

# **Bharat Heavy Electricals Limited**



**Corporate Systems & Information Technology**

## **Request for Proposal (RFP) for Video Conferencing Solution**



**BHARAT HEAVY ELECTRICALS LIMITED**  
भारत हेवी इलेक्ट्रिकल लिमिटेड  
**CORPORATE SYSTEMS & INFORMATION TECHNOLOGY**  
कॉर्पोरेट प्रणाली एवं सूचना प्रौद्योगिकी

**Ref. No. : AA:CIT:P31:VC-RP**

**Date: 07<sup>th</sup> August, 2013**

Dear Sir / Madam,

**Sub: Video Conferencing Solution – Lease Basis**

BHEL proposes to implement Video Conferencing Solution across company on 5 year Lease Basis. In view of this, sealed bids are invited for supply, installation, and maintenance of Video Conferencing Equipments on 5 year lease basis as per the terms and conditions of RFP enclosed.

Any clarifications / queries from the interested bidders shall be given in the specified format (**Annexure-XI**) to BHEL on or before **14.08.2013**.

Any corrigendum / notifications issued by BHEL, subsequent to Video Conferencing Solution, shall be available / hosted on [www.bhel.com](http://www.bhel.com) and <http://eprocare.gov.in>. Hence all bidders are expected to keep visiting [www.bhel.com](http://www.bhel.com) and <http://eprocare.gov.in> for any corrigendum / notification in their own interest.

The bidders are expected to examine all instructions, formats, terms, specifications, conditions and all other information in the bidding documents. Failure to furnish all information asked for or to submit a bid not substantially responsive to the bidding documents may result in rejection of the bid as decided by the BHEL. BHEL's decision shall be final and binding.

Please ensure that your response complete in all respect in requisite format with necessary enclosures is delivered on or before the due date & time i.e., **29.08.2013 at 17:00 hrs.**

Bids shall be addressed to:

SDGM (CS&IT)  
Bharat Heavy Electricals Limited,  
CS&IT-Hall, 2<sup>nd</sup> Floor, HRD & ESI Complex,  
Plot no. 25, Sector-16a, Noida (UP) – 201301.

Thanking you,  
Yours faithfully,  
For and on behalf of BHEL

SDGM (CS&IT)

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## 1. Introduction:

BHEL is the largest **engineering** and manufacturing enterprise in India in the energy-related/infrastructure sector, today. BHEL was established more than 40 years ago, ushering in the indigenous Heavy Electrical Equipment industry in India - a dream that has been more than realized with a well-recognized track record of performance. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77.

BHEL manufactures over 180 products under 30 major product groups and caters to core sectors of the Indian Economy viz., Power Generation & Transmission, Industry, Transportation, Telecommunication, Renewable Energy, etc. The wide network of BHEL's 14 manufacturing divisions, four Power Sector regional centers, over 100 project sites, eight service centers and 18 regional offices, enables the Company to promptly serve its customers and provide them with suitable products, Systems and services -- efficiently and at competitive prices. The high level of quality & reliability of its products is due to the emphasis on design, engineering and manufacturing to international standards by acquiring and adapting some of the best technologies from leading companies in the world, together with technologies developed in its own R&D centers.

BHEL's vision is to become a world-class engineering enterprise, committed to enhancing stakeholder value. The company is striving to give shape to its aspirations and fulfill the expectations of the country to become a global player.

## 2. Current Network Scenario:

BHEL has taken MPLS network services from two service providers, namely BSNL & Reliance Communications Ltd. There are about 150 locations connected on MPLS network, of which 36 are permanent locations, while the rest are project sites. The bandwidth at locations ranges from 2Mbps at project sites & smaller locations to 16Mbps/32Mbps at major units.

## 3. Existing VC setup:

Currently Polycom based High Definition Video Conferencing solution is implemented at about 50 locations in BHEL. In addition, dedicated VC system has been installed in the cabins of CMD, Directors, Executive Directors and other Unit Heads. The list of locations where currently VC systems are installed with make & model are given in **Annexure-I**.

## 4. Objective:

In a fire incident some of the VC equipment installed at our Corporate Office, New Delhi had got damaged and some functionality had been affected. The objective is to procure those items which were damaged and restore the affected functionalities. The purpose of RFP is to select a VC Solution vendor who shall provide, install, maintain and operate the equipment to be procured and also integrate it seamlessly with the existing VC solution at BHEL. The solution should be capable of integrating with the existing VC setup in the organization & it shall be responsibility of the Vendor to integrate the same. The supplied equipment (hardware / software) shall be on 5 year lease.

## 5. Eligibility Criteria:

**5.1** The bidder shall be the OEMs of the VC Systems / Endpoints or authorized partner / system integrator of OEM. In case of bidder being an authorized partner / system integrator of the OEM, the bidder shall submit an authorization letter from the OEM authorizing it to bid specifically for this tender as per format enclosed as **Annexure-VIII**.

**5.2** The bidder must have been a profitable company for the last three financial years having an average annual turnover of minimum Rs 47 lakhs for the last 3 years. Attested copies of Balance Sheets / PL statements of the last three years to be submitted as proof.

**5.3** The bidder must have executed at least one order of VC systems during last 7 years ending 31.07.2013, value of which must be at least 125 lakhs. PO copies including value to be submitted as proof.

Or

must have executed at least two orders of VC systems during last 7 years ending 31.07.2013, value of each must be at least 80 lakhs. PO copies including value to be submitted as proof.

Or

must have executed at least three orders of VC systems during last 7 years ending 31.07.2013, value of each must be at least 60 lakhs. PO copies including value to be submitted as proof.

**5.4** The bidder shall provide support for all the VC Systems, Endpoints, other allied equipments, software, etc, including any third party items for a period of 05 (Five) Years. There shall be back-to-back agreement with the OEM of the solution for warranty and support for the entire contract period. The bidder shall submit a certificate from the OEM for back-to-back support for the complete solution as per enclosed Format given in **Annexure-VII**.

**5.5** The bidder shall have a registered office in India. A documentary proof with complete address details and contact person details shall be submitted along with the offer.

**5.6** The bidder shall have at least 2 service centres in India. List of service centres in India to be provided.

## **6. Key Activities and Dates**

| <b>S.No.</b> | <b>Key Activity</b>                            | <b>Date</b>                    |
|--------------|--|--------------------------------|
| 1            | Issuance of Request For Proposal (RFP)         | 07-08-2013                     |
| 2            | Last date of receiving queries from bidders    | 14-08-2013                     |
| 3            | Last date of replying to queries               | 21-08-2013                     |
| 4            | Last date and time for submission of proposals | <b>29.08.2013: 1700hrs</b>     |
| 5            | Technical Proposal opening                     | <b>30-08-2013: 1500hrs</b>     |
| 6            | Commercial Proposal opening                    | <b>Will be intimated later</b> |

## **7. General Terms and Conditions**

### **7.1 Integrity Pact:**

The bidder shall sign an Integrity Pact, to comply with the requirements of the Transparency International Limited (TIL) and the Central Vigilance Commission (CVC) guidelines to ensure an ethical and corruption-free business environment. The proforma for the Integrity Pact is attached as **Annexure-IV. (Not applicable)**

### **7.2 Non-Disclosure Agreement:**

The bidder shall sign a Non-Disclosure Agreement (NDA) with BHEL. By signing the NDA, the bidder agrees not to disclose any confidential information, business or proprietary, as covered by the agreement. The proforma for the Non-Disclosure Agreement is attached as **Annexure-V**.

### **7.3 Cost of Bidding:**

The Bidder shall bear all costs associated with the preparation and submission of its bid and the Purchaser will in no case be responsible or liable for those costs.

### **7.4 Procedure for Submission & Opening of Bids:**

Bids shall be accepted by the official inviting the tenders, in two parts, as described below, on or before the due date & time indicated in the Tender Notice.

#### **Part-I : EMD & Techno-Commercial Bid**

This part shall consist of the following:

- 1) EMD in the form of Pay Order/ Bank Draft of **Rs.2,00,000/-** (Rupees Two Lakhs only) in favour of "Bharat Heavy Electricals Limited" payable at New Delhi or Noida. In the absence of submission of EMD, the offer will be summarily rejected.
- 2) Bounded volume of:
  - i. Technical offer/ details including literature/leaflets. The bidder can offer only as per technical specifications of the equipments. The Lessee reserves the right to accept or reject the technical offer. Price bids of only techno-commercially short listed vendors will be opened.
  - ii. Authorization by OEM's as per format enclosed as Annexure-VIII.
  - iii. No Deviation Certificate as per format enclosed as Annexure-VI.
  - iv. Checklist of Make and Models offered as per format enclosed as Annexure-X.
  - v. Checklist of PRICE BID (Unpriced Copy) as per format enclosed as Annexure-IX.
  - vi. Enclosures as defined in checklist of enclosures.
  - vii. A copy of complete RFP where each page is signed & stamped by the bidder.

### **Part-II : Price Bid**

Price bid containing PRICES only is to be submitted (in the Price Schedule format enclosed as Annexure-IX only). Prices shall be quoted in Indian Rupees only. Bidder shall give details of Direct Applicable Taxes (between Bidder & BHEL as asked in the Price Bid Format) clearly. Any changes in these Direct Applicable Tax rates during the complete lease period will only be payable as per actuals, subject to submission of documentary evidence. Any other taxes, duties, levies and charges assessed on the bidder by local, national or any statutory authorities will not be payable by BHEL.

Price Bid should not contain any technical details and/or Commercial Terms & Conditions as the same are supposed to be contained in PART-I only, so that the same can be evaluated before opening of Price Bid(s).

### **7.5 Marking On Envelope**

Part-I and Part-II offers shall be submitted in two separate sealed envelopes with bidder's distinctive SEAL and super-scribed as follows:

#### **Part-I : 1. Tender Enquiry No. and Its Description**

2. Due Date of Opening
3. "EMD & Techno-Commercial Bid".

#### **Part-II : 1. Tender Enquiry No. and Its Description**

2. Due Date of Opening
3. "Price Bid" as per enclosed Format.

Un-sealed envelopes or envelopes not super-scribed as above may not be accepted/considered.

### **7.6 Bid Submission**

- 7.6.1** Bids shall be addressed to the official inviting Bids by name and designation and sent at the following address:

**SDGM (CS&IT)**  
**Bharat Heavy Electricals Limited,**  
**CS&IT Hall, 2nd Floor, HRD & ESI Complex, Plot No. 25,**  
**Sector – 16A, Noida (UP) 201301**  
**Telephone no. : (0120) 2416476**  
**Email : [manish@bhel.in](mailto:manish@bhel.in) / [shivali@bhel.in](mailto:shivali@bhel.in)**

- 7.6.2** Bids can also be delivered in person to the official inviting Bids.

**7.6.3** Bids submitted by post shall be sent by "REGISTERED POST" only and shall be posted with due allowance for any postal delay.

### **7.7 Bid Opening**

- 7.7.1** PART-I (EMD & Techno-commercial Bid) may be opened on the due date and time as specified in the Enquiry Letter, in the presence of bidders who may like to attend. Part-II (Price Bid) shall be opened subsequently. However, Purchaser/Lessee reserves the right to open both the parts simultaneously i.e. Part-I and Part-II together.
- 7.7.2** In case of public opening, date and time of Price Bid (Part-II) opening shall be intimated to the technically and commercially acceptable bidders only.
- 7.7.3** Purchaser/Lessee also reserves the right to open the earlier i.e. superseded price bids, if any, submitted by the bidder(s), if required.
- 7.7.4** Not more than two representatives from each bidder will be permitted to be present during tender opening.
- 7.7.5** No correspondence shall be entertained from the bidders after the opening of Price Bid(s).
- 7.7.6** Standard pre-printed conditions of the bidders attached to the offer will not be accepted and only those mentioned in the body of his offer will be considered.
- 7.7.7** Unsolicited bids shall not be entertained. Unsolicited revised Price Bids also, shall not be entertained at any stage of the tendering process and will lead to automatic disqualification of the party's bid.
- 7.7.8** No Literature, Pamphlets other than what is specified is to be enclosed. All such enclosures shall be considered as unread and also will not be considered as part of the quotation.
- 7.7.9** Manufacturer's name, trade Mark or Patent No., if any, should be specified.
- 7.7.10** Purchaser/Lessee reserves the right to negotiate the tender, if required.

### **7.8 Late Bids:**

Any proposal received by BHEL after the deadline for submission of bids shall be summarily rejected and returned unopened to the bidder.

### **7.9 Deviations:**

Bidder shall submit the No Deviation Certificate as per the **Annexure-VI**.

### **7.10 Language of Bid:**

The bid, all correspondence and documents related to the bid shall be in English.

### **7.11 Clarification on Bidding Documents:**

The Bidder is expected to carefully go through this Tender Document and understand the functional requirements thoroughly before submitting their offer. All legitimate queries and clarifications regarding this tender must be submitted in writing to the undersigned by **14.08.2013**. The reply to the same will also be made available from the undersigned within 07 days. BHEL will not entertain or respond to bidders' queries and clarifications received after **14.08.2013**.

### **7.12 Amendment of Bidding Documents:**

The Purchaser may at its sole discretion amend the Bidding Documents at any time prior to the deadline for submission of bids. However in case of such amendment, the bid submission date may be extended at the discretion of the purchaser.

Amendments made prior to submission of bid will be provided in the form of Addenda / Corrigendum to the Bidding Documents and will be posted on the BHEL website (<http://www.bhel.com> or <http://eprocure.gov.in>) in Tender Notification section.

### 7.13 Documents Accompanying the Bid:

All documents shall be submitted as per the NIT. All documentary evidence in support of claims must clearly be marked as to against which criteria the document is submitted and should be fully indexed.

### 7.14 Security Deposit

7.14.1 Upon acceptance of Tender, the successful Tenderer should deposit the required amount of Security Deposit for satisfactory completion of work, as per the rates given below:

| S. No. | Contract Value                      | Security Deposit Amount                                       |
|--------|-------------------------------------|---|
| 1      | Up to Rs. 10 lakhs                  | 10% of Contract Value   |
| 2      | Above Rs. 10 lakhs upto Rs.50 lakhs | 1 lakh + 7.5% of the Contract Value                           |
| 3      | Above Rs. 50 lakhs                  | Rs 4 lakhs + 5% of the Contract Value exceeding Rs. 50 lakhs. |

7.14.2 The security Deposit should be furnished before start of the work by the contractor

7.14.3 Security Deposit may be furnished in any one of the following forms

7.14.3.1 Cash (as permissible under the Income Tax Act)

7.14.3.2 Pay Order / Demand Draft in favour of BHEL.

7.14.3.3 Local cheques of scheduled banks, subject to realization.

7.14.3.4 Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).

7.14.3.5 Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format for Security Deposit shall be in the prescribed formats.

7.14.3.6 Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.

7.14.3.7 Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited in any form as prescribed before start of the work and the balance 50% may be recovered from the running bills.

7.14.3.8 EMD of the successful bidder can be converted and adjusted against the cash portion of Security Deposit excepting for such bidders who have remitted One Time EMD.

**NOTE:** Acceptance of Security Deposit against Sl. No. (7.14.3.4) and (7.14.3.6) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

**7.14.4** The Security Deposit shall not carry any interest.

**7.14.5** In case the value of work exceeds / reduces from the awarded / accepted value, the Security Deposit shall be correspondingly enhanced / reduced as given below:

**7.14.5.1** The enhanced part of the Security Deposit shall be immediately deposited by the Contractor or adjusted against payments due to the Contractor.

**7.14.5.2** There will be no reduction in Security Deposit value in case of variation in contract value upto the lower limit specified in Quantity variation clause. In case of reduction of contract value beyond the lower limit specified in Quantity Variation clause, then the Security Deposit shall be re adjusted in proportion.

**7.14.5.3** In case of reduction, the reduced Contract value shall be certified by BHEL representative. The reduced Security Deposit value can only be considered after taking into account the adequacy of the securities held by BHEL to meet the liabilities of the contractor for the contract, and the performance of the contract in general.

**In such cases, the revised value of Security Deposit shall be worked out only after execution of not less than the lower limit of the revised scope of work/contract value as per quantity variation clause, and as certified by BHEL representative. This reduction in value of Security Deposit shall not entitle the contractor to any amendment of Contract and shall be operated at the discretion of BHEL**

**7.14.6** Contract value for the purpose of operating the reduced / increased value of Security Deposit due to Quantity Variation, shall be exclusive of Price Variation Clause, Over Run Compensation and Extra works done on man day rates.

**7.14.7** The validity of Bank Guarantees towards Security Deposit shall be initially up to the completion period as stipulated in the Letter of Intent/Award + 3 months, and the same shall be kept valid by proper renewal till the acceptance of Final Bills of the Contractor, by BHEL.

**7.14.8** BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the Contractor's failure to fulfil any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit against any claims of other contracts with BHEL.

## **7.15 Return Of Security Deposit**

Security Deposit shall be refunded/Bank Guarantee(s) released to the Contractor along with the „Final Bill“ after deducting all expenses / other amounts due to BHEL under the contract / other contracts entered into with them by BHEL.

## **7.16 Bank Guarantees**

Where ever Bank Guarantees are to be furnished / submitted by the contractor, the following shall be complied with

**7.16.1** Bank Guarantees shall be from Scheduled Banks / Public Financial Institutions as defined in the Companies Act.

- 7.16.2** The Bank Guarantees shall be as per prescribed formats.
- 7.16.3** It is the responsibility of the bidder to get the Bank Guarantees revalidated/extended for the required period (subject to a minimum period of six months), as per the advice of BHEL Site Engineer / Construction Manager. BHEL shall not be liable for issue of any reminders regarding expiry of the Bank Guarantees.
- 7.16.4** In case extension / further extensions of any Bank Guarantees are not required, the bidders shall ensure that the same is explicitly endorsed by the Construction Manager and submitted to the Regional HQ issuing the LOI/LOA.
- 7.16.5** In case the Bank Guarantees are not extended before the expiry date, BHEL reserves the right to invoke the same by informing the concerned Bank in writing, without any advance notice/communication to the concerned bidder.
- 7.16.6** Bidders to note that any corrections to Bank Guarantees shall be done by the issuing Bank, only through an amendment in an appropriate non judicial stamp paper.
- 7.16.7** The Original Bank Guarantee shall be sent directly by the Bank to BHEL under Registered Post Acknowledgement Due), addressed to the Subcontracting Department of the respective Region.

#### **7.17 Evaluation of Bids:**

The Purchaser will evaluate the bids that have been determined to be substantially responsive. The bid evaluation is based on L1 criteria. The evaluation of responsive bids shall be done in 3 stages:

##### **Stage-I: Evaluation Of Response To Eligibility Criteria:**

These are mandatory requirements to be met by the Bidder. Only those Bidders who meet all the requirements as per eligibility criteria shall be considered for Stage-II evaluation.

##### **Stage-II: Evaluation Of Techno & Commercial Bids:**

This shall be the second stage of the evaluation by the Purchaser. Only those Bidders who adhere to the purchaser's technical and commercial requirements shall be considered for next stage of evaluation.

Commercial and Technical bid of the vendor shall be opened and evaluated for acceptability of commercial terms, deviations and technical suitability. The bidders should meet the commercial conditions as defined in the bidding documents.

After the evaluation of commercial conditions, the Technical bid submitted by the Bidders will be evaluated. During the Technical Evaluation of the bid, the purchaser may ask for additional information / resources to validate the bid. These may include technical documents / white papers / presentation from bidder or OEM or third party, references, demonstration of a proof of concept or solution, visit to supplier's lab or their clients reference site, etc.

##### **Stage –III: Evaluation of The Price Bid:**

After finalizing the techno-commercial offers, BHEL may adopt Reverse Auction process for arriving at the lowest price offer. BHEL will also claim depreciation as per provisions of the Income Tax Act.

Price Bids of only those bidders who pass the Techno-Commercial evaluation will be opened. The total cost of the bid will be calculated as under:

- i. Total lease charges for 5 years for Hardware & Software including duties, taxes (as in Table A of Form #3), warranty & support for the entire lease period.

- ii. The bid having the least total cash outflow for 5 years will be considered L1 bidder. Evaluation of L1 ranking will be based on net of CENVAT/VAT basis, if any. The L1 Bidder shall be eligible for award of contract.

**7.18 Taxes & Duties:**

Any change in applicable taxes, like Service Tax, VAT, etc, shall be to BHEL's account during the entire lease period.

**7.19 Purchaser's Right to accept or Reject any or all Bids:**

The Purchaser reserves the full right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability towards the Bidders.

**7.20 Limitation of Liability:**

The vendor's liability shall be limited to the value of this contract only.

**7.21 Delivery Schedule**

All the hardware & software under this contract shall be delivered and successfully installed and commissioned within 4 months (120 days) from the date of acceptance of order by the successful bidder. The date of acceptance of order shall not be later than 7 days from the date of placement of order.

**7.22 Penalty for Late Delivery:**

If deliveries or installation & commissioning are not completed within the delivery schedule, a penalty of 0.5% per week (or part thereof) subject to a maximum of 5% of the total lease charges of the equipment or service which has been delayed will be charged. The LD charges will be deducted from the first quarter lease rentals. If LD charges are more than the first quarter lease rentals, then the balance amount will be deducted from the subsequent quarter(s).

**7.23 Insurance:**

Insurance for the complete Systems / Goods shall be arranged by the Vendor / Lessor at his own risk and cost during transit, movement, storage and throughout the period of lease. Purchaser / Lessee, under any circumstances, shall not be responsible for any loss / damage / theft / fire of any Systems / goods, due to any reasons, whatsoever. Claim(s) etc., if any, shall be dealt with the underwriters directly by the Vendor / Lessor. Evidence of insurance policy shall be submitted to BHEL. If the lessor fails to renew the policy before the expiry, BHEL may affect the insurance from the lease rental.

**7.24 Indemnity:**

Vendor / Lessor shall fully indemnify and keep indemnified the Purchaser / Lessee against all claims which may be made in respect of the use of System / Software / Item(s) / services supplied / rendered by the Vendor / Lessor, for infringement of any rights protected by patent, registration of designs or trademarks and legality of the Software. However the Vendor / Lessor will have no obligation for any claim of infringement arising from third party products not supplied in the order, modifications and technical information / instructions advised by purchaser and use of products prohibited by product manuals.

All such claims in this regard shall be settled as per Indian Laws.

In the event of any such claims being made against the Purchaser / Lessee, Purchaser / Lessee will inform in writing to the Vendor / Lessor who shall at his own risk and cost either settle any such dispute or conduct any litigation that may arise there from.



## **7.25 Risk Purchase:**

**7.25.1** Purchaser / Lessee shall reserve the right to terminate the order / contract and purchase from elsewhere at the risk and cost of the Vendor / Lessor, either the whole or part of the Systems / goods, which the Vendor/Lessor has failed to deliver within the stipulated delivery period or if the same were not available, the best and the nearest available substitute(s) thereof. The Vendor / Lessor would be liable to compensate the Purchaser / Lessee for any loss, which the Purchaser / Lessee may sustain by reason of such purchase. This clause will be operated only after completion of delivery period including extended period with penalty.

**7.25.2** After installation & commissioning, if the vendor fails to rectify a problem, faulty hardware / software item /component or restore a faulty service within 15 days of the occurrence of the fault / problem, BHEL shall reserve the right to rectify or replace the faulty item /component / software / service by procuring from the market at risk and cost to the vendor.

## **7.26 Arbitration:**

In all cases of disputes emanating from and in reference to this contract, the matter shall be referred to the arbitration. All disputes or differences between the parties will be resolved through arbitration governed by "The Arbitration and Conciliation Act, 1996" as amended from time to time. The venue of arbitration shall be in New Delhi.

## **7.27 Force Majeure:**

Vendor / Lessor shall not be responsible for delay in delivery resulting from acts / events beyond his control, provided notice of the happening of any such act / event is given by the Vendor / Lessor to the Purchaser / Lessee within 15 days from the date of its occurrence. Such acts / events shall include but not be limited to acts of God, war, floods, earthquakes, strikes, lockouts, epidemics, riots, fire or Governmental regulations superimposed after the date of order / contract.

## **7.28 Termination of Contract:**

**7.28.1** If the availability and performance of 25% of supplied systems is below 95% continuously over a period of 3 months, BHEL reserves the right to terminate the contract in full, without any cost implication to BHEL.

**7.28.2** At the end of the full lease period, BHEL shall have the right to acquire or surrender all the equipment. In case BHEL decides to acquire the equipment, a nominal charge of Re.1.00 per equipment will be paid as terminal payment.

## **8. Special Terms and Conditions**

### **8.1 Scope of Supply**

The successful bidder shall supply & deliver the equipment at BHEL locations as per the attached **Annexure-II**

### **8.2 Scope of Work:**

**8.2.1** The bidder shall Supply, Install, Integrate, Carry out Testing of all the supplied systems and other software and other related items at all the locations listed in **Annexure-I**.

**8.2.2** The bidder shall devise IP scheme in consultation with BHEL network team for the new VC solution.

**8.2.3** The bidder shall also integrate the offered solution with the existing VC setup at BHEL. The existing VC setup is explained in **Annexure-III**.

**8.2.4** The bidder shall carry out installation of systems, fixing, termination and inter-cabling, etc, as per the best international standards and practices.

- 8.2.5** For installation & commissioning work, it shall be the responsibility of the bidder to arrange and provide requisite tools, etc, for carrying out the installation and commissioning job.
- 8.2.6** All software to be provided as part of the solution should be licensed to “Bharat Heavy Electricals Limited”. All documents, manuals, administration manuals and software CDs should be submitted to BHEL before commissioning the systems. All softwares should come with at least two sets of CDs/DVDs, etc.
- 8.2.7** The Bidder shall ensure that no other equipment/structure/setup gets damaged due to their activities. Any damages if caused to BHEL’s property due to Bidder’s negligence shall be rectified, repaired and borne by the Bidder at its own account.

### **8.3 Performance Guarantee Tests (PG Tests):**

- 8.3.1** The Performance Guarantee Test shall start after installation and commissioning of all the Hardware & Software at respective BHEL locations by the Supplier with the full cooperation of BHEL.
- 8.3.2** The performance test will be done individually and collectively for all systems for ascertaining the performance of systems for business-class best quality VC performance for a minimum 02 days continuously.
- 8.3.3** The bidder shall seamlessly integrate the offered solution with the existing solution for assuring the best quality VC performance. The calls shall be of HD quality in case of
- i) One to one calls
  - ii) Multipoint calls via endpoint

### **8.4 Commissioning Certificate:**

On successful installation, configuration and PG test of individual components and the solution as a whole, the supplier shall submit the following as part of the commissioning:

- 8.4.1** Configuration details of all items.
- 8.4.2** IP address, name, etc, details of all items.
- 8.4.3** Details of Backup policy and configuration

On submission of the above and after successful PG test, BHEL will issue a **Commissioning Certificate** for the individual locations.

### **8.5 Performance Requirements:**

#### **8.5.1 Service Level Agreement (SLA):**

As the facility will be used extensively by the Top Management of BHEL, the supplier shall provide support on 24x7x365 basis for all the hardware & software items. The supplier shall ensure that the following SLA parameters are met:

#### **Definitions:**

##### **8.5.1.1 Non Availability:**

- i) Is defined as the service is not available or service is available with degraded performance.

- ii) Any equipment / service working with degraded performance & if not fully resolved within stipulated time shall be considered non-available including the time period during which it was working with degraded performance.
- iii) If the quality of audio or video is poor for more than 15 minutes at a stretch even when sufficient Bandwidth is available for VC & the packet loss between the endpoints is not more than 1%.

**8.5.1.2 SLA Requirements:**

- i) An uptime of 99.5% on all hardware & software products per month at Class A locations
- ii) An uptime of 99.0% on all hardware & software products per month at Class B locations
- iii) Same business day support on all hardware & software products
- iv) Any faulty hardware component shall be repaired or replaced with Standby Equipment of similar configuration within (06) six hours / (12) hours at class A locations and within 24 hours at class B locations after logging the call. Subsequently it will be replaced by a New One/ repaired one. The severity of the problem and the maximum time taken to resolve the problem / replace the component shall be as per the following table:

| S.No. | Item                      | Component   | Class of Location | Service / Performance Affected | Problem Severity | Expected Restoration Time (Hrs) |
|-------|---------------------------|---|-------------------|--------------------------------|------------------|---------------------------------|
| 1     | Gatekeeper                | Any Redundant Component like Card, NIC, Power Supply, etc.                        | A                 | No                             | Level 1          | 12                              |
| 2     | Gatekeeper                | Any Component Without redundancy or whose redundant component has already failed. | A                 | Yes                            | Level 2          | 6                               |
| 3     | Gatekeeper                | Any software (IOS) error, etc.  | A                 | Yes                            | Level 2          | 6                               |
| 4     | Gateway                   | Any Redundant Component like Card, NIC, Power Supply, etc.                        | A                 | No                             | Level 1          | 12                              |
| 5     | Gateway                   | Any Component Without redundancy or whose redundant component has already failed. | A                 | Yes                            | Level 2          | 6                               |
| 6     | Gateway                   | Any software (IOS) error, etc.  | A                 | Yes                            | Level 2          | 6                               |
| 7     | Endpoint                  | Any Component like Codec, Camera, NIC, Power Supply, etc.                         | A                 | Yes                            | Level 2          | 6                               |
| 8     | Endpoint                  | Any Component like Codec, Camera, NIC, Power Supply, etc.                         | B                 | Yes                            | Level 2          | 24                              |
| 9     | Display Unit              | Any component, screen, interface, etc.  | A                 | Yes                            | Level 2          | 6                               |
| 10    | Display Unit              | Any component, screen, interface, etc.  | B                 | Yes                            | Level 2          | 24                              |
| 11    | Central Management System | Error or non-working of any these softwares or components or modules thereof      | A                 | No                             | Level 1          | 12                              |

|    |                           |  |   |     |         |    |
|----|---------------------------|--|---|-----|---------|----|
| 12 | Central Management System | Error or non-working of any these softwares or components or modules thereof | A | Yes | Level 2 | 6  |
| 13 | Others                    |  | A | No  | Level 1 | 12 |
| 14 | Others                    |  | A | Yes | Level 2 | 6  |
| 15 | Others                    |  | B | No  | Level 1 | 48 |
| 16 | Others                    |  | B | Yes | Level 2 | 24 |

- v) On-site support for all hardware & software products
- vi) If a system or component is down for more than 36 hours at a stretch at Class A location, then the downtime considered for deduction for such component or system will be 2 times, e.g., if a system was down for 40 hours at a stretch, then the downtime taken for deduction will be 80 hours. Similarly, at Class B location, if a system or component is down for more than 48 hours at a stretch, then the downtime considered for deduction for such component or system will be 2 times.
- vii) If the availability and Performance of systems is below 95% continuously over a period of 3 months at more than 25 % of the Installed Location , BHEL reserves the right to terminate the contract in full, without any cost implication to BHEL.

#### 8.6 Penalty for SLA Non-Conformance:

At the end of each quarter downtime will be calculated for all the systems and softwares. Downtime will be calculated on per month basis. The deductions will be made as per the following formula:

Deduction (D) = downtime in minutes (d) × rental per minute ( r ) × multiplication factor (f)

Where Multiplication Factor will be calculated as per the following table:

**Multiplication Factor Table for Class A Locations**

| S.No. | Uptime %           | Multiplication Factor (F) |
|-------|--------------------|---------------------------|
| 1     | >= 99.50           | 0.00                      |
| 2     | < 99.5% & >= 99.00 | 1.00                      |
| 3     | < 99.0 & >= 98.00  | 1.50                      |
| 4     | < 98.00 & >= 97.00 | 2.00                      |
| 5     | < 97.00 & >= 96.00 | 3.00                      |
| 6     | < 96.00 & >= 95.00 | 4.00                      |
| 7     | < 95.00            | 5.00                      |

### Multiplication Factor Table for Class B Locations

| S.No. | Uptime %                     | Multiplication Factor (F) |
|-------|------------------------------|---------------------------|
| 1     | $\geq 99.00$                 | 0.00                      |
| 2     | $< 99.0\% \ \& \ \geq 98.00$ | 1.00                      |
| 3     | $< 98.0 \ \& \ \geq 97.00$   | 1.50                      |
| 4     | $< 97.00 \ \& \ \geq 96.00$  | 2.00                      |
| 5     | $< 96.00 \ \& \ \geq 95.00$  | 3.00                      |
| 6     | $< 95.00$                    | 4.00                      |

#### 8.7 Payment Terms:

**8.7.1** Lease period will start only after successful installation and commissioning of all hardware and software products as per scope of work & successful completion of PG Test. Quarterly lease rental charges (after deducting pro-rata rent cut, for any SLA non-conformance) become payable at the end of each quarter.

**8.7.2** Payments will be made within 45 days on submission of following documents:

- i) Invoice in triplicate
- ii) Installation Report & SRV (Stores Receipt Voucher)
- iii) SLA reports for the quarter ( to be verified by the System Administrator)
- iv) Performance Bank Guarantee
- v) Insurance documents for all the items

**8.7.3** In case of termination or surrender of equipment by BHEL at the end of the lease period or before, Vendor / Lessor shall remove the equipment from Purchaser / Lessee's premises at his own risk and cost after due permission from BHEL.

#### 8.8 Income Tax Depreciation:

Income tax depreciation will be claimed by BHEL.

#### 8.9 Functional Scope for Hardware & Software:

The functional scope for hardware, software and related services as detailed in Technical Specification of Hardware, includes all activities but not limited to the following:

**8.9.1** Delivery of equipment at all locations of BHEL and all arrangements for loading/unloading (including labor), movement, etc.

**8.9.2** Handling, installation, configuration, testing, commissioning and integration at site of the ordered materials.

- 8.9.3** Fine tuning of configuration parameters, settings, etc for smooth installation and functioning of all the systems.
- 8.9.4** Testing based on diagnostic software to be carried out to ascertain healthiness of the equipments / hardware, backup system, etc.
- 8.9.5** A complete project report giving all installation and configuration reports, documents, diagrams, etc, to be submitted before commissioning.
- 8.9.6** The Bidder shall work closely in co-ordination with BHEL network team and system integrators for installation, fine tuning and configuration of the hardware and software for smooth and best quality performance of the VC systems.

**8.10 Training:**

The supplier shall organize and provide operational level training on the supplied equipment for 2 days centrally at BHEL premises.

**8.11 Warranty & Support:**

- 8.11.1** All the supplied equipment / systems (hardware/software) shall be covered under a Comprehensive On-Site Warranty for 05 (Five) years. Warranty period shall start from the date of successful commissioning of the Equipment / System.
- 8.11.2** If any document / manual / CD supplied by the supplier is found to be inadequate / incomplete within the period of the contract, the supplier shall replace/complete such document/manual/CD at their cost within 15 days' time.
- 8.11.3** The Bidder/OEM shall be required to provide all the services based on standards and the best practices to meet or exceed the SLAs as per **Clause 8.5.1**. If the performance and uptime does not meet the SLA as per **Clause 8.5.1**, deductions as per SLA **Clause 8.6** will be done from the quarterly rental charges.

**8.12 Special Clauses:**

- 8.12.1** There shall be only 1 bid from each Bidder.
- 8.12.2** Bidder shall have to quote for all the Items of the BOQ as specified in this document.
- 8.12.3** The Endpoints, Gatekeeper, ISDN Gateway & Management System should be from a single OEM only.
- 8.12.4** All the items to be supplied must be NEW. Newness certificate to be provided by the bidder at the time of delivery.
- 8.12.5** All the items must be supplied in full and complete.
- 8.12.6** BHEL shall not be responsible for any misinterpretation or wrong assumption by the bidder.
- 8.12.7** Relevant portions, in the documents submitted in pursuance of eligibility criterion shall be highlighted. If the offer is not accompanied by all the above documents mentioned, the same would be rejected. Undertaking for subsequent submission of any of the above documents will not be entertained under any circumstances.
- 8.12.8** Purchaser reserves the right to verify / confirm all original documentary evidence submitted by vendors in support of above mentioned clauses of eligibility criteria. Upon verification, evaluation / assessment, if in case any information furnished by the vendor is found to be

false / incorrect, their total bid shall be summarily rejected and no correspondence on the same shall be entertained.

## 9. Technical Requirements

### 9.1 Solution Design Requirements:

The VC solution is intended to enable BHEL's management to interact, discuss and review the status of projects with other manufacturing units, regional headquarters and project sites. It should provide a robust means to review and monitor project progress. It should also provide the capability to review project with external agencies like customers, vendors, business partners, etc. The core infrastructure should have enough redundancy to provide enough fault tolerance.

### 9.2 Basic Design Requirements of Central Management System:

The entire Video Conferencing Solution shall be manageable through a single central management system. It should have the capability to configure any of the endpoints, MCU, gateway, gatekeeper, update the settings, upgrade the software of all the endpoints centrally from a single console, view the statistics like call details, bandwidth utilization reports, packet loss, jitter, errors, etc. The complete hardware and software required for this management system should be supplied.

**The common minimum specifications of Central Management System are as under:**

| S.No. | Features/Components    | Minimum Required Specifications  | Bidder's Response |
|-------|------------------------|--|-------------------|
| 1     | Management             | The system should be able to manage on-site and remote site video calls.   |                   |
|       |                        | Should provide complete conference overview on one screen.   |                   |
| 2     | System Upgrades        | Should provide automatic download of new software and corresponding release keys.  |                   |
| 3     | VC Control             | The system should provide to schedule, initiate and terminate video conferences.   |                   |
| 4     | Monitoring & Reporting | The system should monitor and report statistics of all video conferences. Should show the bandwidth of each call, error rate, packet loss, jitter, etc.  |                   |
| 5     | System Control         | <ul style="list-style-type: none"> <li>➤ Should provide the following:</li> <li>➤ Phonebook access</li> <li>➤ Change video layouts</li> <li>➤ Volume control and audio mute/unmute</li> <li>➤ Microphone on/off</li> <li>➤ Edit local phone books</li> <li>➤ Send messages to systems</li> <li>➤ Detect illegal system configurations</li> </ul> |                   |
| 6     | Phone Book Services    | Should have the provision for Corporate directory folders, browsing and searching from the endpoint.   |                   |

|    |  |   |  |
|----|--|---|--|
|    |  | Should provide automatic directory import from gatekeeper, LDAP, etc.   |  |
|    |  | Should have the feature to create, edit, import and export phone books.   |  |
|    |  | Should support automatic application of national and international dialing rules  |  |
|    |  | Should support automatic identification of ISDN/IP numbers  |  |
|    |  | Should support automatic insertion of gateway (GW) prefix, area codes and country codes.  |  |
| 7  | Account Management, Security and Permissions | Should provide audit logging VC Endpoints and MCUs  |  |
|    |  | Should have the provision to define and manage user roles.  |  |
|    |  | Should support the features of single sign-on authentication of users.  |  |
| 8  | Backup                                       | Should have the capability to perform daily backup of system configuration and settings.  |  |
|    |  | Should have the capability to perform restore of configuration and settings from the backup.  |  |
| 9  | Monitoring                                   | The system should have the capability to: <ul style="list-style-type: none"> <li>➤ Map monitor with graphic display</li> <li>➤ Customizable background images</li> <li>➤ Graphical display of call and system status</li> </ul>   |  |
| 10 | Event Notification                           | The management system should have the capability to provide event notifications like: <ul style="list-style-type: none"> <li>➤ E-mail notification to individuals or groups</li> <li>➤ Event logging including boot, link down/up, connect error, call connected/ disconnected, lost response/got response</li> <li>➤ Upgrade start/finish scheduling, gatekeeper registration, low battery, wrong password alerts</li> </ul> |  |

|    |                                 |  |  |
|----|---------------------------------|--|--|
| 11 | Call Detail Record & Statistics | <ul style="list-style-type: none"> <li>➤ The system should provide Call Detail Records from Endpoints, MCUs, Gatekeepers, Gateways, etc.</li> <li>➤ It should provide graphical display of call detail data</li> <li>➤ Number of incoming and outgoing calls</li> <li>➤ Bandwidth usage</li> <li>➤ Number/address called</li> <li>➤ Error statistics</li> </ul>  |  |
| 12 | Call Routing                    | <p>The system should have the capability to provide :</p> <ul style="list-style-type: none"> <li>➤ Automatic call routing on IP and ISDN</li> <li>➤ Automatic MCU, gateway and network selection</li> <li>➤ Support MCU cascading, SIP, H.323, and H.320</li> </ul>  |  |
| 13 | Scheduling and Booking          | <p>The management system should provide the capability:</p> <ul style="list-style-type: none"> <li>➤ To book system and meeting room simultaneously</li> <li>➤ To book recurring meetings and video resources</li> <li>➤ To create, password protect, edit or delete booked conferences</li> <li>➤ Add Web or data conference to meetings</li> <li>➤ Add / remove participants from reservation or connect/disconnect participants during conferences</li> <li>➤ Connect conferences ad-hoc or pre-schedule connection</li> <li>➤ Reserve resources for dial-in participants</li> <li>➤ Schedule point-to-point conferences or multipoint meetings</li> <li>➤ Lock conference, preventing new participants from joining</li> <li>➤ Invite participants by e-mail</li> <li>➤ Customize meeting names</li> <li>➤ Over view of scheduled meetings, resources and participants</li> <li>➤ Real-time over view of meeting status</li> </ul> |  |

|    |  |   |  |
|----|--|---|--|
| 14 | Integration with Microsoft Unified Communication | <ul style="list-style-type: none"> <li>➤ The system should be integrable with Microsoft Exchange Server.</li> <li>➤ It should provide the ability to schedule conferences, book rooms and invite participants using Microsoft Outlook</li> <li>➤ Ability to launch ad-hoc and multipoint calls via MS Communicator</li> </ul>   |  |
| 15 | Management of devices                            | <ul style="list-style-type: none"> <li>➤ The management software should be accompanied with the hardware of appropriate size</li> <li>➤ The management application should support 250 device registrations</li> </ul>   |  |
| 16 | Firewall / NAT Traversal                         | <ul style="list-style-type: none"> <li>➤ The system should enable conducting of Video Conferences over Public Network for both endpoints and desktop based clients. The Firewall/ NAT traversal system should provide minimum 50 simultaneous concurrent calls. The bidder shall explain and submit a solution document on how this requirement will be met.</li> </ul> |  |
|    | <b>Gatekeeper:</b>                               |   |  |
| 17 | General Feature                                  | Should support min 2,500 clients  |  |
|    |  | Should support at least 200 concurrent point-to-point video sessions  |  |
|    |  | Should register H.323 clients over LAN and WAN  |  |
| 18 | Security   | Should provide Management via HTTPS, SSH and SCP  |  |
|    |  | Should provide SNMP security alerts   |  |
|    |  | Should provide Network Settings protection  |  |
|    |  | Should provide role based password protected GUI user access  |  |
|    |  | Should have the feature to disable root access over Telnet or SSH   |  |
| 19 | Management                                       | Should be manageable via embedded web server, SNMP, Telnet, etc.  |  |
|    |  | Should support remote software upload/upgrade via web server, ftp server or ISDN  |  |
|    |  | Should have the Embedded setup wizard via a serial port for initial configuration   |  |
|    |  | Shall provide diagnostic reports, call detail records, CDR bandwidth usage, type of network and the number of incoming and outgoing calls.  |  |
| 20 | Call Control and Registrations                   | Should support manual registration of H.323 endpoints and API call control  |  |

|    |                      |   |  |
|----|----------------------|---|--|
|    |                      | Should support H.225/Q.931, H.245 call control routed mode and non-call routed mode   |  |
|    |                      | Should support registration of H.323 ID, E.164 aliases and services   |  |
| 21 | Zone Control         | Should support Remote Zone monitoring and remote Zone redundancy  |  |
|    |                      | Should support bandwidth management within sub-zone area  |  |
|    |                      | Should support Registration control (open, specifically allow, specifically deny) of end points   |  |
| 22 | Bandwidth Management | The Gatekeeper should allow bandwidth management on per call basis as well as per quota basis between Video endpoints, between zones created on the Gatekeeper and among zones. |  |
|    |                      | Should automatically downspeed the call if it exceeds the allowed bandwidth.  |  |
| 23 | High Availability    | Should support high availability feature. Should automatically failover to the redundant gatekeeper in case primary gatekeeper goes down.                                       |  |
| 24 | Interfaces           | Should have min 1 100/1000 Base-TX Ethernet ports   |  |

### 9.3 Basic Design Requirement for Firewall Traversal:

- a) For initiating third party calls.
- b) The solution to be provided (software with appliance based or appliance based) shall be provided in high availability mode.

### 9.4 Basic Design Requirements for Recording & Media Streaming System:

BHEL has a requirement for recording of video conferences and multimedia presentations for live and on-demand access. The bidder shall provide a solution for recording and streaming of Video Conferences. The solution shall provision for recording and streaming of important video conferences, an executive meeting, top management's address, a training session or any other critical event.

**The common minimum specifications of Recording & Media Streaming System shall be as under:**

| S.No. | Basic Requirement  | Bidder's Response |
|-------|--|-------------------|
| 1     | The recording and media streaming system should be an appliance based purpose-built system mountable on a standard 19" rack. |                   |
| 2     | The system should be compatible, integrable and inter-operable with the MCU and the total supplied and existing VC           |                   |

|    |   |  |
|----|---|--|
|    | solution. All inter-connecting cables, hardware and software required shall be supplied along with the system.  |  |
| 3  | The system shall have the feature to record and stream video and H.239 dual-stream presentations from any H.323 or SIP videoconferencing unit.          |  |
| 4  | The system shall support synchronized streaming of video and presentation in live and on-demand modes.  |  |
| 5  | The system should support Unicast and Multicast streaming of content.   |  |
| 6  | Should be compatible with all major streaming formats like Windows Media®, Flash® and QuickTime®, etc.  |  |
| 7  | Should have editing and library features for simple content creation and retrieval.   |  |
| 8  | It must be possible to easily trim the start and end time of the recording to help in cutting out any idle time in the beginning or end of the meeting. |  |
| 9  | It must be possible to fast-forward , rewind and skip to a specific location in the recording   |  |
| 10 | Shall have the capability to record minimum 5 simultaneous H.323 or SIP video calls.  |  |
| 11 | Should support download of content to PC and portable media devices.  |  |
| 12 | The system should have a recording capacity of at least 500hours. Should have the capability to connect to the external storage also.                   |  |

#### 9.5 Basic Design Requirements for VC System for Executive Directors' Cabins:

In BHEL, every manufacturing unit, power sector regional headquarters and other divisions are typically headed by an Executive Director (ED) or a GM (I/c). These officials quite frequently need to interact with CMD & Directors in Corporate Office, Construction Managers at Project Sites, Project Engineering & Management Division at Noida, Project Management Group at Corporate Office, various customers, vendors, partners and collaborators. The requirement is for a state-of-the-art Video Conferencing solution that will enable these officials to conduct business-class video conferences with all the above officials and parties to discuss, review and share information on the progress of various projects. The conferences can be point-to-point and multipoint also. The conferences will be on IP when conducted within a BHEL location or on ISDN when the other party is an external agency. The solution shall provision for IP & ISDN conferences simultaneously.

The solution proposed for the above requirement shall be based on the latest technology, of highest quality, robustness and reliability. It is desired to have a table top based integrated LCD display unit and the VC endpoint in the cabins of these officials.



**The common minimum specifications of VC System for Executive Directors' Cabins shall be as under:**

| <b>S. No.</b> | <b>Parameter / Feature</b> | <b>Basic Requirement</b>   | <b>Bidder's Response</b> |
|---------------|----------------------------|--|--------------------------|
| 1             | General Design             | Should be a desktop based system consisting of codec, display unit, HD camera, microphone and speakers   |                          |
| 2             | Display                    | Shall have an integrated LCD display Unit of minimum 20" with wide view angle screen.  |                          |
| 3             | Speakers                   | Should have built-in stereo speakers   |                          |
| 4             | Microphone                 | Should have built-in microphone  |                          |
| 5             | Resolution                 | Both camera & display unit should support HD 720p @30 fps  |                          |
| 6             | IP Support                 | Should support minimum 2Mbps both point-to-point and multipoint on IP  |                          |
| 7             | SIP Support                | Should support 2Mbps on SIP  |                          |
| 8             | Multisite Feature          | Should be able to connect to 3 other sites concurrently on IP  |                          |
| 9             | Point-to-Point Conference  | Should be able to connect to other sites on High Definition 720p @ 30 frames per second on IP  |                          |
| 10            | Firewall Traversal         | Should support firewall/NAT traversal based on H.460.18, H.460.19 standards  |                          |
| 11            | Video Standards            | Should support H.261, H.263, H.263+, H.264 video standards   |                          |
| 12            | Audio Standards            | Should support G.711, G.722, G.722.1, 64 bit & 128 bit MPEG4 AAC or equivalent audio standard  |                          |
| 13            | Aspect Ratio               | Should support 16:9 aspect ratio   |                          |
| 14            | Video Inputs               | Should have minimum 1 DVI-I Input for PC Presentation,   |                          |
| 15            | Audio System               | Should have 2 stereo front speakers, Integrated full range microphone  |                          |
| 16            |                            | Should also have a provision for audio in from PC  |                          |
| 17            | Live Video Resolutions     | Should support PAL, CIF, QCIF, 4CIF, VGA, SVGA, XGA, SXGA and HD 720p@30fps.   |                          |
| 18            | Audio Features             | <ul style="list-style-type: none"> <li>➤ Should have high quality digital audio</li> <li>➤ Should have the feature of Automatic Gain Control (AGC)</li> <li>➤ Should have the feature of Automatic Noise Reduction</li> <li>➤ Should have the feature of Active lip synchronization</li> </ul> |                          |
| 19            | Dual Video Support         | Should support H.239 dual video  |                          |
| 20            | Packet Loss Mitigation     | Should have mechanism to withstand network Packet Loss of at least 2% to ensure good Video and Audio quality   |                          |

|    |                    |   |  |
|----|--------------------|---|--|
| 21 | Jitter             | Should provide Dynamic jitter buffering to minimize the effect of jitter on Video & audio quality   |  |
| 22 | Security Features  | <ul style="list-style-type: none"> <li>➤ Should provide SNMP security alerts</li> <li>➤ Should provide Network Settings protection</li> </ul> |  |
| 23 | Network Interfaces | Should have minimum 2 numbers of 100Mbps Ethernet full duplex ports for LAN Connectivity  |  |
| 24 | QoS Feature        | Should support QoS features based on DSCP   |  |
|    |                    | Should support IP adaptive bandwidth management (including flow control)  |  |
| 25 | Camera             | Should support HD 720p or higher resolution camera  |  |
|    |                    | Should have Automatic/manual focus, brightness, white balance   |  |
| 26 | System Management  | Should be fully manageable through the Central Management Application provided with the solution  |  |
|    |                    | Should be manageable via embedded web server, SNMP, Telnet, etc.  |  |
|    |                    | Should support remote software upload/upgrade via web server  |  |
| 27 | Other Features     | Should support Auto gatekeeper discovery  |  |
|    |                    | Should support Dynamic playout and lip-sync buffering   |  |
|    |                    | Should support H.245 DTMF tones in H.323  |  |
|    |                    | Should have Date and Time support via NTP   |  |
| 28 | Accessories        | Should come with 2 sets of necessary audio, video and power cables  |  |
|    |                    | Should come with necessary remote control /dial pad / touch pad to operate the system   |  |

#### **9.6 Basic Design Requirements for VC System for Manufacturing Units & Power Sector Regional Head Quarters:**

Officials in Units & Regions need to regularly interact, discuss, plan and review various projects with Corporate Office, Project Management Group, Project Engineering & Management Division, other Units, Project Sites, various customers, vendors and business partners. The requirement is for a room based business-class state-of-the-art Video Conferencing solution that will enable officials in these units and regions to interact, discuss, review projects and share information, presentations, drawings, etc, with all other concerned units and agencies. The conferences can be point-to-point and multipoint also. There offered solution should work on IP as well as ISDN on point-to-point and multipoint basis.

The systems proposed for the above requirement shall be of the highest quality, robustness and reliability. There shall be two min 50” LCD display units with a full high definition VC endpoint at each of these locations. The solution shall be OEM integrated solution in which the VC endpoint and the display units are integrated in a single frame. The installation work & workmanship must be as per the best international standards. The sitting capacity of the rooms will be typically between 15 to 20 persons.

**The common minimum specifications of VC System for Units & Regional Head Quarters shall be as under:**

**VC Endpoint:**

| <b>S. No.</b> | <b>Parameter / Feature</b> | <b>Basic Requirement</b>   | <b>Bidder's Response</b> |
|---------------|----------------------------|--|--------------------------|
| 1             | General Design             | Should be High Definition end point compatible with the offered MCU. The offered system should be an OEM integrated system consisting of HD codec, HD camera and HD LCD display unit.  |                          |
| 2             | Display Unit Size          | Should be min 50"  |                          |
| 3             | IP Support                 | Should support minimum 4Mbps point-to-point & 6 Mbps multipoint on IP  |                          |
| 4             | ISDN Support               | Should have minimum 1 ISDN PRI ports   |                          |
| 5             | SIP Support                | Should support 4Mbps on SIP  |                          |
| 6             | Multisite Feature          | Should be able to connect to 3 other sites concurrently on IP and ISDN   |                          |
| 7             | Point-to-Point Conference  | Should be able to connect to other site on High Definition 720p @ 30 frames per second on IP and ISDN  |                          |
| 8             | Firewall Traversal         | Should support firewall/NAT traversal based on H.460.18, H.460.19 standards  |                          |
| 9             | Video Standards            | Should support H.261, H.263, H.263+, H.264 video standards   |                          |
| 10            | Audio Standards            | Should support G.711, G.722, G.722.1, G.728 64 bit & 128 bit MPEG4 AAC audio standards or equivalent   |                          |
| 11            | Aspect Ratio               | Should support 4:3 and 16:9 aspect ratio   |                          |
| 12            | Video Inputs               | Should have minimum 1 HD Camera Input, 1 DVI-I INPUTS for PC Presentation, 1 S-Video / Composite port for interfacing with projector or any other AV equipment   |                          |
| 13            | Video Outputs              | Should have min 2 DVI-I Output and 1 Composite / S-Video ports   |                          |
| 14            | Audio Inputs               | Should have min 2 RCA/Phono inputs for stereo left and right   |                          |
| 15            | Audio Outputs              | Should have min 2 RCA/Phono outputs for stereo left and right  |                          |
| 16            | Live Video Resolutions     | Should support PAL, CIF, QCIF, 4CIF, VGA, SVGA, XGA, SXGA, HD 720p@30fps or higher.  |                          |
| 17            | Microphone Ports           | Should have min 3 ports for connecting microphones   |                          |
| 18            | Audio Features             | <ul style="list-style-type: none"> <li>➤ Should have high quality digital audio</li> <li>➤ Should have the feature of Automatic Gain Control (AGC)</li> <li>➤ Should have the feature of Automatic Noise Reduction</li> <li>➤ Should have the feature of Active lip synchronization</li> </ul> |                          |
| 19            | Dual Video Support         | Should support H.239 dual video  |                          |
| 20            | Packet Loss Mitigation     | Should have mechanism to withstand network Packet Loss of at least 2% to ensure good Video and Audio quality   |                          |
| 21            | Jitter                     | Should provide Dynamic jitter buffering to minimize the effect of jitter on Video & audio quality  |                          |

|    |                    |   |  |
|----|--------------------|---|--|
| 22 | Security Features  | <ul style="list-style-type: none"> <li>➤ Should support access rights and privileges for user from administrator to simple guest.</li> <li>➤ Should provide SNMP security alerts</li> <li>➤ Should provide Network Settings protection</li> </ul> |  |
| 23 | Network Interfaces | Should have minimum 1 numbers of 100Mbps Ethernet full duplex ports for LAN Connectivity  |  |
| 24 | QoS Feature        | Should support QoS features based on DSCP and TOS/IP Precedence   |  |
|    |                    | Should support IP adaptive bandwidth management (including flow control)  |  |
| 25 | Camera             | Should come with HD 720p or higher resolution camera  |  |
|    |                    | Should have Automatic focus, brightness, white balance  |  |
|    |                    | Should provide minimum 7x zoom  |  |
|    |                    | Should support Far-end camera control   |  |
| 26 | System Management  | Should be fully manageable through the Central Management Application provided with the solution  |  |
|    |                    | Should be manageable via embedded web server, SNMP, Telnet, etc.  |  |
|    |                    | Should support remote software upload/upgrade via web server, ftp server or ISDN  |  |
| 27 | Other Features     | Should support Auto gatekeeper discovery  |  |
|    |                    | Should support Dynamic playout and lip-sync buffering   |  |
|    |                    | H.245 DTMF tones in H.323   |  |
|    |                    | Should have Date and Time support via NTP   |  |
| 28 | Accessories        | Should come with 2 sets of necessary cables to connect to Display Unit, PC, and microphones   |  |
|    |                    | Should come with necessary remote control to operate the system   |  |

**Display Unit:**

Two Units of min 50” each LCD display Units (OEM integrated with Codec & Camera) shall be supplied and installed in the Conference Rooms at Manufacturing Units / Regional Headquarters / Divisions / Project Sites

**The common minimum specifications of Display Unit shall be as under:**

| S. No. | Parameter / Feature | Basic Requirement                                      | Bidder's Response |
|--------|---------------------|--|-------------------|
| 1      | Technology          | Should be LCD based minimum 50” Display Unit           |                   |
| 2      | Resolution          | Should support HD 720p @ 30 fps & Full HD 1080p @ 60ps |                   |
| 3      | Contrast Ratio      | 2000:1 or above  |                   |
| 4      | Aspect Ratio        | Should support aspect ratio 16:9 & 4:3                 |                   |



|    |                              |  |  |
|----|------------------------------|--|--|
| 5  | Brightness                   | 700cd/sq.m or above  |  |
| 6  | Viewing Angle                | Minimum 178 degree ( horizontal )  |  |
|    |                              | Minimum 178 degree ( vertical )  |  |
| 7  | Display Colors               | Should support 1.07 billion or above   |  |
| 8  | Supported Display Resolution | Should support computer formats: 640*480, 60Hz, 800*600, 60Hz, 1024*768,60Hz   |  |
| 9  | Sound                        | <ul style="list-style-type: none"> <li>➤ Should come with auto volume leveler, sound enhancer</li> <li>➤ Digital Signal Processing,</li> <li>➤ Dynamic Bass Enhancement,</li> <li>➤ Graphic Equaliser,Smart Sound</li> <li>➤ Dolby Digital</li> </ul>  |  |
| 10 | Speakers                     | 2x10W or higher  |  |
| 11 | Connectivity / Interfaces    | The display unit should have following min. interfaces :   |  |
|    |                              | 1 HDMI interface   |  |
|    |                              | 1 DVI interface  |  |
|    |                              | 1 RGB  |  |
|    |                              | Component (Y,Pb,Pr) & Audio  |  |
|    |                              | Composite Video  |  |
|    |                              | 1 AV In  |  |
| 12 | Power                        | Should work on AC 220-240 V +/- 10%  |  |
| 13 | Compatibility                | Should be compatible with the offered video conferencing equipment   |  |
| 14 | Accessories                  | <ul style="list-style-type: none"> <li>➤ Should come with wall mounting bracket, connectors,</li> <li>➤ Should also come with 2 sets of all necessary cables to connect to the Video Endpoint, PC, Projector, power cables, etc.</li> <li>➤ Should come with the remote control to operate the system</li> </ul> |  |

### 9.7 Basic Design Requirements for VC System for Project Sites:

Project sites are the customer sites where BHEL is executing projects like setting up power plants for our customers like NTPC, NHPC, State Electricity Boards, and many other private agencies. These sites are typically in remote areas. However, at all of these sites, an MPLS or MLLN link of minimum 2Mbps uncompressed on an Fibre / RF / Copper last mile is already or will be provisioned from service providers M/s Reliance Infocomm Ltd or M/s BSNL Ltd. The officials working at a project site need to interact with their Regional Head Quarters, Various Manufacturing Units, Corporate Office, Project Management Group, Project Engineering & Management Division, customers, vendors, collaborators, business partners, etc.

The requirement is for a room based business-class state-of-the-art Video Conferencing solution that will enable the site officials to interact, discuss, review projects and share information, presentations, drawings, etc, with all other concerned units, regions and agencies. The conferences can be point-to-point and multipoint also. The offered solution should work on IP as well as ISDN on point-to-point and multipoint basis.

The systems proposed for the above requirement shall be of the highest quality, robustness and reliability. There shall be one 42" or higher LCD display unit and full high definition VC endpoint at each of these sites. The VC Endpoint & display unit shall be an integrated system. The installation

work & workmanship must be as per the best international standards. The sitting capacity of the rooms will be typically between 5 to 10 persons.

**The common minimum specifications of VC System for Project Sites shall be as under:**

| <b>S. No.</b> | <b>Parameter / Feature</b> | <b>Basic Requirement</b>   | <b>Bidder's Response</b> |
|---------------|----------------------------|--|--------------------------|
| 1             | General Design             | Should be High Definition end point compatible with the offered MCU. The offered system should be an OEM/SI integrated system consisting of HD codec, HD camera and HD LCD display unit.   |                          |
| 2             | Display Unit Size          | Should be min 42"  |                          |
| 3             | IP Support                 | Should support minimum 2Mbps point-to-point & 2 Mbps multipoint on IP  |                          |
| 4             | ISDN Support               | Should have minimum 4 ISDN BRI ports   |                          |
| 5             | SIP Support                | Should support 2Mbps on SIP  |                          |
| 6             | Multisite Feature          | Should be able to connect to 3 other sites concurrently on IP and ISDN   |                          |
| 7             | Point-to-Point Conference  | Should be able to connect to other site on High Definition 720p @ 30 frames per second on IP and ISDN  |                          |
| 8             | Firewall Traversal         | Should support firewall/NAT traversal based on H.460.18, H.460.19 standards  |                          |
| 9             | Video Standards            | Should support H.261, H.263, H.263+, H.264 video standards   |                          |
| 10            | Audio Standards            | Should support G.711, G.722, G.722.1, G.728, 64 bit & 128 bit MPEG4 ACC or equivalent audio standard   |                          |
| 11            | Aspect Ratio               | Should support 16:9 aspect ratio   |                          |
| 12            | Video Inputs               | Should have minimum 1 HD Camera Input, 1 DVI-I INPUTS for PC Presentation, 1 S-Video / Composite port for interfacing with projector or any other AV equipment   |                          |
| 13            | Video Outputs              | Should have min 1 DVI-I Output and 1 Composite / S-Video ports   |                          |
| 14            | Audio Inputs               | Should have min 2 RCA/Phono inputs for stereo left and right   |                          |
| 15            | Audio Outputs              | Should have min 2 RCA/Phono outputs for stereo left and right  |                          |
| 16            | Live Video Resolutions     | Should support PAL, CIF, QCIF, 4CIF, VGA, SVGA, XGA, SXGA, HD 720p@30fps or higher.  |                          |
| 17            | Microphone Ports           | Should have min 2 ports for connecting microphones   |                          |
| 18            | Audio Features             | <ul style="list-style-type: none"> <li>➤ Should have high quality digital audio</li> <li>➤ Should have the feature of Automatic Gain Control (AGC)</li> <li>➤ Should have the feature of Automatic Noise Reduction</li> <li>➤ Should have the feature of Active lip synchronization</li> </ul> |                          |
| 19            | Dual Video Support         | Should support H.239 dual video  |                          |

|    |                        |   |  |
|----|------------------------|---|--|
| 20 | Packet Loss Mitigation | Should have mechanism to withstand network Packet Loss of at least 2% to ensure good Video and Audio quality  |  |
| 21 | Jitter                 | Should provide Dynamic jitter buffering to minimize the effect of jitter on Video & audio quality   |  |
| 22 | Security Features      | <ul style="list-style-type: none"> <li>➤ Should support access rights and privileges for user from administrator to simple guest.</li> <li>➤ Should provide SNMP security alerts</li> <li>➤ Should provide Network Settings protection</li> </ul> |  |
| 23 | Network Interfaces     | Should have minimum 1 numbers of 100Mbps Ethernet full duplex ports for LAN Connectivity  |  |
| 24 | QoS Feature            | Should support QoS features based on DSCP and TOS/IP Precedence   |  |
|    |                        | Should support IP adaptive bandwidth management (including flow control)  |  |
| 25 | Camera                 | Should support HD 720p or higher resolution camera  |  |
|    |                        | Should have Automatic focus, brightness, white balance  |  |
|    |                        | Should provide minimum 7x zoom  |  |
|    |                        | Should support Far-end camera control   |  |
| 26 | System Management      | Should be fully manageable through the Central Management Application provided with the solution  |  |
|    |                        | Should be manageable via embedded web server, SNMP, Telnet, etc.  |  |
|    |                        | Should support remote software upload/upgrade via web server.   |  |
| 27 | Other Features         | Should support Auto gatekeeper discovery  |  |
|    |                        | Should support Dynamic playout and lip-sync buffering   |  |
|    |                        | H.245 DTMF tones in H.323   |  |
|    |                        | Should have Date and Time support via NTP   |  |
| 28 | Accessories            | Should come with 2 sets of necessary cables to connect to Display Unit, PC, and microphones   |  |
|    |                        | Should come with necessary remote control to operate the system   |  |

**Display Unit:**

One Unit of 42" or higher LCD display Unit shall be supplied and installed in the Conference Rooms at all sites. The minimum technical specifications for the display unit shall be identical to the requirements for display unit for Conference Rooms at Manufacturing Units / Regional Headquarters / Divisions / Project Sites.



**10. List of Annexures:**

- 10.1** Annexure-I: List of Total Locations
- 10.2** Annexure-II: Delivery Location s
- 10.3** Annexure-III: Existing VC Setup.
- 10.4** Annexure-IV: Proforma for Integrity Pact (Not Applicable).
- 10.5** Annexure-V: Proforma for Non Disclosure Agreement.
- 10.6** Annexure-VI: Format for No-Deviation Certificate.
- 10.7** Annexure-VII: Format for Back-to-Back Support.
- 10.8** Annexure-VIII: Format for OEM Authorization.
- 10.9** Annexure-IX: Price Bid Format.
- 10.10** Annexure-X: Checklist of Make & Models Offered
- 10.11** Annexure-XI: Pre-bid Query / Clarification Format

**Checklist of Enclosures**

| <b>Sl. No.</b> | <b>Annexure to be attached</b>                           | <b>Format attached as Annexure</b> | <b>Whether attached or not (Yes/NO)</b> |
|----------------|--|------------------------------------|---|
| <b>1.</b>      | <b>Eligibility Criteria (Clause 5)</b>                   |                                    |   |
|                | Authorization by OEM for Participation as per Clause 5.1 | Annexure VIII                      |   |
|                | Attested Copies of Balance Sheets as per Clause 5.2      |                                    |   |
|                | PO Copies & Documentary Proof as per Clause 5.3          |                                    |   |
|                | Certificate as per Clause 5.4                            | Annexure VII                       |   |
|                | Documentary Proof as per Clause 5.5                      |                                    |   |
|                | Documentary Proof as per Clause 5.6                      |                                    |   |
| <b>2.</b>      | Format for Non Disclosure Agreement                      | Annexure V                         |   |
| <b>3.</b>      | EMD of Rs.2,00,000/- (Rupees Two Lakhs only)             |                                    |   |
| <b>4.</b>      | Format for No Deviation Certificate                      | Annexure VI                        |   |
| <b>5.</b>      | Checklist of Make & Models Offered                       | Annexure X                         |   |
| <b>6.</b>      | Checklist of Price Bid                                   | Annexure IX                        |   |



## List of Total Locations

| S.No.  | Location Name                          | Class of Location | Brief Description  | Make & Model                             |
|--|--|-------------------|--|--|
| <b>Permanent Locations</b>                     |  |                   |  |  |
| <b>Corporate, Business Sectors, PS-Regions</b> |  |                   |  |  |
| 1  | Corp Office Conference Room, New Delhi | A                 | VC System consisting of codec, camera and integrated dual 52" LCD display unit | Polycom : HDX 8000<br>Samsung : 520 Dx   |
| 2  | Corp Office Board Room, New Delhi      | A                 | VC System consisting of HD Codec, Camera and VC Video Wall (4x3x50" size)      | Polycom : HDX 8000<br>Barco : 4X3 OLF510 |
|  |  |                   | VC System consisting of codec, camera and integrated 52" LCD display unit      | Polycom : HDX 8000<br>Samsung : 520 Dx   |
|  |  |                   | 60 port MCU  | Polycom : RMX 4000                       |
|  |  |                   | 20 port MCU (2 Nos.)   | Polycom : RMX 4000<br>E1/T1              |
|  |  |                   | CMA + Gatekeeper   | Polycom : CMA 5000                       |
|  |  |                   | Firewall Traversal   | Polycom : VBP 5300-E25                   |
|  |  |                   | Recording & Streaming Solution   | Polycom : RSS 4000 + VMC                 |
|  | 42U Rack                               | APW : President   |  |  |
| 3  | Industry Sector, New Delhi             | A                 | VC System consisting of codec, camera and integrated dual 52" LCD display unit | Polycom : HDX 8000<br>Samsung : 520 Dx   |
| 4  | PEM                                    | A                 |  |  |
| 5  | PSER, Kolkata                          | A                 |  |  |
| 6  | PSWR, Nagpur                           | A                 |  |  |
| 7  | PSSR, Chennai                          | A                 |  |  |
| 8  | PSNR, Noida                            | A                 |  |  |
| <b>Manufacturing Units</b>                     |  |                   |  |  |
| 9  | Haridwar                               | A                 | VC System consisting of codec, camera and integrated dual 52" LCD display unit | Polycom : HDX 8000<br>Samsung : 520 Dx   |
| 10   | Bhopal                                 | A                 |  |  |
| 11   | Jhansi                                 | A                 |  |  |
| 12   | RC Puram, Hyderabad                    | A                 |  |  |
| 13   | EDN, Bangalore                         | A                 |  |  |
| 14   | Trichy                                 | A                 |  |  |
| <b>Project Sites: PSER</b>                     |  |                   |  |  |
| 15   | Sagardighi                             | B                 | VC System consisting of codec, camera and integrated 46" LCD display unit      | Polycom : HDX 7000<br>Samsung : 460 DX2  |
| 16   | Barauni EPC                            | B                 |  |  |
| 17   | Korba West                             | B                 |  |  |
| 18   | Maithon                                | B                 |  |  |
| 19   | Marwa                                  | B                 |  |  |

|                              |                                    |   |  |                    |
|------------------------------|------------------------------------|---|--|--------------------|
| 20                           | Hinduja Vizag                      | B |  |                    |
| 21                           | OTPC : Palatona                    | B |  |                    |
| <b>Project Sites: PSNR</b>   |                                    |   |  |                    |
| 22                           | Anpara D                           | B | VC System consisting of codec, camera and integrated 46" LCD display unit    |                    |
| 23                           | Chhabra                            | B |  |                    |
| 24                           | Bara                               | B |  |                    |
| 25                           | Jhajjar                            | B |  |                    |
| 26                           | Goindwal GVK                       | B |  |                    |
| 27                           | Bawana                             | B |  |                    |
| 28                           | Ramgarh                            | B |  |                    |
| 29                           | Lalitpur                           | B |  |                    |
| <b>Project Sites: PSSR</b>   |                                    |   |  |                    |
| 30                           | KPCL-Bellary Stg-II                | B | VC System consisting of codec, camera and integrated 46" LCD display unit    |                    |
| 31                           | MRPL-Mangalore Refineries CPP Expn | B |  |                    |
| 32                           | MPGenco-Malwa SSTP                 | B |  |                    |
| 33                           | APPDC-Krishnapatnam                | B |  |                    |
| 34                           | APGenco-Kakatiya TPP stg-II        | B |  |                    |
| 35                           | NTECL-Tuticorin                    | B |  |                    |
| <b>Project Sites: PSWR</b>   |                                    |   |  |                    |
| 36                           | NTPC, Mauda                        | B | VC System consisting of codec, camera and integrated 46" LCD display unit    |                    |
| 37                           | Sikka                              | B |  |                    |
| 38                           | Ukai                               | B |  |                    |
| 39                           | Hindalco Mahan                     | B |  |                    |
| 40                           | Satpura                            | B |  |                    |
| 41                           | NTPC, Rihandnagar                  | B |  |                    |
| 42                           | Chandrapur                         | B |  |                    |
| 43                           | Vindhyachal                        | B |  |                    |
| <b>Others</b>                |                                    |   |  |                    |
| 44                           | Goindwal                           | B | VC System consisting of codec, camera and integrated 46" LCD display unit    |                    |
| 45                           | IP, Jagdishpur                     | B |  |                    |
| 46                           | HERP, Varanasi                     | B |  |                    |
| 47                           | ESD, Bangalore                     | B |  |                    |
| 48                           | CSU, Jagdishpur                    | B |  |                    |
| 49                           | Piping Centre, Chennai             | B |  |                    |
| 50                           | EMRP, Mumbai                       | B |  |                    |
| <b>For EDs &amp; GM(I/c)</b> |                                    |   |  |                    |
| 1                            | Corp Office, New Delhi             | A | Desktop based VC System consisting of codec, camera and 20" LCD display unit | Polycom : HDX 4002 |
| 2                            | Industry Sector, New Delhi         | A |  |                    |
| 3                            | PEM                                | A |  |                    |
| 4                            | PSER, Kolkata                      | A |  |                    |
| 5                            | PSNR, Noida                        | A |  |                    |
| 6                            | PSSR, Chennai                      | A |  |                    |
| 7                            | PSWR, Nagpur                       | A |  |                    |
| 8                            | Haridwar                           | A |  |                    |

|    |                        |   |  |  |
|----|------------------------|---|--|--|
| 9  | Bhopal                 | A |  |  |
| 10 | Jhansi                 | A |  |  |
| 11 | RC Puram, Hyderabad    | A |  |  |
| 12 | EDN, Bangalore         | A |  |  |
| 13 | Trichy                 | A |  |  |
| 14 | Ranipet                | A |  |  |
| 15 | Kribhco Bhawan         | B |  |  |
| 16 | Corp. R&D              | B |  |  |
| 17 | EPD, Bangalore         | B |  |  |
| 18 | IP, Jagdishpur         | B |  |  |
| 19 | HERP, Varanasi         | B |  |  |
| 20 | CSU, Jagdishpur        | B |  |  |
| 21 | Piping Centre, Chennai | B |  |  |



**List of Delivery Locations**

| <b>S.No.</b> | <b>Location Name</b>   | <b>Address</b>   | <b>Consignee / Contact Details</b>   |
|--------------|------------------------|--|--|
| 1            | Corp Office, New Delhi | BHEL House,<br>Siri Fort,<br>New Delhi - 110049.   | <b>Sh Mukesh Kr Mishra</b> , Engineer,<br>CIT<br>Email: mukeshmishra@bhel.in<br>Mobile: +919711318001  |
| 2            | PMG, New Delhi         | BHEL, 1st Floor,<br>Vasant Square Mall,<br>Abdul Gaffar Khan Marg, Sector B,<br>Vasant Kunj,<br>New Delhi - 110070 | <b>Sh Ashok</b> , AGM / PMG<br>Email: asok@bhel.in<br>Ph. 011-26890477                                 |
| 3            | BAP, Ranipet           | Boiler Auxiliaries Plant,<br>Indira Gandhi Industrial Complex,<br>Ranipet - 632406,<br>Vellore Dist. (Tamil Nadu)  | <b>Sh M C Jayanarayan</b> , Engr. (IC)<br>Email: mcjay@bhelrpt.co.in<br>Mobile: (+91)9444735471        |
| 4            | ROD, Mumbai            | 14th / 15th Floor,<br>World Trade Centre-I,<br>Cuffe Parade,<br>Murnbai-400005                                     | <b>Mrs Julie Srivastava</b> , DGM (MS &<br>Sys)<br>Email: julie@bhelrmb.co.in<br>Mobile: +919821680336 |



**Existing VC Setup**

Currently Polycom based High Definition Video Conferencing solution is implemented at about 50 locations in BHEL. In addition, dedicated VC system has been installed in the cabins of CMD, Directors, Executive Directors and other Unit Heads. The details of the Polycom based VC system is as below:

| <b>S.No.</b> | <b>Item Name</b>                              | <b>Make &amp; Model</b>   |
|--------------|---|---|
| 1            | For Corporate Office Board Room               | Polycom : HDX 8000-1080<br>Barco : 4X3 OLF510<br>Polycom : HDX 8000-720<br>Samsung : 520 Dx |
| 2            | For Corporate Office Main Conference Room     | Polycom : HDX 8000-1080<br>Samsung : 520 Dx   |
| 3            | For Top Management (CMD & Directors)          | Polycom : HDX 8000-1080<br>Samsung : 520 Dx   |
| 4            | For EDs & GM(I/c)                             | Polycom : HDX 4002  |
| 5            | For Units & PS Regional Head Quarters         | Polycom : HDX 8000-720<br>Samsung : 520 Dx  |
| 6            | For Project Sites & Smaller Units             | Polycom : HDX 7000-720<br>Samsung : 460 DX2   |
| 7            | PC Based VC Solution for 100 concurrent users | polycom/CMA   |
|              | <b>VC Infrastructure</b>                      |   |
| 8            | 40 Port MCU                                   | Polycom : RMX 4000  |
| 9            | 20 Port MCU (standby)                         | Polycom : RMX 4000  |

The locations details are as per **Annexure – I**.

## MUTUAL NON-DISCLOSURE AGREEMENT

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This Agreement is made and entered into as of the last date signed below (the “Effective Date”) by and between **Bharat Heavy Electricals Ltd.(BHEL)**, a Public Sector Organization having its principal place of business at BHEL House, Siri Fort, New Delhi - 110049 and \_\_\_\_\_, a \_\_\_\_\_ corporation, hereinafter called “The Bidder”, whose principal mailing address is \_\_\_\_\_ .

WHEREAS in order to pursue the mutual business purpose of this particular project as specified in Bid document for ERP implementation, **BHEL** and the Bidder have an interest in participating in discussions wherein either Party might share information with the other that the disclosing Party considers to be proprietary and confidential to itself (“Confidential Information”); and

WHEREAS the Parties agree that Confidential Information of a Party might include, but not be limited to that Party’s:

1. business plans, methods, and practices;
2. personnel, customers, and suppliers;
3. inventions, processes, methods, products, patent applications, and other proprietary rights; or
4. specifications, drawings, sketches, models, samples, tools, computer programs, technical information, or other related information;

NOW, THEREFORE, the Parties agree as follows:

1. Either Party may disclose Confidential Information to the other Party in confidence provided that the disclosing Party identifies such information as proprietary and confidential either by marking it, in the case of written materials, or, in the case of information that is disclosed orally or written materials that are not marked, by notifying the other Party of the proprietary and confidential nature of the information, such notification to be done orally, by e-mail or written correspondence, or via other means of communication as might be appropriate.
2. When informed of the proprietary and confidential nature of Confidential Information that has been disclosed by the other Party, the receiving Party (“Recipient”) shall, for a period of three (3) years from the date of disclosure, refrain from disclosing such Confidential Information to any contractor or other third party without prior, written approval from the disclosing Party and shall protect such Confidential Information from inadvertent disclosure to a third party using the same care and diligence that the Recipient uses to protect its own proprietary and confidential information, but in no case less than reasonable care. The Recipient shall ensure that each of its employees, officers, directors, or agents who has access to Confidential Information disclosed under this Agreement is informed of its proprietary and confidential nature and is required to abide by the terms of this Agreement. The Recipient of Confidential

Information disclosed under this Agreement shall promptly notify the disclosing Party of any disclosure of such Confidential Information in violation of this Agreement or of any subpoena or other legal process requiring production or disclosure of said Confidential Information.

3. All Confidential Information disclosed under this Agreement shall be and remain the property of the disclosing Party and nothing contained in this Agreement shall be construed as granting or conferring any rights to such Confidential Information on the other Party. The Recipient shall honor any request from the disclosing Party to promptly return or destroy all copies of Confidential Information disclosed under this Agreement and all notes related to such Confidential Information. The Parties agree that the disclosing Party will suffer irreparable injury if its Confidential Information is made public, released to a third party, or otherwise disclosed in breach of this Agreement and that the disclosing Party shall be entitled to obtain injunctive relief against a threatened breach or continuation of any such breach and, in the event of such breach, an award of actual and exemplary damages from any court of competent jurisdiction.
4. The terms of this Agreement shall not be construed to limit either Party's right to develop independently or acquire products without use of the other Party's Confidential Information. The disclosing party acknowledges that the Recipient may currently or in the future be developing information internally, or receiving information from other parties, that is similar to the Confidential Information. Nothing in this Agreement will prohibit the Recipient from developing or having developed for it products, concepts, systems or techniques that are similar to or compete with the products, concepts, systems or techniques contemplated by or embodied in the Confidential Information provided that the Recipient does not violate any of its obligations under this Agreement in connection with such development.
5. Notwithstanding the above, the Parties agree that information shall not be deemed Confidential Information and the Recipient shall have no obligation to hold in confidence such information, where such information:
  - 5.1. Is already known to the Recipient, having been disclosed to the Recipient by a third party without such third party having an obligation of confidentiality to the disclosing Party; or
  - 5.2. Is or becomes publicly known through no wrongful act of the Recipient, its employees, officers, directors, or agents; or
  - 5.3. Is independently developed by the Recipient without reference to any Confidential Information disclosed hereunder; or
  - 5.4. Is approved for release (and only to the extent so approved) by the disclosing Party; or
  - 5.5. Is disclosed pursuant to the lawful requirement of a court or governmental agency or where required by operation of law.

6. Nothing in this Agreement shall be construed to constitute an agency, partnership, joint venture, or other similar relationship between the Parties.
7. Neither Party will, without prior approval of the other Party, make any public announcement of or otherwise disclose the existence or the terms of this Agreement.
8. This Agreement contains the entire agreement between the Parties and in no way creates an obligation for either Party to disclose information to the other Party or to enter into any other agreement.
9. This Agreement shall remain in effect for a period of two (2) years from the Effective Date unless otherwise terminated by either Party giving notice to the other of its desire to terminate this Agreement. The requirement to protect Confidential Information disclosed under this Agreement shall survive termination of this Agreement.

IN WITNESS WHEREOF:

**FOR AND ON BEHALF OF**

**FOR AND ON BEHALF OF**

\_\_\_\_\_

**BHARAT HEAVY ELECTRICALS LTD.**

**Signature:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Name :** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Witness**

**Witness**

1.

1.

2.

2.



**No Deviation Certificate**

This is to certify that our offer is exactly in line with your tender enquiry no. **AA:CIT:P31:VC-RP, dated 07<sup>th</sup> August 2013**. This is to expressly certify that our offer contains no deviation either Technical or Commercial in either direct or indirect form.

**Signed By:**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Organization:** \_\_\_\_\_

**Date & Place:** \_\_\_\_\_

**Phone/Fax/Mobile/Email:** \_\_\_\_\_

**Stamp & Seal:** \_\_\_\_\_



**Back to Back Support From OEM**

Date: \_\_\_\_\_

To,  
BHEL  
CIT, NOIDA

Subject: **Letter of Authority**

Tender Ref. No.: **AA:CIT:P31:VC-RP, dated 07<sup>th</sup> August 2013**

Dear Sir,

We hereby confirm to provide back to back support for the entire lease period of 5 years to the bidder whom we have authorized to quote in the tender enquiry ref. no. AA:CIT:P31:VC-RP dated 07<sup>th</sup> August 2013. The availability of spares would also be ensured for the complete lease periods of 5 years and further for a period of 3 years.

(Authorized Signatory)

For \_\_\_\_\_

Note: This 'Letter of Authority' should be issued on the letterhead of OEM & enclosed in Part-I.

**Authorization by OEM**

Date: \_\_\_\_\_

To,  
BHEL  
CIT, NOIDA

Subject: **Letter of Authority**

Tender Ref. No.: **AA:CIT:P31:VC-RP, dated 07<sup>th</sup> August 2013**

Dear Sir,

We hereby authorize \_\_\_\_\_ who has all India presence and fulfills the requirements of the tender enquiry ref. no. AA:CIT:P31:VC-RP, dated 07<sup>th</sup> August 2013 to quote / negotiate and service the equipment as required in the above tender enquiry.

This authorization is valid only for the following equipment for which we are the OEM:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

The authorized agency would ensure reliable service during complete lease period of 5 years.

(Authorized Signatory)

For \_\_\_\_\_

Note: This 'Letter of Authority' should be issued on the letterhead of OEM & enclosed in Part-I.



## Annexure-IX

## Price Bid Format (For Hardware)

| S. No.               | Item Name  | Qty. | Per Quarter Lease Charges for Unit Quantity    |            |             |  |            |             | Per Quarter Lease Charges for the Total Qty. (INR) |  |
|----------------------|--|------|--|------------|-------------|--|------------|-------------|--|--|
|                      |  |      | Towards Equipment Cost (Excluding taxes) (INR) | Taxes      |             | Towards Maintenance and Incidentals like Interest on capital (Excluding taxes) (INR) | Taxes      |             |  | Per Quarter Lease Charges for Unit Qty ( Including Taxes ) |
|                      |  |      |  | Percentage | Value (INR) |  | Percentage | Value (INR) |  |  |
| A                    | B  | C    | D  | E          | F           | G  | H          | I=(C+E+F+H) | J=B*I  |  |
| 1                    | Desktop based VC System consisting of codec, camera and 20" LCD display unit   | 1    |  |            |             |  |            |             |  |  |
| 2                    | VC System consisting of codec, camera and integrated dual 50" LCD display unit | 2    |  |            |             |  |            |             |  |  |
| 3                    | VC System consisting of codec, camera and integrated 42" LCD display unit      | 1    |  |            |             |  |            |             |  |  |
| 4                    | ISDN Gateway   | 2    |  |            |             |  |            |             |  |  |
| 5                    | Firewall Traversal   | 3    |  |            |             |  |            |             |  |  |
| 6                    | Central Management System  | 2    |  |            |             |  |            |             |  |  |
| 7                    | Recording & Streaming Solution   | 1    |  |            |             |  |            |             |  |  |
| 8                    | Video Media Centre   | 1    |  |            |             |  |            |             |  |  |
| 9                    | Standby 52" LCD Screen   | 1    |  |            |             |  |            |             |  |  |
| 10                   | Standby 46" LCD Screen   | 1    |  |            |             |  |            |             |  |  |
| 11                   | KVM Switch with integrated LCD Monitor, Keyboard & Mouse                       | 1    |  |            |             |  |            |             |  |  |
| <b>Grand Total =</b> |  |      |  |            |             |  |            |             |  |  |



Tender Ref. No. AA:CIT:P31:VC-RP dated 07th August 2013

(Signature of the Bidder)

(Stamp of the Bidder)

## Annexure-IX

## Price Bid Format (For OutRight Purchase)

| S. No.               | Item Name   | Qty. | OutRight Charges for Unit Quantity             |            |                |  |   |            |                | Total Outright Cost<br>(including maintenance for 5<br>years & taxes) for the Total<br>Qty. (INR) |   |
|----------------------|---|------|--|------------|----------------|--|---|------------|----------------|---|---|
|                      |   |      | Basic Unit Price<br>(Excluding taxes)<br>(INR) | Taxes      |                | Basic Unit<br>Price<br>(Including<br>taxes)<br>(INR) | Maintenance Cost on<br>Unit Qty (Excluding<br>Taxes) for Five Years | Taxes      |                |   | Maintenance Cost on<br>Unit Qty (Including<br>Taxes) for Five Years |
|                      |   |      |  | Percentage | Value<br>(INR) |  |   | Percentage | Value<br>(INR) |   |   |
| A                    | B   | C    | D  | E          | F=C+E          | G  | H   | I          | J=G+I          | K=B*(F+J)   |   |
| 1                    | Desktop based VC System consisting of<br>codec, camera and 20" LCD display unit   | 1    |  |            |                |  |   |            |                |   |   |
| 2                    | VC System consisting of codec, camera and<br>integrated dual 50" LCD display unit | 2    |  |            |                |  |   |            |                |   |   |
| 3                    | VC System consisting of codec, camera and<br>integrated 42" LCD display unit      | 1    |  |            |                |  |   |            |                |   |   |
| 4                    | ISDN Gateway  | 2    |  |            |                |  |   |            |                |   |   |
| 5                    | Video Border Proxy Setup  | 3    |  |            |                |  |   |            |                |   |   |
| 6                    | Central Management System   | 2    |  |            |                |  |   |            |                |   |   |
| 7                    | Recording & Streaming Solution  | 1    |  |            |                |  |   |            |                |   |   |
| 8                    | Video Media Centre  | 1    |  |            |                |  |   |            |                |   |   |
| 9                    | Standby 52" LCD Screen  | 1    |  |            |                |  |   |            |                |   |   |
| 10                   | Standby 46" LCD Screen  | 1    |  |            |                |  |   |            |                |   |   |
| 11                   | KVM Switch with integrated LCD Monitor,<br>Keyboard & Mouse                       | 1    |  |            |                |  |   |            |                |   |   |
| <b>Grand Total =</b> |   |      |  |            |                |  |   |            |                |   |   |



Tender Ref. No. AA:CIT:P31:VC-RP dated 07th August 2013

(Signature of the Bidder)

(Stamp of the Bidder)

**Checklist of Make & Models Offered:**

| <b>S. No</b> | <b>Item Name / Description</b>   | <b>Make and Model of Equipment(s) offered</b> | <b>Remarks</b> |
|--------------|--|---|----------------|
| 1            | Desktop based VC System consisting of codec, camera and 20" LCD display unit   |   |                |
| 2            | VC System consisting of codec, camera and integrated dual 50" LCD display unit |   |                |
| 3            | VC System consisting of codec, camera and integrated 42" LCD display unit      |   |                |
| 4            | ISDN Gateway   |   |                |
| 5            | Firewall Traversal   |   |                |
| 6            | Central Management System  |   |                |
| 7            | Recording & Streaming Solution   |   |                |
| 8            | Video Media Centre   |   |                |
| 9            | Standby 52" LCD Screen   |   |                |
| 10           | Standby 46" LCD Screen   |   |                |
| 11           | KVM Switch with integrated LCD Monitor, Keyboard & Mouse                       |   |                |



**Pre- bid Query / Clarification Format**

| <b>S.No.</b> | <b>Reference of the Clause No. of the RFP</b> | <b>Query / Clarification</b> |
|--------------|---|------------------------------|
|              |   |                              |
|              |   |                              |
|              |   |                              |

**Signed By:****Name:** \_\_\_\_\_**Designation:** \_\_\_\_\_**Organization:** \_\_\_\_\_**Date & Place:** \_\_\_\_\_**Phone/Fax/Mobile/Email:** \_\_\_\_\_**Stamp & Seal:** \_\_\_\_\_