



# BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL

**Bid for Comprehensive maintenance contract for Maintenance of  
IP based Video Surveillance System (50 PTZ & 100 Fixed camera)  
for one year**

**Tender Enq. Number: HRM/TO&DS/2020/01**

|                                   |   |                                                  |
|-----------------------------------|---|--------------------------------------------------|
| Tender Issue Date                 |   | <b>24/04/2020</b>                                |
| Bid Submission Date & Time        | : | <b>On or before<br/>01/05/2020 at 14:00 Hrs.</b> |
| Technical Bid Opening Date & Time | : | <b>01/05/2020 at 14:00 Hrs.</b>                  |



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**1.0 Tender Notice:**

**Ref. No.: BPL/HRM/TO&DS/2019-20**  
**Date: 20.03.2020**

M/s \_\_\_\_\_

Dear Sir,

**Subject: Bid for Comprehensive maintenance contract for Maintenance of IP based Video Surveillance System (50 PTZ & 100 Fixed camera) for one year from the date of work order.**

Sealed quotations is invited for comprehensive maintenance contract for Maintenance including supply/ replacement of all parts of IP based Video Surveillance System (50 PTZ & 100 Fixed CCTV cameras) for one year as per specifications detailed under "TECHNICAL SPECIFICATION" (Annexure-D) and Terms and Conditions as enclosed. Firm offer should be submitted in **TWO PARTS, PART-I (EMD, Techno-Commercial Bid) & PART-II (PRICE Bid)** as detailed in relevant sections.

**General Instructions for the bidders**

1. Tender documents (non-transferable) will be available from **24/04/2020** at BHEL corporate website [www.BHEL.com](http://www.BHEL.com).
2. Last date for sale of Tender document is **01/05/2020**
3. Earnest Money Deposit (EMD) for the tender is **Rs.72,378/- (Rupees Seventy Two Thousand and Three Hundred Seventy Eight only)**.
4. Last date of submission of tender is up to **14:00 Hrs of due date 01/05/2020**.
5. **Two bids of tenders shall be mailed to the TENDER BOX E-MAIL ID – "mmtender.bpl@bhel.in" as two different files mentioning Techno-commercial and Price Bid separately up to 14:00 Hrs of due date.**
6. **PART-I of tender (EMD, Techno-Commercial Bid)** shall be opened on the **same date at 14:00 Hrs**. Previously the bids were opened in the presence of tenderer's and /or their authorized representatives who choose to be present, but due to the present scenario of COVID-19 lockdown limitations the bids need to be submitted online to tender room mail ID and representative presence is not required.

Tender should be addressed to undersigned.

With Regards

For & on behalf of **BHEL Bhopal**.

**Paritosh Ku Dalei,**  
**Dy. Manager (HRM),**  
**Prerna Bhawan, Digital Surveillance Section, HRM**  
**Bharat Heavy Electricals Limited,**  
**Piplani, BHEL, Bhopal, M.P. - 462022**



## **2.0 REQUEST FOR PROPOSAL**

Bharat Heavy Electricals Ltd., Bhopal (A Govt. of India Undertaking) invites tender from bidder who qualify as per criteria below. The tender is invited in **TWO PARTS, PART-I (EMD, Tender Fees, Techno-Commercial) & PART-II (PRICE BID)** for CMC for Maintenance including supply/ replacement of all parts of IP based Video Surveillance System (50 PTZ & 100 Fixed camera) for one year from the date of work order.

**2.1 PURPOSE/ SCOPE OF WORK:** The scope of the contract covers comprehensive annual maintenance including supply/ replacement of all parts of IP based CCTV Cameras, NVR, Storage etc., & operation of all supplied components like Cameras, NVR, Hard Disc, housings, power supplies, etc. The cameras will be used for Day & Night online surveillance of stipulated locations on a 24 X 7 X 365 days basis for one year from the date of work order.

## **2.2 QUALIFYING CRITERIA:**

***Bidder should meet the qualification criteria and furnish the details as mentioned below:***

| <b>S.No.</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>     | <b><u>Equipment:</u></b> Bidder should be either Original Equipment Manufacturer or should be Authorized System Integrator partner having direct purchase and support agreement with the OEM for IP based Cameras quoted for this tender.<br><br>In case the bidder is a System Integration Partner of the Principal Manufacturer, a valid certificate from the Principal Manufacturer clearly stating the relationship with the Partner and authorization to the Partner to quote for this specific tender is to be furnished. The Certificate/ Authorization Letter specific to this tender must be enclosed by Authorized Representative of the OEM with the Technical Bid.                                                 |
| <b>2</b>     | Bidder should have the experience of successful execution or CMC of minimum <b>single project of 90 IP based Video Surveillance System, or two projects of 40 IP based Video Surveillance System at a single location</b> with supply, installation & maintenance. Such projects should have been completed within last <b>7 years</b> from the date of tender opening and should be working satisfactorily for more than one year after commissioning. (A successful execution must be enclosed).<br><br>The Work order of the project should be in the name of the bidder. The order copy of above mentioned project & completion & performance certificate is to be submitted along with the offer as per <b>Annexure-E</b> |
| <b>3</b>     | Bidder should have completed three projects of Rs 14.5 Lacs each, or two projects of Rs 18.1 Lacs each, or one project of 28.95 Lacs for similar work (as above in point -2) of installation & support or CMC in last seven years. Annual Financial turnover of previous financial year ending 31 <sup>st</sup> March 2019 of should be at least Rs 10.86 Lacs. Balance sheet is required for the same.                                                                                                                                                                                                                                                                                                                        |

**Note: The technical offer shall be evaluated for only those bidders complying qualifying criteria.**

**2.3 Statutory Requirements:** The bidder will have to observe/perform all the laws/enactment of Central/State Government being in force for such type of work/services during the contract period. Details like your **GST Registration, PF Account No., ESI Reg.**



**No., PAN No** are to be furnished. In case any of the above statutory provisions are not applicable, the same shall be supported by certificates/documents.

### **3.0 INSTRUCTIONS AND GUIDELINES TO BIDDERS**

#### **3.1 INTRODUCTION**

M/s Bharat Heavy Electricals Limited (A Govt. of India Undertaking) incorporated under the Companies Act 1956 having registered office at BHEL House, Siri Fort, New Delhi-110049 through its office at New Delhi (hereinafter referred to as "BHEL", which expression shall include its successors and assigns), invites offer for CMC of Equipment/ Services in BHEL, as per Technical Specification and Commercial Terms and Conditions detailed in the tender documents.

#### **3.2 SCOPE OF WORK OF CMC SCHEME**

CMC Period under the scheme shall be up to one year and the total Price shall be for the complete scope as per technical specifications, inclusive of comprehensive on-site maintenance including repair/replacement of parts during the entire CMC period, all taxes & duties, insurance, any other incidental charges, etc. CMC Period of one year shall start from the date of award of CMC by BHEL. Vendor shall be responsible for comprehensive on-site maintenance of the equipment & services during the entire CMC period. Payments shall be released in quarterly basis after submission of bill, statutory documents and verification of work, as per Payment Terms and other Commercial Terms & Conditions.

#### **3.3 BIDDER TO INFORM HIMSELF FULLY:**

**3.3.1** The bidder shall closely peruse all the clauses, specifications and requirements etc., indicated in the tender documents, before quoting. Should the bidder have any doubt about the meaning of any portion of the tender specifications or find discrepancies or omissions in the specifications or if the tender documents are found to be incomplete or require clarifications on any of the technical aspects, scope of work etc., he shall at once contact the official inviting the tender, for **pre-bid discussions/ clarifications**, before submission of the tender.

**3.3.2** Bidders are advised to study all the tender documents carefully. Any submission of tender by them shall be deemed to have been done after careful study and examination of the tender documents and with the full understanding of the implications thereof. The specifications and terms and conditions shall be deemed to have been accepted unless otherwise specifically commented upon by the bidder in his offer.

#### **3.4 PROCEDURE FOR SUBMISSION & OPENING OF BIDS**

**3.4.1** 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, TENDER FEE & TECHNO-COMMERCIAL BID)**

This part shall consist of the following:

1. EMD in the form of electronic mode of **Rs. 72,378/-** in favor of "**Bharat Heavy Electricals Limited**" payable at **Bhopal**. In the absence of submission of EMD, the offer will be summarily rejected.



2. The EMD may be accepted only through Electronic Fund Transfer credited in BHEL account (before tender opening)
3. EMD of successful tenderer will be retained as part of Security Deposit. EMD will not carry any interest.
4. Tender Fees of **Rs.500/-+ GST 12%** in favor of **"Bharat Heavy Electricals Limited"** payable online (procedure mentioned at BHEL webpage). In the absence of submission of same, the offer will be rejected.
5. Bound volume of:
  - a) Technical Specification & Checklist dully filled for all the items. **The bidder should offer only as per Technical Specification of the equipments.** The purchaser reserves the right to accept or reject the technical offer.
  - b) Un-priced copy of PRICE FORMAT (The un-priced copy of the Price bid format shall be the same as the Price bid but without the Prices).
  - c) Enclosures as defined in "Checklist of Formats" (referring to s.no. 6 under Table of Contents).

### **3.4.2 PART-II: (PRICE BID)**

Price Format containing **PRICES** only (**to be furnished in the enclosed Price Schedule format only**). Prices shall be quoted in Indian Rupees only. GST shall be payable extra. No over-writings erasures and corrections are permitted and may render such bids liable for rejection. Prices should be indicated both in words as well as in figures.

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).

### **3.5 MARKING ON ENVELOPE**

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

**PART I: "EMD, TENDER FEE & TECHNO-COMMERCIAL BID".**

**PART II: "PRICE BID".**

The above two parts shall be enclosed in another envelope and super scribed in bold letters with the following:

- 1. TENDER ENQUIRY NO. AND DESCRIPTION**
- 2. DUE DATE OF OPENING**

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

### **3.6 BID SUBMISSION**

Two bids of tenders shall be mailed to the **TENDER BOX E-MAIL ID – "mmtender.bpl@bhel.in"** as two different files mentioning Techno-commercial and Price Bid separately up **to 14:00 Hrs of due date**. Bids received after the Due Date and Time of opening are liable to be rejected.



### **3.7 BID OPENING**

- 3.7.1 **PART-I (Techno-Commercial Bid)** shall be opened on the due date at 14:00 Hrs. Previously the bids were opened in the presence of tenderer's and /or their authorized representatives who choose to be present, but due to the present scenario of COVID-19 lockdown limitations the bids need to be submitted online to tender room mail ID and representative presence is not required and the confidentiality of bids is ensured by BHEL management. **Part-II (Price Bid)** of only the techno-commercially short listed vendor shall be opened subsequently at a later date after complete evaluation of **Part-I**.
- 3.7.2 Date and time of **Price Bid (Part-II)** opening shall be intimated to the technically and commercially acceptable bidder only.
- 3.7.3 No representatives is required to be present for the tender opening (technical or Price due to COVID-19 lockdown).
- 3.7.4 No correspondence shall be entertained from the bidders after the opening of Price bid(s).
- 3.7.5 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.
- 3.7.6 Unsolicited bids shall not be entertained. Unsolicited revised Price Bids also, shall not be entertained at any stage of the tendering process.
- 3.7.7 **Literature, Pamphlets submitted along-with the offer shall only be treated as supplementary information. All their contents will not be considered as part of the quotation. The information/details provided as per our formats/annexure shall only be considered and evaluated.**
- 3.7.8 Manufacturer's name, Model no., Trade Mark of or Patent No., if any, should be specified.
- 3.7.9 **Vendor not submitting their bids in two parts i.e. PART-I (EMD, , TENDER FEE) & Techno-Commercial Bid) & PART II (PRICE BID) will be out rightly rejected.**

### **3.8 VALIDITY OF OFFER**

Offer shall be kept valid for 90 days from the due date of Tender, for Purchaser acceptance.

### **3.9 DEVIATIONS**

Bids shall be submitted strictly in accordance with the Technical Specification and Terms & Conditions of the Tender Enquiry. Vendors have to submit a "NO Deviation Certificate" in Part I of his offer as per sample enclosed (Annexure A).

**Technical and Commercial - No Deviation is acceptable.**

### **3.10 LANGUAGE & CORRECTIONS**

- 3.10.1 The bidder shall quote the rates in English language and international numerals only. The metric system of units shall be used, for the purpose of tender.



3.10.2 Bidder shall fill the **ORIGINAL** tender documents issued by BHEL. All entries and signatures in the bid shall be in **BLUE/ BLACK INK only**. Each page of the bid shall be signed and stamped using official seal of the company by the bidder.

3.10.3 All entries shall be filled in neat and legible handwriting. No over-writings erasures and corrections are permitted and may render such bids liable for rejection.

3.10.4 However, if any cancellations, corrections and insertions are in the bid, the bidder shall duly attest the same.

### **3.11 REJECTION OF BID AND OTHER CONDITIONS**

3.11.1 All cameras to be replaced during CMC shall be of same make & OEM as the existing system – CP Plus or equivalent which must be compatible and provide the same output resolution. No mix and match is allowed.

3.11.2 All accessories like power cables, power supply adopters, data cables & Passive components shall be of reputed brands (ISI Mark/ISO Certified, as per safety & security guidelines). No mix and match is allowed for the same type of items.

3.11.3 Any format not properly filled, partially filled or not filled will make the bid liable for rejection. Bidders are requested to note that all columns, rows and spaces provided to fill up the data must be filled with relevant data without fail. In case, any bidder fails to do so or fills up irrelevant data, BHEL is not bound to seek clarifications on such items and will be free to reject the tender summarily.

3.11.4 Enclosures consisting of all specified documents shall be bound and cross-referenced with respect to relevant clause of this tender document. This shall be submitted along with the technical bid as a separate volume. *A check list of such documents has been also incorporated into the tender to guide the bidders.*

3.11.5 Any relevant information pertaining to this tender can be obtained from:

Paritosh Ku Dalej, Dy. Manager (HRM)  
Email: paritosh1@bhel.in  
Phone:0755-2503148, MOBILE : 9406903686

**3.11.6 Canvassing in any way concerning this tender, wrong declaration, incorrect information, misleading or incorrect certifications, etc. shall be viewed seriously and suitable action will be taken as per company norms.**

3.11.7 The Purchaser reserves to itself, full rights for the following without assigning any reasons, whatsoever:

- a) to reject any or all the bids.
- b) to increase or decrease the quantities.

3.11.8 The offer is liable to be rejected, if it is found that after Price Bid Opening, the Checklist of Price Bid submitted by the bidder in Part-I offer, is different from the Price Bid (Part -II).

3.11.9 Purchaser reserves the right to reject a bid at any stage or to cancel the Order/Contract, if awarded and forfeit the security deposit/ Bank Guarantee, if it is found that the bidder has deliberately given wrong/misleading information in his bid.





- 3.11.10 The offer is liable to be rejected, if it is found that the bidder has not quoted Prices/Rates of one or more of the enquired equipments.

### **3.12 TENDER EVALUATION**

- 3.12.1 Totals/ Gross Total of Prices should be indicated both in words as well as in figures.
- 3.12.2 Though, offer of higher configuration/ rating components, than what is required as per tender specifications, may be accepted, no extra weightage or preference will be given for the same.
- 3.12.3 Prices of optional items, if quoted, shall not be considered for Price evaluation and comparison.
- 3.12.4 The evaluation will be on the basis of **total CMC charges** plus taxes. GST shall be payable extra.

## **4.0 COMMERCIAL TERMS AND CONDITIONS FOR BIDDERS**

### **4.1 GENERAL**

The words incorporating singular shall include plural and vice-versa, in the words importing masculine gender shall include feminine and vice-versa and the words importing persons shall include bodies; corporate, limited liability companies, partnership and other legal entities.

### **4.2 Expectations from Bidder**

Bidder is required to give a total solution & services as per specifications enclosed. The full working of the system from various locations and gates is to be implemented. All equipments and services is the responsibility of the Vendor. In case, any extra item is required for complete functioning of the system, the same must be included and shall be quoted. Bidder is to give in detail the methodology for implementation of the proposed solution.

### **Contract Agreement**

This tender document shall be deemed to form an integral part of the contract to be entered into for this work. The successful bidder shall have to enter into a contract agreement on non-judicial stamp paper of Rs 500 (Rupees Five Hundred only) before start of the contract, which will remain valid for the entire period of the contract.

### **4.3 SUPPLY CONDITION:**

All equipment supplied and installed at the stipulated locations shall be NEW and confirming to the contract technical specifications.

### **4.4 RATES**

Rates to be quoted on CMC basis up to 17.05.2021, the charges of freight, handling and packing charges, transit insurance, installation, regular insurance and on-site comprehensive maintenance including spares during the CMC period. Rates shall remain FIRM without any variation till completion of the CMC contract. GST shall be payable extra.



**Rates are to be quoted as per Price Bid Format. GST shall be payable extra. Details of prevailing rates of taxes on CMC should be indicated separately. Bidders, in their own interest, are requested to check up and indicate the different tax tariff like "Right to use"/ CMC tax/ GST; etc on CMC rental and evaluation will be based on taxes indicated by the bidder. Taxes not mentioned by the bidder in their bid will not be entertained at later date. However, during the execution of the contract any increase or decrease in the above taxes/imposition of new taxes on CMC will be entertained against documentary proof.**

**Note: - Any loss of tax credit due to the reason attributable to the contractor shall be recovered with interest from them.**

#### **4.5 PAYMENT TERMS**

The payment of CMC charges will be made on quarterly basis after completion of each quarter and submission of invoice(s) in triplicate, clearly indicating taxes applicable on verified invoices and all statutory documents like PF, ESI and salary details of service engineer after deducting downtime if any. The payment will be made at the end of each quarter.

#### **4.6 SECURITY DEPOSIT**

4.6.1 Security deposit is to be deposited by the Bidder after the issue of LOI/work order but before the start of work.

##### **The amount of Security Deposit shall be:**

The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

4.6.2 Alternately the Security Deposit may be furnished in any one of the following forms:

**Modes of deposit:** The balance amount to make up the required Security Deposit of 5% of the contract value may be accepted in the following forms:

- i) Electronic Fund Transfer in favour of BHEL
- ii) Bank Guarantee from Scheduled Banks/ Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL
- iii) Fixed Deposit Receipt issued by Scheduled Banks/ Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL)
- iv) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL)  
(Note: 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)

##### **Collection of Security:**



- 1- At least 50% of the required Security Deposit, including the EMD, should be collected before start of the work. Balance of the Security Deposit can be collected by deducting 10% of the gross amount progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.
- 2- If the value of work done at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or recovered from payment/s due to the Contractor.
- 3- The recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, with the approval of the authority competent to award the work.
- 4- EMD of the successful tenderer shall be converted and adjusted against the security Deposit
- 5- The Security deposit shall not carry any interest.
- 6- Security Deposit shall be released to the Contractor upon fulfilment of contractual obligations as per terms of the contract - CMC.

#### **4.7 DEDUCTION FOR DOWNTIME/ PENALTY/ LD**

##### **DOWNTIME CALCULATION FOR THE SUPPLIED EQUIPMENT & SERVICES**

Bidder shall be responsible for running the complete installed system at the uptime of 98% per month or higher. The deduction for downtime will be as mentioned below:

**a) Downtime Calculation**

Deduction from payments will be made based on downtime of equipment(s) monitored on daily basis. The amount to be deducted will be calculated as per the deduction formula given below:

**If equipment is down for > 4 Hours in a day: Say for 'X' Hrs**  
**Quarterly CMC amount of equipment is Rs. A**  
**Then the deduction for equipment will be: Rs.  $[A / (90 \times 24)] \times X$**

For downtime deductions, the total downtime shall be taken into consideration, which implies that the allowed grace period of 4 Hrs shall also included for penalty.

Downtime calculation will be applicable for non-availability of services arising because of malfunctioning of cameras, NVR, Software and storage.

**b) Overall System Downtime Calculation**

If downtime of any equipment is more than 15 hrs in a month on cumulative basis then deduction will be done on pro rata basis for that equipment.

**c) Individual Downtime Calculation**

If the downtime hour is more than 15 hrs in a month, deduction will be done on pro rata basis for the faulty camera / equipment. However, grace period of 4 hrs is permitted for repair of equipment.

**Note:**



**If the uptime for any equipment falls below 98% continuously for 3 month, the equipment shall have to be replaced by the Bidder, without any extra charge.**

#### **4.8 MAINTENANCE**

It is the responsibility of the vendor to ensure 98% uptime and to coordinate daily operations including maintenance & support for 24x7 working.

Vendor to depute one full time resident engineer for the operation and maintenance of the system along with necessary tools and tackles, which will be available for all working days & on need basis during holidays.

Maintenance service shall cover services, repairs and replacements necessary to keep the system in good working order during the CMC period. However, in case of any defect or sabotage or damage due to any reason whatsoever, the same should be rectified/replaced by the vendor within 24 hrs (24x7 manner) of reporting of such incident. Vendor shall maintain sufficient equipment inventory to rectify/replace the damaged/defective/non-functioning equipments. Periodic maintenance check should be carried out to keep the equipments in good working conditions and vendor has to submit the quarterly maintenance report to BHEL. Maintenance will include all moveable, plastic and/or rubber parts, etc.

#### **4.9 INDEMNITY**

Bidder shall fully indemnify and keep indemnified the Purchaser against all claims;

- a. Which may be made in respect of the use of Item(s)/services supplied/rendered by the Vendor, for infringement of any rights protected by patent, registration of designs or trademarks and legality of the Software.
- b. For injury or damage caused by his negligence or the negligence of his employees or arising from any defect in the goods supplied or any work carried out by him.
- c. For injury to his employees or employees of his agent(s), whilst on Purchaser's premises.
- d. Any other claims of whatsoever nature arising during the course and out of the execution of this Order/Contract.

All such claims in this regard will be settled as per Indian Laws. In the event of any such claims being made against the Purchaser, Purchaser will inform the Bidder who shall at his own risk and cost either settle any such dispute or conduct any litigation that may arise there from.

#### **4.10 INSURANCE**

Insurance for the complete Systems/Goods shall be arranged by the Vendor at his own risk and cost throughout the period of CMC. Purchaser, under any circumstances, will not be responsible for any loss/damage/theft of any Systems/goods, due to any reasons, whatsoever. Claim(s) etc., if any, will be dealt with the underwriters directly by the Vendor. Original insurance policy will be submitted to BHEL. If the bidder fails to renew the policy before the expiry, BHEL will affect the insurance from the CMC payment.



**4.11 CONFIDENTIALITY**

Bidder shall, at all times, undertake to maintain complete confidentiality of all data, information, software, drawings & documents, etc. belonging to the Purchaser and also of the Systems, procedures, reports, input documents, manuals, results and any other company documents discussed and/or finalized during the course of execution of the order/contract.

**4.12 FORCE MAJEURE**

Bidder 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 to the Purchaser 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.

**4.13 RISK PURCHASE**

Purchaser shall reserve the right to terminate the order/contract and enter into CMC at the risk and cost of the Vendor, either the whole or part of the Systems/goods, which the Vendor 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 would be liable to compensate the Purchaser for any loss, which the Purchaser may sustain by reason of such CMC contract. This clause will be operated only after completion of delivery period including minimum time period for maximum penalty.

**4.14 PATENTS & TRADEMARKS**

Bidder shall at all times indemnify the Purchaser against all claims which may be made in respect of the Systems/goods/Software supplied by the Bidder, for infringement of any right protected by patent, registration of designs or trade marks and legality of usage of Software. In the event of any such claims being made against the Purchaser, Purchaser will inform the Bidder who shall at his own cost either settle any such dispute or conduct any litigation that may arise there from.

**4.15 SUB-CONTRACTING**

Order/contract or any part thereof shall not be sub-contracted, assigned or otherwise transferred without prior written consent of the Purchaser.

**4.16 TERMINATION OF THE CMC CONTRACT & ITS CONSEQUENCES**

4.16.1 Purchaser reserves the right to terminate the order/contract, either wholly or in part, upon situations arising due to non-compliance of stipulations of the Order/contract by the Bidder, or non-performance of the equipment/system continuously at the risk and cost of the Bidder. However, Bidder shall continue the performance of the order/contract under all circumstances, to the extent not cancelled.

4.16.2 **Consequences:** As soon as the CMC agreement is cancelled / terminated by the purchaser, no CMC rent will be payable to the bidder.

**4.17 SETTLEMENT OF DISPUTES**

4.20.1 Except as otherwise specifically provided in the Order/Contract, all disputes concerning questions of the facts arising under the Order/Contract, shall be decided by the Purchaser, subject to written appeal by the Bidder to the Purchaser, whose decision shall be final to the parties hereto.



4.20.2 Any disputes or differences shall be to the extent possible settled amicably between the parties hereto, failing which the disputed issues shall be settled through arbitration.

4.20.3 However, the Bidder shall continue to perform the Order/Contract, pending settlement of dispute(s).

#### **4.18 ARBITRATION CLAUSE**

##### **ARBITRATION & CONCILIATION**

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the contract; or, the respective rights and liabilities of Parties; or, in relation to interpretation of any provision of the contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL Unit/Region/Division issuing the Contract.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be ----- (the place from which the contract is issued)

The cost of arbitration shall be borne as per the award of the Arbitrator.

Subject to the arbitration in terms of Clause ----- above, the Courts at ----- (PI incorporate the name of the place where the Principal Civil Court having ordinary original civil jurisdiction to decide questions forming subject matter of the arbitration is located) shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.

Notwithstanding the existence of any dispute or differences and /or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

In case of Contract with public sector enterprise (PSE) or a Government Department, shall be applicable:

In the event of any dispute or difference relating the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the secretary to the Government of India in-charge of the Department of public Enterprises. The arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal affairs, Ministry of Law and justice, Government of India. Upon such references the dispute shall be decided by the Law Secretary or the Special Secretary or Additional secretary when so authorized by the law secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator."



**4.19 ACCEPTANCE OF ORDER**

Letter of bidder's acceptance of the LOI/Order/Contract is to be submitted within one week from the date of issue of the LOI/ Work Order.

**4.20 SHIFTING OF EQUIPMENT FROM A LOCATION TO OTHER**

Shifting of equipment from one location to another shall be the responsibility of the Bidder. All the requisite works like dismantling of equipment, packing, transportation and transit insurance shall be the responsibility of the Bidder. The time given for shifting and installation of equipment at new location will be mutually agreed and time taken beyond that period will be treated as downtime.

**4.21 REMOVAL OF SYSTEM AFTER COMPLETION OF CMC**

In case BHEL decides to surrender the equipment after the expiry of the contract, Bidder will remove and take away and safely dispose the cables, cameras, accessories from Purchaser's premises at his own risk and cost after due permission from BHEL for the permitted items.

**5.0 TECHNICAL TERMS & CONDITIONS/ SCOPE OF WORK**

1. The Bidder shall specify item wise compliance to Technical Specification and furnish the acceptance to maintain the system. Technical specifications and checklist in line with the desired requirements.
2. The Bidder shall submit the proposed plan of methodology to execute the maintenance at the time of bid submission.
3. Proposed system to be maintained at BHEL Bhopal at stipulated location.
4. **The bidder shall keep all equipment intact in BHEL premises without any change in place of installation during the contract period of CMC and if any change required then bidder must obtain permission from BHEL.**
5. All cameras will be connected to BHEL, Bhopal data communication network at the edge switch level.
6. All required hardware and software for the system shall be supplied, installed and commissioned by the bidder. It includes but not limited to
  - a. Maintenance of cameras with Power supply adaptor, Connectivity, laying of UTP cables from edge level switches to camera.
  - b. Maintenance of Control Room for Video Surveillance System monitoring
  - c. Maintenance of storage & NVR after informing DTG - IT dept.
7. Successful bidder shall constitute a project implementation team headed by the project manager. This team will work with BHEL team to formulate the project implementation plan. This plan shall be ready before the product delivery for faster execution of the project.
8. Supply of Electrical & UTP Cables, Connectors and other accessories required will be vendor's responsibility. These accessories shall be of reputed brand (ISI mark & ISO Certified wherever applicable as per safety & security guidelines). The vendor has to comply the specification for structured cabling.
9. Laying of all the power/network/communication cable shall be through suitable size HDPE conduit indoor as well as outdoor. Vendor to install standard cable route markers for outdoor cables.
10. BHEL shall provide point for power supply of 230V AC  $\pm$  10% & nearest switch port for network connectivity. The Bidder shall lay Power and Data cable (UTP), in



different lengths as required, using suitable clamps & in suitable conduits (PVC or GI pipes) wherever required.

11. Any extra item required like hardware/software & necessary manpower to make the total system successfully operational will be in the scope of vendor.
12. Supply, installation & configuration of any additional software/component required for the desired functioning of the system shall be vendor's responsibility.
13. Complete documentation of the system (both hardware and software) should be provided by vendor.
14. Bidder to maintain confidentiality of data and services being provided by BHEL
15. Vendor shall take necessary precautions to ensure that there is no damage to existing facilities in any form. Cost of damage, if any by action of vendor will be debited to him.
16. Vendor shall provide seamless connectivity of more display screens on need basis for future expansion.

## **6.0 COMPENSATION IN CASE OF DEATH OR PERMANENT INCAPACITATION**

BHEL shall recover the amount of Compensation to be paid to victim(s) by BHEL towards loss of life in case of death or permanent disability/ incapacitation of person due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below. (as per BHEL corporate circular no – 016/MLX/2018, Dt: 10.09.2018)

- a. Victim: Any person who suffers permanent disablement or dies in an accident as defined below
- b. Accident: Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/ operation and works incidental thereto at BHEL factories/ offices and precincts thereof, project execution, erection and commissioning, services, repairs and maintenance, trouble shooting, servicing, overhaul, renovation and retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/ during working at BHEL Units/ offices/ townships and premises/ Project sites.
- c. Compensation in respect of each of the victims:
  - i. In the event of death or permanent disability resulting from loss of both limbs: Rs. 10,00,000/- (Rs. Ten Lakh)
  - ii. In the event of other permanent disability : Rs. 7,00,000/- (Rs. Seven Lakh)
- d. Permanent disability is classified as a permanent total disablement under the provision to section 2(I) of the employee's compensation act 1923.





**6.0 CHECKLIST OF FORMATS (TO BE ATTACHED WITH TECHNO-COMMERCIAL BID (PART I) DULY FILLED BY THE VENDOR)**

| <b>S. No.</b> | <b>Annexure to be attached</b>                                           | <b>Format attached as annexure</b> | <b>Whether attached (Yes / NO)</b> |
|---------------|--------------------------------------------------------------------------|------------------------------------|------------------------------------|
| 1             | No Deviation Certificate                                                 | Annexure A                         | Yes / NO                           |
| 2             | Price Format without prices, indicating the % of statutory levies/ Taxes | Annexure B                         | Yes / NO                           |
| 3             | GST Registration/ Compliance                                             | Annexure C                         | Yes / NO                           |
| 4             | Technical Specification of System                                        | Annexure D                         | Yes / NO                           |
| 5             | Details of Major Project Executed                                        | Annexure E                         | Yes / NO                           |
| 6             | EMD deposited details                                                    | Annexure F                         | Yes / NO                           |
| 7             | Authorization letter from OEMs for IP Based video Surveillance           | Annexure G                         | Yes / NO                           |



FORMAT FOR  
"NO DEVIATION CERTIFICATE"

Tender Enquiry No: ....., dated --/--/----

**NO DEVIATION CERTIFICATE**

This is to certify that our offer is exactly in line with your tender enquiry no. ...., **dated --/--/----**. 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:** \_\_\_\_\_

Place:

Date:


**ANNEXURE- B**
**Price Format without prices, indicating the % of statutory levies/ Taxes**

| S.No | Description                                                                                                                                                                                                                                                                                                                                        | Quantity       | 4 Quarter CMC rate       |                                |                                                  |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|--------------------------------|--------------------------------------------------|
|      |                                                                                                                                                                                                                                                                                                                                                    |                | CMC per Quarter per Unit | CMC per Quarter for total Qty. | Total Amount payable for one year for Total Qty. |
|      |                                                                                                                                                                                                                                                                                                                                                    | a              | b                        | c=(a*b)                        | d=(c*4)                                          |
| 1    | IP based Video Surveillance Camera (Fixed)                                                                                                                                                                                                                                                                                                         | 100            |                          |                                |                                                  |
| 2    | IP based Video Surveillance Camera (PTZ)                                                                                                                                                                                                                                                                                                           | 50             |                          |                                |                                                  |
| 3    | NVR Server – 256 channel<br>• including Hardware, OS, Video Management & Monitoring software<br>• with minimum 150 channels with features for Video management, Video monitoring & administration, user access control<br>• Keyboard, Mouse, Display monitor (min 17" TFT)<br>• Rack mountable                                                     | 1 set          |                          |                                |                                                  |
| 4    | Storage for video recording archival<br>• should be able to store min 90 days video recording in 24x7 mode<br>• storage <b>90 days</b> @25fps for 150 cameras<br>• size to be specified by the vendor<br>• Storage should be of industrial grade and should come with all necessary racks (if external) and suitable enclosures for rack mounting. | 180 TB storage |                          |                                |                                                  |
| 5    | Minimum 55" commercial display panel (LED Monitor) for control room viewing along with PC or workstation for 24*7 monitoring (Each PC/Workstation should have Latest licensed OS, min i7 Processor, Min 8 GB RAM & min Dual graphics card), Keyboard, mouse                                                                                        | 3 set          |                          |                                |                                                  |
| 6    | PoE converters                                                                                                                                                                                                                                                                                                                                     | 150            |                          |                                |                                                  |
|      | <b>Total Quarterly Rental Value</b>                                                                                                                                                                                                                                                                                                                |                |                          |                                |                                                  |
|      | <b>Total cash outflow for 4 Quarter CMC rate</b>                                                                                                                                                                                                                                                                                                   |                |                          |                                |                                                  |
|      | <b>Price in word -</b>                                                                                                                                                                                                                                                                                                                             |                |                          |                                |                                                  |

**Offer includes:**

1. Offer includes all maintenance charges for 4 Quarters CMC period.
2. Offer is exclusive of GST.



**ANNEXURE-C**

1. Whenever bidders are required to supply services at project site Party has to submit GST registration no. of the State in which project site is located along with copy of registration certificate at the time of submission of Bid. In case the same is not available at the time of submission of bid, the contractor has to give an undertaking that the same will be arranged before award of work order.
2. HSN Code/SAC, rate of tax under GST and applicable GST (IGST, CGST/ SGST/ UTGST) and GSTIN shall be clearly mentioned by the Bidder.
3. GST portion of the invoice shall be released only upon: -
  - a) All invoices raised by contractor/ vendors must be GST compliant Tax invoices as per GST invoice rules.
  - b) Contractor declaring such invoice in his GSTR-1 or any modified return as notified by Government
  - c) Receipt of goods/ services and Tax invoice by BHEL and
  - d) Confirmation of payment of GST thereon by contractor on GSTN portal
  - e) Alternatively, Contractor has to submit BG of appropriate value which shall be valid at least one month after the confirmation of date of payment of GST by contractor on GSTN portal and receipt of Tax invoice and receipt of services, whichever is later. Contractor has to give an undertaking in this regard.
  - f) Contractor has to give an undertaking to BHEL that they have declared invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.Payment to Contractor for GST portion will be released only after completion of above activity and on availment of ITC by BHEL.
4. In case GST credit is delayed/ denied to BHEL due to **non/ delayed receipt of services/ goods and /or tax invoice** or expiry of the timeline prescribed in GST Law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from the contractor along with interest levied/ leviable on BHEL.

**Reverse Charge under GST**

5A. In respect of services, reverse charge liability shall arise at the earliest of date of payment to service provider or 60 days from the date of issue of invoice by service provider. Contractor has to submit bill for payment within 30 days from date of invoice. Any interest or penalty implications attributable to the contractor shall be recovered from them.

5B. Any GST liability arising on BHEL under reverse charge before actual receipt of goods and / or invoice thereof would be subject to recovery of interest leviable for the period between the date of such liability and actual date of eligibility of ITC based on receipt of goods, receipt of invoices and other condition specified in GST Law.

**Liquidated Damage/ penalty**

6. Liquidated damage (LD) or Penalty if chargeable from suppliers/ contractors as per NIT, applicable GST will be charged in addition to the same.



**ANNEXURE-D**

**Specification for IP based Video Surveillance Camera (PTZ)**

| Sno | Feature                      | BHEL's minimum requirement                                                                                                                                                     | Vendor compliance | Remark |
|-----|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|
| 1   | Qty                          | <b>50</b>                                                                                                                                                                      | Yes/No            |        |
| 2   | Camera type                  | IP based PTZ Dome, Color to be installed in factory shop floor area as well as outdoors                                                                                        | Yes/No            |        |
| 3   | Make                         | <i>CP Plus or equivalent pl specify</i>                                                                                                                                        |                   |        |
| 4   | Model                        | <i>Pl specify</i>                                                                                                                                                              |                   |        |
| 5   | Camera Vision                | Automatic Day/Night switchover with IR cut filter                                                                                                                              | Yes/No            |        |
| 6   | Image Sensor                 | 1/3" or better, CMOS Sensor                                                                                                                                                    | Yes/No            |        |
| 7   | Resolution                   | upto 1920x1080 (HDTV Resolution)                                                                                                                                               | Yes/No            |        |
| 8   | Pan Travel                   | The camera should deliver a 360° PAN travel                                                                                                                                    | Yes/No            |        |
| 9   | Tilt Travel                  | Minimum 0 - 180°                                                                                                                                                               | Yes/No            |        |
| 10  | Zoom                         | Minimum 30X optical zoom                                                                                                                                                       | Yes/No            |        |
| 11  | Compression                  | The camera shall digitize and compress the video using the latest in video compression technology and shall utilize M-JPEG and H.264 compression technology                    | Yes/No            |        |
| 12  | Connection users             | MJPEG/MPEG4- min 10 users                                                                                                                                                      | Yes/No            |        |
| 13  | Video Encoding and Streaming | The digital video should provide dual encoded video streams to allow simultaneous and independent viewing and recording of live video at different frame rates and/or quality. | Yes/No            |        |
| 14  | Frames/second                | 30 fps @ 1080p or better                                                                                                                                                       | Yes/No            |        |
| 15  | Motion Detection             | Motion Detection capable                                                                                                                                                       | Yes/No            |        |
| 16  | Back Light compensation      | Required with black masking or other suitable technology                                                                                                                       | Yes/No            |        |
| 17  | Event Notification           | Relay Out / Email /Go to Preset                                                                                                                                                |                   |        |
| 18  | White balance                | Auto                                                                                                                                                                           | Yes/No            |        |
| 19  | Audio                        | Bi-directional audio, G.711                                                                                                                                                    | Yes/No            |        |
| 20  | Ethernet                     | Minimum 10/100 Ethernet                                                                                                                                                        |                   |        |
| 21  | IPv6                         | Should be IPv6 compliant                                                                                                                                                       |                   |        |

**BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL**

|      |                                                                                                                                                                                      |                                                                                                                                                                                                                                                        |        |  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--|
| 22   | Power                                                                                                                                                                                | AC and PoE capable, with necessary power adapters, converters, power cables etc. BHEL Shall provide only raw power supply (230V,1 Phase). vendor shall make all necessary arrangement (like UPS, spike busters etc) to keep the camera safe & working. | Yes/No |  |
| 23   | Certification                                                                                                                                                                        | Quoted model should be UL Listed, FCC Mark and CE Certified                                                                                                                                                                                            | Yes/No |  |
| 24   | Management: Configuration: Browser-based using Internet Explorer 7 and later.<br>Camera access control: Multiple user access levels with password protection.                        |                                                                                                                                                                                                                                                        | Yes/No |  |
| 25   | Protocol support: The camera should as minimum provide the following communication protocols: TCP/IP, HTTP, ICMP, PPPoE, DHCP, SMTP protocols                                        |                                                                                                                                                                                                                                                        | Yes/No |  |
| 26   | Network interface: Camera should have an integrated onboard Ethernet Port (IP) using an RJ-45 CAT6 UTP cable                                                                         |                                                                                                                                                                                                                                                        | Yes/No |  |
| 27   | View and control camera via Web server and Network Video Management software (vms) packages (vms shall be provided by the vendor)                                                    |                                                                                                                                                                                                                                                        | Yes/No |  |
| 28   | <b>Camera mount should be:</b>                                                                                                                                                       |                                                                                                                                                                                                                                                        |        |  |
| 28.1 | Of the same make as that of camera and suitable for the model number offered and should be an integrated unit along with all housing accessories.<br>Should be <b>IP66</b> compliant |                                                                                                                                                                                                                                                        | Yes/No |  |
| 28.2 | Should support the weight of camera and accessories such as housing, pan & tilt head in any vertical or horizontal position                                                          |                                                                                                                                                                                                                                                        | Yes/No |  |

**Specification for IP based Video Surveillance Camera (Fixed)**

| Sno | Feature       | BHEL's minimum requirement                                                      | Vendor compliance | Remark |
|-----|---------------|---------------------------------------------------------------------------------|-------------------|--------|
| 1   | Qty           | <b>100</b>                                                                      | Yes/No            |        |
| 2   | Camera type   | IP based Fixed, Color to be installed in factory shop floor area/store/annexies | Yes/No            |        |
| 3   | Make          | <i>CP Plus or equivalent pl specify</i>                                         |                   |        |
| 4   | Model         | <i>Pl specify</i>                                                               |                   |        |
| 5   | Resolution    | upto 1920x1080 (HDTV Resolution)                                                | Yes/No            |        |
| 6   | Camera Vision | Automatic Day/Night switchover with IR cut filter                               | Yes/No            |        |
| 7   | IR Distance   | Minimum 20m                                                                     |                   |        |
| 8   | Image Sensor  | 1/3" or better, CMOS Sensor                                                     | Yes/No            |        |



|      |                                                                                                                                                                                                                       |                                                                                                                                                                                |        |  |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--|
| 9    | Lens Type                                                                                                                                                                                                             | 3 ~ 9mm F1.2, 3x Optical motorized zoom                                                                                                                                        |        |  |
| 10   | Min. Illumination                                                                                                                                                                                                     | Color : 0.05 lux (F1.2)<br>B/W : 0 lux                                                                                                                                         |        |  |
| 11   | Compression                                                                                                                                                                                                           | The camera shall digitize and compress the video using the latest in video compression technology and shall utilize M-JPEG and H.264 compression technology                    | Yes/No |  |
| 12   | Video Encoding and Streaming                                                                                                                                                                                          | The digital video should provide dual encoded video streams to allow simultaneous and independent viewing and recording of live video at different frame rates and/or quality. | Yes/No |  |
| 13   | Frame Rate (fps)                                                                                                                                                                                                      | 30 fps @ 1920 x 1080                                                                                                                                                           | Yes/No |  |
| 14   | Image Enhancement                                                                                                                                                                                                     | Backlight Compensation<br>White Balance                                                                                                                                        | Yes/No |  |
| 15   | Audio                                                                                                                                                                                                                 | Bi-directional audio, G.711                                                                                                                                                    | Yes/No |  |
| 16   | Motion Detection                                                                                                                                                                                                      | Motion Detection capable                                                                                                                                                       | Yes/No |  |
| 17   | Compliance                                                                                                                                                                                                            | Open Network Video Interface Forum (ONVIF)                                                                                                                                     | Yes/No |  |
| 18   | Ethernet                                                                                                                                                                                                              | Minimum 10/100 Ethernet                                                                                                                                                        |        |  |
| 19   | IPv6                                                                                                                                                                                                                  | Should be IPv6 compliant                                                                                                                                                       |        |  |
| 20   | Power                                                                                                                                                                                                                 | Camera should be PoE (Power over Ethernet) capable                                                                                                                             | Yes/No |  |
| 21   | Certification                                                                                                                                                                                                         | Quoted model should be UL Listed, FCC Mark and CE Certified                                                                                                                    | Yes/No |  |
| 22   | <b>Management</b>                                                                                                                                                                                                     |                                                                                                                                                                                |        |  |
| 23   | Configuration: Browser-based using Internet Explorer 7.0 and later.                                                                                                                                                   |                                                                                                                                                                                | Yes/No |  |
| 24   | Camera access control: Multiple user access levels with password protection.                                                                                                                                          |                                                                                                                                                                                | Yes/No |  |
| 25   | Protocol support: The camera should as minimum provide the following communication protocols: TCP/IP, HTTP, ICMP, PPPoE, DHCP protocols                                                                               |                                                                                                                                                                                | Yes/No |  |
| 26   | Network interface: Camera should have an integrated onboard Ethernet Port (IP) using an RJ-45 CAT6 UTP cable                                                                                                          |                                                                                                                                                                                | Yes/No |  |
| 27   | View and control camera via Web server and Network Video Management software (vms) packages (vms shall be provided by the vendor)                                                                                     |                                                                                                                                                                                | Yes/No |  |
| 28   | <b>Camera mount should be:</b>                                                                                                                                                                                        |                                                                                                                                                                                |        |  |
| 28.1 | Of the same make as that of camera and suitable for the model number offered as specified by the manufacturer and should be an integrated unit along with all housing accessories.<br>Should be <b>IP66</b> compliant |                                                                                                                                                                                | Yes/No |  |
| 28.2 | Should support the weight of camera and accessories such as housing, pan & tilt head in any vertical or horizontal position                                                                                           |                                                                                                                                                                                | Yes/No |  |



**NVR**

| Sno | Feature                                     | BHEL's minimum requirement                                                                                                                       | Vendor compliance | Remark |
|-----|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|
| 1   | Qty                                         | <b>1</b>                                                                                                                                         | Yes/No            |        |
| 2   | Make                                        | <i>CP Plus or equivalent pls. specify</i>                                                                                                        | Yes/No            |        |
| 3   | Model                                       | with minimum 150 channels with features for Video management, Video monitoring & administration, user access control                             | Yes/No            |        |
| 4   | Box solution                                | Rack mountable, Box solution                                                                                                                     | Yes/No            |        |
| 5   | No. of channels/<br>Cameras to be connected | Each NVR should be able to connect min 50 PTZ camera & 100 Fixed cameras                                                                         | Yes/No            |        |
|     |                                             | NVR should support all cameras at the maximum frame rate and the maximum resolution                                                              | Yes/No            |        |
|     |                                             | The system should allow the recording, live monitoring, playback of archived video, audio, and data simultaneously                               | Yes/No            |        |
| 6   | Size/capacity                               | Each NVR should be able to manage the video traffic of min 50 PTZ camera & 100 Fixed cameras, Video Monitoring & User access control             | Yes/No            |        |
| 7   | User authorization                          | Device access permission                                                                                                                         | Yes/No            |        |
|     |                                             | Privilege Control                                                                                                                                | Yes/No            |        |
|     |                                             | PTZ control priority for different users                                                                                                         | Yes/No            |        |
| 8   | Scheduling                                  | Time scheduled events, User login duration, Recording Schedules                                                                                  | Yes/No            |        |
| 9   | Camera Integration                          | Should be ONVIF compliant, support for multiple IP camera brands                                                                                 | Yes/No            |        |
| 10  | Video Streaming - Viewing & Recording       | NVR should have the ability to stream minimum 150 camera connections to multiple clients simultaneously for live viewing                         | Yes/No            |        |
|     |                                             | Recording server should receive multiple streaming from the camera simultaneously.                                                               | Yes/No            |        |
|     |                                             | Simultaneous recording & viewing should not degrade the performance of NVR server. NVR should support separate streaming for recording & viewing | Yes/No            |        |
| 11  | Support for video streaming                 | H.264 decoders to deliver 1080P/720P/D1/VGA IP camera streams                                                                                    | Yes/No            |        |





|    |                                                             |                                                                                                                                                                                                                                                                                                                 |        |  |
|----|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--|
| 12 | Recording Modes                                             | Should support multiple event based & schedule based recording modes including continuous record, record on event, manual record etc.                                                                                                                                                                           | Yes/No |  |
| 13 | Video Codec support                                         | H.264, MJPEG, MPEG4                                                                                                                                                                                                                                                                                             | Yes/No |  |
| 14 | Centralized Management                                      | Should allow the configuring and viewing of all the IP cameras connected from a single console                                                                                                                                                                                                                  | Yes/No |  |
| 15 |                                                             | Should be a standalone solution for managing IP cameras and systems                                                                                                                                                                                                                                             | Yes/No |  |
| 16 | License management                                          | Its vendor's responsibility to procure and supply all the required licenses whether for NVR server level or for clients. All licenses should be on the name of BHEL Bhopal (if any)                                                                                                                             | Yes/No |  |
| 17 | Time Synchronization                                        | Should be able to integrate directly with internet based NTP server or LAN based NTP server. All cameras should sync time from NVR server                                                                                                                                                                       | Yes/No |  |
| 18 | Log                                                         | NVR should be able to log events like camera status change, user access configuration change, user vs camera access log etc.                                                                                                                                                                                    | Yes/No |  |
| 19 | Audio                                                       | should support camera audio recording & audio log                                                                                                                                                                                                                                                               | Yes/No |  |
| 20 | Interface                                                   | HDMI port required                                                                                                                                                                                                                                                                                              | Yes/No |  |
| 21 | Central Management                                          | Administrator should be able to manage all the features and functionality of NVR, access control provisioning, user management activities etc. from a central web based console.                                                                                                                                | Yes/No |  |
| 22 | Viewing & Monitoring of cameras from Control Room & LAN PCs | BHEL Bhopal shall setup a central control room for regular monitoring of the surveillance cameras at CISF Control Room. In-charge of Control Room should be able to perform all the administrative & monitoring activities from control room itself either by a dedicated PC based client or web based console. | Yes/No |  |
| 23 |                                                             | For monitoring from LAN PCs, solution should include Client software or web based console for individual user.                                                                                                                                                                                                  | Yes/No |  |



|    |  |                                                                                                                                        |        |  |
|----|--|----------------------------------------------------------------------------------------------------------------------------------------|--------|--|
| 24 |  | Storage should be of industrial grade and should come with all necessary racks(if external) and suitable enclosures for rack mounting. | Yes/No |  |
|----|--|----------------------------------------------------------------------------------------------------------------------------------------|--------|--|

**Storage**

| SL No | Feature                              | BHEL's minimum requirement                                                                                                                                                                                                                                                                                                                       | Vendor compliance | Remark        |
|-------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|
| 1     | Storage for video recording archival | <ul style="list-style-type: none"><li>• should be able to store min 90 days video recording in 24x7 mode</li><li>• storage <b>90 days</b> @25fps for 150 cameras</li><li>• size 180TB</li><li>• Storage should be of industrial grade and should come with all necessary racks(if external) and suitable enclosures for rack mounting.</li></ul> | Yes/No            | No attachment |

| SL No | Feature                                    | BHEL's minimum requirement                                                                                                                                                                                                                                           | Vendor compliance | Remark        |
|-------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|
| 1     | 55" commercial display panel (LED Monitor) | Minimum 55" commercial display panel (LED Monitor) – 3 sets for control room viewing along with PC or workstation for 24*7 monitoring (Each PC/Workstation should have Latest licensed OS, min i7 Processor, Min 8 GB RAM & min Dual graphics card), Keyboard, mouse | Yes/No            | No attachment |

**PoE converters**

| SL No | Feature        | BHEL's minimum requirement          | Vendor compliance | Remark        |
|-------|----------------|-------------------------------------|-------------------|---------------|
| 1     | PoE converters | PoE converters, quantity – 150 nos. | Yes/No            | No attachment |



**EXECUTED ORDER DETAILS  
(As per Qualification Criteria)**

**Tender Enquiry No: ....., dated --/--/----**

| <b>S.No.</b> | <b>Description</b>                                                             | <b>Experience of Successful Execution</b> |                  |                  |
|--------------|--------------------------------------------------------------------------------|-------------------------------------------|------------------|------------------|
|              |                                                                                | <b>Project 1</b>                          | <b>Project 2</b> | <b>Project 3</b> |
| 1            | W.O. No. & date (copy to be enclosed)                                          |                                           |                  |                  |
| 2            | Name of the customer / company where such system is installed or AMC received. |                                           |                  |                  |
| 3            | Complete postal address of the customer.                                       |                                           |                  |                  |
| 4            | Year of commissioning.                                                         |                                           |                  |                  |
| 5            | Name and designation of the contact person of the customer.                    |                                           |                  |                  |
| 6            | Phone, FAX no. and email address of the contact person of the customer.        |                                           |                  |                  |
| 7            | Certificate from the customer regarding satisfactory performance               |                                           |                  |                  |

Place:  
Date:

Signature with seal



**EMD DEPOSIT DETAILS**

**Tender Enquiry No: ....., dated --/--/----**

| <b>S.No.</b> | <b>EMD amount</b>  | <b>EMD details</b> |
|--------------|--------------------|--------------------|
| 1            | <b>Rs.72,378/-</b> |                    |

Place:  
Date:

Signature with seal



ANNEXURE-G

FORMAT FOR  
"LETTER OF AUTHORITY"

Tender Enquiry No. : .....

Date: --/--/----

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

To,  
-----  
-----

Subject: **Letter of Authority**

Tender Ref. No.: ....., **dated --/--/----**

Dear Sir,

We hereby authorize \_\_\_\_\_ who will fulfill the requirements of the tender enquiry ref. no. ...., dated --/--/---- 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. In case of any default alternative arrangement would be done by us on the same terms and conditions as negotiated and finalized in this tender enquiry.

(Authorized Signatory)

For \_\_\_\_\_

Place:

Date:

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