

Malaviya National Institute of Technology Jaipur

Jawahar Lal Nehru Marg, JAIPUR-302017 (Rajasthan)

**Ministry of Education
(Government of India)**



Open Tender Enquiry For

Procurement of Integrated System for Dynamic Characterization of Prototype Dams through Field Testing

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

No. F5(6403)ST/MNIT/NCDMM/2023

Phone : 0141-2713312,2713352

Notice Inviting Quotation (E-Procurement Mode)

Registrar, Sponsored Research MNIT, JLN Marg, Jaipur invites tenders for the supply of “**Integrated System for Dynamic Characterization of Prototype Dams through Field Testing/Qty.01**” for **National Centre for Disaster Mitigation and Management (NCDMM) Deptt.** of this Institute.

1. Vendors are requested to submit their online bid for mentioned item as per detailed technical specification given and Price Bid as per BOQ on CPP Portal. The Important information related to tender are as follows:

Schedule	
Event	Date & Time
Date of Issue/Publishing	06-11-2023 (17:00 Hrs)
Document Download/Sale Start Date	06-11-2023 (17:00 Hrs)
Last Date and Time for receipt of queries	15-11-2023 (14:00 Hrs)
Document Download/Sale End Date	28-11-2023 (14:00 Hrs)
Last Date and Time for Uploading of Bids	28-11-2023 (14:00 Hrs)
Date & Time of Opening of Technical Bids	29-11-2023 (14:00 His)
Date of Opening of Financial Bids	will be informed later
Earnest Money	Rs. 7,50,000.00.00 in the form mentioned in bid document
Performance Bank Guarantee	10% of the contract value valid till warranty period plus 60 days.
Warranty	The supplier shall provide One years warranty and onsite support for Two year from the date of installation / successful acceptance at MNIT Jaipur
Delivery	20 weeks
No. of Covers	02
Bid Validity days	90 days
Email Address (for Technical Clarifications)	storepurchase@mnit.ac.in

2 Instructions to Bidders

Instructions for Online Bid Submission

Department of Expenditure has issued the directive to publish the tender document on the Central Public Procurement Portal (URL:<http://eprocure.gov.in/eprocure/app>). The bidders are required to submit soft copies of their bids electronically on the CPP Portal using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. For more information, bidders may visit the CPP Portal <http://eprocure.gov.in/eprocure/app>. Tender document can also be downloaded from MNIT Jaipur Website (www.storepurchase@mnit.ac.in)

2.1 Registration Process

- a) Bidders to enroll on the e-Procurement module of the portal <http://eprocure.gov.in/eprocure/app> by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- b) The bidders to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- c) Bidders to register upon enrolment their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India with their profile.
- d) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. Foreign bidders are advised to refer "DSC details for Foreign Bidders" for Digital Signature requirements on the portal.
- e) Bidder then logs in to the site through the secured login by entering their user ID / password and the password of the DSC / eToken.

2.2 Tender Documents Search

- a) Various built in options are available in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters include Tender ID, organization, location, date, value, etc.
- b) There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- c) Once the bidders have selected the tenders they are interested in; they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- d) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

2.3 Bid Preparation

- a) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- b) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
- c) Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- d) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document /Schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.

- e) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process

2.4 Bid Submission

- a) Bidder to log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- b) The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- c) Bidder to select the payment option as “on-line” to pay the tender fee/ EMD wherever applicable and enter details of the instrument.
- d) A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the pre- scribed format and no other format is acceptable.
- e) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- f) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
- g) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- h) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- i) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

2.5 Assistance to Bidders

- a) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- b) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 2337315.

2.6 General Instructions to the Bidders

1. The tenders will be received online through portal <https://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
2. Possession of Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card Token in the company’s name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link ‘Information about DSC’. Bidders are advised to follow the instructions provided in the ‘Instructions to the Bidders for the e- Submission of the bids online through the Central Public Procurement Portal for e-Procurement at <https://eprocure.gov.in/eprocure>

3. Online Bid Submission

The bids (complete in all respect) must be uploaded online in **two** Envelops as explained below.

Cover – 1 (Following documents to be provided)					
Ser.	Technical Bid	Content	Supporting Page Number of bid	File Types	
1.			Index / Table of Content		.PDF
2.			UTR No. of payment of EMD. In case of exemption from submission of Bid security, proof of registration with NSIC/MSME.		
3.			Copy of GST Certificate and PAN.		.PDF
4.			Compliance Sheet (Annexure-I)		
5.			Non Blacklisting of Supplier and Price reasonability declaration as per Annexure-II		.PDF
6.			Required past Experience as per Annexure- III (kindly refer clause No. 5.6.E)		.PDF
7.			Manufacturer’s Authorization Letter as per Annexure-IV		.PDF
8.			Minimum average annual turnover of the bidder (kindly refer clause No. 5.6.F)		.PDF
9.			Minimum average annual turnover of the OEM (kindly refer clause No. 5.6.G)		.PDF
10.			After Sale Service Certificate (Annexure V) (kindly refer clause No. 5.29)		.PDF
11.			Certificate - Bidder Not from/ from Country sharing Land border with India & Registration of Bidder with Competent Authority (Annexure-VIII)		.PDF
12.			Declaration of Local Content (Annexure-IX)		.PDF
13.			Buyer Organization specific Integrity Pact (Annexure-X)		
Cover - 2					
Ser.	Types	Content	File Type		
1.	Financial Bid	Price bid as per BOQ format only. (Note: -Comparison of prices will be done ONLY on the bids submitted for the Main Equipment and anything asked as ‘Optional’ in the specifications is not to be included for overall comparison)	.XLS		

FINANCIAL BID (PRICE-BID): Bidder has to quote separately for all the fields as mentioned in Price Schedule. Adding 0 'Zero' shall be treated as unresponsive. Online submission of the bids will not be permitted on the portal after the expiry of submission time and the bidder shall not be permitted to submit the same by any other mode. **The bid will be evaluated ‘total value wise’ hence it is mandatory for the bidder to quote price for all the items and supply the same to the Institute. If any bidder quote ‘0’ Zero price for any article, his bid will be treated non-responsive and will be rejected.**

MAVLAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

4. Invitation for Tender Offers for Procurement of Integrated System for Dynamic Characterization of Prototype Dams through Field Testing

Malaviya National Institute of Technology Jaipur invites online Bids (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for Procurement, of “**Integrated System for Dynamic Characterization of Prototype Dams through Field Testing/Qty.01**” for **National Centre for Disaster Mitigation and Management (NCDMM) Deptt.** (warranty period as stated at “Schedule”) on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document, which is available on CPP Portal <http://eprocure.gov.in/eprocure/app>

4.1. TECHNICAL SPECIFICATION:

Name of item- “Integrated System for Dynamic Characterization of Prototype Dams through Field Testing
Quantity: 1 No.

Technical specifications required

Integrated System for Dynamic Characterization of Prototype Dams through Field Testing

1. Scope

The scope is to supply an Integrated System for In-Situ Dynamic Characterization of Prototype Dams in India. The broad application of the System is to capture Dynamic Characteristics of the large size dams on actual sites under, Ambient, Impulse and Sinusoidal excitations, the Characteristics shall include- Resonating Natural Frequencies (first few modes), Mode Shapes and Damping ratios. The functioning of the System shall have to be demonstrated through on site testing on at least one dam site, for which the engineers and professionals of the Supplier must be deployed at the site at the time of testing. For subsequent uses of the system online support shall have to be provided during the period of warranty.

The system shall include- (i) High sensitivity piezoelectric accelerometers with Connecting Cable, with Mounting blocks for sensor fixing at the Dam site; (ii) Vibration data acquisition system with amplifiers and filtering; (iii) Eccentric mass vibrator & controller; (iv) Application Software for Controller & Data analysis; (v) Air gun and hoses and control box and cable for Impulse Excitation. And any other item/accessories/Fixtures etc. for system integration. The technical specifications of individual items are detailed below.

The complete system, called, *Integrated System for In-Situ Dynamic Characterization of Prototype Dams*, should be able to capture the first few Resonating Modes (i.e., Frequency, Mode Shapes, and Damping) of the prototype dams at site in *full reservoir* and *empty reservoir* conditions. The typical mass of the real size dam can be 2-4 Million Tones. The entire testing protocol should be completed under Ambient, Impulse and Sinusoidal excitation condition, for which sensors with suitable sensitivity, figures and connecting cable be provided. Each of the components shall have to be provided with the Technical Data Sheet, and manufacturing drawing as applicable. The details of the Technical Specifications of the major subsystems/components are given below.

2. High sensitivity Piezoelectric Accelerometers with Amplifier

Piezoelectric Accelerometers (8 Nos.)	
Performance	Value
Sensitivity	10 V/g
Measurement Range	±0.5 g pk
Frequency Range (±5%)	0.1 to 200 Hz
Resonant Frequency	≥700 Hz
Broadband Resolution	0.000001 g rms
Non-Linearity	≤1 %
Transverse Sensitivity	≤5 %
Overload Limit (Shock)	±40 g pk
Base Strain Sensitivity	≤0.0005 g/με
Temperature Range	-15 to +150 °F
Electrical	
Excitation Voltage	24 to 28 VDC
Constant Current Excitation	2 to 10 mA
Output Impedance	≤500 Ohm
Output Bias Voltage	8 to 14 VDC
Discharge Time Constant	≥5 sec
Settling Time	60 sec
Spectral Noise (1 Hz) (Typical)	0.06 μg/√Hz
Spectral Noise (10 Hz) (Typical)	0.01 μg/√Hz
TEDS 1.0 version available (TLD)	–
Physical	
Sensing Element	Ceramic
Sensing Geometry	Flexural
Housing Material	Stainless Steel
Size - Diameter / Hex	2.25 in
Size - Height	2.80 in
Weight	635 gm (22.4 oz)
Electrical Connector	2-Pin MIL-C-5015
Mounting Thread	1/4-28 Female

ICP Power Supplies/amplifier (2 No. 8 Channel Each)	
Performance	Description
Input Sensor Type	ICP Voltage
Gain	x1, x10, x100 [1]
Charge Conversion (selectable)	0.1, 1, 10 mV/pC
Frequency Range (±5%) (gain <100)	0.05 Hz to 17 kHz
Frequency Range (±5%) (gain ≥100)	0.05 Hz to 17 kHz
Coupling (AC or DC)	AC/DC
Input Filter [3]	Optional
Output Filter [3]	Optional
TEDS Sensor Support	Yes
Electrical	
AC Power (47 to 63 Hz)	
AC Power	≤0.9 amps

Excitation Voltage (To Bridge/Diff. Sensors)	-12 V to +12 V [5][6]
Excitation Voltage (To ICP® Sensors)	+24 VDC
Constant Current Excitation (To ICP® Sensors)	
DC Offset	<50 mV
Broadband Electrical Noise (1 to 10000 Hz) (x1 gain)	5.6 µV rms
Oscillator (±2%) (Internal Generator -ICP®/ Voltage mode)	0.1 V pk 100/1000 Hz
Oscillator (±2%) (Internal Generator - Charge mode)	100 pC pk 100/1000 Hz
Physical	
Front Panel Display/Keypad	Yes
Digital Control Interface	Ethernet
Electrical Connector (Inputs)	8-socket mini DIN BNC jack,
Electrical Connector (Outputs)	
Electrical Connector (AC Power Input)	
Size (Height x Width x Depth) (Nominal)	8.0 x 20 x 15 cm (approximate)
Weight	2.5-3.00 kg
Accessories	
Power Cord & Power Adapter	Yes
Control Software	Yes
Notes [1] Jumper selectable on internal circuit board. [2] Charge input low frequency response is 0.5 Hz (+/-20%). [3] Contact factory for available filter options. [4] Units are supplied with applicable AC to DC converter for operation from 100 to 240 VAC (50 to 60 Hz). [5] User adjustable, factory set at 4 mA. [6] Adjustable in 0.1V steps. [7] Negative excitation can be set to 0V or to track the positive excitation voltage. [8] 0 Hz low frequency response when DC coupled. [9] Dual input filters: 1x ICP, Voltage & 1x Bridge/Differential. [10] 120 m of cables per accelerometer [11] These power supplies are to be provided with operator switch selectable accelerometer gains of x1, x10 and x100. [12] To be provided with 16 antialiasing filters with fixed 5 pole, low-pass filters with cutoff set at 35 Hz.	

3. Vibration Test Controller with Data Acquisition and Analysis

- (i) PC based hardware and software system that drives eccentric mass vibrators (EMV's) while analyzing feedback signals for amplitude and phase shift.
- (ii) Output of analogue signals to drive one or multiple VFD motors/vibrators.
- (iii) Sixteen standard (expandable to 128) freely assignable analogue input channels to read a wide variety of sensors.
- (iv) Real time monitoring and display of force, eccentricity, and frequency.
- (v) Real time data display of in phase component, out of phase component, amplitude modulus, and phase.
- (vi) Real time data analysis tools such as correlation verification allowing to see confidence levels of recorded data sets.
- (vii) Options for conversion from acceleration to velocity and displacement and normalization to force.
- (viii) Data set review feature without the need of running the EMV.
- (ix) Export data to MS Excel and as ASCII files to allow easy import into other programs.

- (x) Ability to compute and display Fourier transform of transient data to allow identification of modal properties.
- (xi) Ability to control an eccentric mass vibrator in a step sine sweep and acquire accelerometer data.
- (xii) Ability to compute and display frequency response plots to allow determination of modal properties.

4. Omnidirectional Eccentric Mass Shaker

The eccentric mass vibrator is required for sinusoidal excitation of the dam to higher levels than possible with ambient vibration. The eccentric mass vibrator shall use one or more rotating eccentric arms to impart a horizontal force into the dam crest. The vibrator shall be anchored to the crest of the dam with eight concrete chemical anchors. The vibrator shall be driven by a precise, variable speed electric motor and drive. The eccentricity of the vibrator can be adjusted to allow operations at low and high frequency. The specific parameters of the eccentric mass shaker are as under.

- (i) Force Capacity: 200 kN
- (ii) Minimum eccentricity: 500 kg-m (variable mass in the bucket)
- (iii) Precision variable speed drive: 1-15 Hz
- (iv) Omnidirectional eccentric mass vibrator with 10 HP three phase motor.
- (v) Vibrator controller and data acquisition system.
- (vi) 10 HP (horsepower) variable frequency drive and pulley pylon.
- (vii) Timing belts and pulleys, and all other fixtures and cables and connectors as per the requirement to conduct the test at dam site.

5. Compressed Air gun, Hoses, Control Box and Cables

The Compress Air Gun with Hoses (10-meter length), Control Box and Cables shall be required for Impulse excitation in the reservoir for Modal extraction of the dam. Air gun will generate impulse load through the release of compressed air, by way of electronic circuit-controlled valve opening in few milliseconds. This creates a suddenly expanding air bubble under the water that sends an acoustic wave in all directions through the water, including the direction of the dam. Some of the design parameters are as under.

- (i) Compressed air pressures up to 20 MPa
- (ii) Air chamber: 500 cc
- (iii) Compressed air cylinder and control unit

6. Typical Dam Properties to be Tested

The typical properties of the dam which are to be tested are provided as under.

Parameters	Dam-1	Dam-2
Density (kg/m ³)	2650	2500
Young's Modulus (MPa)	31027	31027
Poisson's Ratio	0.20	0.20
Total Length (m)	800	320
Length of the tallest Monolith (m)	15	15
Height of the Tallest Monolith (m)	103	63
Top Width of the Tallest Monolith (m)	14	
Monolith mass (ton)	145107	65058
Frequency (Hz) 1 st Mode	3.1	7.6
Frequency (Hz) 2 nd mode	8.3	15.8
Frequency (Hz) 3 rd mode (vertical)	11.1	19.5

Frequency (Hz) 4 th mode	16.1	27.5
Mass Participation (%) 1 st mode	31.86	39.8
Mass Participation (%) 2 nd mode	25.89	32.7
Mass Participation (%) 3 rd mode (vertical)	8.33	1.4
Mass Participation (%) 4 th mode	12.24	15

#Mass Participation (%) Based on 2D plane stress Finite Element Analysis

7. Other Conditions

- (i) **User defined Software flexibility:** the application software shall have User defined flexibility, the same should be demonstrated.
- (ii) **Indigenous component Preference:** The system should be manufactured in India and **at least 20 percent** of the content must be Indian make.
- (iii) **Pre-Dispatch Inspection:** Before delivery, the items shall be thoroughly inspected at the supplier's works by the Institute through an authorized representative. The item shall be accepted for delivery only after the Institute authorized representative finds it satisfactory at the pre-dispatch inspection (PDI).
- (iv) **Demonstration:** The supplier shall demonstrate the functionality and compliance of the DAQ system. The supplier shall also demonstrate the functionality of an integrated system i.e., sensors, DAQ system and software as a system, all connected together and interfaced with a PC/ Laptop computer.

5. GENERAL TERMS & CONDITIONS

5.1 Due date: The tender has to be submitted online on or before the due date. The offers received after the due date and time will not be considered.

5.2 EMD (if applicable): Bidders can submit the EMD for an amount which is stated at the "Schedule" of the tender document with Account Payee Demand Draft/Banker's Cheque in favour of 'MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY' payable at JAIPUR. Bidder has to upload scanned copy / proof of the DD/ banker cheque along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

Bidders can also submit the EMD with Payment online through RTGS / internet banking in Beneficiary name:

MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY

Account No. 676805000011

IFSC Code ICIC0006768

Bank Name ICICI BANK LTD

Branch address MNIT BRANCH.

Bidder to indicate bid number and name of bidding entity in the transaction details field at the time of on line transfer. Bidder has to upload scanned copy / proof of the Online Payment Transfer along with bid.

The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. Refer to Schedule (at page 2 of this document) for its actual place of submission. **NSIC / MSE (Micro and small enterprises) registered bidders must submit copy of valid NSIC / MSE Registration Certificate for exemption of EMD.**

5.3 Refund of EMD: The EMD will be returned to unsuccessful tenderers **only after the tenders are finalized.** In case of successful Tenderer, it will be refunded to bidder after award of contract and submission of Performance Bank Guarantee by the vendor.

5.4 Opening of the tender: The online bid will be opened by a committee duly constituted for this purpose. The financial offer/bid will be opened only for the offer/bid which technically meets all requirements as per the specification, and will be opened subsequently for further evaluation. In case, the day of bid opening is declared a holiday by the government, the Bids will be opened on the next working day at the same time

5.5 Acceptance/ Rejection of bids: The Institute reserves the right to reject any bid not fulfilling the eligibility criteria. Submission of incomplete bid/ incomplete bid format would lead to rejection of bids. All documents required to be submitted should be the part of the bid. If any document is not submitted, the bid will be treated as incomplete and this would lead to rejection. No communication in this regard will be entertained.

5.6 Pre-Qualification Criteria:

a) **Tenderer should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) specific to the tender should be enclosed (Annexure IV)**

b) **Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between tenderer specification and supporting documents etc. may lead to rejection of the bid.**

c) **In the tender, either an Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.**

d) **If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.**

- e) The Bidder must have successfully executed / completed at least one single order of Rs. 1,05,00,000.00 or 2 orders each of Rs. 60,00,000.00 or 3 orders each of Rs. 45,00,000.00 for similar products in last three years to any IIT/NIT/CFTIs/ any other Govt. organization/**Public listed company**, Reputed private organization. Copies of contracts / purchase orders and documentary evidence of successful execution / completion in support of Past Experience of Similar product along with names, address and contact details of clients shall be submitted in the format (**Annexure III**) with the bid for verification by the Buyer.
- f) The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March 2023 should be Rs. 1,50,00,000.00. **Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be submitted with the bid.** In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for these criteria.
- g) Turnover OEM Turnover Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be Rs. 12,00,00,000.00. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria. In case of bunch bids, the OEM of CATEGORY RELATED to primary product having highest bid value should meet this criterion.
- h) **Only "Class-I and Class-II local supplier will be eligible to bid. It is mandatory for bidders to quote items having local content more than 20%. Refer revised Public Procurement (Preference to Make in India), Order 2017 P-45021/2/2017-B.E-II dated 04.06.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. (Submit duly filled Annexure X for the same)**

5.7 Performance Security: The supplier shall require to submit the performance security for an amount which is stated at the "Schedule" of the tender document within 15 days from the date of receipt of the purchase order and should be kept valid for a period of 60 days beyond the date of completion of warranty period. Performance security may be in the form of irrevocable bank guarantee issued by any commercial bank or Demand Draft/ Banker's Cheque in favour of 'MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY' payable at JAIPUR or through NEFT/RTGS in Beneficiary name:

MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY

Account No. 676805000011

IFSC Code ICIC0006768

Bank Name ICICI BANK LTD

Branch address MNIT BRANCH

5.8 Force Majeure: The Supplier shall not be liable for feature of its performance security, liquidated damages or ~~penalty~~ for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

5.9 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

- 5.10** If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 5.11 Risk Purchase Clause:** In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.
- 5.12 Liquidated Damages (L.D):** If a supplier fails to execute the order in time as per the terms and conditions stipulated therein, it will be open to the purchaser to recover liquidated damages for delay in delivery and installation from the supplier at the rate 0.5% of the value of the order per week subject to a maximum of 10% of the total order value.
- 5.13 Prices:** The price should be quoted in BoQ format only. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However, the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since MNIT Jaipur is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.
- 5.14 Progress of Supply:** Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:
- 5.14.1** Quantity offered for inspection and date;
 - 5.14.2** Quantity accepted/rejected by inspecting agency and date;
 - 5.14.3** Quantity dispatched/delivered to consignees and date;
 - 5.14.4** Quantity where incidental services have been satisfactorily completed with date;
 - 5.14.5** Quantity where rectification/repair/replace effected/completed on receipt of any communication from consignee/Purchaser with date;
 - 5.14.6** Date of completion of entire Contract including incidental services, if any; and
 - 5.14.7** Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).
- 5.15 Resolution of Disputes:** The dispute resolution mechanism would be as follows:
- 5.15.1** In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, MNIT Jaipur and if he is unable or unwilling to act, the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
 - 5.15.2** In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (i) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
 - 5.15.3** The venue of the arbitration shall be the place from where the order is issued.
- 5.16 Place of Jurisdiction:** The place of jurisdiction would be Jaipur (Rajasthan).

5.17 Right to Use Defective Goods

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

5.18 Transfer and Subletting: The supplier shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.

5.19 Supplier Integrity

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

5.20 Installation & Demonstration

The supplier is required to do the installation and demonstration of the equipment within two weeks of the arrival of materials at the MNIT Jaipur, site of installation, otherwise the penalty clause will be the same as per the supply of materials.

In case of any damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. MNIT Jaipur will not be liable to any type of losses in any form.

5.21 Warranty:

5.21.1 Warranty period shall be (as stated at "Schedule "of this tender) from date of installation of Goods and acceptance at MNIT Jaipur. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.

5.21.2 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall arrange to repair or replace the defective goods or parts within 3 days free of cost in MNIT Jaipur. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 03 days. If the supplier having been notified fails to remedy the defects within 03 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

(iii) The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.

5.22 Governing Language

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

5.23 Applicable Law

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.

5.24 Notices

- 5.24.1** Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address.
- 5.24.2** A notice shall be effective when delivered or on the notice's effective date, whichever is later.

5.25 Taxes and Duties

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroy, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

MNIT Jaipur is exempted from paying custom duty under notification No.51/96 (partially or full) and necessary "Custom Duty Exemption Certificate" can be issued after providing following information and Custom Duty Exemption Certificate will be issued.

MNIT Jaipur is exempted from paying Excise Duty and necessary Excise Duty Exemption Certificate will be provided for which following information are required.

- (i) Quotation with details of Basic Price, Rate, Tax & Amount on which ED is applicable.
- (ii) Supply Order Copy
- (iii) Performa-Invoice Copy.

MNIT Jaipur will issue Custom Duty Exemption Certificate (CDEC) (for import items only).

5.26 Payment:

- a) For Indigenous supplies, 80% payment shall be made by the Purchaser against delivery, 10% payment against inspection, successful installation, commissioning and acceptance and 10% payment against training of the equipment to the entire satisfaction of the Purchaser. The payment is also subject to production of unconditional performance bankguarantee as specified in bid document.
- b) GST Deduction at source as per Order/ notification of the Govt.
- c) GST No of MNIT Jaipur is **08AAAJM0351L1Z6**
- d) HSN/SAC No of the items must be clearly mentioned in the quotation along with GST No.

5.27 Manuals and Drawings:

- 5.27.1** Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
- 5.27.2** The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
- 5.27.3** Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.

5.28 After Sale Service certificate:

The bidder must mention the details of 'After Sale Services' in the format **(Annexure- V). Without After sale service certificate in the prescribed format, bid will not be considered technically responsive.**

5.29 Application Specialist: The Tenderer should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers (if required) in the nearest regional office. (Ref. to Annexure- III)

5.30 Site Preparation: The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment,

which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier may visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre- installation requirements.

5.31 Spare Parts

The Supplier may be required to provide any or all of the following materials, notifications, and Information pertaining to spare parts manufactured or distributed by the Supplier. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and In the event of termination of production of the spare parts; Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested. Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

5.32 Defective Equipment: If any of the equipment supplied by the Supplier is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 7 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, MNIT Jaipur may consider "Banning" the supplier.

5.33 Termination for Default

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

5.33.1.1 If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser ;or

5.33.1.2 If the Supplier fails to perform any other obligation(s) under the Contract.

5.33.1.3 If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

5.33.2 For the purpose of this Clause:

5.33.2.1 "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

5.33.2.2 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderer (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the Borrower of the benefits of free and open competition;"

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

5.34 Downtime: During the warranty period, not more than 1% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 1% contract value will be imposed. Downtime will be counted from the date and time of the filing of complaint within the business hours. Supplier should clearly mention about their service set up in India (preferably in Northern part of India) for prompt service support. The manufacturer and/or their Indian representative must have at least three qualified and factory

trained service engineer in India to be able to attend to service at MNIT Jaipur within 48 hours on submitting a complaint. Training certificates from the manufacturer have to be provided with the tender. During the warranty period, only factory trained and certified engineers are acceptable to attend the service.

In case the Equipment / System remains non-operational for more than 5 days then warranty period will be extended for the equivalent period for which Equipment / System remained non-operational. Warranty extension in such case shall be done without prejudice to any other Term & condition of the contract.

MNIT Jaipur would like to enter in service agreement through which MNIT Jaipur will receive re- placement of defective spares/part (if any, that are not covered under warranty) immediately so as to minimize the down time. Order, if any, required to be placed for such spares/parts will be done by MNIT Jaipur in due course of time.

5.35 Training of Personnel (if applicable): The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment if applicable. (refer Annexure VII)

5.36 Compliancy certificate: This certificate must be provided indicating conformity to the technical specifications. (Annexure-I)

5.37 Genuine Pricing: Vendor is to ensure that quoted price is not more than the price offered to any other customer in India to whom this particular item has been sold.

5.38 Comparison of Bids: Comparison of prices will be done only on the bids submitted for the main equipment and anything asked as Optional in the specifications is not to be included for overall comparison.

1. To evaluate a Price Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology will be used. The price bids shall be evaluated on the basis of final landing cost which shall be arrived as under:

- i) The price of the goods quoted Ex-works.**
- ii) GST which will be payable on the goods if the contract is awarded.**
- iii) The charges for installation, commissioning, training charges, inland transportation, insurance, packing and forwarding charges and other local services required for delivering the goods at the desired destination as specified in the price schedule form.**

5.39 Award of Contract

MNIT Jaipur shall award the contract to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the criteria mentioned above. However, MNIT Jaipur reserves the right and has sole discretion to reject the lowest evaluated bid.

In case more than one bidder happens to quote the same lowest price, MNIT Jaipur reserves the right to decide the criteria and further process for awarding the contract, decision of MNIT Jaipur shall be final for awarding the contract.

5.40 As per Ministry of Finance, Deptt. of Expenditure, Public Procurement Division Order (Public Procurement No.1) issued from file No.6/18/2019-PPD dated 23rd July, 2020 regarding Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017 A certificate shall be submitted by bidders in the tender documents regarding their compliance with the said order. If the certificate submitted by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law. Annexure VIII (For Goods/ Services contracts)/ Annexure IX (For Works contracts, including Turnkey contracts)

- 5.41 Preference to Make in India Products:** The Institute is following and abide with the revised Public Procurement (Preference to Make in India), Order 2017 P- 45021/2/2017 – B. E. –II dated 04.06.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India & subsequent amendments/instructions of Ministry. Accordingly, preference will be given to the make in India products while evaluating the bids. However, it is sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India along with respective documentary evidence in the technical bid itself.
- 5.42 Purchase preference to Micro and Small Enterprises (MSEs):** Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference for product/services, the bidder must be the manufacturer/Service provider of the offered product/service. Relevant documentary evidence in this regard shall be submitted along with the bid in respect of the offered service. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price.
- 5.43 Buyer Organization specific Integrity Pact** shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact (as mentioned in **Annexure- X**) as per Buyer organizations policy along with bid. In case of non-receipt of integrity pact in prescribed format, the bid will be summarily be rejected without any correspondence in this regard.
- 5.44 Exemption to Startups:** If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria". In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 5.45 Exemption to MSME:** If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria". In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.

COMPLIANCE SHEET

Name of the Item: Integrated System for Dynamic Characterization of Prototype Dams through Field Testing/Qty.01” Make: Model:		Comply (Yes/No)	Supporting Page No.
Integrated System for Dynamic Characterization of Prototype Dams through Field Testing - Quantity: 1 No.			
Ser.	Technical specifications required		
1.	<p>Integrated System for Dynamic Characterization of Prototype Dams through Field Testing</p> <p>1. Scope</p> <p>The scope is to supply an Integrated System for In-Situ Dynamic Characterization of Prototype Dams in India. The broad application of the System is to capture Dynamic Characteristics of the large size dams on actual sites under, Ambient, Impulse and Sinusoidal excitations, the Characteristics shall include- Resonating Natural Frequencies (first few modes), Mode Shapes and Damping ratios. The functioning of the System shall have to be demonstrated through on site testing on at least one dam site, for which the engineers and professionals of the Supplier must be deployed at the site at the time of testing. For subsequent uses of the system online support shall have to be provided during the period of warranty.</p> <p>The system shall include- (i) High sensitivity piezoelectric accelerometers with Connecting Cable, with Mounting blocks for sensor fixing at the Dam site; (ii) Vibration data acquisition system with amplifiers and filtering; (iii) Eccentric mass vibrator & controller; (iv) Application Software for Controller & Data analysis; (v) Air gun and hoses and control box and cable for Impulse Excitation. And any other item/accessories/Fixtures etc. for system integration. The technical specifications of individual items are detailed below.</p> <p>The complete system, called, <i>Integrated System for In-Situ Dynamic Characterization of Prototype Dams</i>, should be able to capture the first few Resonating Modes (i.e., Frequency, Mode Shapes, and Damping) of the prototype dams at site in <i>full reservoir</i> and <i>empty reservoir</i> conditions. The typical mass of the real size dam can be 2-4 Million Tones. The entire testing protocol should be completed under Ambient, Impulse and Sinusoidal excitation condition, for which sensors with suitable sensitivity, figures and connecting cable be provided. Each of the components shall have to be provided with the Technical Data Sheet, and manufacturing drawing as applicable. The details of the Technical Specifications of the major subsystems/components are given below.</p>		

2. High sensitivity Piezoelectric Accelerometers with Amplifier

Piezoelectric Accelerometers (8 Nos.)	
Performance	Value
Sensitivity	10 V/g
Measurement Range	±0.5 g pk
Frequency Range (±5%)	0.1 to 200 Hz
Resonant Frequency	≥700 Hz
Broadband Resolution	0.000001 g rms
Non-Linearity	≤1 %
Transverse Sensitivity	≤5 %
Overload Limit (Shock)	±40 g pk
Base Strain Sensitivity	≤0.0005 g/με
Temperature Range	-15 to +150 °F
Electrical	
Excitation Voltage	24 to 28 VDC
Constant Current Excitation	2 to 10 mA
Output Impedance	≤500 Ohm
Output Bias Voltage	8 to 14 VDC
Discharge Time Constant	≥5 sec
Settling Time	60 sec
Spectral Noise (1 Hz) (Typical)	0.06 μg/√Hz
Spectral Noise (10 Hz) (Typical)	0.01 μg/√Hz
TEDS 1.0 version available (TLD)	–
Physical	
Sensing Element	Ceramic
Sensing Geometry	Flexural
Housing Material	Stainless Steel
Size - Diameter / Hex	2.25 in
Size - Height	2.80 in
Weight	635 gm (22.4 oz)
Electrical Connector	2-Pin MIL-C-5015
Mounting Thread	1/4-28 Female

ICP Power Supplies/amplifier (2 No. 8 Channel Each)	
Performance	Description
Input Sensor Type	ICP Voltage
Gain	x1, x10, x100 [1]
Charge Conversion (selectable)	0.1, 1, 10 mV/pC
Frequency Range (±5%) (gain <100)	0.05 Hz to 17 kHz
Frequency Range (±5%) (gain ≥100)	0.05 Hz to 17 kHz
Coupling (AC or DC)	AC/DC
Input Filter [3]	Optional
Output Filter [3]	Optional
TEDS Sensor Support	Yes
Electrical	
AC Power (47 to 63 Hz)	
AC Power	≤0.9 amps
Excitation Voltage (To Bridge/Diff. Sensors)	-12 V to +12 V [5][6]
Excitation Voltage (To ICP® Sensors)	+24 VDC
Constant Current Excitation (To ICP® Sensors)	
DC Offset	<50 mV

Broadband Electrical Noise (1 to 10000 Hz) (x1 gain)	5.6 μ V rms
Oscillator ($\pm 2\%$) (Internal Generator -ICP®/ Voltage mode)	0.1 V pk 100/1000 Hz
Oscillator ($\pm 2\%$) (Internal Generator - Charge mode)	100 pC pk 100/1000 Hz
Physical	
Front Panel Display/Keypad	Yes
Digital Control Interface	Ethernet
Electrical Connector (Inputs)	8-socket mini DIN BNC jack,
Electrical Connector (Outputs)	
Electrical Connector (AC Power Input)	
Size (Height x Width x Depth) (Nominal)	8.0 x 20 x 15 cm (approximate)
Weight	2.5-3.00 kg
Accessories	
Power Cord & Power Adapter	Yes
Control Software	Yes
Notes	
<p>[1] Jumper selectable on internal circuit board.</p> <p>[2] Charge input low frequency response is 0.5 Hz (+/-20%).</p> <p>[3] Contact factory for available filter options.</p> <p>[4] Units are supplied with applicable AC to DC converter for operation from 100 to 240 VAC (50 to 60 Hz).</p> <p>[5] User adjustable, factory set at 4 mA.</p> <p>[6] Adjustable in 0.1V steps.</p> <p>[7] Negative excitation can be set to 0V or to track the positive excitation voltage.</p> <p>[8] 0 Hz low frequency response when DC coupled.</p> <p>[9] Dual input filters: 1x ICP, Voltage & 1x Bridge/Differential.</p> <p>[10] 120 m of cables per accelerometer</p> <p>[11] These power supplies are to be provided with operator switch selectable accelerometer gains of x1, x10 and x100.</p> <p>[12] To be provided with 16 antialiasing filters with fixed 5 pole, low-pass filters with cutoff set at 35 Hz.</p>	

3. Vibration Test Controller with Data Acquisition and Analysis

- (i) PC based hardware and software system that drives eccentric mass vibrators (EMV's) while analyzing feedback signals for amplitude and phase shift.
- (ii) Output of analogue signals to drive one or multiple VFD motors/vibrators.
- (iii) Sixteen standard (expandable to 128) freely assignable analogue input channels to read a wide variety of sensors.
- (iv) Real time monitoring and display of force, eccentricity, and frequency.
- (v) Real time data display of in phase component, out of phase component, amplitude modulus, and phase.
- (vi) Real time data analysis tools such as correlation verification allowing to see confidence levels of recorded data sets.
- (vii) Options for conversion from acceleration to velocity and displacement and normalization to force.

- (viii) Data set review feature without the need of running the EMV.
- (ix) Export data to MS Excel and as ASCII files to allow easy import into other programs.
- (x) Ability to compute and display Fourier transform of transient data to allow identification of modal properties.
- (xi) Ability to control an eccentric mass vibrator in a step sine sweep and acquire accelerometer data.
- (xii) Ability to compute and display frequency response plots to allow determination of modal properties.

4. Omnidirectional Eccentric Mass Shaker

The eccentric mass vibrator is required for sinusoidal excitation of the dam to higher levels than possible with ambient vibration. The eccentric mass vibrator shall use one or more rotating eccentric arms to impart a horizontal force into the dam crest. The vibrator shall be anchored to the crest of the dam with eight concrete chemical anchors. The vibrator shall be driven by a precise, variable speed electric motor and drive. The eccentricity of the vibrator can be adjusted to allow operations at low and high frequency. The specific parameters of the eccentric mass shaker are as under.

- (i) Force Capacity: 200 kN
- (ii) Minimum eccentricity: 500 kg-m (variable mass in the bucket)
- (iii) Precision variable speed drive: 1-15 Hz
- (iv) Omnidirectional eccentric mass vibrator with 10 HP three phase motor.
- (v) Vibrator controller and data acquisition system.
- (vi) 10 HP (horsepower) variable frequency drive and pulley pylon.
- (vii) Timing belts and pulleys, and all other fixtures and cables and connectors as per the requirement to conduct the test at dam site.

5. Compressed Air gun, Hoses, Control Box and Cables

The Compress Air Gun with Hoses (10-meter length), Control Box and Cables shall be required for Impulse excitation in the reservoir for Modal extraction of the dam. Air gun will generate impulse load through the release of compressed air, by way of electronic circuit-controlled valve opening in few milliseconds. This creates a suddenly expanding air bubble under the water that sends an acoustic wave in all directions through the water, including the direction of the dam. Some of the design parameters are as under.

- (i) Compressed air pressures up to 20 MPa
- (ii) Air chamber: 500 cc
- (iii) Compressed air cylinder and control unit

6. Typical Dam Properties to be Tested

The typical properties of the dam which are to be tested are provided as under.

Parameters	Dam-1	Dam-2
Density (kg/m ³)	2650	2500
Young's Modulus (MPa)	31027	31027
Poisson's Ratio	0.20	0.20
Total Length (m)	800	320
Length of the tallest Monolith (m)	15	15
Height of the Tallest Monolith (m)	103	63
Top Width of the Tallest Monolith (m)	14	

	Monolith mass (ton)	145107	65058		
	Frequency (Hz) 1 st Mode	3.1	7.6		
	Frequency (Hz) 2 nd mode	8.3	15.8		
	Frequency (Hz) 3 rd mode (vertical)	11.1	19.5		
	Frequency (Hz) 4 th mode	16.1	27.5		
	Mass Participation (%) 1 st mode	31.86	39.8		
	Mass Participation (%) 2 nd mode	25.89	32.7		
	Mass Participation (%) 3 rd mode (vertical)	8.33	1.4		
	Mass Participation (%) 4 th mode	12.24	15		
	#Mass Participation (%) Based on 2D plane stress Finite Element Analysis				
	7. Other Conditions				
	(i) User defined Software flexibility: the application software shall have User defined flexibility, the same should be demonstrated.				
	(ii) Indigenous component Preference: The system should be manufactured in India and at least 20 percent of the content must be Indian make.				
	(iii) Pre-Dispatch Inspection: Before delivery, the items shall be thoroughly inspected at the supplier's works by the Institute through an authorized representative. The item shall be accepted for delivery only after the Institute authorized representative finds it satisfactory at the pre-dispatch inspection (PDI).				
	(iv) Demonstration: The supplier shall demonstrate the functionality and compliance of the DAQ system. The supplier shall also demonstrate the functionality of an integrated system i.e., sensors, DAQ system and software as a system, all connected together and interfaced with a PC/ Laptop computer.				
2.	UTR No. of payment of EMD. In case of exemption from submission of Bid security, proof of registration with NSIC/MSME.				
3.	Copy of GST Certificate and PAN				
4.	Leaflets catalogue (Brochure)				
5.	Non Blacklisting of Supplier and Price reasonability declaration				
6.	Required past Experience				
7.	List of Govt. Organization/Dept. & User List				
8.	After Sale Service Certificate				
9.	Manufacturer's Authorization Letter				
10.	Certificate - Bidder Not from/ from Country sharing Land border with India & Registration of Bidder with Competent Authority				
11.	Buyer Organization specific Integrity Pact				
12.	Declaration of Local Content				
13.	Minimum average annual turnover of the bidder				
14.	Minimum average annual turnover of the OEM				

Signature of Tenderer

Name: _____

Designation: _____

Organization

Name: Contact

No.: _____

<< Organization Letter Head >>

DECLARATION SHEET

We, _____ hereby certify that all the information and data furnished by our organization with regard to these tender specifications are true and complete to the best of our knowledge. I have gone through the specifications, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certify that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.

The prices quoted in the financial bids are subsidized due to academic discount given to MNIT Jaipur and the rates quoted are not more than those quoted to any other Institution in India or abroad during the last one year.

NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent	
Phone	
Fax	
E-mail	
Contact Person Name	
Mobile Number	
GST number	
PAN Number	
(In case of on-line payment of EMD) UTR No. (For EMD)	

(Signature of the Tenderer)

Name:

Seal of the Company

MANUFACTURERS' AUTHORIZATION FORM

[The Tenderer shall require the Manufacturer to fill in this Form in accordance with the Instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer]

Date: [insert date (as day, month and year) of Bid Submission] Tender No.: [insert number from Invitation for Bids]

To: [insert complete name and address of Purchaser] WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Tenderer] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 5.22 of the Terms and Conditions, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer] Name: [insert complete name(s) of authorized representative(s) of the Manufacturer] Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Tenderer]

Dated on day of , [insert date of signing]

AFTERSALE SERVICE CERTIFICATE

From:

To

The Registrar,
 Malaviya National Institute of Technology (MNIT),
 Jaipur

Whereas, we M/s (Bidder Name) are established & reputable manufacturers (Make of items) of [items name] having service offices at Delhi, Jaipur and in the state of Rajasthan. Details are as under:

Sr.No. Address of Service Centre Phone No. Number of Engineers

- 1.
- 2.
- 3.

 We do hereby confirm that:

Services including repair/replacement of defective parts will be done by us. Replacement of defective Systems/parts will be done by equivalent or better systems/parts of the same make. We will attend all the complaints/service calls within 24 working hours and not beyond 3 working days. Down time will not exceed beyond 3 working days. In case, down time exceed 3 working days then we will extend the warranty period of that item(s) double of the down time.

Signature of Bidder**Name:** _____**Designation:** _____**Organization Name:** _____**Contact No.:** _____

Covering Letter

(Required on the Letter head of the Bank)

To
Malaviya National Institute of Technology Jaipur
JLN Marg, Jaipur- 302017

Dear Sir / Madam,

Guarantee
Number Date of
Issue Guarantee
Amount Date of
Expiry Date of
Claim Applicant
Name:

We confirm having issued/ extended the captioned Bank Guarantee in your favor on behalf of our
above named constituent and the same signed by the officers of the bank.

Yours faithfully,

Authorized Signatory

Name:

Email ID:

(Signed and Stamped)

PERFORMANCE BANK GUARANTEE

(To be executed on Stamp Paper of Rs. 100/- or such higher value as per the Stamp Act of the State in which the Guarantee is issued. Stamp Paper should be in the name of the Bank Issuing the Guarantee.)

BANK GUARANTEE NO. :

DATED :

Dear Sirs,

1. THIS DEED OF GUARANTEE made on this day of..... between **MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY, JAIPUR** (hereinafter called the "**MNIT**" which expression shall unless excluded by or repugnant to the context includes its successors and assignees) of the one part and the (hereinafter called the "**Bank**" which expression shall unless excluded by or repugnant to the context include its successors and assignees) of the other part.
2. AND WHEREAS as per clause..... Of the purchase order in question the supplier shall furnish a Performance Bank Guarantee of 10% of P.O. Value i.e. Rs. (in words) only) valid for the period of two months beyond warranty period as and by way of security for satisfactory working of the AND WHEREAS at the request of the supplier, the Bank executes these presents.
- 3.0 THIS DEED WITNESSETH AND IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN PARTIES HERETO AS FOLLOWS:
 - 3.1 The Bank hereby guarantees to the MNIT, Jaipur that the equipment / service contracted are capable of performing the work as demanded by the MNIT, Jaipur. In the event of equipment / service failing to perform to the satisfaction of the MNIT, Jaipur, which shall be final and conclusive of the factum of non-performance, the Bank shall indemnify and keep the indemnified to the extent of of P.O. Value i.e. Rs. (Rupees) valid for the period of two months beyond the warranty period against any loss or damage that may be caused to or suffered by the MNIT, Jaipur consequent to non-performance of the contracted equipment / services to be supplied by the supplier.
 - 3.2 In consideration of the aforesaid premise and at the request of the supplier, we the Bank hereby irrevocably and unconditionally guarantee that the supplier shall perform in an orderly manner their contractual obligations in accordance with the terms and conditions set forth in the Purchase order dated and in the event of the supplier's failure to do so, the Bank unconditionally pay to the MNIT, Jaipur on demand, any amount up to the value mentioned in Clause 3.1 above without any reference to the supplier and without questioning the claim.
 - 3.3 The guarantee herein shall remain in full force for a period of two months beyond the warranty period from the date of certification by the MNIT, Jaipur of successful installation and commissioning of the equipment/ service contracted. Date of start of warranty period will be notified by MNIT, Jaipur to the Bank.
 - 3.4 The decision of the MNIT, Jaipur regarding the liability of the Bank under the guarantee and the amount payable there under shall be final and conclusive and binding on us without question. The Bank shall pay forthwith the amount demanded by the MNIT, Jaipur notwithstanding any dispute, if any, between the MNIT, Jaipur and the supplier.
 - 3.5 The Bank further agrees that the guarantee herein shall remain in full force during the pendency of aforesaid period mentioned in Clause 3.3 above and also any extension of the guarantee which has been provided by the Bank for this purpose beyond the aforesaid period provided, further, that if any claim accrues or against the Bank by virtue of this guarantee, should be lodged with us within a period of 60 days from the date of expiry of the guarantee period.

- 3.6 This Guarantee shall not be affected by any change in constitution of the supplier, MNIT, Jaipur or us not shall it be affected by any change in constitution or by any amalgamation or absorption or reconstruction thereof otherwise, but will ensure for and be available to and endorsable by the absorbing amalgamated company or concern.
- 3.7 The MNIT, Jaipur has the fullest liberty without affecting the guarantee to postpone at any time or from time any of the powers exercisable by it against the supplier, either to enforce or forbear the clause governing guarantee in the terms and conditions of the said contract and Bank shall not be released from its liabilities under the guarantee by any matter referred to or by reason of time being given to the supplier or any other forbearance, act or omission on the part of the MNIT, Jaipur or any material or things whatsoever which under the law relating to sureties shall but for the provisions hereof have the effect of so releasing the Bank from its liabilities.
- 3.8 We further agree that the MNIT, Jaipur shall have the fullest liberty without affecting in any way our obligations hereunder with or without our consent or knowledge to vary any of the terms and conditions of the said contract or to extend the time of delivery from time to time.
- 3.9 The Bank undertakes not to revoke this guarantee during its currency except with the previous consent in writing of the MNIT, Jaipur.
- 3.10 We further agree that in order to give full effect to the guarantee herein contained MNIT, Jaipur shall be entitled to act as if we were its principal debtors in respect of its claim against the Supplier hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights if any which are in any way inconsistent with the above provision of this Guarantee.

Notwithstanding anything herein before, liability of the Bank under this guarantee is restricted to Rs. (Rupees only) and it will remain in force up to the period specified in Clause 3.3 unless a suit to enforce any claim under the Guarantee is filed against the Bank before the period specified in Clause 3.4. All your rights under this Guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

COUNTERSIGNED

Signature	:	Signature	:
Name	:	Name	:
Designation	:	Designation	:
Organization	:	Organization	:

Training Requirement

1.	Product Description	Integrated System for Dynamic Characterization of Prototype Dams through Field Testing /Qty.01
2.	Attendees	5 persons
3.	No. of Days	One week

<On Organization Letter Head>

(ANNEXURE-VIII)

(for Goods/Services Contract)

No. _____

Dated: _____

CERTIFICATE

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that the organization is not from such a country.

OR (whichever is applicable)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that the organization is from _____ (*Name of Country*) and has been registered with the Competent Authority. I also certify that the organization fulfills all the requirements in this regard and is eligible to be considered.

(Copy/ evidence of valid registration by the Competent Authority is to be attached)

Signature of Bidder/ Agent

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

DECLARATION OF LOCAL CONTENT

[For Local Content of Products, Services or Works]

(To be given on Company Letter Head – For tender value below Rs.10 Crores)

(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

To,
The Registrar
MNIT Jaipur

Subject: Declaration of Local Content

Tender reference No. _____

1. Country of Origin of Goods being offered: _____
2. With reference to Order No. P- 45021/2/2017-PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided.
 - Class I local supplier – has local content equal to more than 50%. Local contents added at _____ (name of location).
 - Class II local supplier – has local content 20% but less than 50%. Local content added at _____ (name of location).
 - Non-local supplier – has local content less than or equal to 20%. Local contents added at _____ (name of location).
3. We are solely responsible for the above mentioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature of Bidder/ Agent

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

INTEGRITY PACT

(To be executed on plain paper and submitted along with technical bid/tender documents)

Malaviya National Institute of Technology jaipur (MNIT) hereinafter referred to as "The Principal".

AND

.....hereinafter referred to as "The Bidder/Contractor"

PREAMBLE

The Principal intends to award, under laid down organizational procedures, contract/s for . The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of and of fairness/transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Action 1 – Commitments of the Principal.

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal is not legally entitled.

b) The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.

c) The Principal will exclude from the process all known prejudiced persons.

2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

1. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a. The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or during the execution of the contract.

b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractors will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or documents provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All the payments made to the India agent/representative have to be in Indian Rupees only.

e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. The Bidder(s)/Contractor (s) who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision on the matter.

2. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3: Disqualification from tender process and exclusion from futurecontract

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed, for such reasons.

Section 4 : Compensation for Damages

1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.

2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, The Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 : Previous Transgression

1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the TII's anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.

2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process and appropriate action can be taken including termination of the contract, if already awarded, for such reason.

Section 6: Equal treatment of all Bidders / Contractors / Sub -contractors.

1. In case of sub –contracting, the Principal Contractor shall take the responsibility of adoption of Integrity Pact by the Sub – Contractor.

2. The Principal will enter into agreements with the identical conditions as this one with all bidders and Contractors.

3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7: Criminal charges against violation Bidder(s) / Contractor(s) / Subcontractors(s).

If the Principal obtains knowledge of conduct of a Bidder(s)/ Contractor(s) which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 : Independent External Monitor/Monitors

1. The Principal appoints competent and credible Independent External Monitor for this Pact after approval of Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. The Monitor will have access to all contract documents, whenever required. It will be obligatory for him to treat the information and documents of bidders /contractors as confidential. He reports to the Registrar of MNIT.

3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors.

4. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality. The Monitor has also signed declarations on "Non – Disclosure of Confidential Information" and of "Absence of Conflict of Interest" In case of any conflict of interest arising at a later date, the IEM shall inform Registrar of MNIT and recuse himself/herself from the case.

5. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

6. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

7. The Monitor will submit a written report to the Registrar of MNIT within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

8. If the Monitor has reported to the Registrar of MNIT, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Registrar of MNIT has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

9. The word "Monitor" word include both singular and plural.

Section 10 : Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidder 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Registrar of MNIT.

Section 11 : Other Provisions

- This agreement is subject to Indian Law. Place of performance and jurisdiction is the registered office of the Principal i.e. Jaipur (Rajasthan)
- Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- If the contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- Issues like Warranty/Guarantee etc. shall be outside the purview of the IEMs.
- In the event of any contradiction between the Integrity Pact and its Annexure, the clause in the Integrity Pact will prevail.

(For & on behalf of the Principal)

(For& on behalf of Bidder/Contractor)

(Office Seal)

(Office Seal)

Place

Date

Witness 1 :
(Name &Address)

Witness 1:
(Name & Address)

Witness 2:
(Name&Address)

Witness 2 :
(Name & Address)
