

REQUEST FOR
EXPRESSION OF INTEREST
ON
**‘Empanelment of Technology partner for Smart Metering, AMI Network,
MDM and IT Infrastructure’**

EOI Notice No: KCA/STSG/EOI/B/17/20387 dtd 20th July-2017



Kerala State Electronics Development Corporation Limited
Regd office: Keltron House, Vellayambalam, Thiruvananthapuram 695 033
www.keltron.org

EOI to be submitted to :

Manager (Purchase),
Keltron Controls, Aroor.P.O,
Alappuzha Dist. Kerala – 688 534,
Contact no. 0478 2872323-6 (4 lines)

Last date of Submission: 07-08-2017

PART-I

TENDER INFORMATION

Name of the assignment: Empanelment of Technology partner for Smart Metering, AMI Network, MDM and IT Infrastructure.

Sl. No.	Event	Information to the Agencies
1	Date of Release of EOI	20.07.2017
2	Last date for queries / seeking clarification	24.07.2017
3	Pre Bid Meeting	28.07.2017
4	Last date of submission of EOI	07.08.2017
5	Date of Opening of EOI	08.08.2017
6	Pre- Bid Meeting Address	Keltron Controls Aroor,688534 Alappuzha
7	EOI Document	Available on: http://www.keltron.org from 20.07.2017
8	Earnest Money Deposit (EMD) #	Rs 10,000/- (Rupees Ten Thousand Only)
9	Address for submission of EOI	Keltron Controls Aroor,688534 Alappuzha
10	Contact Person	Mr. M. Balachandran Manager, Purchase Keltron Controls Aroor kelkca@vsnl.com Contact No: 0478 2830712

The EMD (Earnest Money Deposit) is to be submitted by all the participating Bidders in the form of demand draft for an amount of Rs.10,000/- (Rupees Ten Thousand Only/-.) from SBI/any Nationalised Indian bank in favour of **KERALA STATE ELECTRONICS DEVELOPMENT CORPORATION LIMITED**, Payable at Aroor. The EMD of unsuccessful Bidder will be returned immediately after completion of Empanelment process upon request by the bidder.

The proposal shall remain valid for a period of 180 days from the date of bid opening.

PART-II

Expression of Interest (EOI) for 'Empanelment of Technology partners for Smart Metering, AMI Network, MDM and IT Infrastructure'

1) Introduction

In recent past, Ministry of Power (Govt. of India) has emphasized the need for the state DISCOMs(distribution companies) of India for the replacement of existing electronic/mechanical energy meters at consumer / Distribution Transformers / Feeder site with the Smart Energy Meter for reduction of manual intervention in revenue cycle and better demand side management. The metering industry has taken rapid strides in the past few years by traversing from automated meter reading (AMR) to smart metering, using bidirectional communication and thereby enabling greater benefits to electricity DISCOMS, customers and society. The Ministry of Power (mop) has come out with several transformational policy initiatives for reforming the power sector in India. The Bureau of Indian standard (BIS) Published standards for smart metering ,IS 16444 in August 2015 And is 15959 Part 2 in February 2016.The Central Electricity Authority (CEA) followed With these standard functional requirements for Advanced metering infrastructure (AMI) and technical specification of smart meters in August 2016. Adoption of Smart Metering will help the utilities in Loss reduction, improvement in collection efficiency due to remote connect / disconnect, Real time Energy Auditing, faster outage reduction, improvement in power reliability, reduction in consumer complaints, reduction in Peak power purchase cost, reduction in DT failure rate etc. Smart Metering adoption will also help the Utilities in meeting futuristic business requirement like Renewable Integration, ToU/ToD based Energy Billing, Home Automation, Reduction in Carbon Footprint, etc.

Kerala State Electronics Development Corporation Limited (KELTRON) has national interest to offer end-to-end services to state DISCOMS in implementing Smart Grid Technology at competitive prices and with proven technology.

For this purpose, KSEDC (Kerala State Electronics Development Corporation Limited) will empanel Technology Solution providers for associating with Keltron for setting up of smart meter manufacturing facility at Keltron premises; provide complete smart meter solution in line with the utility requirements, handover of technical know-how as a manufacturing company/ solution provider and after commissioning, support / value added services etc.

"KELTRON® / Corporation/ The Buyer / Purchaser" means Kerala State Electronics Development Corporation Limited having registered office at Vellayambalam, Thiruvananthapuram, Kerala or the concerned Division of the same.

"The Bidder / Technology Solution provider/Solution Provider/ Contractor" means the firm or company who participates in this EOI.

"The End User/Utility means firm or company where the complete 'Smart Meter Solution' to be provided.

Firms fulfilling the essential requirements, outlined in subsequent sections may submit the EOI on or before 5 P.M, 07.08.2017 to Keltron Controls, Aroor.

2 Scope of EOI

Scope of this EOI is to empanel Technology Solution providers who has the expertise for associating with Keltron for setting up of smart meter manufacturing facility at Keltron premises; provide complete smart meter solution in line with the utility requirements, handover of technical know-how as a manufacturing company/ solution provider , after commissioning, support / value added services etc. The same solution provider should have, expertise and the solution for communication networks for RF Mesh and GSM/GPRS /PLC /Hybrid /or any other proven mechanism, Web Services and MDM to ensure the interoperability of communication modules with the non-DLMS as well as DLMS meters.

3 Description of work / specifications/ standards

- a. The solution provider shall associate with KELTRON, in setting up of a full-fledged manufacturing facility at Keltron Premises and ensure the timely completion of the facility. This include identifications of plants, machinery, test , bench marking equipments, tools, accessories and its source, calibration test facility, certification etc.
- b. Solution provider shall assist Keltron to get the necessary certification for the manufacturing facility as well as the product.
- c. The Solution provider shall have a comprehensive QAP at all stages of manufacturing for ensuring products giving reliable, trouble free performance.
- d. The Solution provider shall have at least the following testing facilities to ensure accurate calibration as per IS 16444 or the contract shall provide the details for setup manufacture/test facility for Smart meters and the facilities as per current IS standards-Insulation resistance measurement, Running at no load ,Starting Current Test ,Limits of Error ,Power Loss in Current and Voltage Circuit, Repeatability of Error, Heating Test, Effect of Magnetic Field of external origin.
- e. The solution provider shall support in Installation and Commissioning, after commissioning, support and value added services for a period of 5 years of the solution for each awarded project.
- f. Technology transfer for the products and solution.
- g. Smart Meters should have minimum basic features conforming to latest Indian Standards IS 16444 and IS 15959 Part-2 applicable in Indian Market like Net Metering features, On demand reading, Remote firmware upgrade, Pre-Paid Provisions, Recharging facility, Alarms/Alerts to the Customer, Measurement of electrical energy parameters, Bidirectional Communication, Tamper event detection, recording and reporting etc and shall be able to adapt/upgrade new market demands.
- h. General Standards applicable for Meters will be IS 15959 Part 1 & Part 2 with latest amendments(Data Exchange for Electricity Meter Reading, Tariff and Load Control- Companion Standards),16444 with latest amendments(A.C. Static Direct Connected Watt Hour Smart Meter Class 1 and 2- Specification), IS 15884 with latest amendments(Alternating Current Direct Connected Static Prepayment Meters for Active Energy (Class1 and 2)- Specification),IS 15959

Part 1 & Part 2 with latest amendments(Data Exchange for Electricity Meter Reading, Tariff and Load Control- Companion Standards) & CEA Guidelines defined in August 2016 and subsequent revisions.

- i. The solution provider shall have solution as per the latest CEA Standards for Smart Meter and associated equipments, Communication Infrastructure, Meter Data Management (MDM), Web application with updated on-line data for customers, Billing and Collection System, consumer panel, Utility administration, Monitoring of grids in private area, Associated equipments /Systems etc.

4 Essential Requirements for participating in EOI

- a. The Bidder should have at least two years' experience in Smart meters, Smart meter Solution, AMI, MDM (Refer PART II/Section-3).
- b. The Bidder should have successfully implemented or implementing Smart Metering solution in any reputed electricity utilities/ government organizations / autonomous bodies and should submit client references to the same, including name, address, e-mail, and telephone and project details or agreement.
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- c. The bidder should have a Research & Development team and infrastructure to approach and adopt the new technology and upgrade total system as and when required.
- d. The bidder should be willing to deliver the Technology, Design, and Source Code of software.
- e. The bidder should have a thorough knowledge about relevant certifications applicable to the Smart metering Industry as well as the product as such.
- f. The Bidder should have a qualified team of technical professionals having Master's degree in Engineering / Bachelor's Degree in Engineering / Technology, from a recognized University or equivalent.
- g. The Bidder should have minimum net worth of Rs.50 Lakhs as a company/ organization.
- h. The bidder should not be black -listed by any Central /State Government /Public Sector Undertaking in India.
- i. Even If a particular bidder is qualified only in a specific field/fields and not fully qualified in other field/fields (field means : Smart Metering, AMI Network, MDM and IT Infrastructure) the bidders can still bid for empanelment , provided KELTRON may take appropriate decision to go ahead with multiple bidders after verifying all the technical aspects.

Note: Compliance to each of the above said requirements may be substantiated with documentary proofs.

In spite of the documentary evidences, if found necessary, a Committee constituted by MD, KELTRON, may visit the firm and ascertain their competence to participate in the bidding.

5 Evaluation Criteria

The competence in the areas mentioned in section 3 would be evaluated. On receipt of Expressions of Interest, a Committee constituted by MD, KELTRON shall evaluate the proposal received, may invite the firms for technical and commercial discussions and presentations at KELTRON. The firms which are prima-facie found complied with the qualification criteria of the EOI and based on the input received during discussions will be shortlisted.

KELTRON shall finalise the specification/scope of work and float the RFP/TENDER to the Empanelled/ Short listed firms in Limited Bidding Mode(LBM) to finalise all commercial aspects including royalty, profit sharing etc.

6 Other conditions

- a. This EOI request document is not transferable. This EOI is not an agreement and is neither an offer. Discrepancy, if any, in the EOI document shall be communicated by the Bidder to the contact person immediately or to be raised in the Pre-bid meeting. Attendance at Pre-Bid meeting is mandatory.
- b. Corporation accepts no liability of any nature whatsoever, whether resulting from negligence or otherwise arising from reliance of any Bidder upon the statements contained in this EOI. Corporation may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this EOI.
- c. The issue of this EOI request does not imply that Corporation is bound to select any qualified 'Bidders' or to appoint the selected 'Bidder' for the implementation and the Corporation reserves the right to reject all or any of the Bids without assigning any reasons whatsoever.
- d. Nothing in the EOI should be relied on, as a promise or representation as to the future. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid, including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations etc. which may be required by Corporation or any other costs incurred in connection with or relating to its Bidding. All such costs and expenses will be borne by the Bidder and the Corporation shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by the Bidder in preparation for submission of the Bid, regardless of the conduct or outcome of the Bidding process.
- e. At any time prior to the last date for receipt of offers, KELTRON, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective companies, modify the EOI document by an Amendment. In order to provide prospective companies reasonable time to take the Amendment into account in preparing the offer, KELTRON may, at its discretion, extend the last date for the receipt of offers and/or make other changes in the requirements set out in the Invitation for EOI.
- f. KELTRON reserves the right to suspend or cancel the EOI process at any stage, to accept, or reject any, or all offers at any stage of the process and / or to modify the process, or any part thereof, at any time without assigning any reason, without any obligation or liability whatsoever.

7 Submission of EOI

- a. In case there are any clarifications/queries on this notification, please contact our "Authorized person for correspondence". All clarifications/queries shall be asked through e-mail only and the last date for receiving the clarifications/queries is 5.00PM on 24.07.2017.
- b. Attendance at Pre-Bid meeting is mandatory.
- c. Interested firms complied with the above mentioned criterions for participation of the EOI may send their EOIs in sealed envelope which shall be super scribed as "EOI for Empanelment of Technology partner for Smart Metering, AMI Network, MDM and IT Infrastructure " to the following address on or before 07th August 2017: Manager (Purchase), Keltron Controls, Aroor.P.O, Alappuzha Dist. Kerala – 688 534, Contact no. 0478 2872323-6 (4 lines)
- d. Following documents are to be submitted along with EOI:
 - Certificates of registration as a manufacturing unit, if any.
 - Income Tax returns for the preceding three year period
 - Number of technically or professionally qualified personnel.
 - Record of past performance
 - List of Testing and Support equipments
 - ISO/ ISI certification or any other certification
 - Relevant clearances from the authorities/ ministries (if any)
 - Details of R&D facilities

Note: The offer shall include clause-by-clause compliance to all clauses of this EOI along with other documents as requested against specific clauses.

Authorised person for correspondence:

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