Expression of Interest (EOI) for Supply, Operation and Maintenance of Perimeter Intrusion Detection System (PIDS) on lease basis for 5 years for BHEL, Bhopal.

Ref: HRM/19-20/EOI/PIDS/01

Date: 09.01.2020

### **EXPRESSION OF INTEREST (EOI)**

Bharat Heavy Electricals Limited, a leading Indian Engineering and Manufacturing Enterprise engaged in Engineering, Manufacturing of products and execution of turnkey projects in the field of Power Generation and Transmission invites Expression of Interest (EOI) for Supply, Operation and Maintenance of Perimeter Intrusion Detection System (PIDS) on lease basis for 5 years for BHEL, Bhopal unit.

For further details please visit: www.bhel.com

#### **DISCLAIMER**

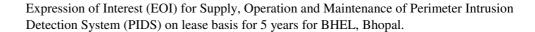
All information contained in this EOI provided / clarified are in good interest and faith. The information contained in this Expression of Interest document or subsequently provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of BHEL, is provided on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their application for qualification and subsequent selection pursuant to this EOI. This EOI is not an offer by BHEL to the prospective Applicant(s) or any other person. This EOI is neither intended nor shall it be construed as creating or requiring any on-going or continuing relationship or commitment with any party or person.

Though adequate care has been taken in the preparation of this EOI document, the interested firms shall satisfy itself that the document is complete in all respects. The information is not intended to be exhaustive. Interested Agencies are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the EOI document is complete in all respects and firms submitting their interest are satisfied with the EOI Document in all respects.

BHEL also reserves the right to withhold or withdraw the process at any stage. Neither BHEL nor its employees and associates will have any liability any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document or any matter deemed to form part of this EOI document, the information and any other information supplied by or on behalf of BHEL. BHEL accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance/use of any statements/information contained in this EOI by the Applicant. BHEL is not making any representation or warranty, express or implied, as to the accuracy or completeness of any information/statements made in this EOI.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BHEL or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and BHEL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI.





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Invitation for Expression of Interest (EOI) for Supply, Operation and Maintenance of Perimeter Intrusion Detection System (PIDS) on lease basis for 5 years for BHEL, Bhopal.

### 1. Introduction

This Expression of Interest (EOI) seeks response from vendor/ suppliers of PIDS system who are meeting the requirements of this EOI and are willing to participate in tender for Supply, Operation and Maintenance of Perimeter Intrusion Detection System (PIDS) on lease basis for 5 years for BHEL, Bhopal.

### 2. About BHEL

BHEL is a leading state owned company, wherein Government of India is holding 63.17% of its equity. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing organization in India, catering to the core infrastructure sectors of Indian economy viz. energy, transportation, heavy engineering industry, defense, renewable and non-conventional energy.

The energy sector covers generation transmission and distribution equipment for thermal, gas, hydro, nuclear and solar photo voltaic. BHEL has been in this business for more than 50 years and BHEL supplied equipment's account for more than 59% (approx. 190 GW) of the total thermal generating capacity in India. BHEL is also listed in both major Indian stock exchanges.

BHEL has 16 manufacturing units, 4 power sector regions, 8 service centers, 3 overseas offices and 15 regional offices besides host of project sites spread all over India and abroad. The annual turnover of BHEL for the year 2018-19 was around USD 4.12 billion.

BHEL's highly skilled and committed manpower of approx. 35000; state-of-the-art manufacturing facilities and latest technologies helped BHEL to deliver a consistent track record of performance since long. To position leading state owned companies as Global Industrial giant and as a recognition for their exemplary performance, Government of India categorized BHEL as "Maharatna Company" in 2013.

Our ongoing major technology tie-ups include agreements with GE Technology GmbH, Switzerland (for Once through Boilers and Coal Pulverisers); Siemens, Germany (for Steam Turbines, Generators and Condensers); Metso Automation Inc., Finland (for Control & Instrumentation); MHI, Japan (for Pumps); MHPS, Japan (for Flue Gas Desulfurization Systems); Vogt Power International, USA (for HRSG); OTO Melara, Italy (for SRGM); GENP, Italy (for Compressors); TLT Turbo GmbH, Germany (for Fans), Sheffield Forge Masters International, UK (for Forgings); ISRO, India (for space grade li Ion cells); BPE, USA (for SCR System), NANAO, Korea (for SCR Catalyst); HLB Power Co. Ltd., Korea (for Gates and Dampers) and Kawasaki Heavy Industries Ltd., Japan (for Stainless Steel Metro Coaches & Bogies).

More details about the entire range of BHEL's products and operations can be had by visiting our web site www.bhel.com.

### 3. About BHEL, Bhopal

Bhopal unit of BHEL is the largest among all the units of BHEL. It is the manufacturer of Thermal and hydro turbines, large size power transformers for EHV/ UHV, Switch Gears, traction motor for locomotives, various categories of medium and large Industrial motors etc.

### 4. EOI Proposal

- BHEL, Bhopal has a total approx. 7 Km. length of perimeter wall alongwith 07 (seven) numbers of entry gates and it is desired to install CCTV camera based Perimeter Intrusion Detection System for the Perimeter.
- The system will be based on fiber optic communication.
- There will be also ANPR camera at entry gates for detecting and storing the vehicle registration numbers in day and also in low lighting condition in night. The ANPR camera must be capable of reading various types of fonts of numbers eliminating the unnecessary logos & writings.
- System should be able to detect and recognize the English alpha numeric License plates of two wheelers or four wheelers. System should Perform OCR [Optical Character Recognition] for the standard license number plate (only English alpha numeric plates) of vehicles entering or leaving from the designated locations.
- The recording of the CCTV cameras need to be stored in the hard disc of NVR of the system for at least 90 days.
- The intrusion detection system must be smart enough with artificial intelligence (AI) to capture any man with suspicious movement excluding animals like dog, cat etc in the desired area of both the sides of the perimeter wall. It must provide alarm if it founds any intrusion. The software alarm recording shall support pre-and post-alarm periods. Both can be configured in duration.
- There must be VMS Video Management and Control Software to view live as well as recording in various speeds. It must play simultaneously 1, 4, 6, 8, 9, 16, 25, 36 or 64 numbers of cameras in live view and recording mode. The operator shall be able to control the playback with play, pause, forward, and speed buttons.
- The GUI software shall allow operators to view an instant replay of any Camera.
- The system shall allow the recording, live monitoring, playback of archived video and data simultaneously.
- It shall be possible to search for recordings in the VMS software by camera, date and time. If a data and time is specified, playback shall commence from that date and time. It shall be possible to playback more than one camera simultaneously.
- Multiple users shall be able to view the same camera sequence simultaneously, not necessarily synchronized one with the other.
- The VMS must be able to control of movable PTZ cameras.
- Fault Tolerant Recording: The software shall support network fault-tolerant recording such that if the network connection between a video management server and video recording server becomes unavailable, for example through cable breakage, network congestion or WLAN

interruption, the system operation shall automatically recover when the connection is restored. The NVR should be able to synchronize video from cameras on restoration of Network after failure.

- When any failover or network interference happens, the recording should start on the SD Card in the IP Cameras, however when network recovers, the data on SD Card should be automatically transferred to NVR without any impact on operation of NVR.
- The software shall be able to display video of cameras on 55 inch Large Format Display Monitors and Workstation Monitors.
- AI Deep Learning Function The camera should support Motion Detection, Alarm in Audio Detection, Tampering, Trip Zone, Line Crossing, Loitering & Object Detection. The analytics should be based on Deep Learning and should identify between Humans, Vehicles & Cycles. The system should raise alarm only on basis of chosen category. It should allow search based on (a). Human, Vehicle or Cycle (b). Intrusion Detection (c). Loitering detection (d) Colour search (e). Count search (f). Combination search person, colour & Vehicle colour.
- The system should be rugged & be able to work under all weather conditions.
- The vendor has to provide/ depute service engineers at BHEL, Bhopal 24 X 7 basis for maintenance and uninterrupted smooth performance of the system.

### 5. Pre- Qualification Requirements

Suppliers/ vendors and OEM desirous of submitting their response against this EOI should meet the following criteria(s):

### **Bidder Pre-Qualification Criteria**

S.No	To Pre-Qualify Bidder should satisfy the eligibility criteria	Documentary Proof Required
1	The Bidder should be a registered entity in India under the relevant Acts at least for the last 5 Financial years. Any kind of JV/consortium not allowed	Copy of the relevant registration certificate shall be uploaded
2	The applicant should have valid GST registration on its name	GST registration certificate to be attached
3	The applicant should have valid PAN on its name	PAN copy to be attached
4	Bidder/OEM should have experience in the field of Gate security and perimeter security (Supply & Installation) and must have completed at least 3 projects in last 5 years with the cumulative worth of Rs. 2 Crore.	Purchase Order Copy and / or Completion Certificate to be submitted
5	The Bidder should have been ISO 9001:2015/ ISO14001:2015 (or latest) valid as on last date of Submission of bid.	Copy of the valid ISO Certificate to be submitted

S.No	To Pre-Qualify Bidder should satisfy the eligibility criteria	Documentary Proof Required
6	The bidder shall not be blacklisted by any Government agencies/Departments/PSU at the time of bidding.	A self-declaration by the Bidder as per format Specified shall be uploaded

# **OEM Pre-Qualification Criteria**

S.No.	To Pre-Qualify all the OEM should satisfy the eligibility criteria	Documentary Proof Required
1	All the system components must be in compliance with CE,FCC & BIS/UL certifications	Product Certifications to be attached
2	It shall conform to ONVIF (S) standard. The quoted camera OEM should also be listed in the ONVIF website. ONVIF compliant certificate indicating the make of the camera offered shall be submitted	Necessary supporting document to be submitted
3	The MAC address of the IP camera must be registered in the name of OEM supplying the cameras	Letter from OEM manufacturing is required during technical evaluation or POC. The verification can be done through IEEE MAC verification website.
4	All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system and components shall have been thoroughly tested. Manufacturers claiming MAKE IN INDIA as per DIPP policy need to submit an affidavit that the models quoted are being manufactured in India with the details of their manufacturing setup. The purchaser may verify the same by visiting the manufacturing facility to verify that the quoted models are being manufactured in the said factory.	Letter of Undertaking from OEM
5	In case the OEM is not participating directly, bidder should be an authorized reseller or channel partner of the OEM. An authorization letter from the OEM with respect to this tender/project need to be submitted in original. This certificate shall be issued through the global headquarters and attested by the Indian office in case OEM is of international repute	MAF(Manufacturer Authorization format) as per the format
6	CCTV OEM should be a manufacturer in India/global with at least 5 Years (with respect to last date of submission of bid) of manufacturing experience	Certificate of Registration and

S.No.	To Pre-Qualify all the OEM should satisfy the eligibility criteria	Documentary Proof Required
	(Government proof to be enclosed). Registration certificate wherein the nature of business is indicated	Incorporation
7	CCTV OEM should have an ISO9001:2008 and ISO14001:2004 for its manufacturing process	Valid ISO Certificate to be attached
8	The work of VSS is very sensitive in nature and being in the interest of national security, for ensuring protection against hacking and other types of threats and vulnerabilities for vital equipment like IP cameras, Edge devices, Servers, Storages, Datacom equipment etc. the bidders while selecting OEMs of equipment and hardware (proposed to be supplied against this tender) are NOT to quote those products and/or OEMs or any company sourcing from these OEMs which are suspected to have clandestinely embedded spyware/malicious code either in embedded form or in application software to hack or intercept data including video footages and intrude into the VSS. In this context the bidders are requested to refer advisories of bodies like CERT-IN and also reports published in various international media, technical journals, trusted websites etc.	Declaration Certificates
9	Any OEM who is known to get the products manufactured from any company that is Blacklisted by any Government Department in India or any Government Globally as per GFR2017 is liable to be disqualified irrespective of the models offered.	Declaration from OEM
10	The Camera OEM should have an minimum Turnover of 750Cr globally in the last three financial years	Certificate
11	Any OEM claiming Make in India has to submit the IPR  – (Intellectual Property Right) for the camera/technology & firmware that are manufactured in India	Certificate
12	The Camera to be provided by the bidder should not be complying to GB28181, GB/T28181-2011 standards and there should be no option to activate or deactivate GB/T 28181standards in the camera web page/Settings. The Purchaser reserves the right to get it verified from CERT-In approved labs at the cost of the Bidder.	Certificate

# 6. Financial Criteria:

Net Worth for last 3 financial years should be positive and should be more than 25 crores.

## 7. The EOI Proposal

Interested companies who wish to participate for PIDS project in BHEL, Bhopal must submit their Expression of Interest by 03.00 pm on 3<sup>rd</sup> February, 2020. Expression of Interest should be accompanied by details as listed out in Annexure-1 attached with this EOI document.

#### 8. Miscellaneous

i. Subsequent to enlistment of the parties through this process, BHEL shall invite the price offer from the enlisted parties for various project tenders on limited tender basis. Followed by an in- camera price bid opening. A tender specific tie-up/agreement shall be made with the qualified party (meeting the tender-specific requirements from end customer/utility) who becomes the lowest evaluated bidder.

The order for the respective scope shall be awarded to the party in case BHEL secures the order under competitive bidding.

- ii: The PIDS OEM thus finalized by BHEL for specific tender has to meet the pre-Qualification criteria (Financial & Technical both) of the end customer specifically mentioned for the PIDS scope in that particular tender including meeting / agreeing to any other mandatory terms and conditions which are also applicable as vendor or subcontractor to the end-customer.
- iii. Right to accept or reject any or all Applications:
  - a. Notwithstanding anything contained in this EOI, BHEL reserves the right to accept or reject any response and to annul the EOI Process and reject all Applications, at any time without any liability or any obligation for such acceptance, rejection or annulment and without assigning any reasons thereof. In the event that BHEL rejects or annuls all the response(s), it may, at its discretion, invite all eligible Prospective vendors to submit fresh Applications.
  - b. BHEL reserves the right to disqualify any respondent during or after completion of EOI process, if it is found there was a material misrepresentation by any such respondent or the respondent fails to provide, within the specified time, supplemental information sought by BHEL.
  - c. BHEL reserves the right to verify all statements, information and documents submitted by the respondent in response to the EOI. Any such verification or lack of such verification by BHEL shall not relieve the respondent of his obligations or liabilities hereunder nor will it affect any rights of BHEL.

### iv. Governing Laws & Jurisdiction:

- a. The EOI process shall be governed by and construed in accordance with, the laws of India and the Courts at Bhopal (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the EOI process.
- b. Response from the Countries, Organizations, Groups, Individuals etc. with whom

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Import/Export are banned/prohibited as per the Indian Foreign Trade policy shall not be considered.

c. The evaluation of the respondent among others shall be based on the technical experience, capacity/ capabilities/ physical verification of works & facilities and the financial performance of the company.

### 9. Contact Details:

The proposal complete in all respect should be marked to:

Directly Marked to:(Hard + Soft) Copy Marked to (Soft)

Paritosh Kumar Dalei Binoy Kumar

Dy. Manager (HRM) Additional General Manager (HRM)

Tel: +91-0755-2503148 Tel: +91-0755-2503442 Mob: 9406903686 Mob: 9425604497

e-mail: paritosh1@bhel.in e-mail: binoykumar@bhel.in

Please send a hardcopy of the EOI document to the following

Office Address: TIME OFFICE,

HRM, PRERNA BHAWAN Bharat Heavy Electricals Limited PIPLANI, BHOPAL, M. P. - 462022

Upon receipt of responses against this EOI, BHEL will review the responses to ascertain suitability of the offer and shortlist Prospective vendors for further discussions. Detailed discussion on technical, commercial and other terms and conditions to finalise the NIT shall be held with shortlisted prospective vendors. The detailed terms and conditions shall be mutually agreed upon subsequently.

Annexure-l

### Details to be furnished along with EOI proposal

- a. The proposal for EOI.
- b. Details documents on company profile, Certificate of Registration or Incorporation (Form- 1).
- c. Products and Services offered Technical features Product range
- d. Performance certificates (Form-2)
- e. Audited balance Sheet of last financial year.

## Form- 1 General Information

	1 2	Name of the Company: Place of Incorporation/ Registration:	
	3		
		Year of Incorporation/Establishment	
	4	Address of the company (Head Office, Registered Office, Business Office)	
		Address:	
		Telephone:	
		Fax:	
		E-mail:	
		Web site:	
	5	Address of factory	
		Works Address:	
		Telephone:	
		Fax:	
		E-mail:	
	6	Details of marketing agent (For Foreign manufacturer): Address:	
		Telephone	
		: Fax:	
		E-mail:	
	7	Authorized representative of the company having the Power of Attorney	
		(POA).: Name(s):	
		Designatio	
		n: Address:	
		Telephone:	
		Fax:	
		E-mail:	
	Plea	se attach the POA of authorized representative duly notarized as enclosure to FORM-I	
Date:		Signature of the Authorized representative)	
Daic.		Signature of the Authorized Tepresentative)	

Name-

(Designation) - (Company Seal)

Place:

BHEL, Bhopal

### Form-2

Data/Details of Manufacturer in support of Technical QR Submit separate form 2 for each of the cases/experience

Name of the Bidder (Single Firm)

- 1 Name of Contract
- 2 Contract Reference No. & Date of Award
- Name and Address of the Employer/ Utility by whom the Contract was awarded e-mail ID

Telephone No.

Fax No.

- 4 Name of project:
  - a) Date of successful execution of the Contract (enclose completion certificate/taking over certificate)
  - b) No. of years the above referred project is in satisfactory operation as on the date of bid opening "Satisfactory Operation" means Certificate issued by the Employer certifying the operation without any adverse remark.
- 6 Scope of work executed under the above contract.
- Details/ documentary evidence submitted in support of stated experience/ contract. Need to submit Performance Certificate issued by the customer.

Date:	(Signature of the Authorized representative)
Place:	Name-
	(Designation) -
	(Company Seal)