

# Expression of Interest (EoI)

## **Selection of Concessioner for Implementing Intelligent Poles for Smart City Projects in Ranchi Ranchi on BOOT model**

**Eoi reference No.: SUDA/SCM/RSCCL-IIP-258**

**Date : 22/02/2017**

**Authority: RANCHI SMART CITY CORPORATION LIMITED**



**Urban Development & Housing Department**  
**Ranchi Smart City Corporation Limited**

Eol reference No.: SUDA/SCM/RSCCL-IIP-258

Ranchi/Date: 22/02/2017

**Expression of Interest**

Ranchi Smart City Corporation Limited (RSCCL), invites responses (“Proposals”/“Bids”) to this Expression of Interest (“Eol”) from eligible Concessioner to be appointed as PPP vendor for implementation of Intelligent Poles for Smart City projects in Ranchi.

Interested Concessioners advised to study this Eol document carefully before submitting their proposals in response to the EOI document. Submission of a proposal in response to this Eol shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

Interested Concessioner to download the Eol document from our website <http://udhd.jharkhand.gov.in>. Any subsequent clarifications, which will be issuing by the authority made available on the above website only.

Proposals must be received no later than time, date and venue mentioned in the below table:

#	Information	Details
1.	Name of Work	Eol for Selection of Concessioner for Implementing Intelligent Poles for Smart City Projects in Ranchi on BOOT model
2.	URL	<a href="http://udhd.jharkhand.gov.in">http://udhd.jharkhand.gov.in</a>
3.	Last date for submission of written queries for clarifications along with email for sending queries	07-03-2017
4.	Date and venue of pre-bid conference	08-03-2017, 1500 Venue : O/o Director, SUDA 4th Floor, Project Bhawan, Dhurwa, Ranchi-04
5.	Last date (deadline) for submission of bids	23-03-2017 till 1400 hours
6.	Opening of Bids	23-03-2017 at 1500 at 1500 hours
7..	Submission of Bid	Offline

Proposals that are received after the deadline will not be considered in this procurement process. All documents that form a part of proposal response submitted by Concessioner, should be submitted on the venue mentioned in the table. To obtain first-hand information on the assignment, Concessioners encouraged to attend a pre- bid meeting. Attending the pre-bid meeting is optional.

Sd/-  
**(Rajesh Kumar Sharma)**  
Director, SUDA

## **Invitation for Proposal**

Ranchi Smart City Corporation Limited (RSCCL), invites responses (“Proposals”/“Bids”) to this Expression of Interest (“EoI”) from eligible Concessioner to be appointed as PPP vendor for implementation of Intelligent Poles for Smart City projects in Ranchi.

Interested Concessioners advised to study this EoI document carefully before submitting their proposals in response to the EOI document. Submission of a proposal in response to this EoI shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

Interested Concessioner to download the EoI document from the website URL mentioned in the ‘Schedule of Bid Process’. Any subsequent clarifications will be made available on the website.

Proposals must be received not later than time, date and venue mentioned in the ‘Schedule of Bid Process’. Proposals that are received after the deadline will not be considered in this procurement process. All documents that form a part of proposal response submitted by Concessioner, should be submitted on the office of RSCCL.

To obtain first-hand information on the assignment, Concessioners encouraged to attend a pre- bid meeting. Attending the pre-bid meeting is optional.

## **Table of contents**

1	Introduction	7
2	Schedule of Bid Process	7
3	Background Information	8
3.1	Basic Information	8
3.2	About Ranchi	8
3.3	About Ranchi Smart City Ltd	8
3.4	Project Background	8
3.5	Project Objective	9
3.6	Project Description	9
4	Instructions to Bidder	10
4.1	Consortium	10
4.2	Pre-bid Conference	10
4.3	Minimum Pre-Qualification Criteria	10
4.4	Submission of Bid	11
5	Evaluation of Bid	11
5.1	Technical Presentation and Proof of Concept/Client Visit	11
6	Scope of Work for the Concessioner	10
6.1	Intelligent Poles	12
6.2	Smart LED light	12
6.3	Public Wi-Fi	13
6.4	Optical Fiber	13
6.5	Surveillance	13
6.6	Smart Bill Board	14
6.7	Centralized Command and Control Centre	14
6.8	Environmental Sensors	14
6.9	Electronic Vehicle Charging Point	14
6.10	Ground Based Mast	14
7	Annexure	15
7.1	Particulars of the Concessioner	15
7.2	Company Profile	16
7.3	Revenue Generation	17
7.4	Documents to establish legal entity	18
7.4.1	Certificate of Incorporation	18

7.4.2	Articles and Memorandum of Association	18
7.4.3	Annual Report for the last three financial years	18
7.5	Audited balance sheet for the last three years	19
7.6	Self-Declaration for non-blacklisting	20

## 1 Introduction

- a) Ranchi Smart City Corporation Ltd (RSCCL) is considering the appointment of private partner to implement and maintain Smart City Pan city Project in an efficient and effective manner on an appropriate Public Private Partnership (PPP) model
- b) Concessioner has to implement the project in Build Own Operate and Transfer (BOOT) model
- c) Concessioner is advised to study this EoI document carefully before submitting their proposals in response to this tender. Submission of a proposal in response to this tender shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications. Failure to furnish all information required as mentioned in the EoI documents or submission of a proposal not substantially responsive to the EoI documents in every respect will be at the Concessioner's risk and may result in rejection of the proposal.

## 2 Schedule of Bid Process

#	Information	Details
1.	Name of Work	EoI for Selection of Concessioner for Implementing Intelligent Poles for Smart City Projects in Ranchi on BOOT model
2.	URL	<a href="http://udhd.jharkhand.gov.in">http://udhd.jharkhand.gov.in</a>
3.	Last date for submission of written queries for clarifications along with email for sending queries	07-03-2017
4.	Date and venue of pre-bid conference	08-03-2017, 1500 hours Venue : O/o Director, SUDA 4th Floor, Project Bhawan, Dhurwa, Ranchi-04
5.	Bid validity period	90 Days
6.	Last date (deadline) for submission of bids	23-03-2017 till 1400 hours
7.	Opening of Bids	23-03-2017 at 1500 at 1500 hours
8.	Date of Technical Presentation	To be notified.
9.	Date of Proof of Concept	To be notified.
10.	Submission of Bid	Offline

## **3 Background Information**

### **3.1 Basic Information**

- I. RSCCL proposals (“Tenders”) to this Expression of Interest (“Eoi”) from PPP vendor (“Concessioner”) for the implementing Intelligent Poles in Ranchi on BOOT model. The indicative Scope of Work is mentioned under Section 7 of the EOI.
- II. The last date of submission of proposal is mentioned under Schedule of Bid Process

### **3.2 About Ranchi**

Ranchi is a city with prime regional importance and syncretic culture. It is the state capital of Jharkhand state.

Ranchi has been selected by Ministry of Urban Development (MoUD), Government of India among the fast-track cities for implementation of projects proposed in Smart City Mission. As part of the Smart City Proposal, the city of Ranchi has set its vision for Smart City as follows:

“Transforming Ranchi into a vibrant regional economic and cultural hub through inclusive urban regeneration, to act as a magnet for investment and new opportunities for the youth.”

### **3.3 About Ranchi Smart City Corporation Ltd.**

In line to the guidelines issued by Ministry of Urban Development (MoUD)/ Government of India (GoI) Government of Jharkhand has created a Special Purpose Vehicle (SPV) Ranchi Smart City Corporation Ltd (RSCCL) for implementing the Smart City mission at the city level.

RSCCL will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects. RSCCL is headed by the CMD, a full time CEO and have nominees of Central Government, State Government and ULB on its Board.

The key functions and responsibilities of RSCCL are to;

- i. Approve and sanction the projects including their technical appraisal
- ii. Take measures to comply with the requirements of MoUD with respect to the implementation of the Smart Cities programme
- iii. Undertake review of activities of the Mission including budget, implementation of projects, etc and co-ordination with other missions / schemes and activities of various ministries

### **3.4 Project Background**

City of Ranchi participated in the Smart City Challenge and is one of the 13 fast-track cities shortlisted by MoUD for implementing Smart City projects.



The selected Smart City Proposal is to leverage the available resources and focus on larger development amounting to large share of public investment for smart implementing smart solutions. The SCP has a compelling three pronged vision of improving public life through quantum jump in quality of services, simplifying governance and aligning incentives of city functionaries. The idea is to:

- i. Maximize reuse of existing infrastructure (ICT/non ICT)
- ii. Creating a backbone for smarter initiatives in the future.
- iii. Modernize service delivery.

The vision is to Transforming Ranchi, into a vibrant regional economic and cultural hub through inclusive urban regeneration, to act as a magnet for investment and new opportunities for the youth.

One of the key enabler to achieve the vision is the adoption of smart solutions for efficient use of available assets and enhance the quality of urban life for more vibrant and livable city. Following are the few smart components to be adopted as per the SCP;

- SWM: ICT enhanced integrated smart waste management 100% processing of waste
- Water Supply- 24x7, Purity of potable water 100%
- Street Lighting- All light to be LED and with Solar Power.
- Sewerage: 100% household and public places to be covered, 100% treatment and recycling.
- Sanitation- City to be OD free, in every 150 meter radius at least one public toilet.
- Zero Tolerance to crime,
- Special safety mechanism to capture SOS messages in the form of oral word "HELP" or "SOUND OF CLAPPING" in addition to other form which can be analysed and channelised automatically.
- Roads with utility ducts, underground electric cables

### **3.5 Project Objective**

The objective is to provide city of Ranchi a core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.

The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities.

### **3.6 Project Description**

The aim of the project is to Design, Develop, Implement, Manage, Operations and Maintenance of smart services to improve RSCCL operation, delivers benefits to citizens and provide seamless integration of smart services & solution inter alia of following;

The details of each module is provided in the Scope of Work.

## 4 Instructions to Bidder

### 4.1 Consortium

The Concessioner can form a consortium. The consortium may consist of multiple members (not more than 4 parties) with one lead member and other consortium members.

The Concessioner need to provide the details of firm wise activities that will be performed by the consortium.

### 4.2 Pre-bid Conference

- i. RSCCL shall hold a pre-bid meeting with the prospective Concessioner as mentioned in Section 3 - Schedule of Bid Process.
- ii. The queries should necessarily be submitted in the following format:

#	EOI Document Reference(s) (Section & Page Number(s))	Content of EOI requiring Clarification(s)	Points of clarification

- iii. RSCCL shall not be responsible for ensuring that the Concessioner's queries have been received by them. Any requests for clarifications after the indicated date and time may not be entertained by RSCCL.

### 4.3 Minimum Pre-Qualification Criteria

#		Prequalification Requirement	Supporting Documents to be attached
1.	<b>Legal Entity</b>	The Sole/Lead Bidder should be an Indian Registered Company registered under Company Act 1956.	<ul style="list-style-type: none"> <li>• Certificate of Incorporation from Registrar of Companies.</li> <li>• Articles and Memorandum of Association.</li> <li>• Annual Report for the last three financial years.</li> </ul>
2.	<b>Financial: Turnover from IT/ ITeS/Telecom</b>	Average Annual Turnover of the Sole/Lead Bidder from IT/ ITeS/Telecom from hardware, software and services during the last three financial years, i.e., 2013-2014, 2014- 2015 and 2015-2016 (as per the last published audited balance sheets),	<ul style="list-style-type: none"> <li>• Audited balance sheet for the last three years</li> </ul>

#		Prequalification Requirement	Supporting Documents to be attached
		should be at least Rs. 500 Crores	
3.	<b>Presence in India</b>	The Sole/Lead Bidder should have been present in India for the least 7 years carrying out business in India as on 31.03.2016	<ul style="list-style-type: none"> <li>• Certificate of Incorporation</li> </ul>
4.	<b>Blacklisting</b>	The Sole Bidder/All Members of Consortium shall submit a self- declaration of not having been black listed to provide similar services to any State or Central Government Department or Ministry as on bid submission date	<ul style="list-style-type: none"> <li>• Self-declaration duly signed by PoA holder for signing the bid</li> </ul>

#### **4.4 Submission of Bid**

The Concessioner (Lead member in case of consortium) will submit the bid offline through their authorized representative at the office of RSCCL

## **5 Evaluation of Bid**

The bids will be evaluated basis the qualification criteria as mentioned in the section 4.2, various details sought as per section 7, technical presentation and Proof of Concept as mentioned in the section 5.1

### **5.1 Technical Presentation and Proof of Concept/Client Visit**

The Concessioner need to give a detailed technical presentation to RSCCL covering the following;

- Details on technical solution envisaged in the project
- Indicative approach to be adopted
- Suggest, with proper justification, the various revenue modes which can be part of the EOI. RSCCL will consider these suggestions while evaluating the EoI.

Post the technical presentation the Concessioner has to do a Proof of Concept (PoC) with following details;

- Each shortlisted Concessioner for Technical Evaluation shall demonstrate the PoC on No Cost No Commitment basis (NCNC) at a location defined by the Client
- The Concessioner has to demonstrate the solution as per following;
  - Installation of at least 2 smart poles with all the smart components as mentioned in the EOI
  - Interface with each other on a common communication platform

- The demonstration/presentation should provide a representative solution to integrate various aspects of the project as per the scope
- RSCCL shall facilitate ground space for installation of Gateway, Switches, Routers etc. and power requirement to each applicant during the entire period of PoC. Any Civil/Electrical work required will be the responsibility of the applicant. OFC connectivity may not be available at the time of PoC. If this is essential for any applicant, RSCCL may consider providing suitable location(s) for their PoC
- Post completion of PoC, RSCCL will terminate all the facilities given to Concessioner for PoC
- The learnings from PoC will serve as the basis of designing detailed solution, scope of work and technical specifications of the RFP

## **6 Scope of Work for the Concessioner**

The Concessioner shall be solely and exclusively responsible to design, implement and maintain on a BOOT (Build, Own, Operate, and Transfer) model the solution as mentioned in this EOI and to provide the services as specified.

Design, Develop, Implement, Manage, Operations and Maintenance of following services to improve RSCCL operation and delivers benefits to citizens and provide seamless integration of smart services and solution inter alia of following:

### **6.1 Intelligent Poles**

The Concessioner will install Intelligent Poles at the pre-defined locations with following functionalities;

- Facility to house telecom 3G/4G components for small cells
- Smart LED lights
- Access points for Wi-Fi
- Surveillance Camera
- Smart Billboards
- Environmental Sensors
- Electronic Vehicle Charging point While implementing Intelligent poles Concessioner has to keep in consideration the overall aesthetics of the poles with no loose wires hanging, slots for placing switches and other IoTs etc.

### **6.2 Smart LED light**

Electric streetlights are essential elements of a municipal environment and services. They affect resident sense of safety while influencing a city's ability to create an inviting environment for business and tourism. Unfortunately, outdoor lights are also a major energy draw. Therefore, following are desired in designing, implementation and O&M of street lightings:

- Reduce energy consumption, cost, and its maintenance

- Enhance situational awareness, real-time collaboration, and decision making across city
- Add intelligent IT innovations to civic utilities, public safety without adding significantly more physical infrastructure
- Real-time data communications with low latency (or minimal delay), to improve safety and security

### **6.3 Public Wi-Fi**

Hot Spot Wi-Fi serves as the foundation for creating a connected city to access the wireless internet service with ease and convenience. For this purpose RSCCL will identify locations within the Municipal limits of Ranchi where these services have to be provided to Citizens.

City Wi-Fi Hot Spot also helps cities provide citizens with Internet connectivity and access to a broad range of citywide service which has following benefits:

- More revenue and lower costs from infrastructure management
- Better city planning and development
- E-government services delivered to citizens, faster, and at a lower operating expense
- Local economic development
- Improved productivity and service
- Access to city services and Internet connectivity
- Improved quality of life
- Increased access to online services

### **6.4 Optical Fiber**

In order to provide better bandwidth to the Wi-Fi users/bandwidth as required for future Smart Services/ providing Backhaul to Telecom Fiber shall be laid across the city.

Concessioners could use the fiber for various applications, earn the revenue through leasing and shall share the revenue with RSCCL. While laying fiber, Concessioners shall use necessary protection material for making the deployment future proof.

After laying the fiber, Concessioner shall be responsible for restoration of the roads, O&M for the entire concession period.

### **6.5 Surveillance**

City Safety and Security solution helps protect cities against crime, terrorism, and civil unrest, planning events, monitoring of infrastructure, encroachments etc. It helps law enforcement monitor public areas, analyze patterns, and track incidents and suspects enabling quicker response.

Keeping the above perspective, RSCCL for this purpose is intending to implement the high definition surveillance cameras installed. The cameras should be housed on the poles. It shall also be possible to adjust the camera focus from a remote location.

## **6.6 Smart Bill Board**

As a part of the beautification of certain specific locations in the city of Ranchi, Concessioners are required to implement intelligent poles with smart billboards housed on it. Revenue earned out of these advertisements shall be shared between RSCCL and Concessioner.

It shall be possible to change the advertisements /Messages in these smart bill boards from a centralized location.

## **6.7 Centralized Command and Control Centre**

The Concessioner has to provide, deploy and configure a centralized command and control center with an integrated operations and dashboard application that will integrate various Smart City components implemented in this project and in future.

The centralized command and control center can monitor and control, via the centralized application, the smart components like Smart LED, Smart Surveillance, Access Points for the public Wi-Fi, Smart Billboards and Environmental Sensors.

The Command and Control Center will be hosted and operated at the premises of Ranchi Smart City Corporation Limited. Day to day operations at Command and Control Center will be monitored by RSCCL. All the hardware and software issues will be the responsibility of the Concessioner.

RSCCL will provide the civil infrastructure, power supply and backup.

## **6.8 Environmental Sensors**

Concessioners are required to integrate environmental sensor for providing air quality, temperature, and humidity. These Sensors should be integrated into the intelligent poles.

## **6.9 Electronic Vehicle Charging Point**

Concessioners are required to provide Electronic Vehicle Charging Points in the pole for charging electronic vehicles as they are envisioned to be part of the Ranchi's public transport system.

## **6.10 Ground Based Mast**

Apart from the intelligent poles, the Concessioner will also install Ground Based Mast (GBM) at the pre-defined locations to mount the macro cells for a wider telecom connectivity.

## 7 Annexure

### 7.1 Particulars of the Concessioner

[In case of Consortium, all members of the Consortium need to fill this form]

#	Information Sought	Details to be Furnished
1.	Name and address of the bidding Company	
2.	Participations as	Sole/Lead/Consortium Member
3.	Incorporation status of the firm (public limited/private limited, etc.)	
4.	Year of Establishment	
5.	Date of registration	
6.	ROC Reference No.	
7.	Details of company registration	
8.	Details of registration with appropriate authorities for service tax	
9.	Turnover in the last 3 years	<ul style="list-style-type: none"> <li>• 2015-16</li> <li>• 2014-15</li> <li>• 2013-14</li> </ul>
10.	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

## **7.2 Company Profile**

A brief company profile covering the following aspects;

- A brief description of the Company's organization and an outline of recent experience on assignment of similar nature
- Understanding of the project
- Type of resources and their expertise that should be deployed on such type of projects In

case of Consortium, all members of the Consortium need to provide the details



### **7.3 Revenue Generation**

Details/Suggestions on revenue generation out of the following;

- Intelligent Poles
- Public Wi-Fi
- Smart LEDs
- Smart Billboards
- Optical Fiber
- Ground Based Mast
- Any other component

The Concessioner need to highlight the various methods for generating revenue (from the aforementioned smart components) along with an indicative calculation, along with total monetization period, on how the revenue will be generated.

**7.4 Documents to establish legal entity**

**7.4.1 Certificate of Incorporation**

**7.4.2 Articles and Memorandum of Association**

**7.4.3 Annual Report for the last three financial years**

**7.5 Audited balance sheet for the last three years**

## **7.6 Self-Declaration for non-blacklisting**