

**Foundation for Innovation and Technology
Transfer (FITT) for Patna Smart City
Limited (PSCL) invites**



REQUEST FOR PROPOSAL

For

**The Upgradation and Automation of Existing Drainage Pump System at major
Pumping Station locations i.e., Yogipur, Saidpur, Pahari, ECO Park in
Patna with SCADA & ICCC Integration and 5 Years Comprehensive AMC**

NIT No: 01/FITT/PSCL/03/2024

Through website: <https://fitt-iitd.in>

Addressed to

**Chief Operating Officer,
Foundation for Innovation and Technology Transfer
on behalf of Patna Smart City Limited**

E-Mail: coo@fitt-iitd.in

REQUEST FOR PROPOSAL

RFP for Upgradation and Automation of Existing Drainage Pump System at major Pumping Station locations i.e., Yogipur, Saidpur, Pahari, ECO Park in Patna with SCADA & ICCC Integration and 5 Years Comprehensive AMC

(Through online mode only- <https://fitt-iitd.in>)

FITT No. – 01/FITT/PSCL/03/2024

Date:- 11.03.2024

1. Foundation for Innovation and Technology Transfer (FITT) for Patna Smart City Limited (PSCL) invites bids from eligible experienced Firms/ /Contractors / Agencies / Bidders registered in appropriate category in any Government Organization/PSUs for execution of works as listed below :-

Name of Work	Estimated Cost	RFP Document (Non-Refundable)	Bid Security (EMD)	Bid Processing Fee	Time for completion	
Upgradation and Automation of Existing Drainage Pump System at major Pumping Station locations i.e., Yogipur, Saidpur, Pahari, ECO Park in Patna with SCADA & ICCC Integration and 5 Years Comprehensive AMC	-	Rs. 11800.00	15.0 Lakh.	-	3 months	
2.	Date of Downloading of RFP Document	:	From 11.03.2024 to 23.03.2024 up to 05:00 P.M. Through website: https://fitt-iitd.in			
3.	Proposed Site Visit	:	Date: 14.03.2024 to 15.03.2024 up to 05:00 P.M. Contact: coo@fitt-iitd.in for scheduling appointment			
4.	Place & Date of pre-bid meeting	:	Date: 18.03.2024, Time 03.00 P.M.; Online, link shall be shared with all the registered bidder			
5.	Last date of Receiving Queries	:	Date: 16.03.2024, Time 05.00 P.M. Queries can be sent on coo@fitt-iitd.in			
6.	Last Date and time for uploading of bid.	:	Date: 26.03.2024 up to 03.00 P.M. Through website: https://fitt-iitd.in			
7.	Last Date and time for submission of hard copy of bid	:	Date: 26.03.2024, Time 05.00 P.M At FITT			
8.	Time & Date of opening technical bids	:	Date: 27.03.2024, Time 12:00 P.M			
9.	Time & date of opening financial bids	:	Date: 30.03.2024, Time 02.00 P.M			
10.	Place of opening of Bid	:	Through website https://fitt-iitd.in			
11.	Periods of bids validity	:	60 Days.			

12	Officer inviting bids	Col. Naveen Gopal (Retd.), Chief Operating Officer, FITT, IIT Delhi. Email: coo@fitt-iitd.in
13	For participation in E-tendering procedure, the vendor shall submit the fees of tender document and send an email to coo@fitt-iitd.in to get the Full RFP document and to participate in E-tendering.	
14	The Full tender documents shall be emailed to all the vendors, once they share the payment proof of tender document on given email ID coo@fitt-iitd.in	
15	<p>(i) Bid processing fees to be paid through online mode i.e. Internet payment gateway (Net Banking, NEFT/RTGS).</p> <p>Bank Details for the payments are given below:</p> <p>Beneficiary: Foundation of Innovation and Technology Transfer</p> <p>Bank Account No: 10773571968</p> <p>Bank Address: State Bank of India, IIT Delhi, Hauz Kaus, New Delhi – 110016</p> <p>IFCS Code: SBIN0001077</p> <p>MICR Code: 110002156</p> <p>Account Type – Saving</p> <p>SWIFT No: SBI NIN BB 547</p> <p>(ii) Bids along with necessary online payments must be submitted to email Id: coo@fitt-iitd.in before the date & time specified in document</p> <p>(iii) The FITT does not take any responsibility for the delay/Non availability of internet connection, Network Traffic/Holidays or any other reasons".</p> <p>(iv) Bidders are requested to send technical and financial bid separately. Financial bid should be password protected. Once the bidder is selected for 2nd round, they shall be requested for the password of the document.</p> <p>(v) Technical document should be submitted in PDF format and financial bid can be submitted in Excel with password protection.</p> <p>(vi) Technical document should contain all relevant documents requested in RFP. All the relevant document and CVs should be added as an annexure document of Technical Bid.</p> <p>(vii) In total 3 documents shall be emailed on coo@fitt-iitd.in, (a) Technical Document with Detailed Approach and Methodology – PDF (b) Annexure of Technical Document (all relevant proofs and documents requested in RFP) - PDF (c) Financial Bid (password protected) - Excel</p>	
16.	Bid document cost should be paid as mentioned and payment proof need to be submitted at coo@fitt-iitd.in to get the full RFP	
17	<p>Earnest Money should be deposited online payable in favour of Foundation of Innovation and Technology Transfer, on or before 03:00 PM on 26.08.2023. Before sending the Technical and Financial Proposal at coo@fitt-iitd.in</p> <p>Failing which the tender will be rejected. The Estimated Cost may increase or decrease. All the information/corrigendum /addendum related to the project shall be published on the website https://fitt-iitd.in and shall be emailed to registered vendors.</p>	
18	The authority shall have the right to reject the bid without assigning any reason what so ever. For any information department	

	Contact No. 011 - 26597164
19	After award of work the agency will furnish performance security deposit and make agreement as per SBD Clause of Contract for execution of the Project.
20	Payment for work will be made as per schedule of Payment given in RFP document.
21	For queries & Clarifications, if any, send e-mail to coo@fitt-iitd.in
	<p>Chief Operating Officer Foundation for Innovation and Technology Transfer, IIT Delhi, Hauz Kaus, New Delhi – 110016</p>

INSTRUCTIONS FOR ONLINE BID SUBMISSION

- i. FITT as implementing agency intends to undertake a competitive bidding process in order to shortlist and qualify suitable Bidders, who shall be eligible for evaluation of their price bids towards the selection of the successful bidder.
- ii. The document containing the project profile, invitation for qualification and criteria for evaluation may be obtained from the website: <https://fitt-iitd.in>
- iii. FITT as the implementing agency will not be responsible, in case of any delay, due to any reason whatsoever, in receipt of Bid Documents.
- iv. The FITT reserves the right to reject any or all Bids or cancel/withdraw the Invitation for Bids (IFB) without assigning any reason whatsoever and in such case, no Bidder/ intending Bidder shall have any claim arising out of such action.
- v. The details of the bidding process and summary of the scope of proposed works for the project is included in the document.
- vi. Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.
- vii. The bidders shall send their eligibility and qualification details, technical bid, financial bid etc., in the online standard formats given for respective tenders on coo@fitt-iitd.in the respective stage only. The bidders shall send the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria / technical bids and other certificate /documents as an annexure of technical document. The bidder shall sign on the supporting statements, documents, certificates, sent by him, owning responsibility for their correctness /authenticity.
- viii. Bidder must send the proof of EMD and Tender Fee on coo@fitt-iitd.in and also send the Technical and Financial Bid along with relevant annexures on coo@fitt-iitd.in. The Financial bid submitted in hard copy shall be treated as non-responsive and eligible for rejection. The proof of EMD and Tender Fee must be sent on coo@fitt-iitd.in before the given dates to the Tender Inviting.
- ix. In exceptional circumstances, the competent authority, FITT may solicit the Bidder's Consent to an extension of the period of validity.
- x. Corrigendum/ Addendum, if any, will be published on the website and shall be send to registered bidder.
- xi. For any queries regarding Tendering process, the bidders may contact at the address as provided in the tender document.
- xii. Bids that are rejected during the bid opening process shall not be considered for further evaluation, irrespective of the circumstances.

DISCLAIMER

The information contained in this **Request for Proposal (RFP)** or subsequently provided to Applicants, whether verbally or in documentary or any other form by or on behalf of Patna Smart City Limited (PSCL) (henceforth referred to as PSCL in this document/ 'the Authority') or any of its employees or advisers, shall be considered confidential and not to be reproduced/ transmitted/ adopted/ displayed for any purpose whatsoever.

This RFP is one of the steps in the process of selection of an entity for the project of '**The Automation of Drainage Pumping Station at major Pump house locations i.e. Yogipur, Saidpur, Pahari, ECO Park in Patna with 5 Years Comprehensive AMC**'.

This RFP is not an agreement or an offer by the Authority to the Applicants or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their proposals, and based upon the proposals so received from interested parties a specific Request for Proposal (RFP) can subsequently be prepared by PSCL.

This RFP includes statements, which reflect various assumptions and assessments, arrived at by the Authority/ Employer in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each bidder may require. As such this RFP may not be appropriate for all persons, and it is not possible for the Authority/ Employer, its employees, or advisers to consider the objectives, technical expertise and particular needs of each and every Applicant who reads or uses this RFP. The assumptions, assessments, statements, and information contained in this RFP, may not be complete, accurate, adequate, or correct. Each Applicant should therefore conduct their own investigations and analyses and should also check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and consider obtaining independent advice from appropriate source(s).

The information provided in this RFP is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority/ Employer accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

The Authority and its employees and advisers make no representation or warranty and shall have no liability to any person including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise; including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in anyway in this subject.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement any information, objective, assessment, or assumption contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select an Applicant for the project and the Authority reserves the right to reject all or any of the proposal(s)/ terminate the process at any time, without assigning any reasons, whatsoever.

The Applicant shall bear all its costs associated with or relating to the participation in this process, regardless of the conduct or outcome of the process.

*Chief Operating Officer
Foundation for Innovation and Technology Transfer,
IIT Delhi, Hauz Kaus, New Delhi – 110016*

Contents

1	Introduction	9
2	Scope of Work.....	9
3	Eligibility Criteria.....	10
4	Forms.....	11
5	Technical Evaluation Criteria.....	20
6	Financial Criteria.....	43
7	Terms of Payment	36
8	Financial Evaluation Criteria.....	37

Invitation for Request for Proposal for Upgradation and Automation of Existing Drainage Pump System at major Pumping Station locations i.e., Yogipur, Saidpur, Pahari, ECO Park in Patna

with SCADA & ICCC Integration and 5 Years Comprehensive AMC

1. Introduction:

The Patna Smart City Limited through FITT, IIT Delhi invites qualified and experienced agencies to submit technical and financial proposal for the upgradation and automation of nine (9) existing drainage pumping stations (Three (3) pumping stations at Eco Park (Eco Park-1, Eco Park-2, and Eco Park-3), Three (3) pumping stations at Pahari (Old Pahari, New Pahari, and Pahari NBCC), Two (2) pumping stations at Yogipur and One (1) pumping station at Saidpur), including the integration of a SCADA (Supervisory Control and Data Acquisition) system and finally integrating it with ICCC (Integrated Command & Control Center). The primary objective is to enhance the efficiency, monitoring, and control capabilities of the current infrastructure, so that flooding can be minimized.

2. Scope of Work:

The scope of work includes, but is not limited to:

- a) **Upgradation of the existing drainage pump system** to align with modern standards.
To comply with the change of water level in the sump (from the ICCC), and to remain serviceable and upgradable over the operational lifetime of the project for 10 years minimum.
- b) **Automation of complete drainage pumping stations at nine (9) pumping locations** (mentioned above) to switch on/off the pump(s) as per the desired criteria of water level in the sump. The primary objective is the implementation of an automated method for the precise starting and stopping of pump(s) at the pumping station, triggered by the defined water level in the sump at each pump house. The automation process shall be designed for ensuring seamless operation based on predetermined water level thresholds.
- c) **Water Level Monitoring and Alarm System:** The system shall incorporate a robust design for water level monitoring, utilizing sensors at each pump house. In the event of a breach of the predefined water level threshold, besides starting the pump as per design criteria, the alarm mechanism should be activated through a web map interface. Simultaneously SMS notifications shall be dispatched to designated officers.
- d) **Fault Detection and Notification:** The system will feature advanced fault detection capabilities to identify power and machine failures promptly. In the event of such failures, an automated SMS

notification system should be triggered, alerting respective field officers. This real-time notification mechanism is critical for ensuring rapid diagnosis and resolution of operational issues.

- e) **Camera Integration:** The project encompasses the integration and upgrade of the existing analogue camera system to IP-based cameras. The upgraded camera system shall provide enhanced resolution and connectivity features, contributing to improved surveillance and visual monitoring capabilities.
- f) **Integration of a SCADA system** for real-time monitoring, control, and data acquisition. *Desirable:* Provision of redundant fallback communication network in case of outage of SCADA system in times of emergency/disaster. Integration of complete system with Integrated Command and Control Center (ICCC). **Evaluation and replacement** of obsolete components.
- g) **Testing and commissioning** of the upgraded and automated system.
- h) **Comprehensive training** for designated personnel on system operation and maintenance. Five (5) designated personal at each site with refresher update training every 6 months for 5 years
- i) **Operation and Maintenance** including supply of spare parts and upgrade to software for 9 pumping stations for 5 years