



इंडियन पोर्ट रेल एंड रोपवे कॉर्पोरेशन लिमिटेड  
(पोत परिवहन मंत्रालय, भारत सरकार के अधीन संयुक्त उद्यम)  
Indian Port Rail & Ropeway Corporation Ltd.  
(A Company under Ministry of Ports, Shipping & Waterways,  
Government of India)  
CIN No: U60300DL2015GOI282703



संख्या/No. IPRCL/NMHC Lothal/Projects/EOI/PM

तारीख/Date: 23.01.2026

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

**TO ENGAGE CONTRACTOR TO UNDERTAKE DESIGN & IMPLEMENTATION OF  
MULTIMEDIA PROJECTION MAPPING AND LIGHT AND SOUND SHOW AT NATIONAL  
MARITIME HERITAGE CENTRE (NMHC), LOTHAL, AHMADABAD**

**Issued by:**

**INDIAN PORT RAIL & ROPEWAY CORPORATION LIMITED**  
(A company under Ministry of Ports, Shipping & Waterways, Govt. of India)

**Project Office:**

**National Maritime Heritage Complex (NMHC),**  
IPRCL Office, Lothal, Village Saragwala,  
Taluka Dholka, Dist.: Ahmedabad, Gujarat -382230  
Email: sanjay.rawool@iprcl.in, Website: www.iprcl.in

**JANUARY 2026**

## 1.0 About IPRCL

Indian Port Rail and Ropeway Corporation Ltd. (IPRCL) (Formerly known as Indian Port Rail Corporation Ltd.), a company under Ministry of Ports, Shipping & Waterways with equity contribution from various Major Ports (90%) under Ministry of Shipping and Rail Vikash Nigam Ltd. (10%) under Ministry of Railways.

## 2.0 Purpose of the Expression of Interest (EOI)

Since 2015, IPRCL is in the field of FSR, DPR Consultancy & related Services inclusive of Preliminary alignment development, optimization of Alignment, Final location survey (FLS) including Geo Technical survey, PMC and construction. IPRCL is developing prestigious National Maritime Heritage Museum at Lothal, Gujarat for Ministry of Ports, Shipping & Waterways, GoI of approximate cost of Rs. 4000 Cr. And Phase 1A of Museum work is going on and intended to complete by March 2026.

IPRCL is in search of the reputed agencies who can undertake design & implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC) & who are having experience of successful design & execution of such work for various Museums, Buildings or having international experience of similar work.

## 3.0 EOI Issuing Authority

This Expression of Interest (EOI) is being issued by Indian Port Rail and Ropeway Corporation Ltd. (IPRCL), to engage a agency for design and implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC), by single stage two packet system

## 4.0 Tentative Calendar of Events

SN	Milestones	Date and time
1	Uploading on IPRCL website; Expression of Interest (EOI)	23.01.2026 17.00 hrs
2	Pre-EOI queries	28.01.2026, 17.00 hrs
3	Reply and uploading of addendum, if any	29.01.2026, 17.00 hrs
4	Last date for Submission of EOI	02.02.2026 15.00 hrs
5	Opening of EOI	02.02.2026, 15.30 hrs
6	Opening of Financial bid	Will be notified letter

The dates mentioned above are subject to change (pre-pone or post-pone). In case a change is made, it shall be notified on <http://www.iprcl.in>

## 5.0 Application for EOI

IPRCL now invites 'Expression of Interest' from reputed Light & Sound Show and Projection Mapping Service provider agencies / companies to engage as contractor to undertake design & implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC), Lothal, Ahmedabad.

Interested agencies must provide information/documents indicating that they are qualified to perform the said work (brochures, Work Orders, description of similar assignments, availability of appropriate skills among staff, financial performance of the company for at least 5 year, etc.). The organization must have a substantial corporate structure and professional base in IT, Electrical & Electronics, Instrumentation, automation etc. The EoI and capability will be assessed against evidence of skills and experience in providing services in similar nature of work. Description of similar assignments done by

the firm, experience in similar conditions, and availability of appropriate skills among staff, etc. shall be submitted. Similarly, Annual turnover of the company for the last five years may also be provided along with the EOI.

## **6.0 Language of Proposal**

The proposal and all correspondence and documents shall be written in English.

## **7.0 Submission of Proposal**

Proposals, in its complete form in all respects as specified in this document, must be submitted physically or e-mailed in two separate files for technical and financial quote; password protected clearly marked in subject “EOI for design & implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC)” on or before 02.02.2026 to sanjay.rawool@iprcl.in

### Contact Officer:

Chief General Manager/NMHC Lothal  
National Maritime Heritage Complex (NMHC),  
IPRCL Office, Lothal, Village Saragwala,  
Taluka Dholka, Dist.: Ahmedabad, Gujarat -382230  
Email: sanjay.rawool@iprcl.in, Website: www.iprcl.in

- 8.0** The EOI document may be withdrawn or cancelled by IPRCL at any point of time during the process, without assigning any reasons thereof.
- 9.0** Neither IPRCL nor its employees, consultants, advisors accept any liability or responsibility for the accuracy or completeness of, nor make any representation or warranty, express, or implied, with respect to the information contained in the EOI, or on which the EOI is based. The content stated in the notice is for information purpose only; however, the interested entities shall collect the data and analyze the information independently at its own cost to assess the viability of the project. Nothing in the notice of EOI should be relied on, as a promise or representation as to the future.
- 10.0** The Applicant shall bear all its costs associated with or relating to the preparation and submission of the EOI including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its EOI.
- 11.0** The Empanelment will not qualify the Agency for allotment of the work and they will not have any claim to seek the same.

## APPLICATION IN RESPONSE TO EXPRESSION OF INTEREST (Eoi)

To,  
Chief General Manager/NMHC Lothal  
National Maritime Heritage Complex (NMHC),  
IPRCL Office, Lothal, Village Saragwala,  
Taluka Dholka, Dist.: Ahmedabad, Gujarat -382230

Subject: Submission of technical proposal for “design & implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC)”

Dear Sir/Madam,

In response to the Invitation for technical proposal (EOI) published on 23.01.2026 for the above purpose, we would like to submit the proposal to carry out the above proposed task. In reference to the conditions of the Expression of Interest (Eoi) we are hereby submitting the following required documents, for the purpose of evaluation.

- i. Organizational Contact Details (Format-1)
- ii. Experience in related credentials (Format-2)
- iii. CVs of Key experts. (Format-3)
- iv. Financial strength of the organization (Format-4)

Sincerely Yours,

Signature of the applicant  
[Full name of applicant]

Stamp.....  
Date:.....

## Format 1- ORGANIZATIONAL DETAILS

1.	Name of Organization	
2.	Main areas of business	
3.	Type of Organization Firm/ Company/ partnership firm registered under the Indian Companies Act, 1956/ the partnership Act, 1932	
4.	Whether the firm has been blacklisted by any Central Govt. / State Govt./PSU/ Govt. Bodies / Autonomous? If yes, details thereof.	
5.	Address of registered office with telephone no. & fax	
6.	Address of offices in i) National Capital Region of Delhi ii) All other State/UT's	
7.	Contact Person with telephone no. & e-mail ID	
8.	Domestic locations covered in India	List of pin codes covered in India to be provided and registered offices in the country

## **Format – 2: Essential Technical Eligibility Requirement**

- 1) Average Annual Turnover for the last three Fin Years (certified by CA) should be minimum Rs. 7.5 Crores (Rs Seven Crores & Fifty Lakhs only).
- 2) In house or outsourced team of engineers/designers, minimum 5 nos. IT/ET/Automation Engineering Degree & Diploma holders must be available with the firm.
- 3) Must have satisfactory completed minimum two assignment of similar work of Projection Mapping and Light and sound show from State/Central Govt. Organizations in last three years and to produce such documents from them.

Note- The documentary proof for above executed works is to be submitted which should be in the form of satisfactorily completion certificate. The bidder should also give the details of assignment in hand.

Copies of completion certificates issued by any Central / State Government Department / PSU of India or Autonomous Body Central / State Government of India/international experience of same work.

## Format – 2

**A. Details of design & implementation of multimedia projection mapping completed and copies of satisfactory completion certificate of work executed in India or Abroad.**

**B. Details of design & implementation of light and sound show completed & in hand in India or abroad.**

## **Format 3: Key Experts for Light and sound show and projection Mapping (CVs of Main Experts: in-house or outsourced, are to be submitted)**

### **1. Creative & Design Experts**

- Show Director / Creative Director
  - o Oversees the overall vision, narrative, and pacing of the show.
  - o Coordinates between technical and creative teams.
- Visual Designer / Projection Designer
  - o Designs the projected content, animations, and visual effects.
  - o Skilled in 2D/3D animation, mapping content to irregular surfaces.
- Lighting Designer
  - o Designs lighting schemes to enhance mood, emphasize architecture, or synchronize with projections.
  - o Expert in stage lighting, architectural lighting, and dynamic effects.
- Sound Designer / Audio Engineer
  - o Creates soundscapes, synchronizes sound with visuals.
  - o Handles spatial audio, surround sound, or directional speakers.
- Content Producer / Animator
  - o Produces the actual video content for projection mapping.
  - o Works with the visual designer to align animations with the physical surfaces.

### **2. Technical Experts**

These people make the creative vision function in reality.

- Projection Mapping Specialist
  - o Maps visuals accurately to 3D surfaces and structures.
  - o Calibrates projectors, adjusts for angles, curves, and distortions.
- Lighting Technician
  - o Installs, programs, and maintains lighting fixtures.
  - o Experienced with DMX control systems and synchronized shows.
- Audio Technician

- o Manages speakers, amplifiers, microphones, and audio synchronization.
- o Skilled in live mixing and multi-channel sound setups.
- Show Programmer / Automation Specialist
- o Integrates light, sound, and projection cues.
- o Uses control software
- Projection Engineer / AV Engineer
- o Ensures high-quality output from projectors.
- o Handles brightness, lens selection, media servers, and signal management.

### **3. Support & Operations Experts**

These handle logistics, safety, and execution.

- Rigging / Installation Crew
- o Sets up projectors, lights, screens, and other equipment safely.
- Media Server Operator
- o Operates servers
- Technical Director / Stage Manager
- o Oversees timing, synchronization, and troubleshooting during rehearsals and live shows.
- Safety & Compliance Officer
- o Ensures electrical, structural, and public safety standards are met.

## Format – 4: Financial Strength of the Organization

Bidding consultant's Name-

Financial Data	FY-1 (2019-20)	FY-2 (2020-21)	FY-3 (2021-22)	FY-4 (2022-23)	FY-5 (2023-24)
<b>Information from Audited Balance sheet</b>					
Total Assets (TA)					
Total liabilities					
Net Worth (NW)					
Current Assets(CA)					
Current liability (CL)					
<b>Information from audited Income Statement</b>					
Total revenue (TR)					
Profits before Taxes (PBT)					
Profits after Taxes(PAT)					

**Notes**

1. With this Form, the Consultant shall attach copies of the audited balance sheets, including all related notes, and income statements for the last five years, as indicated above, complying with the following conditions.

- All such documents, reflecting the financial situation of the Consultant or partner to a JV, and not sister or parent companies.
- Historic financial statements must be complete, including all notes to the financial statements.
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

1. The data in the above Form shall be certified by the Independent Chartered Accountant. The Respective and specific Reference of Audited Balance sheet to be clearly mentioned [below the amounts for each FY] to Compare the Financial data given in FE-1 and the Data given in the Balance sheet.

2. The Applicant shall also attach the backup calculations in respect of each of the above figures duly referenced to the figures of Audited Financial Statements/Balance Sheets and certified by Independent Chartered Accountant.

Verified by Chartered Accountant (CA)

Signature on Stamp-

Date of CA's signature-

CA's Name-

CA's UDIN-

CA's Firm-

CA/CA's Firm Address-

# Scope of Work

## 1. Light and Sound Show including projection Mapping on Navy gallery façade, at Lothal Town

### Objective:

Create a minimum 30-minute immersive Light & Sound experience that engages visitors, tells a compelling story, and integrates projection mapping on the Navy Gallery wall. The maximum cost of work estimated is Rs. 5 Cr excl. GST

### 1.1 Duration

- Each show must run for a minimum of 30 minutes. (Language English & Hindi)
- Program must include multiple scenes or sequences with smooth transitions

### 1.2 Responsibilities of the Agency

- Content Design:
  - Develop narrative, visuals, lighting sequences, and music/audio cues.
  - Incorporate storytelling that aligns with Lothal Town's historical or thematic elements.
- Equipment Supply and Installation:
  - Provide all required projectors, lights, audio systems, and supporting equipment.
  - Install and calibrate projection surfaces, speakers, and lighting fixtures.
  - Control room establishment.
  - Integration with existing infrastructure.
- Synchronization:
  - Ensure perfect timing between projection, lights, audio, and any effects (laser, fog, etc.).
  - Provide control systems or software to manage the show seamlessly.
- Maintenance and Reliability:
  - Systems must be robust for repeated shows, with minimal downtime.
  - Include operational manuals and troubleshooting procedure.

### 1.3 Projection Mapping – Navy Gallery Wall

#### Projection Area:

- Approximately 64 m (length) × 20 m (height).

#### Lighting Coordination:

- Programmed lighting must complement projection visuals.
- Avoid direct/high-mounted lighting on the projection surface to prevent glare or washout.
- Ambient or decorative lighting may be used but must not interfere with projection quality.

## Projector Setup:

- Two double stacks of 50K lumens projectors (4 projectors total).
- Target brightness: ~110 lux on the projection surface.
- Resolution: 4K, for crisp and detailed visuals.
- Soft-edge blending between projectors to ensure seamless imagery.

## Audio Requirements:

- Main Loudspeakers: Full-range audio for main audience area.
- Subwoofers: For deep bass effects.
- Surround/Fill Speakers: Ensure even sound coverage, avoiding dead zones.
- Audio must be timed and synchronized with projection and lighting.

## Additional Equipment:

- Lighting Fixtures: Wash lights, moving heads, and programmable lights.
- Laser Effects: For dynamic visuals and enhanced show experience.
- Control Systems: To manage and synchronize lights, projection, and audio.

# 2. Jetty Area Entrance Projection

## Objective:

Project visually striking content on the Jetty Entrance Gate for high visibility, creating an impressive welcome experience for visitors.

### 2.1 Projection Requirements

- Use high-brightness outdoor projectors capable of functioning in ambient daylight and night-time conditions.
- Ensure even coverage across the entire gate façade.
- Implement soft-edge blending for seamless visuals when using multiple projectors.
- Provide adequate contrast and brightness to make the visuals stand out from surrounding light sources.

### 2.2 Content & Effects

- Content may include animations, logos, graphics, or thematic visuals.
- Visuals must be designed to enhance visitor experience and match the theme of Lothal Town.
- Optional laser or lighting effects can be added to complement projections.

### 2.3 Equipment & Setup

- Projectors must be weatherproof or outdoor-rated.
- Audio (if required) should cover the entrance area without disturbing surrounding zones.
- Lighting around the gate should not interfere with projection visibility.
- Control room establishment if required.

### **3. General Requirements (Both Sites)**

- Installation and Calibration: Agency must handle full installation, alignment, and testing.
- Operational Manual: Provide detailed instructions for running the show.
- Maintenance Plan: Include schedule and procedures for troubleshooting.
- Safety Compliance: All equipment installations must adhere to local electrical and safety standards.
- Performance Testing: Agency should conduct trial runs and make adjustments to ensure optimal performance.

### **4. Optional Enhancements**

- Interactive elements: sensors or triggers for audience engagement.
- Automated scheduling for multiple daily shows.
- Backup power for uninterrupted performance.

### **5. Recommended Equipment's Brand & Specifications**

- Audio Visual Content creation: This includes artistic, lighting, and audio direction, research, scriptwriting, translation, dramatization, professional recording in two regional languages with voiceover artists and musicians, music and sound effects creation, high-quality 2D/3D animation, CGI elements, live-action video shoots, laser animation, and on-site programming and integration of systems
- Standard 42U 19-inch floor-standing equipment rack: Features include front and rear perforated lockable doors, removable lockable side panels, adjustable 19" mounting rails, cable managers, blanking panels, castor wheels, leveling feet, brush panels, fan tray unit with 4 cooling fans, earthing kit, screws, and cage nuts. The approved make is Valrack
- Power Distribution Unit (PDU): A 19-inch 2U horizontal PDU with minimum 6 to 12 universal or IEC C13 sockets, built-in surge protection, on/off switch, and LED indicators. The approved make is Valrack
- Projector (Main Facade Show): 3-chip DLP, 4K native solution (4096 x 2160), minimum 50,000 lumens, RGB laser digital projector, contrast ratio up to 5000:1, minimum 50,000 hours illumination, omnidirectional, motorized lens offset, inputs: 12G SDI, HDMI 2.0, DP, analog controls, complete with mounts and lens. The approved make is Christie
- Projector (Entry Gate): 3-chip DLP, 4K native solution (4096 x 2160), minimum 36,500 ISO lumens, RGB laser digital projector, contrast ratio up to 5000:1, minimum 50,000 hours illumination, omnidirectional, motorized lens offset, inputs: 12G SDI, HDMI 2.0, DP, analog controls, complete with mounts and lens. The approved make is Christie
- Outdoor Projection housing enclosure: Military Grade locking mechanism, fabricated out of AU 5052 alloy, with remote device management, temperature/humidity control, and air conditioning. Includes assembly and mounting system with SS 304 for projection layout. The approved make is Indigenous Indian Make
- 15" high-performance passive speaker: 55 Hz-20 kHz frequency response (-3 dB), 600 W AES (2400 W peak), 128 dB continuous SPL, 90° x 50° dispersion, user-rotatable horns, 8  $\Omega$  nominal impedance. LF section: 15" driver, 3" voice coil. HF section: 1.4" exit compression driver, 2.5" voice coil. The approved make is British Acoustics

- 10" outdoor coaxial speaker: IP64 rating, 67 Hz-20 kHz frequency response (-3 dB), 450 W AES (1800 W peak), 122 dB continuous SPL, 100° x 100° dispersion, 8 Ω nominal impedance, selectable transformer taps. 10" coaxial driver, 2" voice coil. The approved make is British Acoustics
- 18" passive subwoofer: 34 Hz-800 Hz frequency response (-3 dB), 1200 W AES (4800 W peak), omni-directional coverage, 8 Ω nominal impedance. 18" long-excursion driver, 4" voice coil. Max SPL 129 dB continuous. The approved make is British Acoustics
- 2 × 2600 W Class H amplifier: 2 output channels (1500 W per channel at 8 Ω, 2600 W at 4 Ω, etc.), bridged output up to 6000 W at 4 Ω. 2 analogue inputs, XLR and Speak-On connectors. The approved make is British Acoustics
- 2 × 1500 W Class H amplifier: 2 output channels (900 W per channel at 8 Ω, 1500 W at 4 Ω, etc.), bridged output up to 3600 W at 4 Ω. 2 analogue inputs, XLR and Speak-On connectors. The approved make is British Acoustics
- 2 × 750 W Class H amplifiers: 2 output channels (450 W per channel at 8 Ω, 750 W at 4 Ω, etc.), bridged output up to 1800 W at 4 Ω. 2 analogue inputs, XLR and Speak-On connectors. The approved make is British Acoustics
- 32 Channel Dante Processor: 16 analog inputs/outputs, Dante control interface, 4 x GPIO inputs, Custom GUI Software Builder, Anti-Feedback Algorithm, 32-bit floating DSP, Ducking, Matrix Control, ADDA - Dante Conversion, RS 232 & RS 485 Control. The approved make is OSL
- IP65 600W LED Moving head: Full functions (BEAM, SPOT, Wash, FRAMING), high efficient optic, linear CMY color system, flexible framing system (4 blades), 360° rotating animation wheel. Max power ≥ 750W, Light source ≥ LED 600W, Angle 7-50°, Pan/Tilt 540°/270°, IP Rating ≥ IP65. The approved make is LBT
- 30W RGLB Source Linear Graze Light: Max Power 30W, Voltage AC100~240V, Minimum Lumen (Full Colour On) > 1700 lm, IP67, Protocol DMX + RDM, BIS. The approved make is LBT
- 80W RGLB Source Wash Light: Max Power 80W, Minimum Lumen (Full Colour On) > 4500 lm, IP67, Protocol DMX + RDM, BIS. The approved make is LBT
- 200W RGLB Source Wash Light: Max Power 200W, Minimum Lumen (Full Colour On) > 13350lm, IP67, Protocol DMX + RDM, BIS. The approved make is LBT
- High-Power Animation Laser: Source Laser Diode 30w RGB/RGBY, Scanner 40 kpps, Control modes DMX512/SD card/ILDA, IP65 Ingress Protection. The approved make is LBT
- Edge blending software: User friendly interface, supports playback of uncompressed video and image, 3D mapping, real time effects & transitions, frame lock, supports external commands. The approved make is Watchout
- 8-in/8-out DMX splitter: Supports DMX 512, 8 input/output ports with optical/electrical isolation, 3-pin and 5-pin XLR, rack/wall mounting, surge protection. The approved make is LBT
- DMX Interface (ODE MK3): High-performance device supporting Art-Net, sACN, and DMX512 protocols, 1 DMX512 port (in/out), RJ45 Ethernet port, DHCP/static IP, RDM support, PoE compatible. The approved make is LBT
- High-performance production PC: Intel Core i9 (12th Gen or higher), minimum 32 GB RAM, 1 TB NVMe SSD, dedicated GPU minimum 8 GB VRAM (e.g., RTX 3070 or higher), dual LAN ports, multi-monitor output, Windows 10/11 Pro 64-bit. The approved make is EDS
- True online double-conversion UPS system (40 kVA): IGBT-based with DSP/microprocessor control, automatic/static/manual bypass, 415V input/output,

- power factor >0.95, efficiency  $\geq$  90%, parallel/redundant support, LCD/LED display, RS-232/Modbus/SNMP connectivity. The approved makes are Vertiv/Microtek
- Cabling and Connectivity Works: Supply and termination of various cables (audio, fiber, HDMI, CAT6, speaker, DMX, power/control), junction boxes, LIUs, earth pits, all ISI/BSI certified
- Complete electrical infrastructure: Power distribution, control wiring, protection systems, and earthing for all components, complying with PWD specifications and IS/IEC standards
- Mounting accessories: Includes hot-dip galvanized or powder-coated MS/SS poles, heavy-duty brackets, adjustable tilt & pan mechanisms, safety guards/jali, corrosion-resistant, structurally stable, for outdoor use
- Operation and Maintenance: Lum Sum for 2 years

**Note:-The above mentioned equipment's specification depends upon the design proposed by the vendor.**

## UNDERTAKING TO BE GIVEN BY AGENCY

(On Letter head of Firm)

1. I/We .....(Name of the bidder ) do hereby undertake that we will deploy a team of specialist in Multimedia Projection Mapping and Light and Sound show and have requisite experience in said work.

Date:

Place:

Signature of the Bidder

Financial Offer Sheet

Contractor's Lump Sum offer in Rupees to **carry out design & implementation of multimedia projection mapping and light and sound show at National Maritime Heritage Centre (NMHC)**

Rupees: (In figures) .....

Rupees: (In words) .....

Note: 1. The cost includes all costs like men, material, consumables, incidentals, etc.

2. GST shall be extra payable

3. Payment schedule: Payment schedule on pro rata of spans in meter completed will be as under:

S No	Item	Payment in percentage of the total accepted amount excl GST
1	On submission & approval of designs	20%
2	On supply and delivery of all equipment	40%
3	On Installation, testing & commissioning	30%
4	On completion of assignment as certified by IPRCL/NMHC	10%

4. The financial offer must be password protected in PDF document, and emailed to sanjay.rawool@iprcl.in in two file (technical & financial) or physically submitted in two packets, before or at the time of submission of the offer, and password to mailed at the time of opening.