactorily.

30. Award Criteria

30.1 Subject to ITB Clause 32, the Purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

31. Purchaser's right to vary Quantities at Time of Award

31.1 The Purchaser reserves the right at the time of Contract award to increase or decrease by up to 15 percent of the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

32. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids

32.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders.

33. Notification of Award

33.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable/telex or fax, to be confirmed in writing by registered letter, that its bid has been accepted.

33.2 The notification of award will constitute the formation of the Contract.

33.3 Upon the successful Bidder's furnishing of performance security pursuant to ITB Clause 35, the Purchaser will promptly notify the name of the winning bidder to each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.

33.4 If, after notification of award, a Bidder wishes to ascertain the grounds on which its bid was not selected, it should address its request to the Purchaser. The Purchaser will promptly respond in writing to the unsuccessful Bidder.

34. Signing of Contract

34.1 At the same time as the Purchaser notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.

34.2 Within 21 days of receipt of the Contract Form, the successful bidder shall sign and date the Contract and return it to the Purchaser.

35. Performance Security

35.1 Within 21 days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents or in another form acceptable to the Purchaser.

35.2 Failure of the successful bidder to comply with the requirement of ITB Clause 34.2 or ITB Clause 35.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated bidder or call for new bids.

36. Corrupt or Fraudulent Practices

36.1 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their agents (whether declared or not), personnel, subcontractors, sub-consultants, service providers or suppliers, under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In this context, any action taken by a bidder, supplier, contractor, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees to influence the procurement process or contract execution for undue advantage is improper. In pursuance of this policy, the Bank:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" For the purpose of these Guidelines, "another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions. is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) "fraudulent practice" For the purpose of these Guidelines, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution. is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (iii) "collusive practice" For the purpose of these Guidelines, "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels. is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- (iv) "coercive practice" For the purpose of these Guidelines, "party" refers to a participant in the procurement process or contract execution. is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under par. 1.14 (e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
- (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;
- (d) will sanction a firm or individual, at any time, in accordance with prevailing Bank's sanctions procedures, A firm or an individual may be declared ineligible to be awarded a Bank-financed contract upon completion of the Bank's sanctions proceedings as per its sanctions procedures, including inter alia: (i) temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding; (ii) cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks; and (iii) the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption. including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has: (i) either been included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower. sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract;
- (e) will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

36.2 Furthermore, bidders shall be aware of the provision stated in Sub-Clause 35.1 of the General Conditions of Contract.

"another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

a "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

"parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

¹ a “party” refers to a participant in the procurement process or contract execution.

SECTION III: GENERAL CONDITIONS OF CONTRACT

¹ The factor is based on the country’s projected inflation for the period in question. The borrower inserts the value in the request for extensions prior to issue.

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General Conditions of Contract

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:

- (a) "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
- (e) "GCC" means the General Conditions of Contract contained in this section.
- (f) "SCC" means the Special Conditions of Contract.
- (g) "The Purchaser" means the organization purchasing the Goods, as named in SCC.
- (h) "The Purchaser's country" is the country named in SCC.
- (i) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- (j) "The World Bank" means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (k) "The Project Site", where applicable, means the place or places named in SCC.
- (l) "Day" means calendar day.

2. Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Country of Origin

- 3.1 All Goods and Services supplied under the Contract shall have their origin in the member countries and territories eligible under the rules of the World Bank as further elaborated in SCC.
- 3.2 For purposes of this Clause "origin" means the place where the Goods are mined, grown or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.

4. Standards

4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

5. Use of Contract Documents and Information

5.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

5.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.

5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

6. Patent Rights

6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

7. Performance Security

7.1 Within 21 days of receipt of the notification of contract award, the Supplier shall furnish performance security in the amount specified in SCC.

7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

7.3 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:

(a) A Bank guarantee or irrevocable Letter of Credit, issued by a nationalized/scheduled bank located in India or a bank located abroad acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser; or

(b) A cashier's check, certified check, or demand draft.

7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 30 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC.

8. Inspections and Tests

8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. SCC and the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.

- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data - shall be furnished to the inspectors at no charge to the Purchaser.
- 8.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

- 9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the Notification of Award. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11. Insurance

- 11.1 The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

12. Transportation

12.1 Deleted.

12.2 Deleted.

- 12.3 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

12.4 Deleted

13. Incidental Services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

(a) performance or supervision of the on-site assembly and/or start-up of the supplied Goods;

- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

14. Spare Parts

14.1 As specified in the SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) In the event of termination of production of the spare parts:
 - (i) advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested

15. Warranty

15.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for 12 months after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for 18 months after the date of shipment from the place of loading whichever period concludes earlier, unless specified otherwise in the SCC.

15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from ex-works or ex-factory or ex-showroom to the final destination.

15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

16. Payment

16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in the SCC.

16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the Purchaser but in no case later than sixty (60) days after submission of the invoice or claim by the Supplier.

16.4 Payment shall be made in Indian Rupees.

17. Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in SCC or in the Purchaser's request for bid validity extension, as the case may be.

18. Change Orders

18.1 The Purchaser may at any time, by written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipping or packing;
- (c) the place of delivery; and/or
- (d) the Services to be provided by the Supplier.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21. Subcontracts

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delays in the Supplier's Performance

22.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Schedule of Requirements.

22.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

24.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
- (b) if the Supplier fails to perform any other obligation(s) under the Contract.
- (c) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 34, in competing for or in executing the Contract.

24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25. Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22, 23, 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser

either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency

26.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

27. Termination for Convenience

27.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

27.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

28. Settlement of Disputes

28.1 The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

28.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

28.2.1 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

28.2.2 Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

28.3 Notwithstanding any reference to arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Purchaser shall pay the Supplier any monies due the Supplier.

29. Limitation of Liability

29.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6,

- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
- (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

30. Governing Language

30.1 The contract shall be written in English language. Subject to GCC Clause 30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

31. Applicable Law

31.1 The Contract shall be interpreted in accordance with the laws of the Union of India.

32. Notices

32.1 Any notice given by one party to the other pursuant to this Contract shall be sent to other party in writing or by cable, telex or facsimile and confirmed in writing to the other Party's address specified in SCC.

32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes and Duties

33.1 Deleted.

33.2 Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

34. Fraud and Corruption

34.1 If the Purchaser determines that the Supplier has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Purchaser may, after giving 14 days notice to the Supplier, terminate the Contract, and the provisions of Clause 24 shall apply as if such termination had been made under Sub-Clause 24.1.

(a) For the purposes of this Sub-Clause:

(i) "corrupt practice"² is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

(ii) "fraudulent practice"³ is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

² "another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ a "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

- (iii) "collusive practice"⁴ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "coercive practice"⁵ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Clause 35 [Inspections and Audits by the Bank].
- 34.2 Should any employee of the Supplier be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the purchase of the Goods, then that employee shall be removed.

35. Inspections and Audit by the Bank

35.1 The Supplier shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Supplier's attention is drawn to Clause 34, which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 35.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines).

⁴ "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

⁵ a "party" refers to a participant in the procurement process or contract execution.

SECTION IV: SPECIAL CONDITIONS OF CONTRACT

SECTION IV: SPECIAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

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Special Conditions of Contract

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1. Definitions (GCC Clause 1)

(a) The Purchaser is Member Secretary, Central Pollution Control Board, Delhi

(b) The Supplier is

2. Country of Origin (GCC Clause 3)

All countries and territories as indicated in Section XIV of the bidding documents, "Eligibility for the Provisions of Goods, Works, and Services in Bank-Financed Procurement".

3. Performance Security (GCC Clause 7)

3.1 Within 21 days after the Supplier's receipt of Notification of Award, the Supplier shall furnish Performance Security to the Purchaser for an amount of 5% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 12 months and the Performance Bank Guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.

3.2 Substitute Clause 7.3 (b) of the GCC by the following:

A cashier's cheque or banker's certified cheque or crossed demand draft or pay order drawn in favour of Member Secretary, Central Pollution Control Board , *Delhi*.

3.3 Substitute Clause 7.4 of the GCC by the following:

The Performance Security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligation, under the contract.

3.4 Add as Clause 7.5 to the GCC the following:

In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.

4. Inspection and Tests (GCC Clause 8)

The following inspection procedures and tests are required by the Purchaser:

1. Purchaser may inspect the equipments before dispatch in India at his own cost. In case of equipments to be dispatch from abroad, inspection will be done before installation/ commissioning of the equipment at site.
2. Inspection of equipments at site of work before installation/commissioning.
3. Testing of equipments at site of work after installation to ensure conformity to the specification.

5. Packing (GCC Clause 9)

Add as Clause 9.3 of the GCC the following:

Packing Instructions: The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink, the following:

i) Project ii) Contract No. iii) Country of Origin of Goods iv) Supplier's Name, and v) Packing list reference number.

6. Delivery and Documents (GCC Clause 10)

Upon delivery of the Goods, the supplier shall notify the purchaser and the insurance company by cable/telex/fax the full details of the shipment including contract number, railway receipt number and date, description of goods, quantity, name of the consignee etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- (i) Two Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
- (ii) Railway receipt/acknowledgment of receipt of goods from the consignee(s);
- (iii) Two Copies of packing list identifying the contents of each package;
- (iv) Insurance Certificate;
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate issued by the nominated inspection agency, and the Supplier's factory inspection report;
- (vii) Instructions & operation manuals - 2 sets at each location of installation.
and
- (viii) Certificate of Origin.

The above documents shall be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

7. Insurance (GCC Clause 11)

For delivery of goods at site, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes.

8. Incidental Services (GCC Clause 13)

The following services covered under Clause 13 shall be furnished and the cost shall be included in the contract price of Schedule of Requirement Part A:

- (a) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- (d) Training of the Purchaser's personnel at each location/office, where Video-conferencing system shall be installed, should be provided by the supplier for start-up, operation, maintenance and/or repair of the supplied Goods.

8.2 The following services covered under Clause 13 shall be furnished and the cost shall be included in the contract price of Schedule of Requirement Part B

- a. Comprehensive Annual Maintenance Contract (CAMC) for all equipments including Hardware, Software and Accessories supplied under the contract, for a period of three year after warrantee period shall also be provided by the supplier. Supplier shall quote their rate for the comprehensive maintenance charges as given under Part-B of Schedule of Requirement. The terms & conditions of CAMC shall be as given under Comprehensive Annual Maintenance Contract at Annexure-A

9. Spare Parts (GCC Clause 14)

Add as Clause 14.2 to the GCC the following:

Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

10. Warranty (GCC Clause 15)

(i) G.C.C. Clause 15.2:

In partial modification of the provisions, the warranty period shall be 24 months from date of acceptance of Goods or 30 months from the dates of Shipment, whichever occurs earlier. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion either:

- (a) a) pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees or replace the whole or part of the equipment free of cost and extend warranty period for next two year from the date of replacement". Kindly note that the liquidated damages in this clause are not for delay in supply but for not meeting the performance requirements.
- (b) For MPLS connectivity an assured service of 99.5% is required. In case there is an interruption of MPLS services beyond 4 hours and upto 24 hours at a stretch a penalty of Rs. 2000/- will be imposed. If the interruption occurs more than two times in a month the firm will be liable to provide new line from other network service provided without charging any extra cost. The new line should be installed within 15 days from the written directions from CPCB failing which CPCB will procure the same and the amount will be deducted from the performance security of the firm.

(ii) Substitute Clause 15.4 of the GCC by the following:

"Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever, shall lie on the Purchaser for the replaced parts/goods thereafter.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 36 months."

(iii) GCC Clauses 15.4 and 15.5:

The period for correction of defects in the warranty period is 3 days. *(specify as required)*

11. Payment (GCC Clause 16) "Payment for Goods and Services shall be made in Indian Rupees as follows":

- (i) *Advance Payment:* deleted.
- (ii) *On Delivery:* Seventy percent of the contract price shall be paid on receipt of Goods and upon submission of the documents specified in SCC Clause 6 above. However an advance copy of the supplier's invoice for these goods shall be sent to the purchaser separately.
- (iii) On successful installation & testing : Ten percent of contract price; and
- (iv) *On Final Acceptance:* Ten percent of the Contract Price shall be paid to the supplier within 30 days after the date of the acceptance certificate issued by the Purchaser's representative for the respective delivery.
- (v) On successful completion of training at 3 locations: the remaining Ten percent Of the contract amount

- (v) Payment for post warranty comprehensive annual maintenance charges shall be paid half yearly on production of certificate for satisfactory performance during that period issued by the Purchaser's representatives from locations/offices where Video- Conferencing System has been installed.

12. Prices (GCC Clause 17)

12.1 Prices payable to the supplier as stated in the contract shall be firm during the performance of the contract.

13. Sub-contracts (GCC Clause 21)

Add at the end of GCC sub-clause 21.1 the following:

Sub-contract shall be only for bought-out items and sub-assemblies

14. Liquidated Damages (GCC Clause 23)

14.1 For delays :

GCC Clause 23.1 -- The applicable rate is 0.5% per week and the maximum deduction is 10% of the contract price.

15. Settlement of Disputes (Clause 28)

The dispute settlement mechanism to be applied pursuant to GCC Clause 28.2.2 shall be as follows:

(a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the President of the Institution of Engineers (India) Delhi chapter.

(b) In the case of a dispute with a Foreign Supplier, the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the President of the Institution of Engineers (India) Delhi chapter.

(c) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above, within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the President of the Institution of Engineers (India), Delhi Chapter both in cases of the Foreign supplier as well as Indian supplier, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India) Delhi chapter making such an appointment shall be furnished to each of the parties.

(d) Arbitration proceedings shall be held at New Delhi India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.

(e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.

(f) Where the value of the contract is Rs. 10 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority namely the President of the Institution of Engineers (India) Delhi Chapter.

16. Notices (Clause 32)

For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

Purchaser: Member Secretary, Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar, Delhi

Supplier: (To be filled in at the time of Contract signature)

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17. Supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- Quantity offered for inspection and date;
- Quantity accepted/rejected by inspecting agency and date;
- Quantity despatched/delivered to consignees and date;
- Quantity where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;

- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract
(in case of stage-wise inspection, details required may also be specified).

SECTION V: SCHEDULE OF REQUIREMENTS

SCHEDULE OF REQUIREMENTS

PART-A

S.No.	Brief Description	Unit	Quantity	Delivery Schedule
1.	Bridge	No.	1	Within 3 months from the date of issue of supply order
2.	HD Single Point Endpoint Specification with 10x Camera	No.	3	
3.	Multi Directional Desk Microphones	No.	12	
4.	Digital Signal Processor :	No.	6	
5.	FOH Speakers	No.	18	
6.	Amplifier	No.	3	
7.	LCD	No.	3	
8.	Ceiling Mics	No.	9	
9.	DVR	No.	1	
10.	Rack 17"U	No.	3	
11.	2MB MPLS Managed Services	No.	3	
12.	Installation Commissioning Testing and Training	No.	3	
13.	MS Office 2007	No.	3	

Managed Services (details of point no. 11)

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Input Data				
S.N	A End/ LOCATION	Connectivity	Bandwidth	Class of service
			Mbps	
1	New Delhi	MPLS	2 Mbps	Gold
2	Bangalore	MPLS	2 Mbps	Gold
3	Vadodra	MPLS	2 Mbps	Gold

At all three places Local lead charges, Main lead charges and Modem rental charges shall be included.

PART-B

S. N	Brief Description	I st year (after warranty period)	II nd year (after warranty period)	III rd year (after warranty period)	Total
1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing.	Per year	Per year	Per Year	
i.	Delhi				
ii.	Vadodra				
iii.	Bangalore				

SECTION VI: TECHNICAL SPECIFICATIONS

SECTION VI - TECHNICAL SPECIFICATIONS

Bridge	
S.N.	Feature
1	High Performance Platform
1.1	The MCU should be real time media conferencing platform providing a high performance, scalable, IP network (H.323 and SIP) solution with feature rich easy to use multipoint video and integrated (video, audio, and content) conferencing features. All ports on the MCU should support transcoding and speed matching either if the EPs connect on video or audio-only
1.2	Bidders should quote a hardware based standalone platform for MCU; software based MCU and embedded MCU on video end points are not acceptable
2	Capacity
2.1	The video conferencing system shall support up to 16 participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions
2.2	• Flexible resource capacity supports:
2.2a	Up to 16 HD @ 720p/1080p resources
2.2b	Up to 16 SD resources or any combination of SD/HD
2.3	4Mbps per port
2.4	Flat capacity regardless of the video codecs used.
2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codecs as H.263/H.263+.
3	High Definition
3.1	High Definition (HD) refers to high quality picture resolution. An HD compliant endpoint should connect to a conference at a resolution of 1280x720 (720p) and the bit rate of 1024 kbps ~2 Mb. MCU should also support 1080p.
4	Hardware Characteristics
4.1	Encoder, Decoder and Scalers dedicated for each of the 16 ports
4.2	Support for Gigabit networks
5	Video Support
5.1	H.263
	H.263+
	H.264
5.2	Up to 16 high definition (HD) 720p in continuous presence (CP) transcoding
5.3	Up to 60 frames per second
5.4	16:9 aspect ratio
5.5	A user that is connecting to a conference at a lower speed should not force the rest of the participants to downgrade their individual speeds to meet that user's speed i.e. independent port transcoding
5.6	H.239 Content in H264 Format (720p60)
6	Video resolution
6.1	Supporting for all common resolutions:
6.2	1080p30 (@ 1.7Mbps or less), 720p60 (@ 1.1Mbps or less), 720p30 (@ 768Kbps or less), XGA (1024x768), SVGA (800x600), 4SIF (640x480), 4CIF (704x576), VGA (640x480), 384p (x384) Letterbox 4:3 – The MCU must support 16:9 and 4/3 video aspects in native mode. Endpoints only supporting 4:3 aspect should be seen in their native format (not stretched)
7	Audio Support
7.1	• AAL-LC, G.722.1 Annex C, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC
8	MCU Management
8.1	Firmware upgrades through remote administration UI

8.2	Ability to retain the previous firmware image and to switch back to it whenever desired (e.g. in case a firmware upgrade fails). This switch back should also set all preferences to their default (factory reset)
8.3	Multiples user access levels on the remote administration UI
8.4	Support for serial console connection with ability to setup at least the following basic parameters: IP addressing info, NTP server, 802.1Q VLAN ID, Date, Time and Time Zone
	Support for at least the following log types: Event Logs, Troubleshooting Logs and CDRs
9	Call Scheduling
9.1	Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define:
10	Network Characteristics
10.1	Supported Protocols
10.2	Call signaling - H.323 v4, SIP
10.3	Miscellaneous - IPV4, NTP, 802.1Q (VLAN ID)
10.4	Dual streaming - H.239
10.5	Support for QoS (Int Serv and Diff Serv)
11	HD Single Point Endpoint Specification
11.1	The system should support the following video standards -H.261, H.263, H.263+, H.264 or equivalent
11.2	The system should support H.323, H.320,SIP and other equivalent
11.3	The System should support Full HD Resolution 1080p30, 720p60,& 720p30
11.4	The system must support 16:9 aspect ratio
11.5	The system should support minimum 30 frames per second from 168 kbps and beyond.
11.6	The system should support H.239 for data sharing
11.7	The system should support the following video inputs -:
11.8	One HDMI/DVI-I Input for the camera
11.9	One DVI -I input for Data Sharing
11.10	The System should have the following video output-:
11.11	System should have any 2 HD outputs
11.12	The system should support the following audio standards-:G.711, G.722, G.722.1C, G.728, G.729, MPEG4-AAC-LC/LD
11.13	The system should support the following audio inputs -:
11.14	One Line in
11.15	One Mic-in(can vary for different manufacturers)
11.16	The system should support the following audio outputs -:
11.17	One Line Out
11.18	One HD Video Out(Can vary for different manufacturers)
11.19	The system should support audio conferencing phone integration
11.20	The system should support 128 to 4 Mbps in a Point to Point call
11.21	The system should support 1 PRI and a backup of 1 BRI
11.22	The system should support dual HD Display

	Directory services - Should support Local and Global directories
	Should support LDAP and H.350 protocols for directory transfer.
	External devices – Should have USB/RS232 port for software upgrade or diagnostics.
	Miscellaneous - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.
	For analyzing call details and records, it should be possible to extract CDR information from web management of the endpoints.
	Remote should be capable to switch on or off the VC unit.
	Operating conditions: 230 volts, 50 Hz and PAL video standard
12	Camera HD
12.1	The camera should be Full HD
12.2	The camera should have minimum 10x optical Zoom or higher
13	Omni Directional Desk Microphones
13.1	Polar Pattern : cardioid polar pattern or available with the latest technology
13.2	Frequency response : 100hz - 16Khz or better
13.3	Sensitivity : 47dB +/-3dB @ 1KHz (0dB = 1V/Pa) or better
13.4	S/N : 60dB(A) or better
13.5	Termination : Male 3pin XLR or compatible with system
	Digital Signal Processor :
14	Input
14.1	Each input of the device shall provide 22 kHz bandwidth stereo acoustic echo cancellation processing, upto 20dB of ambient noise cancellation, automatic gain control, digital gain with, and upto one second of audio delay (or better system)
14.2	Device should provide minimum 8 microphone/ line AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals
14.3	All inputs from the linked devices shall be available to all outputs
14.4	The digital audio device shall operate with 22 kHz audio bandwidth (0Hz - 22 kHz) and 48 kHz sample rate and be capable using two simultaneous references for stereo operation on every input
14.5	The unit shall provide user selectable amounts of ambient noise cancellation on each microphone input from 0 to 20 dB
14.6	The noise cancellation shall effectively cancel steady state ambient noise at all frequencies without causing any perceptible degradation of human voice or other transient sounds.
14.7	Dynamics processing compensation for level variation.
15	Connectors (or system compatible connectors)
15.1	RS -232: DB9F or compatible to proposed system
15.2	Power supply
15.3	Input voltage of 90-250 VAC; 50-60 Hz
15.4	0 to 50 degree C operating temperature
15.5	Frequency response: 20-22,000 Hz, +0.1 / - 0.3 dB

15.6	cross talk: <-75dB, 20-22000 Hz, 1 kHz
15.7	Latency : Mic / Line inputs to outputs: 20 ms, AEC and
15.8	Acoustic Echo Cancellation Span: 200ms or better
15.9	RS 232 or USB (compatible with the proposed system) control interface
16	FOH Speakers
16.1	Frequency response - (-3dB) (1) 90 Hz - 25 kHz or better
16.2	Frequency range - (-10dB) (1) 80 Hz - 30 kHz or better
16.3	System Sensitivity - (1w @1 m) (2) 88dB or better
16.4	Dispersion (-6dB) 90 degree conical preferably
16.5	Average 105dB or better
16.6	Peak 111dB or better
16.7	Power Handling
16.8	Average 50w or better
16.9	Programme 100w or better
16.10	Peak 200W or better
16.11	Multi angle bracket
17	Amplifier
17.1	High performance, lightweight Class-D amplifier – weighing less than 15lbs or better.
17.2	• XLR, 1/4", RCA Inputs to ensure compatibility with any source
18.0	Switches
	Cisco 2960 or equivalent L -2 switches
19.0	MPLS connectivity
19.1	2 MPLS connectivity on each location
19.2	Up time 99.5% or above
19.3	Link latency less than 120ms
20.0	LCD 55'
20.1	The Display should have aspect ratio of 16:9.
20.2	The Display should support true resolution of 1920X1080 pixels.
20.3	The Display should have minimum (Native) contrast ratio of 1000:1.
20.4	The Display should have minimum life span of 50,000 Hrs.
20.5	The display should have a high Brightness of 600 Cd/m2 or higher
20.6	The display should have:
	a) Cabinet made of Metal / Powder Coated Alloy
	b) Inbuilt Fans
	c) Anti Reflection Coating
	d) Temper Resistant Settings to lock the front panel buttons
20.7	The display should support the following video standards: NTSC, Modified NTSC, PAL, PAL 60 and SECAM
20.8	The display should have following input terminals.
	a) RGB Input –Mini D-Sub 15 PIN x 1 (For connecting PC/LAPTOP)
	b) DVI-D In – 24+1 PIN (For More Laptop)
	c) RS-232C - D-Sub 9 PIN X 1 (For programming) (Input and Output)
	c) HDMI In – 2(For connecting DVD Players in future)
	d) LAN port - RJ45
20.9	The LCD should have in-built speakers (minimum 10W x 2)
	a) Auto Power off (For saving the power consumption when not in use)
	b) Power Saver Mode (For saving power if not in use for short duration)

20.10	The display to be supplied with in-built or wall mounted PC
	a) The PC should have Dual Core Processor , Min 2 GB Ram,40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with Xp embedded OS, antivirus with one year support
20.11	The Display should support various types of mounting accessories like:
	a) Wall Mount Bracket
20.12	The display should have the following standards certification
	a) RoHS compliant – For environment
	b) UL/IEC – For safety
	c) FCC CISPR22 Class B – For radiations regulation
20.13	Energy Star 5.0 Certified (product should be listed in Energy Star Website for Energy Star 5.0 Certification)
20.14	The Display should have OEM warranty for three years comprehensive including LCD panel (OEM undertaking to be submitted)
20.15	Microsoft office 2007 Has to be Quoted Separately.
21.0	DVR Specifications for Video Conferencing in CPCB
	<p>Video recording and playback at resolutions of HD Instant video recording via a single button on the remote control Pause, mute, fast forward & fast backwards playback controls Media scanning function to locate audio/video files automatically Playback of externally imported videos, music, pictures graphical interface for controlling settings 2x-10x digital picture zoom for viewing photos or better Connect external hard drive storage up to 2 TB or better</p> <p>Specifications: Input Video Signal: Compatible with VC systems Input Connectors: Composite (TV), S-Video, Component, HDM1 Input Connector: USB for connection of external storage device Output Connectors: Composite (TV), S-Video, Component, HDM1 Audio Connections: Analog L/R, input and output Remote Control : Dimensions: Able to fit in 19" Rack</p>
22.0	EQUIPMENT RACK 17U or to the size of equipments
	Top and Bottom covers : Design should be capable of placing the standard equipments of 19" size or the size of the equipments provided. Ventilated at top with fan and having standard accessories for power and cable management with toughned glass door.

SECTION VI-A : QUALIFICATION CRITERIA

(Referred to in Clause 13.3(b) of ITB)

- (a) The bidder should be a manufacturer who must have manufactured, tested and supplied the equipment(s) similar to the type specified in the 'schedule of requirements' up to at least 2 Video-Conferencing System with all accessories, including commissioning of any one during the last 3 years. The equipments offered for supply must be of the most recent series models incorporating the latest improvements in design. The models should have been released on or after January 2009 and be in satisfactory operation for at least 6 months as on date of bid opening. Further, bidder should be in continuous business of manufacturing products similar to that specified in the schedule of requirements during the last three years prior to bid opening.
- (b) Bids of bidders quoting as authorized representative of Video-Conferencing System Manufacturer, meeting with the above requirement in full, can also be considered provided:
- (i) the manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per GCC and SCC to the authorized local representative; and
 - (ii) the bidder, as authorized representative, has supplied, installed and commissioned satisfactorily at least 2 nos of the Video-Conferencing System similar to the type specified in the Schedule of Requirements in the last three years which must be in satisfactory operation for at least 6 months on the date of bid opening and must be providing annual maintenance services

The bidder should furnish the information on all past supplies and satisfactory performance for both (a) and (b) above, in proforma under section XL

All bids submitted shall also include the following information along with formats under Section XV.

- (i) Copies of original documents defining the constitution or legal status, place of registration and principle place of business of the company or firm or partnership, etc.
- (ii) The bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for supply of the required systems and equipment within the specified time of completion after meeting all their current commitments.
- (iii) The bidder should clearly confirm that all the facilities exist in his factory, in India for inspection and testing and these will be made available to the Purchaser or his representative for inspection.
- (iv) Details of Service Centers and information on service support facilities that would be provided after the warranty period [in the Service Support Form given in Section XIV].
- (i) Reports on financial standing of the Bidder such as profit and loss statements, balance sheets and auditor's report for the past three years, banker's certificates etc
- (vi) Should have valid Income tax and sale tax/VAT registration no. (copy to be attached)

SECTION 3-A
 TECHNICAL RESPONSIVENESS FORM
 RELATED TO PROCUREMENT OF VIDEO CONFERENCING SYSTEM
 REF BID NO.: CPCB-05/2011-12

The minimum technical specification requirements for the Video conferencing system to be installed at locations are given in Technical Specifications of bid document. However, the actual technical proposal can have higher or better technical performance parameters and the minimum specifications proposed should not be taken as a constraint on the upper side. The technical specifications given in Technical Specifications of bid documents are descriptive.

The bidder shall submit a detailed item-wise compliance / non-compliance statement referring Para-wise to the requirements given in this document. The compliance statement shall be supported by original brochure(s) of the equipment or sub component from the manufacturer. In case the original brochure is silent on any part of tender specification, it shall be supported by an undertaking by the manufacturer, if claimed complied.

Silence on any part of the technical specification or failure / omission to provide any such details will be treated as non-responsive.

Summary of Instructions

Particulars of Manufacturer and local agent cum representative are to be given along with Address.

All entry boxes shall be filled-in accurately and comprehensively. Quantitative fields shall be filled in accurately. It is not acceptable to use Yes, No, Compliant or similar evading words. Following format is designed to help the Bidder to understand the requirements of the equipment being procured. The Bidder must describe in the format how his bid responds to the technical requirements/specifications of the equipment. One or two responses (e.g. "Yes", "No" "will comply" or similar evading words) are normally not sufficient to confirm the responsiveness with the technical requirements, hence elaborate responses are sought. Even if any one of the following technical requirements of equipment is not as per the minimum criteria mentioned, the bids would be declared "non-responsive" and would not further be considered for evaluation purposes.

Related pamphlets and information shall be enclosed with the bid and be unambiguously associated with instruments as offered in the bid

Negligence to comply with the instructions and requirements as stated above makes the bid liable to be rejected.

Entries requiring special attention:

The bidder's experience with the offered equipment should be clearly reflected. The proposed maintenance interval and the recommended spares as offered in the bid shall be based on instrument deployment history. The training proposal shall be based on experience in similar cases. Moreover, it shall consider the educational level and specialization of the trainees.

Model	VC Equipment Model	-----make and model
Address	VC Equipment Manufacturer Name Place Tel: Fax: E-mail: WWWWeb:	Local Agent for VC Equipment manufacturer: Name Place Tel: Fax: E-mail: WWWWeb:

S.N	Feature	Manufacturer	As per Technical Specification	As offered for bidder	Remarks
	Bridge				
S.N.	Feature				
1	High Performance Platform				
1.1	The MCU should be real time media conferencing platform providing a high performance, scalable, IP network (H.323 and SIP) solution with feature rich easy to use multipoint video and integrated (video, audio, and content) conferencing features. All ports on the MCU should support transcoding and speed matching either if the EPs connect on video or audio-only				
1.2	Bidders should quote a hardware based standalone platform for MCU; software based MCU and embedded MCU on video end points are not acceptable				
2	Capacity				
2.1	The video conferencing system shall support up to 16 participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions				
2.2a	Up to 16 HD @ 720p/1080p resources				
2.3	4Mbps per port				
2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codecs as H.263/H.263+.				
3	High Definition				
3.1	High Definition (HD) refers to high quality picture resolution. An HD compliant endpoint should connect to a conference at a resolution of 1280x720 (720p) and the bit rate of 1024 kbps ~2 Mb. MCU should also support 1080p.				
4	Hardware Characteristics				
4.1	Encoder, Decoder and Scalers dedicated for each of the 16 ports				
4.2	Support for Gigabit networks				
5	Video Support				
5.1	H.263				
	H.263+				
	H.264				
5.2	Up to 16 high definition (HD) 720p in continuous presence (CP) transcoding				

5.3	Up to 60 frames per second				
5.4	16:9 aspect ratio				
5.5	A user that is connecting to a conference at a lower speed should not force the rest of the participants to downgrade their individual speeds to meet that user's speed i.e. independent port transcoding				
6	Video resolution				
6.1	Supporting for all common resolutions: 1080p30 (@ 1.7Mbps or less), 720p60 (@ 1.1Mbps or less), 720p30 (@ 768Kbps or less), XGA (1024x768), SVGA (800x600), 4SIF (640x480), 4CIF (704x576), VGA (640x480), 384p (x384)				
6.2	Letterbox 4:3 – The MCU must support 16:9 and 4/3 video aspects in native mode. Endpoints only supporting 4:3 aspect should be seen in their native format (not stretched)				
7	Audio Support				
7.1	• AAL-LC, G.722.1 Annex C, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC				
8	MCU Management				
8.1	Firmware upgrades through remote administration UI				
8.3	Multiples user access levels on the remote administration UI				
	Support for at least the following log types: Event Logs, Troubleshooting Logs and CDRs				
9	Call Scheduling				
9.1	Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define:				
10	Network Characteristics				
	Supported Protocols				
10.1	Call signaling - H.323 v4, SIP				
10.2	Miscellaneous - IPV4, NTP, 802.1Q (VLAN ID)				
11	HD Single Point Endpoint Specification				
11.1	The system should support the following video standards -H.261, H.263, H.263+, H.264 or equivalent				
11.2	The system should support H.323, H.320,SIP and other equivalents				
11.3	The System should support Full HD Resolution 1080p30, 720p60,& 720p30				
11.4	The system must support 16:9 aspect ratio				

11.5	The system should support minimum 30 frames per second from 168 kbps and beyond.				
11.6	The system should support H.239 for data sharing				
11.7	The system should support the following video inputs -:				
11.8	One HDMI/DVI-I Input for the camera				
11.9	One DVI -I input for Data Sharing				
11.1	The System should have the following video output-:				
11.11	System should have any 2 HD outputs				
11.12	The system should support the following audio standards:-G.711, G.722. G.722.1C. G.728. G.729, MPEG4-AAC-LC/LD				
11.13	The system should support the following audio inputs -:				
11.14	One Line in				
11.15	One Mic-in(can vary for different manufacturers)				
11.16	The system should support the following audio outputs -:				
11.17	One Line Out				
11.18	One HD Video Out(Can vary for different manufacturers)				
11.19	The system should support audio conferencing phone integration				
11.20	The system should support 128 to 4 Mbps in a Point to Point call				
11.21	The system should support 1 PRI and a backup of 1 BRI				
11.22	The system should support dual HD Display				
	Directory services - Should support Local and Global directories				
	Should support LDAP and H.350 protocols for directory transfer.				
	External devices – Should have USB/RS232 port for software upgrade or diagnostics.				
	Miscellaneous - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.				
	For analyzing call details and records, it should be possible to extract CDR information from web management of the endpoints.				
	Remote should be capable to switch on or off the VC unit.				
	Operating conditions: 230 volts, 50 Hz and PAL video standard				

12	Camera HD				
12.1	The camera should be Full HD				
12.2	The camera should have minimum 10x optical Zoom or higher				
13.00	Omni Directional Desk Microphones				
13.1	Polar Pattern : cardioid polar pattern or available with the latest technology				
13.2	Frequency response : 100hz - 16Khz or better				
13.3	Sensitivity : 47dB +/-3dB @ 1KHz (0dB = 1V/Pa) or better				
13.4	S/N : 60dB(A) or better				
13.5	Termination : Male 3pin XLR or compatible with system				
	Digital Signal Processor :				
14	Input				
14.1	Each input of the device shall provide 22 kHz bandwidth stereo acoustic echo cancellation processing, upto 20dB of ambient noise cancellation, automatic gain control, digital gain with, and upto one second of audio delay (or better system)				
14.2	Device should provide minimum 8 microphone/ line AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals				
14.3	All inputs from the linked devices shall be available to all outputs				
14.4	The digital audio device shall operate with 22 kHz audio bandwidth (0Hz - 22 kHz) and 48 kHz sample rate and be capable using two simultaneous references for stereo operation on every input				
14.5	The unit shall provide user selectable amounts of ambient noise cancellation on each microphone input from 0 to 20 dB				
14.6	The noise cancellation shall effectively cancel steady state ambient noise at all frequencies without causing any perceptible degradation of human voice or other transient sounds.				
14.7	Dynamics processing compensation for level variation.				
15	Connectors (or system compatible connectors)				
15.1	RS -232: DB9F or compatible to proposed system				

15.2	Power supply				
15.3	Input voltage of 90-250 VAC; 50-60 Hz				
15.4	0 to 50 degree C operating temperature				
15.5	Frequency response: 20-22,000 Hz, +0.1 / - 0.3 dB				
15.6	cross talk: <-75dB, 20-22000 Hz, 1 kHz				
15.7	Latency : Mic / Line inputs to outputs: 20 ms, AEC				
15.8	Acoustic Echo Cancellation Span: 200ms or better				
15.9	RS 232 or USB (compatible with the proposed system) control interface				
16	FOH Speakers				
16.1	Frequency response - (-3dB) (1) 90 Hz - 25 kHz or better				
16.2	Frequency range - (-10dB) (1) 80 Hz - 30 kHz or better				
16.3	System Sensitivity - (1w @1 m) (2) 88dB or better				
16.4	Dispersion (-6dB) 90 degree conical preferably				
16.5	Average 105dB or better				
16.6	Peak 111dB or better				
16.7	Power Handling				
16.8	Average 50w or better				
16.9	Programme 100w or better				
16.10	Peak 200W or better				
16.11	Multi angle bracket				
17	Amplifier				
17.1	High performance, lightweight Class-D amplifier – weighing less than 15lbs or better.				
17.2	• XLR, 1/4", RCA Inputs to ensure compatibility with any source				
18.0	Switches				
	Cisco 2960 or equivalent L -2 switches				
19.0	MPLS connectivity				
19.1	2 MPLS connectivity on each location				
19.2	Up time 99.5% or above				
19.3	Link latency less than 120ms				
20.0	LCD 55'				
20.1	The Display should have aspect ratio of 16:9.				

20.2	The Display should support true resolution of 1920X1080 pixels.				
20.3	The Display should have minimum (Native) contrast ratio of 1000:1.				
20.4	The Display should have minimum life span of 50,000 Hrs.				
20.5	The display should have a high Brightness of 600 Cd/m2 or higher				
20.6	The display should have:				
	e) Cabinet made of Metal / Powder Coated Alloy				
	f) Inbuilt Fans				
	g) Anti Reflection Coating				
	h) Temper Resistant Settings to lock the front panel buttons				
20.7	The display should support the following video standards: NTSC, Modified NTSC, PAL, PAL 60 and SECAM				
20.8	The display should have following input terminals.				
	a) RGB Input –Mini D-Sub 15 PIN x 1 (For connecting PC/LAPTOP)				
	b) DVI-D In – 24+1 PIN (For More Laptop)				
	c) RS-232C - D-Sub 9 PIN X 1 (For programming) (Input and Output)				
	c) HDMI In – 2(For connecting DVD Players in future)				
	d) LAN port - RJ45				
20.9	The LCD should have in-built speakers (minimum 10W x 2)				
	a) Auto Power off (For saving the power consumption when not in use)				
	b) Power Saver Mode (For saving power if not in use for short duration)				
20.10	The display to be supplied with in-built or wall mounted PC				
	b) The PC should have Dual Core Processor , Min 2 GB Ram,40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with Xp embedded OS, antivirus with one year support				
20.11	The Display should support various types of mounting accessories like:				
	a) Wall Mount Bracket				
20.12	The display should have the following standards certification				
	a) RoHS compliant – For environment				
	b) UL/IEC – For safety				
	c) FCC CISPR22 Class B – For radiations regulation				
20.13	Energy Star 5.0 Certified (product should be listed in Energy Star Website for Energy Star 5.0 Certification)				

20.14	The Display should have OEM warranty for three years comprehensive including LCD panel (OEM undertaking to be submitted)				
20.15	Microsoft office 2007 with antivirus system				
21.0	DVR Specifications for Video Conferencing in CPCB				
	<p>Video recording and playback at resolutions of HD</p> <p>Instant video recording via a single button on the remote control</p> <p>Pause, mute, fast forward & fast backwards playback controls</p> <p>Media scanning function to locate audio/video files automatically</p> <p>Playback of externally imported videos, music, pictures</p> <p>graphical interface for controlling settings</p> <p>2x-10x digital picture zoom for viewing photos or better</p> <p>Connect external hard drive storage up to 2 TB or better</p> <p>Specifications:</p> <p>Input Video Signal: Compatible with VC systems</p> <p>Input Connectors: Composite (TV), S-Video, Component, HDM1</p> <p>Input Connector: USB for connection of external storage device</p> <p>Output Connectors: Composite (TV), S-Video, Component, HDM1</p> <p>Audio Connections: Analog L/R, input and output</p> <p>Remote Control :</p> <p>Dimensions: Able to fit in 19" Rack</p>				
22.0	EQUIPMENT RACK 17U or to the size of equipments				
	Top and Bottom covers : Design should be capable of placing the standard equipments of 19" size or the size of the equipments provided. Ventilated at top with fan and having standard accessories for power and cable management with toughened glass door.				

Methodology for clause no. 26.5 (g) of ITB to be adopted:-

Total 22 specific points serialized in the table or their sub points as mentioned in the technical specifications will be considered for each drop in the performance of the system and these drop points will be accumulative and calculation will be done accordingly.

Technical literature should also be attached with the bid.

SECTION VII: BID FORM AND PRICE SCHEDULE

SECTION VII: BID FORM

Date : [redacted]

Loan No : 4749 IN [redacted]

IFB No : [redacted]

TO: The Member Secretary, Central Pollution Control Board, New Delhi

Gentlemen and/or Ladies :

Having examined the Bidding Documents including Addenda Nos [redacted] [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to Procurement, testing and commissioning of Video-Conferencing System Along With All Accessories to CPCB Offices at New Delhi, Bangalore, & Vadodra in conformity with the said bidding documents for the sum of [redacted] (Total bid amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to [redacted] percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Purchaser.

We agree to abide by this bid for the Bid validity period specified in Clause 16.1 of the Bid Data Sheet and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below :

Amount	Rupees	
Name and address of agent		Purpose of Commission or gratuity
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		[redacted]

(if none, state "none").

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We understand that you are not bound to accept the lowest or any bid you may receive.

We clarify/confirm that we comply with the eligibility requirements as per ITB Clause 2 of the bidding documents.

Dated this [redacted] day of [redacted] 19

[redacted]

(signature)

[redacted]

(in the capacity of)

Duly authorized to sign Bid for and on behalf of [redacted]

PRICE SCHEDULE

Part 'A'

Date:

IFB No.: CPCB/05/2011-12

1	2	3	4	5	6	7	8	8	9
S.N.	Description of goods	Qyn	Unit price EXW (Rs.)	Total EXW price per line item (Col. 3 x 4)	Price per line item for inland transportation and other services required in the purchase country to convey the goods to their final destination	Cost of local labour, raw materials and components form with origin in the purchase country % of column 4	Sales and other taxes payable per line item if contract is awarded (in accordance with ITB 14.6 (a)(ii))	Total price per line item (col. 5 +6)	Place of supply
1.	Bridge	1							Delhi
2.	HD Single Point Endpoint Specification with 10x Camera	3							One at each location
3.	Boundary Layer Microphones	12							Four at each location
4.	Digital Signal Processor :	6							Two at each location
5.	FOH Speakers	18							Six at each location
6.	Amplifier	3							One at each location
7.	55' Professional display LCD	3							One at each location
8.	MS office software 2007 or better and compatible to the system including antivirus of Symantec/McAfee or eqv.	3							One at each location
9.	Ceiling Mics	9							Three at each location
10.	DVR	1							Delhi
11.	Rack 17"U	3							One at each

									location
12.	2MB MPLS Managed Services	3							One at each location
13.	Switches	3							One at each location

Managed Services (details of point no. 11)

1	2	3	4	5
Input Data				
S.N	A End/ LOCATION	Connectivity	Bandwidth	Class of service
			Mbps	
1	New Delhi	MPLS	2 Mbps	Gold
2	Bangalore	MPLS	2 Mbps	Gold
3	Vadodra	MPLS	2 Mbps	Gold

At all three places Local lead charges, Main lead charges and Modem rental charges shall be included.

PART-B

S. N	Brief Description	I st year (after warranty period)	II nd year (after warranty period)	III rd year (after warranty period)	Total
1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices at Delhi, Bangalore, Vadodra including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing.	Per year	Per year	Per Year	

SECTION VIII: BID SECURITY FORM

SECTION VIII: BID SECURITY FORM

Whereas [redacted]¹ (*hereinafter called "the Bidder"*) has submitted its bid dated [redacted] (*date of submission of bid*) for the Procurement, testing and commissioning of Video-Conferencing System Along With All Accessories to CPCB Offices at New Delhi, Bangalore, & Vadodra [redacted]

KNOW ALL PEOPLE by these presents that WE [redacted] (*name of bank*) of [redacted] (*name of country*), having our registered office at [redacted] (*address of bank*) (*hereinafter called "the Bank"*), are bound unto [redacted] (*name of Purchaser*) (*hereinafter called "the Purchaser"*) in the sum of [redacted] for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this [redacted] day of [redacted] 20[redacted].

THE CONDITIONS of this obligation are:

1. If the Bidder

(a) withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

does not accept the correction of errors in accordance with the ITB; or

2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:

fails or refuses to execute the Contract Form if required; or

fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders;

we undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including forty five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank)

[redacted signature line]

[redacted line]
¹ *Name of Bidder*

SECTION IX: CONTRACT FORM

SECTION IX: CONTRACT FORM

THIS AGREEMENT made theday of, 20... Between .Member Secretary, CPCB, of Delhi, India (hereinafter called "the Purchaser") of the one part and (Name of Supplier) of (City and Country of Supplier) (hereinafter called "the Supplier") of the other part :

WHEREAS the Purchaser is desirous that certain Goods and ancillary services viz., (Brief Description of Goods and Services) and has accepted a bid by the Supplier for the supply of those goods and services in the sum of (Contract Price in Words and Figures) (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Bid Form and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Purchaser's Notification of Award.
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Brief particulars of the goods and services which shall be supplied/provided by the Supplier are as under:

SL. NO.	BRIEF DESCRIPTION OF GOODS & SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	Total Price	DELIVERY TERMS
.....					
.....					

TOTAL VALUE:

DELIVERY SCHEDULE:

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

said (For the Purchaser)

in the presence of:

Signed, Sealed and Delivered by the

said (For the Supplier)

in the presence of:

SECTION X: PERFORMANCE SECURITY FORM

SECTION X. PERFORMANCE SECURITY FORM

To: The Member Secretary, CPCB DELHI (Name of Purchaser)

WHEREAS (Name of Supplier)

hereinafter called "the Supplier" has undertaken, in pursuance of Contract (Notification of Award) No. dated 20... to supply (Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limit of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the day of 20.....

Signature and Seal of Guarantors

.....
.....
.....
.....

Date 20.....

Address:

.....

.....

SECTION XI: PERFORMANCE STATEMENT

SECTION XI

Performa for Performance Statement (for a period of last five years)

[Please see Clause 13.3 (b) (ii) of
Instructions
to Bidders]

Bid No. _____ Date of opening _____ Time _____ Hours

Name of the Firm:

Order placed by ("full address of Purchaser)	Order No. and date	Description and quantity of ordered equipment	Value of order	Date of completion of deliver		Remarks indicating reasons for late delivery, if any	Has the equipment been satisfactorily functioning (Attach a certificate from the Purchaser/ Consignee)
				As per contract	Actual		
1	2	3	4	5	6	7	8

Signature and seal of the Bidder

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SERVICE SUPPORT DETAILS

Name of Service Stations	Destination Address and District	Phone No. /Mobile phone No.	Telex /Fax No.	Office Working Days and Hours	Number of Service Engineers	Number of service Staff	Value of Minimum Stock Available at all times

Signature and Seal of the Manufacturer/Bidder

SECTION XII

(Please see Clause 13.3(a) of Instructions to Bidders)

MANUFACTURERS' AUTHORIZATION FORM*

No. _____ dated

To

Dear Sir:

IFB No.

We _____ who are established and reputable manufacturers of
(*name and description of goods offered*) having factories at _____ (*address of factory*) do hereby authorize M/s
(*Name and address of Agent*) to submit a bid, and sign the contract with you for the goods manufactured by us against the
above IFB.

No company or firm or individual other than M/s _____ are authorized to bid, and conclude the
contract for the above goods manufactured by us, against this specific IFB. (*This para should be deleted in simple items
where manufacturers sell the product through different stockists.*)

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and
Clause 10 of the Special Conditions of Contract for the goods and services offered for supply by the above firm against this
IFB.

Yours faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and
having the power of attorney to legally bind the manufacturer. It should be included by the Bidder in its bid.

* Modify this format suitably in case where manufacturer's warranty and guarantee are not applicable for the items for which
bids are invited.

SECTION XIII

SAMPLE FORM

BANK GUARANTEE FOR ADVANCE PAYMENT

Deleted

SECTION XIV

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement.

As of March 2000¹

For the information of Borrowers and Bidders, and with reference to paragraph 1.6, footnote 9, of the *Guidelines: Procurement under IBRD Loans and IDA Credits*, dated January 1995 (revised January and August 1996 and September 1997, and January 1999), set forth below is a list of countries from which Bidders, Goods and Services are not eligible to participate in procurement financed by the World Bank or IDA².

- Andorra
- Cuba
- Democratic People's Republic of Korea (North Korea)
- Liechtenstein
- Monaco
- Nauru
- Tuvalu

In addition, Bidders, Goods and Services from other countries or territories may be declared ineligible by a provision in the Bidding Documents if the borrower's country has excluded them by a law, an official regulation, or an act of compliance meeting the requirements of paragraph 1.8 (a) of the *Guidelines: Procurement under IBRD Loans and IDA Credits*.

The Loan/Credit Agreement also prohibits a withdrawal from the Loan / Credit Account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. At the present time, this prohibition applies to no country.

Notes:

1. The most current listing of eligible countries can be viewed on the Public Information Center's Web page at: <http://www.worldbank.org/html/pic/PROCURE.html>. A list of firms debarred from participating in World Bank projects is available at: <http://www.worldbank.org/html/opr/procure/debarr.html>.
2. Any questions regarding this list should be addressed to the Senior Manager, Procurement Policy and Services Group, Operational Core Services Network, The World Bank

ANNEXURE XV

CAPABILITY STATEMENT OF PERSONNEL, EQUIPMENT, PLANT AND PAST PERFORMANCE

BID NO

DATE OF OPENING :

NAME OF THE BIDDER:

1. Name and address of the bidder
2. Classifications:

Phone :

- 1) Manufacturer Circle what is applicable
- 2) Authorized Agent
- 3) Dealer
- 4) Others, please specify

3. Plant:

- a) Location
- b) Description, Type and size of building
- c) Is property on lease or free hold? If on lease indicate date of expiry of lease in each case.

4.

a) Type of equipments relevant to this bid/assignment manufactured and supplied during last 5 years

Name of equipment	Capacity/ Size	Nos. Manufactured \	Projects to which supplies are made	No. of orders on hand	Are the equipments functioning satisfactorily? (Attach a certificate from the Purchaser)

b) Type of equipments relevant to this bid/assignment manufactured, supplied, installed and commissioned during last 5 years.

Name of equipment	Capacity/ Size	Nos. Manufactured	Projects to which supplied, installed and commissioned	No. of orders on hand	Are the equipments functioning satisfactorily? (Attach a certificate from the Purchaser)

5. a) Types of equipments relevant to this biuVassignment supplied during last 5 years other than those covered under 4 (a) & 4 (b) above.

Name of equipment	Capacity /Size and model	Nos. Manufactured and Country of origin	Total supplied in India	Nos. in	Projects to which supplies are made	No. of orders on hand	Are the equipments functioning satisfactorily? (Attach a certificate from the Purchaser)

b) Type of equipments relevant to this bid/assignment supplied, installed and commissioned during last 5 years other than those covered under 4 (a) and (b) above

Name of equipment	Capacity /Size and model	Nos. Manufactured and Country of origin	Total supplied in India	Nos. in which supplies are made	Projects to which supplies are made	No. of orders on hand	Are the equipments functioning satisfactorily? (Attach a certificate from the Purchaser)

6. Plant facilities:

Sq. Meter Remarks

- a) Space available for manufacture Yes/ No
- b) Space available for storage - -
- c) Space available for inspection items offered -----
- d) Space available for storage items offered -----
- e) Are buildings fire resistant? Yes/ No
- f) Are premises approved by Municipal fire Production?
- g) Are buildings under Municipal fire Productions?
- h) Are power and fuel supply adequate to meet production requirements? ■
- i) Are adequate transportation facilities available?
- j) Are safety measures adequate for performance of proposed contract? -----
- k) Is adequate material handling available?

7. Details of testing / Quality Control facilities available

- a. List testing-equipment available
- b. Give details of tests which can be carried out on items offered.
- c. Details of the testing / Quality Control organization available.

8. Personnel/ Organization:

- 1. Production
- 2. Marketing
- 3. Installation and Commissioning
- 4. Service

- 5. Spare parts
- 6. Administrative

- 9. Nearest service center to Purchaser:
 - Location.....
 - Phone No.....

- 10. Details of organization at Service Centre
 - a) No. of skilled employees -----
 - b) No. of unskilled employees -----
 - c) No. of engineering employees \ -----
 - d) No. of administrative employees -----
 - e) List of special repair/ workshop facility available -----
 - f) The storage space available for spare parts ----- Sq.m
 - g) Value of minimum stock of spares available at all the service centers in respective currency -----
 - h) List of the models/ types by number of equipment serviced by the center in last 2 years.

- 11. Names of two buyers to whom similar equipment are supplied installed and commissioned in the past and to whom reference may be made by the purchaser regarding the bidder's technical and delivery ability :
 - 1
- 12. List of components usually subcontracted.....
- 13. Schedules for furnishing technical data and certified drawings after receipt of orders.....
- 14. Workload as percentage of total capacity for the current and forthcoming financial year on quarterly basis

CAPABILITY STATEMENT OF PERSONNEL EQUIPMENT, PLANT AND PAST PERFORMANCE
(Format - B)

1.	Name and address of the bidder	
2.	Phones:	
	Manufacturer	
	Authorized Agent	
	Dealer	
	Others, please specify	
3.	Plant:	
a)	Location	
b)	Description, Type and size of building	
c)	Is property on lease or free hold? If on lease indicate date of expiry of lease in each case.	

4.
a) Type of equipment relevant to the assignment manufactured and supplied during last 5 years

Name of equipment	Capacity/ Size	Nos. Manufactured	Projects to which supplies are made	No. of orders on hand

Type of equipment relevant to the assignment manufactured, supplied, installed and commissioned during last 5 years.

Name of equipment	Capacity/ Size	Nos. Manufactured	Projects to which supplied, installed and commissioned	No. of orders on hand

5.
a) Types of equipment relevant to the assignment supplied during last 5 years other than those covered under above.

Name of equipment	Capacity/ Size and model	Nos. Manufacturers and Country of origin	Total Nos. supplied in India	Projects to which supplies are made	No. of orders on hand

- b) Type of equipment relevant to the assignment supplied, installed and commissioned during last 5 years other than those covered under 4 (a) and (b) above

Name of equipment	Capacity/ Size and model	Nos. Manufacturers and Country of origin	Total Nos. supplied in India	Projects to which supplies are made	No. of orders on hand

6. Plant facilities:

Sq. Meter Remarks

- a) Space available for manufacture
 b) Space available for storage -----
 c) Space available for inspection items offered
 d) Space available for storage items offered
 e) Are buildings fire resistant? Yes/ No
 f) Are premises approved by Municipal fire Production? -----
 g) Are buildings under Municipal fire Productions? -----
 h) Are power and fuel supply adequate to meet production requirements?
 i) Are adequate transportation facilities available? -----
 j) Are safety measures adequate for performance of proposed contract? -----
 k) Is adequate material handling available?

1. Details of testing facilities/QUALITY CONTROL available

- a) List testing-equipment available
- b) Give details of tests which can be carried out on items offered.
- c) Details of the testing /QUALITY CONTROL organisation available.

8. Personnel/ Organisation:

- a) Production
- b) Marketing
- c) Installation and Commissioning
- d) Service
- e) Spare parts
- f) Administrative

9. Nearest service center to Purchase:

Location..... Phone No.....

10. Details of organization at Service Centre

- a) No. of skilled employees —
- b) No. of unskilled employees -
- c) No. of engineering employees -
- d) No. of administrative employees -
- e) List of special repair/ workshop facility available
- f) The storage space available for spare parts - Sq.m
- g) Value of minimum stock of spares available at all the service centers in respective currency
- h) List of the models/ types by number of equipment serviced by the center in last 2 years.

11. Names of two buyers to whom similar equipment are supplied installed and commissioned in the past and to whom reference may be made by the purchaser regarding the bidder's technical and delivery ability :

1..... —

2..... -

12. List of components usually subcontracted

13. Schedules for furnishing technical data and certified drawings after receipt of orders

14. Workload as percentage of total capacity for the current and forthcoming financial year on quarterly basis A

PROFORMA FOR EQUIPMENT AND QUALITY CONTROL EMPLOYED BY THE MANUFACTURER

BID NO. _____

DATE OF OPENING : _____

NAME OF THE BIDDER : _____

(Note : All details should relate to the manufacturer for the items offered for supply)

1. Name & full address of the Manufacturer
2. (a) Telephone & Fax No Office/Factory/Works
(b) Telex No. Office/Factory/Works
(c) Telegraphic address :
3. Location of the manufacturing factory.
4. Details of Industrial License, wherever required as per statutory regulations.
5. Details of important Plant & Machinery functioning in each dept. (Monographs & description pamphlets be supplied if available).
6. Details of the process of manufacture in the factory.
7. Details & stocks of raw materials held.
8. Production capacity of item(s) quoted for, with the existing Plant & Machinery
 - 8.1 Normal
 - 8.2 Maximum
9. Details of arrangement for quality control of products such as laboratory, testing equipment etc.
10. Details of staff:
 - 10.1 Details of technical supervisory staff in charge of production & quality control.
 - 10.2 Skilled labour employed.
 - 10.3 Unskilled labour employed.
- 10.4 Maximum No. of workers (skilled & unskilled) employed on any day during the 18 months preceding the date of Tender.
11. Whether Goods are tested to any standard specification? If so, copies of original test certificates should be submitted in triplicate.
12. Are you registered with the Directorate General of Supplies and Disposals, New Delhi 110 001, India? If so, furnish full particulars of registration, period of currency etc. with a copy of the certificate of registration.

Signature and seal of the Manufacturer

Comprehensive Annual Maintenance Contract for maintenance of Video-Conferencing System along with All
Accessories installed at CPCB Offices at Delhi, Bangalore & Vadodra
Between Member Secretary, CPCB, DELHI and
M/s.....

(Authorized representative of.....)

This is an agreement made this_ _ day of....., 2011 between -
M/s.....(Authorized representative of M/s.....)(Contractor)
and the Member Secretary, CPCB, Delhi (Employer) at location East Arjun Nagar, DELHI 110032 on behalf of CPCB

WHERE AS:

1. The Bidder is required to provide the Maintenance Services for three years starting from dd/mm/yyyy to dd/mm/yyyy and the Customer is desirous of entering in to a contract with Contractor for Comprehensive Annual Maintenance of the Video-Conferencing System along with all accessories installed at the following Offices:
 - Ø CPCB Head Quarter at East Arjun Nagar, Delhi
 - Ø Zonal Officer, CPCB, Bangalore,
 - Ø Zonal Officer, CPCB, Vadodra,
2. The Bidder has to render such services defined by the scope of this agreement and under the terms and conditions herein.
3. The total value of the contract shall be Rupees (Rupees.....) only excluding taxes.

This agreement now witnessed as follows:

a) SCOPE OF WORK:

The scope of work is as follows- M/s (Bidder) agrees to provide the following services under the contract to keep Video-Conferencing System in good working order:

- a) The services to be provided by the bidder under this contract shall include maintenance, in accordance with the terms and conditions laid down in the contract, of the Video-Conferencing System including all accessories and attachments of the equipments/ systems installed for Video-Conferencing and maintenance and up-gradation of all software installed in the Video-Conferencing System including/ providing of all required consumables, additional spare parts, repair of the defective equipment or the units/ parts thereof.
- b) Customer or any authorized CPCB officials working under CPCB in Delhi, Bangalore and Vadodra shall notify the bidder of any errors and malfunctions, which occur and noticed when equipment are in use, by fax/telephone/e-mail/special messenger directly or through his Service Engineer(s) at his office address during normal working hours or at their residence after normal office hours and/or on holidays.
- c) Bidder shall provide maintenance services to the CPCB at the sites where these Video-Conferencing System is installed and attend the defect(s) reported by the Customer, within a period of 3 (Three) days on receipt of the written complaint.
- d) Bidder shall, at his own cost, carry out repair of the defective equipment or parts thereof, to the satisfaction of the CPCB and return the equipment after satisfactory repair within 10 (Ten) days from the date of written complaint/ request made. All charges towards collection, transportation of defective equipment, return of equipment after repair including cost of repair defective equipment or parts thereof, shall be borne by the Bidder and no charges on this account shall be paid by CPCB.
- e) Operating System (OS) Support: This contract is inclusive of OS support on all the Video-Conferencing System covered under this contract. Any problem related with OS maintenance, reloading of OS with all device drivers, system configuration and network configuration will be attended and rectified by the Bidder. All required device drivers will be provided by the Bidder including OS up-gradation.
- f) Anti Virus Software (AVS) Support: The contract includes the full AVS support on all the systems. Any problem related with AVS support shall be attended and rectified by the Bidder. All required AVS support will be provided by the Bidder. However, Bidder will not be responsible for any data loss due to virus, hard disk or system failure.

2. PENALTY CLAUSE:

Upon receipt of notification of defect in the system from CPCB or any authorized CPCB officials working under CPCB Delhi, Bangalore, Vadodra, if Bidder fails to take immediate corrective measures to rectify the defect, within the stipulated

maximum response time stated above, the contractor is liable to pay penalty for unsatisfactory performance of maintenance services, in accordance with the criteria laid down below:

- 2.1 Video-Conferencing System continues to remain unattended by the Bidder for more than a day in excess of the time schedule of 3 days reckoned from the time of the fault detection and subsequent reporting by any means. Video-Conferencing System shall be treated as faulty if the Bidder fails to respond after 4th day. The Bidder is liable to pay penalty as below.
Penalty per day = Rupees 1,000/- (Rupees One Thousand)
The above penalty shall be applicable during the CAMC period, if any of the Video-Conferencing Facility provide at Delhi/Bangalore/ Vadodra remains faulty after 4th day of fault reporting.
- 2.2 If the Bidder fails to return the Video-Conferencing Equipments after satisfactory repairs within 10 days from date of complaint made, this will be considered as a failure of whole Video-Conferencing System. The contractor is liable to pay penalty as bellow.
Penalty per day = Rupees 1,000/- (Rupees One Thousand)

The maximum limit of the total penalty in a year on account of Clause 2.2 & 2.3 above shall be limited to the value of maintenance contract for corresponding year.

- 2.3 The authority to decide the penalty shall be Member Secretary, CPCB, Delhi.
2.4 The total penalty in a year shall be limited to the value of maintenance contract for corresponding year.

3. TERMS OF PAYMENT :

- a) The Bidder agrees to maintain the Video-Conferencing system for a period of three years i.e. from dd/mm/yyyy to dd/mm/yyyy in accordance with the provisions laid out in the agreement and at the rates given below:-

For Video-Conferencing System installed at	Paying Authority	Yearly Rates of Comprehensive Annual Maintenance Contract in Indian Rupees
CPCB, Delhi		
CPCB, Bangalore		
CPCB, Vadodra		

- b) Any taxes and/or other Governmental levies as applicable or becoming applicable later due to or under any law shall be deducted from the above said amount. However the service tax as per actual will be paid by the Bidder and same will be reimbursed to the Bidder by CPCB on production/ submission of original copy of the receipt to the Bidder.
- c) The maintenance and repair cost shall be paid half yearly, on satisfactory performance of maintenance services in the half year period.
- d) The payment shall be made by Account payee cheque drawn from Union Bank of India, Delhi and Payment shall be made only in Indian Rupees.
- e) The bidder shall provide a Performance Guarantee in favour of CPCB, Delhi for an amount of 5% of the total value of the contract before one month of expiry of the warranty period of two year.
- f) The Performance Guarantee submitted by the bidder shall be valid up to six months beyond the completion of maintenance contract as mentioned above.

4. OTHER TERMS AND CONDITIONS:

- a. Period of Agreement
This maintenance contract agreement is initially for a period of 3 (Three) years i.e. from dd/mm/yyyy to dd/mm/yyyy.
- b. Renewal of Agreement
This agreement could, thereafter, be renewed for successive periods as mutually decided from time to time.
- c. Access to Customer's site/Bidder's office & Records relates to past experience of such equipment in India. The customer shall provide free access to the sites where the defect has occurred. The customer will also arrange for the security clearance, wherever required in advance to ensure that contractor's engineers get the access to site immediately.
- d. Spares/Equipments
The customer has no spares/equipments for maintenance and Customer is not responsible for any import/ purchase of any of such components as required during the maintenance, the same shall also be the sole responsibility of the Contractor. If the Contractor fails to repair the equipments due to non-availability of the

spares technological changes the same may be replaced by the Contractor with equivalent equipment/ spare of same specification and reputed make with prior permission of the Member Secretary, CPCB and the costs in this process shall be borne by the Bidder. Non-returning of the defective spares/ equipment after due repair within stipulated time as specified above shall attract the penalty as per Clause-2 of this Contract.

- e. Consumables
Bidder shall be responsible for providing & replacement of all consumable items likes cables, connectors, ports and other similar items.
- f. Force Majeure
Failures arising of any circumstance not normal such as damages caused due to fire, theft, riots, accidents, floods or any other natural calamities and other exceptional circumstances shall be outside the previews of this agreement. However decision of the Chairman, CPCB about such failures shall be final.
- g. Periodical routine services
Periodical routine services shall be provided by the Bidder on half yearly basis and also as and when required.
- h. Jurisdiction
All disputes or differences between the Parties to this agreement, meaning or effect of this agreement of the respective rights and liabilities of the parties here to or their enforcement there under, shall be referred as per the provisions of the Indian Arbitration Act and only the courts in New Delhi /Delhi shall have jurisdiction in all matters arising out of or connected with this agreement.
- i. The personnel of Bidder will comply with all the security regulations in CPCB premises.
- j. All the maintenance calls will be informed to the Contractor. Service report will be given after attending/ completing the each call.
- k. Notices
Any notice given by one party to other pursuant to this Contract shall be sent to the other party in writing by registered post or fax confirmed in writing to the other party's address specified in this contract.
- l. Termination for Insolvency
The Customer at any time terminates the Contract by giving written notice to the Bidder if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Bidder, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the CPCB.
- m. Termination for Convenience
The CPCB, by written notice sent to the Bidder, may terminate the Contract, in whole or part, at any time for its convenience. The notice of termination shall specify that termination is for the CPCB's convenience, the extent to which performance of the Bidder under the Contract is terminated, and the date upon which such termination becomes effective.
- n. Termination for Default
The CPCB, without prejudice to any other remedy for breach of contract, by written notice of default sent to Bidder, may terminate this contract in whole or in part.
 - i) If the Bidder fails to perform any obligation(s) under this contract. .
 - ii) If the Bidder, in the judgment of the CPCB has engaged in corrupt or fraudulent practices in completing for or in executing the contract.
For the purpose of this Clause:
"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in contract execution.
"Fraudulent practice" means a misrepresentation of facts in order to influence the execution of contract to the detrimental of the Department.
- o. If the Bidder has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Member Secretary, CPCB (which shall be final and binding) he will be unable to complete the work, the CPCB may rescind or terminate the contract in whole or part thereof. The CPCB shall be free to secure the completion of work by other Bidder. The CPCB may without prejudice to his any other rights or remedy against the Bidder or may recover the cost of expenditure incurred by him in addition to the penalty as referred in Clause-2 of this contract.
- p. The Bidder shall be responsible to make good all the damages caused to the existing equipment due to negligence.

q. In case of termination of contract due to insolvency and for default, the pending works shall be got done by the customer at the cost of the contractor.

r. Subcontracts

The Bidder shall notify the CPCB in writing of all subcontracts awarded under this contract and this shall not relieve any liability or obligation under the contract to the bidder.

s. Assignment

The Bidder shall not assign, in whole or any part, its obligations to perform under this contract, to other contractor without prior written permission of the Department.

t. Bidder's Obligations

The Bidder is obliged to work closely with the Department's staff, act within its own authority and abide by directives issued by the Department and implementation activities.

The Bidder shall abide by the job safety measures prevalent in India and will free CPCB from all the demands or responsibilities arising from accidents or loss of life the cause of which is the Bidder's negligence. The Bidder shall pay all indemnities arising from such incidents and will not hold CPCB responsible or obligated.

The bidder is responsible for managing the activities of its personnel or subcontracted personnel and will hold itself responsible for any misdemeanors.

The Bidder will treat as confidential all data and information about CPCB obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of CPCB.

u. The Governing language shall be English

5. ENTIRE AGREEMENT & SERVICEABILITY:

This agreement constitutes the entire agreement between the parties with respect to the subject matter hereof taking precedence over and in continuation of any prior or contemporaneous written agreements of understanding. Unless otherwise provided herein, this agreement shall not be modified, amended, rescinded, or waived, in whole or part, except by a written instrument signed by the authorized representatives of both parties.

In witness whereof, the parties have executed this agreement as of the date indicated below:

BIDER	CPCB
(M/s.....)	
Signed:	Signed
Name:	Name:
Title:	Title:
Station:	Station:
Date:	Date:

In the presence of:

In the presence of:

HYDROLOGY PROJECT - PHASE-II
CENTRAL POLLUTION CONTROL BOARD

NCB No: CPCB /05/2010-11

Supply, Installation, Testing and Commissioning of Video Conferencing System

Corrigendum

Attention is drawn to this office NCB bid notification No: CPCB/05/2010-11 dated: 28.10.2011. Responses to the pre bid queries and addendum are posted on the website of CPCB and e- mailed to the participants/bidders.

On account of technical reasons, the new schedule of bidding process is as below:

- (1). Last date for sale of bidding documents: Aug.-27, 2012
- (2). Last date and time for submission of bid: Aug.-28, 2012 at 1400 hrs [IST]
- (3). Date and Time of opening of bids: Aug.-28, 2012 at 1430 hrs [IST]

All other terms and conditions of tender notice shall be remain unchanged

Member Secretary

Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar, Delhi-32

Pre Bid Meeting: 22nd November, 2011

Subject: Minutes of the meeting – pre-bid meeting for **Supply, Installation, Testing and Commissioning of Video Conference System**

- i. The procurement process for Supply, Installation, Testing and Commissioning of Video Conference System in CPCB Head Office and two zonal office i.e. Bangalore and Vadodara was initiated by CPCB after obtaining NOL from World Bank.
- ii. In compliance to invitation for proposals, pre-bid meeting convened on 22.11.2011 in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-32. Pre-bid meeting was attended by 37 Participants of 24 firms. The register of bidders/ participants is provided in Annex-I. The list of CPCB and TAMC officers attended the pre-bid opening is given at Annex-II.
- iii. Procurement specialist from TAMC, Ministry of Water Resources, Mr. R.K. Visvanath explained the bidding process, World Bank guidelines, transparency issues besides technical aspects through comprehensive PowerPoint presentation. During the presentation, it was informed that the last date for submission of bid will be intimated after the addendums are issued based on the discussions held in the pre bid meeting and after obtaining NOL/ approval of the World Bank.
- iv. Pre bid queries were raised by the 15 firms in writing during the pre bid meeting.
- v. The pre bid queries received from bidders / participants are compiled and the same have been replied by CPCB based on available information. All the pre bid queries received from bidders/participants and draft replies are provided in Annex,-III.
- vi. The Addendum comprising of Amendment is provided at Annexure- IV

Meeting ended with thanks to the Chair.

**Register of firms participants for Pre-Bid Meeting held on 22nd November 2011 for
Supply, Installation, Testing and Commissioning of Video Conference System**

S. N	Name of Firm	Name of representative	Phone No.	Email id
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		Rohit Mahajan		
		Pratek Gupta		
2.		Nishan Gupta		
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		Jaideep jain Alok Anand	8287798824 8287499944	Jaideep.jain@relianceada.com
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6.	M/s Reliance	Madan Garg	9311954043	
7.	M/s Sai Infosystem	Ashim Kumar Dey	9899286050	
8.	M/s HCL Infosystem Ltd	Manpreet Uppal	9560011357	
9.	M/s VU Technology	Avinash Nidhi	9999886772	
10	M/s Polycom	Puneet Dhar Mohit Sharma	9818183151 9958000675	
11	M/s Wipro Ltd	Prashant	9582214306	
12	M/s Total Presenataion Device Ltd	Vivek	7827656588	
13	M/s CISCO System	Anjit Singh	9910400522	

14 .	M/s Siemens	Mayank Ashwani	9654863640 9654910781	ashwani.shangloo@siemens-enterprise.com
15 .	M/s J P Group	Nilesh jain		
16 .	M/s Lifesize Communication	Rohit		rmahajan1@lifesize.com
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18 .	M/s ESSEL Shyam	Subodh Rohit	9582242109	
19 .	M/s Godrej	Shashi Bhushan	9818461905	
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22 .	M/s Dishnet wireless	Nishant	9716499660	
23 .	M/s Tulip Telecom	Sumit Anuroop	40578000	
24 .	M/s Radvision	Sumit Chpudhary	9811801895	

No of Firms present: 24

No of participants Attended: 37 persons

Members of Technical Group and Participants from CPCB

1. Dr.D.D.Basu, Sc.E'
2. Shri R.K.Visvanath, Procurement Specialist, TAMC
3. Sh. Paritosh kumar, Sc. 'D'
4. Shri A. Sudhakar, Scientist 'D'
5. Shri R.M.Bhardwaj, Sc.D
6. Shri. R.P.Gupta, ACO,
7. Shri. Aditya Sharma, Sc. 'C'
8. Sh. Rakesh Ahuja, Sr. Tech.
9. Ms. Meenakshi Rudra,UDC

HYDROLOGY PROJECT - PHASE-II
CENTRAL POLLUTION CONTROL BOARD

NCB No: CPCB /05/2010-11

Supply, Installation, Testing and Commissioning of Video Conference System

Pre-bid Meeting: 22 November 2011

QUERIES AND RESPONSES

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
1	36	Schedule of Requirements	S.No 11: 2 Mbps MPLS Managed services	At Delhi BW should be aggregate bandwidth of the two remote locations. If two locations are having 2 Mbps MPLS links, then Delhi should have 4 Mbps MPLS link.	4 MB MPLS connectivity at Delhi and 2 MB MPLS connectivity on Bangalore and Vadodara. Vide-Amendment No 5 & 9.
2	47	Technical Responsiveness Form	12.21 BRI	BRI should be removed as it cannot give HD VC. As ISDN connection is not mentioned in MCU it should be removed from endpoint as well; there should be 'support' for adding 'ISDN' as	System should be compatible to make ISDN calls through PRI/BRI. Vide Amendment No. 34

<u>S</u> <u>No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
				an additional feature.	
3	49	Technical Responsiveness Form	18.0 switch	Number of LAN Ports- What will be the number of Ethernet LAN ports on the switch?	24 ports switch required Vide Amendment No. 41
4			Router make	Is there any choice of make and model of CPE router	<u>Cisco Model 2941 or equivalent with Multi Protocol Layer Switch & Border Gateway Protocol capability.</u> Vide Amendment No. 43
5				VC through remote laptop.	Module supporting remote Laptop video conferencing for 20 or more users. Vide Amendment No. 25
6	38 & 45	Technical Specifications & Technical Responsiveness Form 2.2 a	Capacity- Up to 16 HD@720p/1080p resources	Change to 15HD @ 720p/1080p resources or 60 SD ports or any combination	<u>MCU should have capability of:</u> <u>a. Calling 15 or more different locations simultaneously @1080p30.</u> <u>b. The multiple conferencing should be possible from day one.</u> <u>c. Audio Conferencing with minimum eight or more locations</u>

S No	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
					<p><u>should be possible Simultaneously with Video conferencing.</u></p> <p>Vide Amendment No 12</p>
7	38	Technical Specifications 2.2 b	Up to 16 SD resources or any combination of SD/HD	Change to 15 HD@720p/1080p resources or 60 SD ports or any combination	<p><u>15 or more SD locations/resources</u> or any combination of SD/HD</p> <p>Vide Amendment No. 13</p>
8	38 & 46	Technical Specifications & Technical Responsiveness Form 7.1	Supporting for all common resolutions	Supporting for all common resolutions- may be removed as in continuous presence does not make much difference.	<p><u>AAC-LC/LD, G.722.1, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC or eqv. or better</u></p> <p>Vide Amendment No 19.</p>
9	38 & 45	Technical Specifications & Technical Responsiveness Form 2.5	Capacity	Shall include H.261 to support legacy systems	Agreed- Vide Amendment No 15.
10	38 & 46	Technical Specifications & Technical Responsiveness	Audio Support	AAC-LC/LD Should be included to support all HD systems	Agreed- Audio should support AAC-LC/LD or better as mentioned in Amendment No 19

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
		Form 7.1			& 59.
11	39 & 46	Technical Specifications & Technical Responsiveness Form 10.2	Network Characteristics	IPv6 support is mandatory as per DIT & Govt. of India regulations	IPv4 support should be present in the system on day one and compatibility to IPv6 should be provided by the firm free of cost as and when it is implemented in the system. Vide Amendment No 22 & 62.
12		2.1		Why 16 port MCU?	MCU shall support initially 15 or more and shall be extendable to 48 ports in future for which device stacking solution should be provided. Vide Amendment No 11.
13	39 & 47	Technical Specifications & Technical Responsiveness Form	HD Single Point Specification 11.2 The system should support H.323, H.320, SIP and other equivalent	12.3 Full HD (1080p30/720p60) support is required from day one or upgradable, please clarify. IPv6 support is mandatory as per DIT& Govt. of India. End point should support IPv6	Full HD (1080p30) support is required from day one. Vide Amendment No 26 & 64. See S. No 11 above

S No	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
			<p>11.5 The system should support min. 30 fps from 168 kbps and beyond</p> <p>11.22 (Sub-Section) Miscellaneous</p> <p>11.22 MCU should have the feature of firewall traversal</p>	<p>The system should not be hardwired for 30 fps, it should be flexible to adapt to available BW while in call.</p> <p>This shall be referred to MCU features</p> <p>MCU manufacturers who do not have built in FT can provide it in a separate box?</p> <p>Firewall traversal unit, MCU, Endpoints & recorders should be from same manufacturer.</p>	<p>Vide Amendment No 27.</p> <p>Revised Technical Specifications & Tech Responsiveness Form Vide Amendment No 72.</p> <p>Not necessary</p>
14	40 & 47	<p>Technical Specifications & Technical Responsiveness Form</p> <p>11.22 (Sub sec.)</p>	HD Single Point Specification	Remote control turning 'on' & 'off' of system is not supported as per industry standards. Remote 'wake' is supported only.	Vide Amendment No 36 & 71.
15	36 & 55	Schedule of Requirements and Price		Last mile media for 3 locations, MPLS connectivity not mentioned	Rates for Copper/Fiber to be

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
		Schedule			provided. Vide Amendment No 42 & 77.
16	36 & 55	Schedule of Requirements and Price Schedule		Under commercial sheet, MPLS BW column for 3 locations not mentioned. PI specify annual recurring charges for the same.	Vide Amendment No 10 & 88.
17	55	Switches	Price Schedule-Part A	PI specify –it would be under one time sale model.	Vide Amendment No 41.
18	32	Penalty	Warranty	Penalty w.r.t. the MPLS asked SLA (99.5%) not mentioned – please specify	Please see SCC 10 (Page 32)
19	33	Liquidated Damages	Liquidated Damages	Liquidated damages not mentioned, if any delays in delivery then what will be the LD. Please specify.	Please see SCC 14 (Page 33)
20	75	AMC & MPLS connectivity	Terms of Payment for AMC & MPLS connectivity	Payment of MPLS network as per RFP is half yearly. Please change the same to quarterly which is a standard industry practice.	Agreed- Quarterly bills to be raised directly to CPCB and CPCB will reimburse to the bidder. Vide Amendment No 90.

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
21	39	Technical Specifications	8.4 MCU Management -Support for serial console	System configuration by serial port restricts the user to perform the system .By command line interface and also System configuration via RJ-45 is mainly used	Provided Technical Specifications are minimum, better specifications can be provided by the bidder. Vide Amendment No 20.
22	39	Technical Specifications	10.5 Network Characteristics	Intserv/diffserv	Diffserv to be provided Vide Amendment No 24.
23	39 & 47	Technical Specifications & Technical Responsiveness Form	11.9 One DVI-I input for data sharing	There should be additional video input like s-video/HDMI/for connecting to VCR/DVD/Document camera	Additional one s-video /DVD/document camera input shall be provided if not inbuilt, with external device support.- Vide Amendment No 28 & 66.
24	39 & 47	Technical Specifications & Technical Responsiveness Form	11.11 System outputs	There should be additional video output like s-video/HDMI for recording calls on VCR/DVD	Basically needed two HD outputs only Vide Amendment No 29 & 67.
25	39 & 47	Technical Specifications & Technical Responsiveness Form	11.12 System support	Kindly change to Intl standards. Like G.711 and G.722	As per the technical specifications mentioned in the bid documents or better Vide Amendment No 30 & 68.

S No	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
26	39 & 47	Technical Specifications & Technical Responsiveness Form	11.14 Audio Inputs	There should be additional one	Signal input can go to DSP Vide Amendment No 32.
27	39 & 47	Technical Specifications & Technical Responsiveness Form	11.17 Audio Outputs 11.19 The system should support audio conferencing phone	There should be additional audio output like RCA	No change Vide Amendment No 12 c.
28	39 & 46	Technical Specifications & Technical Responsiveness Form	8.4 MCU Management & 11.3 Network Characteristics 10.4 Dual Streaming H.239	Is 802.10 VLAN ID required? Should also add configurable through LAN? Dual video should be supported on H.323 and SIP and interoperable with leading brands	Deleted-bidder to provide LAN connectivity with all 24 ports of switch. Vide Amendment No 20. It is for presentation sharing & H.323 is for call signalling
29	38 & 46	Technical Specifications & Technical Responsiveness Form	6.1 Video Resolution	Specification needs clarification	<u>1080p30 (@ 2 Mbps or less), 720p60 (@ 1.5 Mbps or less), 720p30 (@ 1 mbps or less), or better</u> Vide Amendment No 18 & 58.

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
30	36	Schedule of Requirements	MPLS bandwidth	Any scalability required for MPLS bandwidths provided.	Bidder to provide MPLS line scalable up to 10 MBPS at Delhi and up to 5MBPS at other two locations within one month of order (if placed) to the firm by CPCB Vide Amendment No 91.
31				RF last mile media -on license band -unlicensed band	Only fiber/copper cable is required. Vide Amendment No 42.
32	36	Schedule of Requirements	8 Ceiling Mics	Why not you consider table mics also? Specs. are missing.	Due to capacity of room. Ceiling mics are removed. Instead of ceiling mics, Hand Held Mics are to be provided. Vide Amendment No 49.

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
33	36	Schedule of Requirements	Web Client feature	Web client feature needed or not	View through web client is necessary and as such at least Twenty (20) users required to connect at a single location. Vide- Amendment No 25.
34	43	Qualification Criteria		OEM and Bidder should be in the same business in the last five years. Proof for the same should be enclosed along with the bid	Not necessary. But OEM shall be in the same business for not less than 03 years. A certificate to this effect shall be enclosed. Vide- Amendment No 92 (b) (i).
35	43	Qualification Criteria		OEM should have spare warehouse in India for prompt after sales support	Spare ware house and maintenance center shall be located in India. Vide- Amendment No 92(v).
36	42	Technical Specifications & Technical Responsiveness Form	22.0 DVR Specifications	MCU integrated recording device should for central management and usage of the recording device.	Being considered through other procurement.

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
37	41	Technical Specifications & Technical Responsiveness Form	18.0 Amplifier	Specifications insufficient to quote	Dual Channel; Per channel support should be of 200 W or more – Vide Amendment No 40 & 75.
38	36 40 & 48	Schedule of Requirement Technical Specifications & Technical Responsiveness Form	Omni Directional Desk Microphones	Typing Mistake between Schedule of Requirement and Technical Specifications	Modified as below:- Boundary layer Microphones (BLM), with push to talk button. Vide Amendment No 38 & 73.
39	42	Technical Specifications & Technical Responsiveness Form	21.10 LCD	Why to use inbuilt PC ?	No change envisaged.
40	36	Technical Specifications & Technical	15.2.DSP specifications	There seems to be an error in the specifications- Device should provide minimum 8 microphone/ line AEC inputs shall be provided and all inputs	Technical Specifications modified as :

S No	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
		Responsiveness Form		shall have equivalent input processing and support microphone or line level signals	Device shall provide minimum <u>eight</u> microphone & <u>two</u> lines AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals Vide Amendment No 39 & 74.
41	36	Schedule of Requirements	4 Digital Signal Processor	Quantity not clear	Clarified Vide Amendment No 2.
42	42	Technical Specifications & Technical Responsiveness Form	22.0 DVR Specifications	HDMI Input/Output mentioned in the specifications, can we quote with DVI I/O	Agreed - Bidder shall ensure connectivity. Vide Amendment No 48 & 83.
43	41	Technical Specifications & Technical Responsiveness Form	21.0 LCD 21.b .Inbuilt fans 21.9 LCD should have in built	Current available LCDs do not possess this feature because of technological advancement. Required Topology For audio CPCB integrate audio with FOH speaker or	LCD without fan will be accepted. Vide Amendment No. 44 & 79. Ring Topology Vide Amendment No. 42 & 77. Accordingly number of FOH speakers has been revised.

<u>S No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
			in speakers (Min. 10 W x2)	in built speaker	Bidder shall integrate LCD speakers and 4 FOH speakers at each location. Vide Amendment No. 3.
44	38	Hardware characteristics	5.1 Encoder, decoder and scalars dedicated for each of the 16 ports	Why restricts to 16 ports only, the port capacity should increase when used at a lower BW as supported by major industry	For ease of use, non-complex system is desired. Vide Amendment No. 16.
45	38	Video Support	6.3 Up to 60 frames per second	Should be 30 fps as BW requirement for each location is only 2 Mbps	Latest technology is desired for quality performance-no change desired.
46	7	ITB	Eligible Countries 3.1 All goods and ancillary services to be supplied under the contract shall have their origin in eligible source countries	Please share the list of eligible countries or it's link on internet	Vide SECTION -XIV of the bid document page no. 67.
47	32	SCC	10 Warranty 10(b) If the interruption occurs more than two times in a month the firm will be liable to provide new line	The penalty should be replaced by service credit for the equal time duration. The clause is too tough. Providing alternate connectivity through other service provider should be dropped	No change , as in the bid document No change , as in the bid document

<u>S</u> <u>No</u>	Page	Reference to Section and Para/Clause of Bidding Document	Original Para or Clause in Bidding Document issued	Query	Response
			from other n/w provider without charging any extra cost.		
48		General		Suggested that the bidder should mention the name of service provider proposed in the bid for MPLS n/w.	No change in bid document
49		General		If CPCB can share their budget for only Video Conferencing Project	Not Applicable.
50		General		Makes/Models not mentioned in the bid document	Modified Vide Amendment No. 50 & 85.
52		General		Hand held mikes specifications System shall support audio conference Address of all three locations	Specifications added Vide Amendment No. 49 & 84. Modified Vide Amendment No. 33 & 52. Can be downloaded from CPCB website: www.cpcb.nic.in .

HYDROLOGY PROJECT - PHASE-II
CENTRAL POLLUTION CONTROL BOARD

NCB No: CPCB /05/2010-11

Supply, Installation, Testing and Commissioning of Video Conference System

Pre-bid Meeting: 22 November 2011

ADDENDUM

S. No.	Page No.	Clause/Section	As per Bid Document				Amendment			
			S. No.	Brief Description	Unit	Quantity	S. No.	Brief Description	Unit	Quantity
1	36	Schedule of Requirements Part-A	3	Multi directional Desk Microphones	No.	12	3	Boundary Layer Microphones (12 at HO, @7 at both ZO's)	No.	26(12+7+7)
2	36	Schedule of Requirements Part-A	4	Digital Signal Processor	No.	6	4	Digital Signal Processor (2at HO, @1 both ZO's)	No.	4(2+1+1)
3	36	Schedule of Requirements	5	FOH Speakers	No.	18	5	FOH Speakers(4 at each location)	No.	12(4+4+4)

		Part-A										
4	36	Schedule of Requirements Part-A	8	Ceiling Mics	No.	9	8	Hand Held Mics (3at HO, @2 both ZOs)	No.	7 (3+2+2)		
5	36	Schedule of Requirements Part-A	11	2MB MPLS Managed Services	No.	3	11	MPLS Managed Services (4MB at HO, @2MB at both Zonal stations) Gold	No.	3 (4MB+2MB+2MB)		
6	36	Schedule of Requirements Part-A	13	MS Office 2007			13	Switches(1@each location)	No.	6(2+2+2)		
7	36	Schedule of Requirements Part-A	14	New Added			14	Routers(1@each location)	No.	3(1+1+1)		
8	36	Schedule of Requirements Part-A	15	New Added			15	CAT 6 cable per 100 meter length	3	100 mtr at each location		
9	36	Schedule of Requirements Part-A, Managed Services	(Details of Point No. 11)				Managed MPLS Services					
			<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>					
			Input Data									
			S.N	A End/ LOCATION	Connectivity	Bandwidth Mbps	Class of service	S.N	A End/ LOCATION	Connectivity	Bandwidth Mbps	Class of service
			1	New Delhi	MPLS	2 Mbps	Gold	1	New Delhi	MPLS	4 Mbps	Gold

10	36	Schedule of Requirements Part-B,	S. N	Brief Description	Ist year (after warranty period)	II nd year (after warranty period)	III rd year (after warranty period)	Tot al	S. N	Brief Description	Ist year (after warranty period)	II nd year (after warranty period)	III rd year (after warranty period)	Tot al
			1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices at Delhi, Bangalore, Vadodra including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing.	Per year	Per year	Per Year		1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing including MPLS managed Services.	Per year	Per year	Per Year	
									i.	Delhi (with 4MB MPLS)				
									ii.	Vadodra (with 2MB MPLS)				
									iii.	Bangalore (with 2MB MPLS)				
										Recurring cost for MPLS connectivity on Fiber/copper) per year				
									i	Delhi				
									ii	Vadodara				
									iii	Bangalore				
11	38	Section IV Technical Specifications	2.1	The video conferencing system shall support up to 16 participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions					2.1	The video conferencing system shall support <u>15 or more</u> participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions <u>and it should be extendable to 48 ports for which device stacking solution should be available.</u>				

12	38		2.2a	Up to 16 HD @ 720p/1080p resources	2.2a	MCU should have capability of: a. <u>Calling 15 or more different locations simultaneously @1080p30.</u> b. <u>The multiple conferencing should be possible from day one.</u> c. <u>Audio Conferencing with minimum eight or more locations should be possible simultaneously with Video conferencing.</u>
13	38	Section IV Technical Specifications	2.2b	Up to 16 SD resources or any combination of SD/HD	2.2b	<u>15 or more SD locations/resources</u> or any combination of SD/HD
14	38	Section IV Technical Specifications	2.3	4Mbps per port	2.3	<u>Upto 4Mbps per port</u>
15	38	Section IV Technical Specifications	2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codes as H.263/H.263+.	2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codes as <u>H.261/H.263/H.263+.</u>
16	38	Section IV Technical Specifications	4.1	Encoder, Decoder and Scalars dedicated for each of the 16 ports	4.1	Encoder, Decoder and Scalars dedicated for each of the <u>15 or more ports</u>
17	38	Section IV Technical Specifications	5.2	Up to 16 high definition (HD) 720p in continuous presence (CP) transcoding	5.2	<u>As per modified 2.2a and 2.2b above</u>
18	38	Section IV Technical Specifications	6.1	Supporting for all common resolutions: 1080p30 (@ 1.7Mbps or less), 720p60 (@ 1.1Mbps or less), 720p30 (@ 768Kbps or less), XGA (1024x768), SVGA (800x600), 4SIF (640x480), 4CIF (704x576), VGA (640x480), 384p (x384)	6.1	Supporting for all common resolutions: 1080p30 (<u>@ 2 Mbps or less</u>), 720p60 (<u>@ 1.5 Mbps or less</u>), 720p30 (<u>@ 1 mbps or less</u>), <u>or better</u>
19	38	Section IV Technical Specifications	7.1	AAL-LC, G.722.1 Annex C, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC	7.1	<u>AAC-LC/LD</u> , G.722.1, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC <u>or eqv. or better</u>
20	39	Section IV Technical Specifications	8.4	Support for serial console connection with ability to setup at least the following basic parameters: IP addressing info, NTP server,	8.4	Support for serial console connection/ <u>LAN</u> with ability to setup at least the following basic parameters: IP addressing info, NTP server, Date, Time and Time Zone <u>or better system</u>

				802.1Q VLAN ID, Date, Time and Time Zone	
21	39	Section IV Technical Specifications	9.1	Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define:	9.1 Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define: Conference ID Conference name Max bandwidth for participants Conference PIN code Max number of participants in this conference
22	39	Section IV Technical Specifications	10.1	Call signaling - H.323 v4, SIP	10.1 Call signalling - H.323 v4, SIP, <u>should support IPv4 today and compatible to IPv6 as and when implemented without any cost</u>
23	39	Section IV Technical Specifications	10.2	Miscellaneous - IPV4, NTP, 802.1Q (VLAN ID)	10.2 Miscellaneous - IPV4, NTP, <u>should have LAN connectivity with atleast 20 ports</u>
24	39	Section IV Technical Specifications	10.5	Support for QoS (Int Serv and Diff Serv)	10.5 Support for QoS (Diff Serv)
25	39	Section IV Technical Specifications	10.6		10.6 <u>VC through remote Laptop, module supporting required for 20 or more users at each location</u>
26	39	Section IV Technical Specifications	11.3	The System should support Full HD Resolution 1080p30, 720p60,& 720p30	11.3 The System should support Full HD Resolution 1080p30, <u>from day 1</u>
27	39	Section IV Technical Specifications	11.5	The system should support minimum 30 frames per second from 168 kbps and beyond.	11.5 The system should support minimum 30 frames per second from 168 kbps and beyond <u>or should be flexible to adopt available bandwidth while in call.</u>
28	39	Section IV Technical Specifications	11.9	One DVI -I input for Data Sharing	11.9 One DVI -I input for Data Sharing from PC and <u>additional IS – Video/DVD document camera input (external/internal device)</u>

29	39	Section IV Technical Specifications	11.11	System should have any 2 HD outputs	11.11	System should have <u>minimum</u> 2 HD outputs
30	39	Section IV Technical Specifications	11.12	The system should support the following audio standards-:G.711, G.722. G.722.1C. G.728. G.729, MPEG4-AAC-LC/LD	11.12	The system should support the following audio standards-:G.711, G.722. G.722.1C. G.728. G.729, MPEG4-AAC-LC/LD <u>or better</u>
31	39	Section IV Technical Specifications	11.13	The system should support the following audio inputs -:	11.13	The system should support the following audio inputs -:
32	39	Section IV Technical Specifications	11.14	One Line in	11.14	One/two Line in as per requirement.
33	39	Section IV Technical Specifications	11.19	The system should support audio conferencing phone integration	11.19	The system should support audio conferencing phone integration.
34		Section IV Technical Specifications	11.21	The system should support 1 PRI and a backup of 1 BRI	11.21	The system should be <u>compatible to make ISDN calls through PRI/BRI</u>
35	40	Section IV Technical Specifications	11.22 (Sub sec.)	Miscellaneous - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.	11.22 (Sub sec.)	Miscellaneous <u>MCU features</u> - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.
36	40	Section IV Technical Specifications	11.22 (Sub sec.)	Remote should be capable to switch on or off the VC unit.	11.22 (Sub sec.)	Remote should be capable to switch on or off/ <u>wake up</u> the VC unit.
37	40	Section IV Technical Specifications	11.23	New added	11.24	<u>MCU should have Firewall traversal (Inbuilt or external)</u>
38	40	Section IV Technical Specifications	13	Omni Directional Desk Microphones	13	Boundary layer Microphones with push to talk buttons
39	40	Section IV Technical Specifications	14.2	Device should provide minimum 8 microphone/ line AEC inputs shall be provided and all inputs shall have equivalent	14.2	Device should provide minimum 8 microphone <u>and 2 line</u> AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals

				input processing and support microphone or line level signals		
40	41	Section IV Technical Specifications	17.3	Amplifier	17.3	<u>Amplifier</u> Dual channel, per channel support of 200w or more
41	41	Section IV Technical Specifications	18	Switches	18	Switches (Under one time sale model)
				Cisco 2960 or equivalent L -2 switches		Specifications attached as Appendix -I
42	41	Section IV Technical Specifications	19.1	2 MPLS connectivity on each location	19.1	<u>4 MB MPLS connectivity at Delhi and 2 MB MPLS connectivity on Bangalore and Vadodara in ring topology with copper/fiber connectivity</u>
43	41	Section IV Technical Specifications	19.4	-	19.4	<u>Router to be provided by the firm under one time sale, Cisco Model 2941 or equivalent with Multi Protocol Layer Switch & Border Gateway Protocol capability.</u>
44	41	Section IV Technical Specifications	20.6	The display should have:	20.6	The display should have:
				b) Inbuilt Fans		b) Inbuilt Fans <u>or without fan model</u>
45	42	Section IV Technical Specifications	20.10	The display to be supplied with in-built or wall mounted PC	20.10	The display to be supplied with in-built or wall mounted PC
				a) The PC should have Dual Core Processor , Min 2 GB Ram,40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with Xp embedded OS, antivirus with one year support		a) The PC should have Dual Core Processor (<u>or better</u>), Min 2 GB RAM,40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with XP embedded OS (<u>or Latest Windows</u>).
46	42	Section IV Technical Specifications	20.15	Microsoft Office 2007 has to be quoted separately	20.15	Microsoft Office 2007 or higher version as compatible with InBuilt PC or Wall mounted PC to be supplied along with LCD.
47	42	Section IV Technical Specifications	20.16	-	20.16	Antivirus (License) like Norton or McAfee or equivalent. with Two Years support
48	42	Section IV	21	DVR Specifications for Video Conferencing in	21	DVR Specifications:

		Technical Specifications		CPCB			<p>Video recording and playback at resolutions of HD Instant video recording via a single button on the remote control Pause, mute, fast forward & fast backwards playback controls Media scanning function to locate audio/video files automatically Playback of externally imported videos, music, pictures graphical interface for controlling settings 2x-10x digital picture zoom for viewing photos or better Connect external hard drive storage up to 2 TB or better</p> <p>Specifications: Input Video Signal: Compatible with VC systems Input Connectors: Composite (TV), S-Video, Component, HDM1 Input Connector: USB for connection of external storage device Output Connectors: Composite (TV), S-Video, Component, HDM1 Audio Connections: Analog L/R, input and output Remote Control : Dimensions: Able to fit in 19" Rack</p>
49	42	Section IV Technical Specifications	<u>23.0</u>	New Added	<u>23.0</u>	Hand Held mics	<p><u>-50m (250 ft.) Note: actual range depends on RF signal</u></p>

					<p><u>absorption, reflection, and interference.</u> <u>-Minimum: 45 Hz. Maximum: 15 kHz (overall system channel depends on microphone element).</u> <u>-0.5%, typical Ref. +/- 33 kHz deviation, 1 kHz tone</u> <u>- >100 dB A-weighted</u> <u>- XLR connector: 200 Ω 1/4 inch connector: 1kΩ or compatible with system being provided</u> <u>- Turn off button on the microphone</u> <u>- Audio input level :</u> <u>-10 dBV maximum at "mic" gain position</u> <u>+10 dBV maximum at 0dB gain position</u> <u>+20 dBV maximum at -10dB gain position</u></p>	
50	42	Section IV Technical Specifications	24.0	New Added	24.0	Makes and Models for VC
						<u>Reputed Brands similar to Polycom, Tandburg, Redvision, Cisco, Lifesize, Sony or Equivalent.</u>
51	45	Technical Responsiveness Form Section 3-A	2.1	The video conferencing system shall support up to 16 participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions	2.1	The video conferencing system shall support <u>15 or more</u> participants with dedicated encode and decode streams and the quality of experience for users experience must not be affected by other users actions <u>and it should be extendable to 48 ports for which device stacking solution should be available.</u>
52	45	Technical Responsiveness Form Section 3-A	2.2a	Up to 16 HD @ 720p/1080p resources	2.2a	MCU should have capability of: <u>a. Calling 15 or more different locations simultaneously @1080p30.</u> <u>b. The multiple conferencing should be possible from day one.</u> <u>c. Audio Conferencing with minimum eight or more locations should be possible Simultaneously with Video conferencing.</u>
53	45	Technical Responsiveness Form Section 3-A	2.2b	Up to 16 SD resources or any combination of SD/HD	2.2b	<u>15 or more SD locations/resources or any combination of SD/HD</u>

54	45	Technical Responsiveness Form Section 3-A	2.3	4Mbps per port	2.3	<u>Upto 4Mbps per port</u>
55	45	Technical Responsiveness Form Section 3-A	2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codes as H.263/H.263+.	2.5	The MCU should not present any port loss or loss in FPS (30 or 60 FPS) even when using more CPU consuming video codes as <u>H.261/H.263/H.263+</u> .
56	45	Technical Responsiveness Form Section 3-A	4.1	Encoder, Decoder and Scalars dedicated for each of the 16 ports	4.1	Encoder, Decoder and Scalars dedicated for each of the <u>15 or more</u> ports
57	45	Technical Responsiveness Form Section 3-A	5.2	Up to 16 high definition (HD) 720p in continuous presence (CP) transcoding	5.2	<u>As per modified 2.2a and 2.2b above</u>
58	46	Technical Responsiveness Form Section 3-A	6.1	Supporting for all common resolutions: 1080p30 (@ 1.7Mbps or less), 720p60 (@ 1.1Mbps or less), 720p30 (@ 768Kbps or less), XGA (1024x768), SVGA (800x600), 4SIF (640x480), 4CIF (704x576), VGA (640x480), 384p (x384)	6.1	Supporting for all common resolutions: <u>1080p30 (@ 2 Mbps or less), 720p60 (@ 1.5 Mbps or less), 720p30 (@ 1 mbps or less), or better</u>
59	46	Technical Responsiveness Form Section 3-A	7.1	AAL-LC, G.722.1 Annex C, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC	7.1	<u>AAC-LC/LD, G.722.1, G.722, Siren 14, G.711 (u-law), G.711 (a-law), Mpeg-4 AAC-LC or eqv. or better</u>
60	46	Technical Responsiveness Form Section 3-A	8.3	Multiples user access levels on the remote administration UI	8.3	Multiples user access levels on the remote administration UI
				Support for at least the following log types: Event logs, troubleshooting logs, CDRS	8.4	Support for at least the following log types: Event logs, troubleshooting logs, CDRS
61	46	Technical Responsiveness Form	9.1	Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define:	9.1	Ability to schedule MCU calls from the remote administration UI (no need for external software) with possibility to define: <u>Conference ID</u>

		Section 3-A				Conference name
						Max bandwidth for participants
						Conference PIN code
						Max number of participants in this conference
62	46	Technical Responsiveness Form Section 3-A	10.2	Call signaling - H.323 v4, SIP	10.2	Call signalling - H.323 v4, SIP, <u>should support IPv4 today and compatible to IPv6 as and when implemented without any cost</u>
63	46	Technical Responsiveness Form Section 3-A	10.3	--	10.3	Miscellaneous - IPV4, NTP, <u>should have LAN connectivity with atleast 20 ports</u>
64	46	Technical Responsiveness Form Section 3-A	11.3	The System should support Full HD Resolution 1080p30, 720p60,& 720p30	11.3	The System should support Full HD Resolution 1080p30, <u>from day 1</u>
65	47	Technical Responsiveness Form Section 3-A	11.5	The system should support minimum 30 frames per second from 168 kbps and beyond.	11.5	The system should support minimum 30 frames per second from 168 kbps and beyond <u>or should be flexible to adopt available bandwidth while in call.</u>
66	47	Technical Responsiveness Form Section 3-A	11.9	One DVI -I input for Data Sharing	11.9	One DVI -I input for Data Sharing from PC and <u>additional IS – Video/DVD document camera input (external/internal device)</u>
67	47	Technical Responsiveness Form Section 3-A	11.11	System should have any 2 HD outputs	11.11	System should have <u>minimum</u> 2 HD outputs
68	47	Technical Responsiveness	11.12	The system should support the following audio standards-:G.711, G.722. G.722.1C.	11.12	The system should support the following audio standards-:G.711, G.722. G.722.1C. G.728. G.729, MPEG4-AAC-LC/LD <u>or better</u>

		ss Form Section 3-A		G.728, G.729, MPEG4-AAC-LC/LD	
69	47	Technical Responsivene ss Form Section 3-A	11.21	The system should support 1 PRI and a backup of 1 BRI	11.21 The system should be <u>compatible to make ISDN calls through PRI/BRI.</u>
70	47	Technical Responsivene ss Form Section 3-A	11.22 (Sub sec.)	Miscellaneous - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.	11.22 (sub. Sec.) Miscellaneous <u>MCU features</u> - Immediate calls for more than 50 numbers can be viewed with full details on the main menu.
71	47	Technical Responsivene ss Form Section 3-A	11.22 (Sub sec.)	Remote should be capable to switch on or off the VC unit.	11.22 (Sub sec.) Remote should be capable to switch on or off/ <u>wake up</u> the VC unit.
72	47	Technical Responsivene ss Form Section 3-A	11.23		11.24 <u>MCU should have Firewall traversal (Inbuilt or external)</u>
73	47	Technical Responsivene ss Form Section 3-A	13	Omni Directional Desk Microphones	13 Boundary layer Microphones with push to talk buttons
74	47	Technical Responsivene ss Form Section 3-A	14.2	Device should provide minimum 8 microphone/ line AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals	14.2 Device should provide minimum 8 microphone <u>and 2 line</u> AEC inputs shall be provided and all inputs shall have equivalent input processing and support microphone or line level signals
75	48	Technical Responsivene ss Form Section 3-A	17.3	Amplifier	17.3 <u>Amplifier</u> <u>Dual channel, per channel support of 200w or more</u>
76	49	Technical Responsivene ss Form	18	Switches Cisco 2960 or equivalent L -2 switches	18 Switches Specifications attached as Appendix-I

		Section 3-A			
77	49	Technical Responsiveness Form Section 3-A	19.1	2 MPLS connectivity on each location	19.1 4 MB MPLS connectivity at Delhi and 2 MB MPLS connectivity on Bangalore and Vadodara in ring topology with copper/fiber connectivity
78	49	Technical Responsiveness Form Section 3-A	19.4	-	19.4 Router to be provided by the firm under one time sale model Cisco Model 2941 or equivalent with MPLS Connectivity capability
79	50	Technical Responsiveness Form Section 3-A	20.6	The display should have: c) Inbuilt Fans	20.6 The display should have: c) Inbuilt Fans or without fan model
80	50	Technical Responsiveness Form Section 3-A	20.10	The display to be supplied with in-built or wall mounted PC b) The PC should have Dual Core Processor, Min 2 GB Ram, 40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with Xp embedded OS, antivirus with one year support	20.10 The display to be supplied with in-built or wall mounted PC b) The PC should have Dual Core Processor (or better), Min 2 GB RAM, 40 GB HDD, 10/100/1000 Mbps LAN, Wireless LAN support, Bluetooth, keyboard, mouse etc. and with XP embedded OS (or Latest Windows).
81	51	Technical Responsiveness Form Section 3-A	20.15	Microsoft Office 2007 has to be quoted separately	20.15 Microsoft Office 2007 or higher version as compatible with InBuilt PC or Wall mounted PC to be supplied along with LCD.
82	51	Technical Responsiveness Form Section 3-A	20.16	-	20.16 Antivirus (License) like Norton or McAfee or equivalent. with Two Years support
83	51	Technical Responsiveness Form Section 3-A	21	DVR Specifications for Video Conferencing in CPCB Video recording and playback at resolutions of HD	21 DVR Specifications: Video recording and playback at resolutions of HD Instant video recording via a single button on the remote control Pause, mute, fast forward & fast backwards playback controls

			<p>Instant video recording via a single button on the remote control Pause, mute, fast forward & fast backwards playback controls Media scanning function to locate audio/video files automatically Playback of externally imported videos, music, pictures graphical interface for controlling settings 2x-10x digital picture zoom for viewing photos or better Connect external hard drive storage up to 2 TB or better</p> <p>Specifications: Input Video Signal: Compatible with VC systems Input Connectors: Composite (TV), S-Video, Component, HDMI Input Connector: USB for connection of external storage device Output Connectors: Composite (TV), S-Video, Component, HDMI Audio Connections: Analog L/R, input and output Remote Control : Dimensions: Able to fit in 19" Rack</p>	<p>Media scanning function to locate audio/video files automatically Playback of externally imported videos, music, pictures graphical interface for controlling settings 2x-10x digital picture zoom for viewing photos or better Connect hard drive storage up to 2 TB or better</p> <p>Input Video Signal: Compatible with VC systems Input Connectors: Composite (TV), S-Video, Component, <u>HDMI/DVI</u> Input Connector: USB for connection of external storage device Output Connectors: Composite (TV), S-Video, Component, <u>HDMI/DVI</u> Audio Connections: Analog L/R, input and output Remote Control : Dimensions: Able to fit in 19" Rack</p>
84	51	Technical Responsiveness Form Section 3-A	<p><u>23.0</u> New Added</p>	<p><u>23.0</u> <u>Hand Held mics</u></p> <p><u>-50m (250 ft.) Note: actual range depends on RF signal absorption, reflection, and interference.</u> <u>-Minimum: 45 Hz. Maximum: 15 kHz (overall system channel depends on microphone element).</u></p>

										<p><u>-0.5%, typical Ref. +/- 33 kHz deviation, 1 kHz tone</u></p> <p><u>- >100 dB A-weighted</u></p> <p><u>- XLR connector: 200 Ω 1/4 inch connector: 1kΩ or compatible with system being provided</u></p> <p><u>- Turn off button on the microphone</u></p> <p><u>- Audio input level :</u></p> <p><u>-10 dBV maximum at "mic" gain position</u></p> <p><u>+10 dBV maximum at 0dB gain position</u></p> <p><u>+20 dBV maximum at -10dB gain position</u></p>		
85	51	Technical Responsiveness Form Section 3-A	24.0	New Added					24.0	<p>Makes and Models for VC</p> <p><u>Reputed Brands similar to Polycom, Tandburg, Redvision, Cisco, Lifesize, Sony or Equivalent.</u></p>		
86	54-55	Price Schedule Part-A	1	2	3	9			1	2	3	9
			S.N.	Description of goods	Qty	Place of supply			S.N.	Description of goods	Qty	Place of supply
			3.	Boundary Layer Microphones	12	Four at each location			3.	Boundary Layer Microphones	26	(12 at HO, @7 at both ZO's)
			4.	Digital Signal Processor :	6	Two at each location			4.	Digital Signal Processor	4	(2at HO, @1 both ZO's)
			5.	FOH Speakers	18	Six at each location			5.	FOH Speakers	12	(4 at each location)
			7.	55' Professional display LCD	3	One at each location			7.	55" Professional display LCD	3	One at each location
			8.	MS office software 2007 or better and compatible to the system including antivirus of Symantec/McAfee or	3	One at each location			8.	Deleted		
									9.	Hand Held Mics	7	(3at HO, @2 both ZO's)
									12.	MPLS_Managed Services(4Mbps at HO+@2 Mbps at each ZO)	3	One at each location
									13.	Switches	6	Two at each location
									14.	Routers(1@each location)	3	One at each location

				eqv.						15	CAT 6 cable per 100 meter length	3	100 mtr at each location.	
			9.	Ceiling Mics	9	Three at each location								
			12.	2MB MPLS_Managed Services	3	One at each location								
			13.	Switches	3	One at each location								
87	55	Price Schedule Part-A Managed Services	Managed Services (Details of Point No. 11)						Managed MPLS Services					
			<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
			Input Data					Input Data						
			S.N	A End/ LOCATION	Connectivity	Bandwidth Mbps	Class of service	S.N	A End/ LOCATION	Connectivity	Bandwidth Mbps	Class of service		
			1	New Delhi	MPLS	2 Mbps	Gold	1	New Delhi	MPLS	4 Mbps	Gold		
88	55	Price Schedule Part-B Managed Services	S. N Brief Description Ist year (after warranty period) IInd year (after warranty period) IIIrd year (after warranty period) Total						S. N Brief Description Ist year (after warranty period) IInd year (after warranty period) IIIrd year (after warranty period) Total					
			1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices at Delhi,	Per year	Per year	Per Year	1.	Comprehensive Annual Maintenance Charge for Video-conferencing System alongwith all accessories, installed at CPCB offices including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing including MPLS managed	Per year	Per year	Per Year		

			<p>Bangalore, Vadodra including all Hardware, Software and Accessories supplied under the contract for a period of three years after warranty period (2 years) and Up-gradation of all software associated with Video conferencing.</p>							<p>Services.</p>																	
										<p>i. Delhi (with 4MB MPLS)</p>																	
										<p>ii. Vadodra (with 2MB MPLS)</p>																	
										<p>iii. Bangalore (with 2MB MPLS)</p>																	
										<p>Recurring cost for MPLS connectivity on Fiber/copper) per year</p>																	
										<p>i Delhi</p>																	
										<p>ii Vadodara</p>																	
										<p>iii Bangalore</p>																	
89	75	Annexure A CAMC 3. Terms of Payment	<p>a) The Bidder agrees to maintain the Video-Conferencing system for a period of three years i.e. from dd/mm/yyyy to dd/mm/yyyy in accordance with the provisions laid out in the agreement and at the rates given below:-</p> <table border="1"> <thead> <tr> <th>For Video-Conferencing System installed at</th> <th>Paying Authority</th> <th>Yearly Rates of Comprehensive Annual Maintenance Contract in Indian Rupees</th> </tr> </thead> <tbody> <tr> <td>CPCB, Delhi</td> <td></td> <td></td> </tr> <tr> <td>CPCB, Bangalore</td> <td></td> <td></td> </tr> <tr> <td>CPCB, Vadodra</td> <td></td> <td></td> </tr> </tbody> </table>	For Video-Conferencing System installed at	Paying Authority	Yearly Rates of Comprehensive Annual Maintenance Contract in Indian Rupees	CPCB, Delhi			CPCB, Bangalore			CPCB, Vadodra									<p>a) The Bidder agrees to maintain the Video-Conferencing system for a period of three years after warranty period i.e. from dd/mm/yyyy to dd/mm/yyyy in accordance with the provisions laid out in the agreement and at the rates mentioned in Price Schedule Part B Managed Services vide amendment no. 88.</p>					
For Video-Conferencing System installed at	Paying Authority	Yearly Rates of Comprehensive Annual Maintenance Contract in Indian Rupees																									
CPCB, Delhi																											
CPCB, Bangalore																											
CPCB, Vadodra																											

90	75	Annexure A CAMC 3. Terms of Payment- Sub Section- c)	<p>Existing Clause</p> <p>The maintenance and repair cost shall be paid half yearly, on satisfactory performance of maintenance services in the half year period.</p>	<p>Modified Clause</p> <p>The maintenance and repair cost shall be paid quarterly, on satisfactory performance of maintenance services in the quarterly period.</p>
91	36	Technical Responsiveness Form Section 3-A	<p>19.6 New added-MPLS Bandwidth</p>	<p>19.6 MPLS Bandwidth- Bidder to provide MPLS line scalable up to 10 MBPS at Delhi and up to 5MBPS at other two locations within one month of order (if placed) to the firm by CPCB</p>
92	43	Section VI-A : Qualification Criteria	<p>Referred to in Clause 13.3(b) of ITB</p> <p>(b) (i) The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per GCC and SCC to the authorized local representative; and The bidder should furnish the information on all past supplies and satisfactory performance for both (a) and (b) above, in proforma under section XL All bids submitted shall also include the following information along with formats under Section XV. (iv) Details of Service Centers and information on service support facilities that would be provided after the warranty period [in the Service Support Form given in Section XIV]. (v) New added</p>	<p>Modified clause</p> <p>(b)(i) The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per GCC and SCC to the authorized local representative; <u>and furnishes documents that OEM is in the same business for not less than 03 years. A certificate to this effect shall be enclosed.</u> and The bidder should furnish the information on all past supplies and satisfactory performance for both (a) and (b) above, in proforma under section XI All bids submitted shall also include the following information along with formats under Section XV. (iv) Details of Service Centers and information on service support facilities that would be provided after the warranty period [in the Service Support Form given in Section XI]. (v) <u>Spare ware house and maintenance center should be located in India.</u></p>

**Specifications of Switches (Layer 2)
Required for Video Conferencing System Procurement for CPCB
May,2012**

Sl. No.	Item	Configuration
	Hardware Architecture	The switch should have 24 10/100/1000BaseT ports with 4 dual-personality ports (fiber or copper).
		Shall support 1000 Base-SX, LX, BX, LH and 100Base-FX Mini-GBICs
		The Switch should be 1U 19" Rack-Mountable
		Up to 48 Gbps switching capacity
		Switching throughput of Up to 35.7 million pps
		MAC Address table size of 8,000 entries
		All the switch ports shall offer non-blocking, wires peed performance
		The switch shall have a maximum depth of 325 mm.
2	Resiliency and high availability	Shall support IEEE 802.3ad Link Aggregation Control Protocol (LACP) with up to 8 links (ports) per trunk
		Shall support IEEE 802.1s Multiple Spanning Tree Protocol and provide legacy support for IEEE 802.1d STP and IEEE 802.1w RSTP
		Shall have Dual-flash images for redundant switch software images
		Shall support RADIUS VLAN for voice using standard RADIUS attribute and LLDP-MED to automatically configure VLAN for IP phones
3	Layer 2 switching	Shall support IEEE 802.1Q VLANs, up to 64 port-based VLANs
		Shall support GARP VLAN Registration Protocol (GVRP) allowing automatic learning and dynamic assignment of VLANs
		Shall support Jumbo packets up to 9,216-byte frame size to improve performance of large data transfers
4	Security	Shall support protected ports to isolate specified ports from all other ports on the switch
		Shall support Port security, MAC Lockdown and MAC lockout
		Shall support IEEE 802.1X user authentication using an IEEE 802.1X supplicant in conjunction with a RADIUS server
		Shall support multiple IEEE 802.1X users per port preventing user "piggybacking" on another user's IEEE 802.1X authentication
		Shall support Web-based authentication providing a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant
		Shall support MAC-based authentication allowing client to be authenticated with the RADIUS server based on client's MAC address

		<p>Shall support BPDU port protection preventing forged BPDU attacks</p> <p>Shall support secure switch CLI logon</p> <p>Shall support management access (CLI, Web, MIB) securely encrypted through SSHv2, SSL, and SNMPv3</p> <p>Shall support Authorized IP Managers feature to determine which stations (PCs or workstations) can access the switch through the network</p>
5	Convergence and QoS	<p>Shall support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</p> <p>Shall support IEEE 802.1p Traffic prioritization delivering data to devices based on the priority and type of traffic</p> <p>Shall support IP multicast (data-driven IGMP) to automatically prevent flooding of IP multicast traffic</p>
6	Manageability	<p>Shall support SNMPv1/v2c/v3</p> <p>Shall support RMON providing advanced monitoring and reporting capabilities for statistics, history, alarms, and events</p> <p>Shall have Full-featured console port providing complete control of the switch with a familiar command-line interface (CLI)</p> <p>Shall support single IP address management for a virtual stack of up to 16 switches</p> <p>Shall support command-line interface (CLI) and Web Interface for switch configuration</p> <p>Shall find and fix common network problems automatically, then inform administrator</p> <p>Shall allow assignment of descriptive names to ports</p>
7	Warranty	Onsite 3 Years
8	Operating conditions Temperature	Operating 32°F to 140°F (0°C to 40°C)
		Storing: 4°F to 149°F (-20°C to 65°C)
9	Operating conditions Humidity	95% max (Non condensing)