

**Expression of Interest (EOI)**  
**for**  
**Empanelment/Shortlisting of Innovative Technologies for**  
**Enhancement of Water Quality in River Kshipra, Ujjain**



Mela Office, Kothi Road, Ujjain -465010

**August 2026**

**NIT No. USCL/443**

**Tender ID: 2026\_UAD\_528780\_1**

**Place: Ujjain, Date: 11/08/2026**

## **EXPRESSION OF INTEREST (EOI) for Empanelment/Shortlisting of Innovative Technologies for Enhancement of Water Quality in River Kshipra, Ujjain**

### **Background**

River Kshipra is the spiritual lifeline of Ujjain and the focal point of Simhastha-2028, which is expected to attract nearly 30 crore pilgrims. Ensuring safe and sustainable river water quality is therefore of paramount public health, environmental and religious importance.

Ujjain Municipal Corporation, through Ujjain Smart City Limited, invites Expressions of Interest (EOI) from technology providers, OEMs, research institutions and solution integrators for innovative, proven and scalable technologies capable of improving the water quality of River Kshipra during Simhastha-2028 and beyond.

The Authority intends to identify suitable technologies through this EOI for pilot demonstration and subsequent implementation through an appropriate procurement process.

### **1. Objective of EOI**

The objective of this EOI is to identify innovative and field-proven technologies capable of:

- Improving river water quality
- Increasing Dissolved Oxygen (DO)
- Reducing BOD, COD, nutrients, ammonia and odour
- Improving ecological and bathing water quality
- Enabling real-time monitoring
- Providing sustainable long-term operation.

### **2. Scope & Expected Outcomes**

Interested firms shall propose complete techno-economic solutions including:

#### **A. Assessment**

Baseline assessment, River survey, Hydraulic assessment, Pollution load assessment, Water quality assessment, Mathematical modelling, Hydrodynamic simulation and Pollution hotspot mapping.

#### **B. Technology Solution**

The proposed solution may comprise one or more technologies including, but not limited to:

- Advanced oxygenation systems
- Nanobubble technologies
- In-situ bioremediation
- Floating treatment systems
- Advanced oxidation processes
- Electrochemical treatment
- Biological or nature-based solutions

- Any other proven innovative technology.

However, the Authority is open to a combination of technologies rather than a single technology, wherever such integration results in superior water quality outcomes and improved techno-economic viability.

### C. Performance-Based Requirements

Instead of prescribing technology, applicants shall demonstrate capability to achieve measurable improvements in:

| Water Quality                                                                                                                                   | Operational                                                                                                                                     | Economic                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• DO</li> <li>• BOD</li> <li>• COD</li> <li>• Nutrients</li> <li>• Odour</li> <li>• Pathogens</li> </ul> | <ul style="list-style-type: none"> <li>• Energy efficiency</li> <li>• Automation</li> <li>• Reliability</li> <li>• Remote monitoring</li> </ul> | <ul style="list-style-type: none"> <li>• Life-cycle cost</li> <li>• Ease of deployment</li> <li>• Scalability</li> </ul> |

### D. Coverage

Technology should be capable of deployment for pilot stretch of 3–5 km; or entire river stretch approximately 12–15 km within Ujjain Municipal limits with modular scalability.

### E. Desired Outcomes

The proposed solution should remain effective during Low flow, High pilgrim load, Peak bathing days, High organic loading, Variable climatic conditions, Monsoon, Summer and Winter without deterioration in performance.

## 3. Preferred Features

Preference will be given to technologies that are:

- Energy efficient
- Rapidly deployable
- Modular and scalable
- Low maintenance
- Digitally monitored, compatible with ICCC/SCADA
- Suitable for PPP or performance-based implementation.

## 4. Implementation Models

Applicants may propose suitable implementation models such as CAPEX, DBO, BOOT, Rental, Treatment-as-a-Service (TaaS), PPP, Outcome-based O&M or other innovative commercial models.

## 5. Deliverables

Interested applicants shall indicate the deliverables they can provide, including assessment, design, pilot implementation, commissioning, monitoring, O&M and knowledge transfer.

## 6. Eligibility Criteria

Applicants may be:

| SN | Criteria           | Requirement / Supporting Document                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Basic eligibility  | Technology developers/OEMs/River rejuvenation specialists/Environmental engineering firms/Research institutions/IITs/NITs/CSIR laboratories/International technology providers in Sole/JV/Consortium capacity/Start-ups with proven installations/Public sector organizations<br><br>Entity should have legal establishment in India or should be represented (in case of foreign entity/technology provider) through an Indian partner having establishment in India |
| 2  | Experience         | At least one successfully commissioned project of similar nature during the last five years, implemented either in India or internationally.                                                                                                                                                                                                                                                                                                                          |
| 4  | Proven Technology  | Demonstrated compliance with NGT/CPHEEO norms                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5  | Financial Turnover | ≥ ₹5 crore average annual turnover (last 3 years ending on 31.03.2026)                                                                                                                                                                                                                                                                                                                                                                                                |
| 6  | Key Personnel      | Process engineer, environmental specialist, O&M manager                                                                                                                                                                                                                                                                                                                                                                                                               |
| 7  | Certifications     | ISO 9001/14001/45001 preferred                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## 7. Information to be Submitted

Interested Applicants shall submit EOIs in the following sequence:

1. Company Profile
2. Technology Description (Annexure-I: Technology Information Sheet)
3. Relevant Experience
4. Performance Data
5. Commercial Model
6. Financial Capability
7. Contact Details

## 8. Demonstration Requirement

Applicants should indicate willingness to undertake a two-stage implementation:

- (i) a pilot on a 3–5 km stretch with independent third-party validation, followed by
- (ii) city-wide deployment over the full Kshipra stretch based on demonstrated performance.

## 9. Proposed Timelines

| Activity                               | Date           |
|----------------------------------------|----------------|
| Issue of EOI                           | 11 August 2026 |
| Pre-EOI Meeting/Site Visit             | 19 August 2026 |
| Last Date for Queries                  | 19 August 2026 |
| Submission                             | 31 August 2026 |
| Presentation by Shortlisted Applicants | 01 August 2026 |

Interested applicants are encouraged to undertake a site visit prior to submission.

## 10. Evaluation Parameters

EOI responses shall be evaluated as under:

| Parameter            | Marks |
|----------------------|-------|
| Technical capability | 30    |
| Proven performance   | 25    |
| Innovation           | 15    |
| Ease of deployment   | 10    |
| Scalability          | 10    |
| Financial viability  | 10    |

Applicants securing 70 marks shall be empanelled.

## 11. Reservation of Rights

The Authority reserves the right to accept or reject any or all EOIs, modify the scope, seek additional information, invite presentations, conduct pilot demonstrations, or discontinue the process without assigning any reason.

## 12. Important Disclaimer

This EOI is intended solely for technology scouting, market assessment and identification of innovative solutions. It does not constitute a Request for Proposal (RFP) or any commitment by Ujjain Smart City Limited or Ujjain Municipal Corporation to award any contract. The Authority reserves the right to shortlist technologies, invite presentations, conduct pilot demonstrations, or initiate a separate procurement process based on the findings of this EOI.

## 13. Submission Details

EOI must be submitted in **hard copy and soft copy (PDF)** to:

**Executive Director,**

**Ujjain Smart City Limited**

Mela Office, Kothi Road, Ujjain - 456010

Phone: 0734 – 2525856 Email: [ujjainsmartcity@mpurban.gov.in](mailto:ujjainsmartcity@mpurban.gov.in)

Subject: *EOI for Innovative Technologies for Enhancement of Water Quality in River Kshipra, Ujjain*

**Annexure-I: Technology Information Sheet**

| Field                              | Details |
|------------------------------------|---------|
| Technology Name                    |         |
| Technology Category                |         |
| Country of Origin                  |         |
| Patent Status                      |         |
| Technology Readiness Level         |         |
| Similar Installations              |         |
| Design Capacity                    |         |
| Expected Water Quality Improvement |         |
| Energy Consumption                 |         |
| O&M Requirement                    |         |
| CAPEX/OPEX                         |         |
| Suggested Implementation Model     |         |