

# Expression of Interest (EOI) for

**Survey, Design, Supply, Installation, Testing, Commissioning and Maintenance  
of Smart Street Light System in Ujjain Municipal Area**



Mela Office, Kothi Road, Ujjain -465010

**September 2025**

**NIT No. USCL/399**

**Tender ID: 2025\_UAD\_453148\_1**

**Place: Ujjain, Date: 19/09/2025**

## **Expression of Interest (EOI) for Survey, Design, Supply, Installation, Testing, Commissioning and Maintenance of Smart Street Light System in Ujjain Municipal Area**

### **1. Introduction**

Ujjain Smart City Limited (USCL), on behalf of Ujjain Municipal Corporation (UMC), invites Expression of Interest (EOI) from eligible firms for the Survey, Design, Supply, Installation, Testing, Commissioning and Maintenance of a state-of-the-art Smart Street Lighting System across Ujjain city. The project aims to modernize the street lighting infrastructure with advanced technologies, enhance public safety, reduce energy consumption, and provide centralized monitoring through the Integrated Command and Control Centre (ICCC).

### **2. Objectives**

- To implement an intelligent and energy-efficient smart street lighting system.
- To enable centralized, real-time monitoring and control via ICCC.
- To integrate, retrofit, and upgrade existing street lighting systems.
- To integrate smart poles with provisions for CCTV, Wi-Fi, EV charging, and sensors.
- To enhance safety for pedestrians and vehicles through adaptive lighting.
- To reduce operational costs by predictive maintenance and energy saving measures.
- To ensure system scalability for future integrations specifically during Simhastha 2028.

### **3. Conditions of Eligibility**

#### **3.1. Basic Eligibility**

The applicant must be a legally registered Original Equipment Manufacturer (OEM) or system integrator based in India.

#### **3.2. Technical Eligibility**

The applicant should have successfully executed at least two projects involving Survey, Design, Supply, Installation, Testing, Commissioning, and Maintenance of a Smart Street Light System in a city/urban area (having population of 5 lakh and above) anywhere in India.

#### **3.3. Financial Eligibility**

The applicant should have an average annual turnover of at least Rs. 20 Crore in the last three financial years ending on 31 March 2025.

### **4. Scope of Work**

The selected applicant (Concessionaire) shall design, finance, procure, install, operate and maintain an Integrated Smart Street Lighting System in Ujjain on DBFOT basis. The scope shall include phased replacement of all conventional luminaires with energy-efficient,

dimnable LED luminaires (Phase I) and integration with a centralized control and monitoring system, GIS mapping, and deployment of smart poles with provisions for ICT services (Phase II). The Concessionaire shall be entitled to availability payments linked to system uptime, performance-based incentives linked to verified energy savings, and a share of carbon credit and non-tariff revenues, as defined in the Concession Agreement. The Concessionaire shall undertake the following tasks:

(a) Survey and Design:

- City-wide survey of existing street lighting infrastructure.
- Design of appropriate smart street lighting schemes with latest technologies.
- Integration, retrofitting and upgradation of existing street lighting infrastructure and new infrastructure with centralized control systems covering the municipal area.

(b) Technology Options:

Option-1: Group control of existing conventional lights via feeder pillars and ICCC integration

Option-2: Individual control with replacement of existing fixtures with smart LED fixtures

Option-3: Replacement of existing HPSV/MH lights with LED fixtures, integrated with ICCC

(c) Latest Innovations that can be included:

- Adaptive lighting using AI/ML based on traffic, weather, and pedestrian movement.
- IoT-based communication using NB-IoT/LoRaWAN.
- Smart dimming and motion sensor-based lighting.
- Integration with solar and hybrid renewable solutions.
- Predictive maintenance with fault-detection sensors.
- Smart poles with CCTV, Wi-Fi, EV charging, and environmental sensors.
- Data security with end-to-end encryption.
- GIS mapping and real-time dashboards with mobile/web access.

(d) Implementation & Maintenance:

- Supply, installation, testing, and commissioning of smart lighting systems.
- Maintenance of the lighting system for a period of 10 years.
- Centralized 24x7 monitoring at ICCC.
- On-demand meter readings, reports, and alarms.
- Energy audits and compliance with National Lighting Code (SP 72:2010).

## 5. Contracting Structure

One private concessionaire shall be selected on a DBFOT/DBFOM basis through QCBS evaluation.

- Phase I: LED retrofitting of all conventional fixtures with high-efficacy dimmable LEDs.
- Phase II: Integration with CCMS, GIS mapping, IoT controllers, and smart poles with provisions for CCTV, Wi-Fi, EV charging, and sensors.
- Concessionaire shall be responsible for financing, installation, operation and maintenance for 10 years

## **6. Payment Mechanism**

The indicative payment mechanism is given below, which will be finalized based on EOIs and incorporated suitably in RFP Document.

- Availability Payments linked to uptime and functional lights (>98%).
- Energy Savings Incentive: Shared savings based on baseline verified by third party (e.g., 70:30 split in favor of UMC/USCL).
- Carbon Credits: Concessionaire to facilitate registration; revenue to be shared (e.g., 50:50).
- Optional Revenue Streams: Advertising rights, EV charging, telecom co-location, with agreed revenue share to UMC/USCL.

## **7. Expectations from Selected Agency**

- Lifecycle approach ensures assets are maintained, not just installed.
- Arrange factory inspection of equipment.
- Transport, insure, and install equipment at site.
- Provide performance guarantees and reliability tests by Third party agency.
- Ensure labelling and traceability of fixtures.
- Operate and maintain 24x7 complaint redressal system.
- Maintain local storage of minimum 5% spare fixtures.
- Submit regular reports to USCL/UMC.
- Scalable platform for future applications specifically during Simhastha 2028.

## **8. Submission by Applicants**

Interested applicants shall submit the following details:

- Organization profile and registration details.
- Technical experience and project references.
- Financial details of last three years.
- Product and service offerings.
  - Innovative business models and revenue-sharing (if any).
  - Proposed technology solutions for Options 1, 2, and 3.
  - Implementation and AMC plan.

## **9. Evaluation Methodology**

EOIs will be evaluated based on eligibility criteria, technical capabilities, past experience, innovation in proposed solutions, financial strength, and presentation before the Evaluation Committee of USCL.

## **10. Schedule of EOI**

The detailed schedule including pre-bid meeting, submission deadline, and presentation dates will be published on [www.mptenders.gov.in](http://www.mptenders.gov.in).

## **11. Instructions for Submission**

Applicants shall submit their EOI online on [www.mptenders.gov.in](http://www.mptenders.gov.in) along with ONE hard copy to the office of “The CEO, Ujjain Smart City Limited”, as per prescribed schedule.

Clarifications may be sought through email: [ujjainsmartcity@mpurban.gov.in](mailto:ujjainsmartcity@mpurban.gov.in)

Contact for site visit and other information:

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## **12. Annexures**

Annexure-1: Applicant Information Form

Annexure-2: Financial Details

Annexure-3: Technical Experience

Annexure-4: Proposed Technology Solution with tentative financial modelling