

# RFP for Implementation of Revenue Management System on SaaS (System as a Service) Basis

TN – IT-09

Purchaser:



Jodhpur VidyutVitran Nigam Ltd (JdVVNL), Jodhpur

Office of the Superintending Engineer  
(IT), JdVVNL, Jodhpur

**NOTICE INVITING TENDER**
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**Reference No: TN –IT-09**

Jodhpur VidyutVitrana Nigam Ltd. [“JdVVNL”/ “JodhpurDiscom”]invites bids from competent authority for “Implementation of Revenue Management System on SAAS (System As a Service) Basis” in Jodhpur Discom.

The contract period shall be initially for five years. The contract period may further be extended for 1 year upto 2 times as per mutual agreement.

Mode of Bid Submission	Online through e-Procurement/e-Tendering system at <a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a>
Tendering Authority	Superintending Engineer (IT) JodhpurVidyutVitrana Nigam Ltd. New Power House, Jodhpur-342003.
Estimated cost of Project (Approx.)	Rs. 90Cr\$for 5 years
Contact Persons	1) Umesh Mathur SE (IT)
Submission of Banker’s Cheque/ Demand Draft for <b>Tender Document Fee (including GST @ 18%)</b> , with Sr. AO(CPC) in favour of Sr. AO(CPC), JdVVNL, Jodhpur (non-refundable), payable at Jodhpur, Rajasthan	Rs: 5900/- 13.08.2018 up to 02:00 PM
Submission Demand Draft for <b>e-Tender Processing Fee(including GST @ 18%)</b> , with SE(IT) in favour of M.D, RISL payable at Jaipur(non-refundable)	Rs: 1180/- 13.08.2018 up to 02:00 PM
Submission of <b>Earnest Money through DD</b> in favour of Sr.AO(CPC), JdVVNL or Bank Guarantee from schedule bank in the name of Sr. AO(CPC),JdVVNL, Jodhpur	Rs. 1.8 Crore 13.08.2018 up to 02:00 PM
Publishing Date/Time	13.07.2018at 03:00PM
Pre Bid Meeting	24.07.2018 at 11:00 AM
Submission Date for Banker’s Cheque/ Demand Draft / BG for Tender Fee, EMD, and Processing Fee.	The deadline for submission of these instruments is Bid Submission Deadline. The Bidder can submit these instruments before the deadline. The Bidder has to submit the same in hard copy and attach the scan of receipts with online bids.

**NOTICE INVITING TENDER**

Bid submission Last Date/ Time	13.08.2018 up to 03:00 PM
Date & Time of Opening of Technical Bids	14.08.2018 at 03:00 PM
Date & Time of Opening of Financial Bids	To be intimated later
Websites for downloading Tender Document, Corrigendum's, Addendums etc.	<a href="http://eproc.rajasthan.gov.in">http://eproc.rajasthan.gov.in</a> . <a href="http://www.jdvvn.com">http://www.jdvvn.com</a>
Bid Validity& EMD Validity	<b>Bid Validity:</b> 90 Days from the date of Financial Bid Opening <b>EMD Validity:</b> 180 days from date of Technical Bid opening. If required, the same shall be requested to be extended.

The prospective bidder should have the necessary competence, adequate financial standing, sufficient experience, expertise as per Qualification Requirement detailed in this document.

Before bidding under this bid, in order to avoid non responsiveness of bid, bidder should ensure that:

1. They are qualified as per QR mentioned in this document
2. The offered solution meets the technical requirement laid down in this document.

**Scope of Work is detailed out in the subsequent sections of the RFP**

**NOTE:**

1. The bid shall only be submitted through online tendering system of [www.eproc.rajasthan.gov.in](http://www.eproc.rajasthan.gov.in).
2. Bidders who wish to participate in this tender will have to register on <https://www.eproc.rajasthan.gov.in> To participate in online tenders, Bidders will have to procure Digital Signature Certificate (Type – II or Type – III) as per Information Technology Act-2000 using which they can sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency i.e TCS, Safecrypt, Ncode etc. or they may contact e-Procurement Cell, Department of IT & C, Government of Rajasthan for future assistance. Bidders who already have a valid Digital Certificate need not to procure a new Digital Certificate.

**Contact No.** 0141 – 4022688 (Help desk of RISL - 10.00 AM to 6.00 PM on all working days)

**E-mail:** [eproc@rajasthan.gov.in](mailto:eproc@rajasthan.gov.in)

**Address:** e-Procurement Cell, RISL, YojanaBhawan, TilakMarg, C-Scheme, Jaipur.

3. Bidders should go through the website <https://www.eproc.rajasthan.gov.in> should refer to the website and go through the link “Help For Contractors”, “Information About DSC”, “FAQ” and “Bidders Manual Kit” and **Section-I** to know the process for submitting the electronic bids at the website.

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4. The 'Instructions to bidders' and other terms and conditions of this tender pertaining to the bidding process generally follow the guidelines of e-tendering system of the government of Rajasthan, available at URL <https://www.eproc.rajasthan.gov.in>. However, wherever there is any anomaly between the conditions referred to in this tender document and the GoR e-tendering system, the latter shall be final.
5. The complete tender document has been published on the websites, [www.jdvvn.com](http://www.jdvvn.com) and <https://www.eproc.rajasthan.gov.in> for the purpose of downloading.
6. The downloaded tender document shall be considered valid for participation in the bid process subject to submission of required Tender fees, e-Tender Processing Fee & EMD as mentioned in the NIT Section table. A copy of receipt of the tender fees, e-Tender Processing Fees & EMD must be enclosed along with the Technical bid/ proposal failing which the bid will be summarily rejected. The last date of submission of these Original instruments is mentioned in the NIT Table. The Bidder must take due care in submitting the instruments and collecting receipts from JodhpurDiscom so that the Originals are submitted in hard copy and receipt scans are uploaded with the Technical Bid, before the Bid Submission Deadline.
7. All the communication/ correspondence including the bid document (Technical and Financial Bid) should be signed digitally by the Bidder. The Technical and Financial Bid which is uploaded on eproc portal must be signed and stamped on each relevant page by the designated Authorized Representative of the bidder. The name, designation and authority of the designated Authorized Representative of the Bidder shall be stated in the Bid.
8. No contractual obligation whatsoever shall arise from the tender document/bidding process unless and until a formal contract is signed and executed between the purchaser and the successful bidder(s).
9. JdVVNL disclaims any factual/ or any other errors in this tender document (the onus is purely on the individual bidders to verify such information) and the information provided herein are intended only to help the bidders to prepare a logical bids.
10. Bids will be considered only in the prescribed manner. Bids not submitted in the prescribed format will be summarily rejected without further evaluation.
11. Copies of various documents to be enclosed along with the bids must be legible and be self-attested by the authorized signatory with official seal. Claims made by bidder related to the project experience and other requirements shall be considered only when appropriate supporting documents are provided.
12. All the communication/correspondence including the Bid (Technical and Financial Bid) must be signed and stamped on each page by the designated Authorized Representative of the bidder failing which the bid will be summarily rejected.
13. The Bids can be submitted up to date and time given as specified in the NIT Table.
14. The complete bidding process is defined in the tender document.

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15. In case, a bidder imposes conditions which are in addition or at variance or in conflict with the terms and conditions as specified in this tender document, all such bids will be summarily rejected.
16. Tendering Authority reserves the complete right to accept or reject in part or full any or all the bids without assigning any reasons whatsoever. No further discussion/ interaction will be held with the bidders whose bids have been disqualified/ rejected by the tendering authority.
17. In case, a dispute arises with regard to interpretation/ omission/ error in this tender document, bid submitted, other documents; the decision of SE (IT), JdVVNL, JODHPUR will be final and binding upon the bidders.
18. Interested bidders may obtain further information from the office of **The Superintending Engineer (IT), Jodhpur VidyutVitrana Nigam Ltd, New Power House, Jodhpur.**

**Superintending Engineer (IT)**

JodhpurVidyutVitrana Nigam Ltd.

New Power House, Jodhpur 342003.

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## Section 1. INTRODUCTION & OBJECTIVE

### 1.1. THEMATIC FOCUS

JODHPUR VIDYUT VITRAN NIGAM LIMITED (JodhpurDiscom) is an undertaking of Government of Rajasthan engaged in distribution and supply of electricity in the jurisdiction of JodhpurDiscom which comprises of 12 Circles as under.

S.No.	Name of Discom	Zonal Offices	O&M Circles	No. Of Consumers in Non-RAPDRP Area (Tentative figure)	No. Of Consumers in RAPDRP Area (Tentative figure)
1.	JodhpurDiscom	3 Nos. : Jodhpur, Bikaner and Barmer	12 Circles: Jodhpur City, Jodhpur District, Pali, Sirohi, Barmer, Jaisalmer, Jalore, Bikaner City, Bikaner District, Hanumangarh, Sri- ganganagar, Churu	25 Lacs	14Lacs

Note: the figures of consumers based last FY. And having approx. total permanent disconnected consumers (PDC) are 5 lacs in Jodhpur DISCOM.

The invitation to Bid is for “Implementation of Revenue Management System on SAAS (System As a Service) Basisin Jodhpur Discom “ are being procured through this RFP. Initially in areas of JodhpurDiscom which are not covered under R-APDRP program however there is provision in the bid to extend the scope in RAPDRP area also for a period of 5 years. Presently Bikaner city under jurisdiction of Discom has been awarded on Distribution Franchisee Model and as such are not included in the area under consideration for this Bid.

The Bidders are advised to study the tender document carefully. Submission of Bids shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.

### 1.2. GENERAL INFORMATION OF BID:

- 1.2.1. Qualification will be assessed upon meeting all the qualification criteria regarding the applicant’s general and particular experience, personnel capabilities, infrastructure availability, financial position, system proposed, methodology and plans to be adopted as detailed in the Bidder’s Technical Bid.
- 1.2.2. The Bidder, while submission of the Bids, has to ensure that, all the pages of the Bids are signed by the competent authority and also all the pages are numbered and properly indexed. JodhpurDiscom clarified that-the Bid of those bidders, who do not fulfil the requirements, shall be considered as disqualified.

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- 1.2.3. If any bidder fails to fulfil the Qualification Requirement (QR), his bid will be treated as non-responsive and no further correspondence/clarification will be taken into consideration for the same.
- 1.2.4. Merely meeting the qualification requirements does not mean that the Bidders shall be short listed for opening of financial bid. The technical solution proposed by the Bidder must commensurate with the requirements laid down in the Tender document.
- 1.2.5. The short listing shall be made considering all the technical parameters furnished by the bidder along with the technical offer.



## Section 2. QUALIFICATION REQUIREMENTS (QR)

The Bidder must possess following credentials prescribed as Pre-Qualification Criteria. If any bidder fails to fulfil the Qualification Requirement (QR), his bid will be treated as non-responsive and no further correspondence/clarification will be taken into consideration for the same.

**Note:**

1. **In case of non-furnishing the requisite documents along with the bid, the bid will be considered as non-responsive and bid may be summarily rejected.**
2. **Irrespective of meeting the above qualification requirements, none of the consulting companies engaged by JodhpurDiscom as on 13.07.18 for IT Projects can bid for this tender.**

S. No.	Criteria	Supporting Documents Required
<b><i>For Companies / Proprietary Firms / Partnership Firms</i></b>		
<b>A.</b>	Bids can be submitted by a Company incorporated under applicable Companies Act /Proprietary Firm/ Partnership Firm incorporated under applicable Partnership Act and fulfilling the criteria mentioned in the subsequent points	<b>Self-Declaration along with the following:</b> <ul style="list-style-type: none"> <li>• Copy of Self-Attested Incorporation Certificate in case of Company</li> <li>• Copy of Self-Attested Partnership Deed</li> <li>• Copy of Self-attested latest Income Tax Return</li> </ul>
<b>A.1</b>	i. The Bidders shall be minimum CMMI level 5 and shall have ISO 9001:2008 latest version valid for at least three months after submission of bid.  ii. The Bidder shall have experience of implementing Web based billing and Revenue Management System through offered COTS product (SAP/Oracle) software in at least three Power Distribution utilities in India during last five years i.e. from Apr-2013 to Jun-2018 for a continuous period of 12 months in each utility  ii. Out of the above projects the billing	<b>Documents to be uploaded:</b> <ul style="list-style-type: none"> <li>• CMMI Certificate issued by SEI / CMMI institute.</li> <li>• Work orders issued in the name of the bidder by various Power Distribution utilities.</li> <li>• Performance/Work Completion Certificates issued by respective Distribution utilities for the orders issued.</li> </ul>

## QUALIFICATION REQUIREMENTS (QR)

S. No.	Criteria	Supporting Documents Required
	operation for at least 20 lakhs consumer base should be in running condition in multiple /one project, if this condition is met through multiple project at least one project should be with 10 lakhs consumer base.	
<b>Or</b>		
	i. The Bidders shall have ISO 9001:2008 & ISO 27001:2013 latest version valid for at least three months after submission of bid. ii. The Bidder shall have experience of implementing Web based billing and Revenue Management System through COTS (SAP/Oracle) software in at least 3 Power Distribution utilities in India during last five years i.e. from Apr-2013 to Jun-2018 for a continues period of 12 months in each utility. iii. Out of the above projects the billing operation for at least 30 lakhs consumer base should be in running condition in multiple /one project, if this condition is met through multiple project at least one project should be with 20 lakhs consumer base.	<b>Documents to be uploaded:</b> <ul style="list-style-type: none"> <li>• Valid ISO certificate issued by accredited organization.</li> <li>• Work orders issued in the name of the bidder by various Power Distribution utilities.</li> <li>• Performance/Work Completion Certificates issued by respective Distribution utilities for the orders issued.</li> </ul>
<b>A.2</b>	i. The Bidder should have a minimum average annual turnover of Rs. 30 Cr (Gross Turnover of 90 Cr in last 3 years) in last three Financial Years (2015-16, 2016-17, 2017-18) ii. The Bidder should be profit making in the last 3 financial years (2015-16, 2016-17, 2017-18). iii. The Bidder should have positive net worth as on 31st March, 2018	<ul style="list-style-type: none"> <li>• Copy of the audited statement of accounts (P&amp;L Account &amp; Balance Sheet) duly certified by the Chartered Accountant along with certificate stating the Turnover, Profit, Net Worth shall be submitted as a proof. If final accounts of FY 2017-18 are not available provisional certificate duly certified by CA shall be submitted as a proof.</li> <li>• Adequate proofs as mentioned above duly certified by Chartered Accountant to be</li> </ul>

## QUALIFICATION REQUIREMENTS (QR)

S. No.	Criteria	Supporting Documents Required
		provided. <b>Note:</b> Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets.
<b>A.3</b>	The Bidder should not have been black listed by any power utility in India.	Self-Declaration for No Blacklisting on the appropriate stamp paper.
<b>For Power Distribution Utilities</b>		
<b>B</b>	The Power Distribution Utilities irrespective of above QR may also bid subject to fulfilling the following requirements:	
<b>B.1</b>	i. Should have Distribution license for Electricity Distribution from the respective Regulator. ii. Billing in their area of operation is being carried out through COTS (Commercially off the Shelf) platform (SAP/ORACLE). iii. The System being used for at least 20 Lakhs consumers in its area of operation cumulatively for a continuous period of 12 months during last 3 years Apr-2015 to Jun-2018. iv. Such project shall be in running condition as on 10-07-18 V. The undertaking that the core Billing Module used under this Bid shall be SAP / ORACLE should be produced.	<ul style="list-style-type: none"> <li>• Undertaking to be submitted that the core billing module used under this bid shall be SAP/ORACLE</li> </ul>

## **Section 3. INSTRUCTION TO BIDDERS**

### **3.1. GENERAL INSTRUCTIONS**

- 3.1.1. Tendering authority will receive bids in respect of services as set forth in the accompanying Tender document.
- 3.1.2. All bids shall be prepared and submitted in accordance with terms and conditions of this Tender Document.
- 3.1.3. The Bidder, in his own interest is requested to read very carefully these instructions and the terms and conditions as incorporated in General Conditions of Contract and Technical specification before filling and submitting the Bids.
- 3.1.4. If the bidder has any doubt as to the meaning of any provisions or any portion thereof, he shall before submitting the Bid, may refer the same to the Tendering Authority in writing, well in time before the specified date of opening of Bids so that such doubts may be clarified.
- 3.1.5. Submission of the Bid shall be deemed to be the conclusive proof of the fact that the Bidder has acquainted himself and is in agreement with all the instructions, terms and conditions governing this Tender document unless otherwise specifically indicated/ commented by him in his Bid.
- 3.1.6. Bids submitted after the time and date fixed for receipt of bids as set out in the invitation to Bid shall be rejected and returned to the bidders.
- 3.1.7. The works referred herein shall cover the entire scope of the proposal which include commissioning and erection of equipment including the successful completion of performance and guarantee tests which the Discom desires to get executed.

### **3.2. FIELD CONDITIONS**

- 3.2.1. The geographical conditions of the Jodhpur Discom are not same and have different terrain. The details of the area covered are mentioned in the table at the Introduction Section.
- 3.2.2. The bidder may in its own interest, before submitting the bid, inspect and examine the area involved and satisfy it regarding the existing system.
- 3.2.3. For ascertaining the existing system, condition's etc., the agency may contact the Tendering Authority.
- 3.2.4. No claim from Bidder or Agency for change in the bid or terms & conditions of the contract shall be entertained on the ground that the conditions are different than what were contemplated by them at the time of submitting the bids.

### **3.3. SUCCESSFUL IMPLEMENTATION AND GOOD PERFORMANCE**

- 3.3.1. Any work if specifically not mentioned but reasonably implied for the successful implementation and good performance of the proposed work is deemed to be included and has to be executed within the ordered price.

### **3.4. PREPARATION OF BIDDING DOCUMENT**

#### **3.4.1. Earnest Money Deposit (EMD)**

- a. The Bidder shall furnish EMD as per the prescribed in NIT section.

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- b. The Bidder shall **deposit/submit** the EMD in prescribed format to the Sr. Accounts Officer (CPC), JdVVNL, Jodhpur within the stipulated date & time, and obtain a receipt.
- c. Bid uploaded but not accompanied by a copy of the receipt for depositing EMD shall be rejected and the Bid will not be opened.
- d. In case of bidders who are declared as non-responsive, EMD will be refunded on production of the original receipt within 15 working days after opening of financial bid.
- e. Adjustments/proposals for acceptance of EMD, if any, **already** lying with the Discom in connection with some other bids/orders shall not be entertained. Also, the Discom will not adjust the EMD under this tender with the previous dues of bidder if any.
- f. No interest shall be payable on EMD.
- g. Jodhpur Discom reserves the right to forfeit EMD, if successful bidder either has not accepted the work order or not completed the contractual requirement within the specified period.

**3.4.2. Tender Document Fee & Tender Processing Fee**

- a. The bidders are permitted to download the bid document from websites <https://www.eproc.rajasthan.gov.in>, [www.jdvvn.com](http://www.jdvvn.com) but must pay the cost of Tender document fee and e-Tender processing fee as mentioned in NIT table within the stipulated date & time in the office of Sr. Accounts Officer (CPC), Jodhpur and obtain acknowledgement thereof. Such processing fee shall be sent to RISL by SE(IT), JdVVNL, Jodhpur.

**3.5. CLARIFICATIONS AND AMENDMENTS & DEVIATION FROM TENDER DOCUMENT****3.5.1. CLARIFICATIONS TO THE TENDER DOCUMENT**

- a. Verbal clarifications and information given by the Discom or his employee(s) or his representative(s) shall not in any way be binding on the owner.
- b. The bidder is required to carefully examine the Terms & Conditions including specifications of this Tender document and fully inform himself as to all the terms and conditions which may in any way affect the Work or the cost involved thereof.

**3.5.2. CLARIFICATIONS TO THE BID**

- a. To assist in the examination, evaluation, comparison and post qualification of the bids, the Tendering Authority may, at its discretion, ask any bidder for a clarification of his bid. The Tendering Authority's request for clarification and the response shall be in writing or e-mail of the Authorized Signatory of the Bidder.
- b. Any clarification submitted by a bidder with regard to his bid that is not in response to a request by the Tendering Authority shall not be considered.

- c. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the tendering authority in the evaluation of the Bids

### **3.5.3. AMENDMENT OF TENDER DOCUMENT**

- a. At any time prior to the deadline for submission of the Bids, if the Tendering Authority deemed it necessary to amend the Tender document, it shall do so by issuing appropriate Corrigendum/Addendum.
- b. Any Corrigendum/Addendum issued shall be a part of the Tender document and shall be published on the website of Jodhpur Discom & e-proc portal.
- c. To give prospective Bidders reasonable time to take a Corrigendum/Addendum into account in preparing their Bids, the tendering authority may, at its discretion, extend the deadline for the submission of the Bids.
- d. Any change in date of submission and opening of bids would be published through Jodhpur Discom's website and e-proc portal.

### **3.5.4. DEVIATION FROM BID DOCUMENTS**

- a. The bidder should comply all requirements set out in the bidding document and NO TECHNICAL and COMMERCIAL Deviation shall be entertained.
- b. The Bids with Deviation from the requirement laid down in this document shall be considered as NON Responsive.
- c. The offer must have 'No Deviation' certificate as per bid document.

## **3.6. SUBMISSION AND OPENING OF BIDS**

### **3.6.1. COST OF BIDDING:**

The Bidder shall bear all the risks and costs associated with the preparation and submission of its Bid, and the Tendering Authority shall not be responsible or liable for those risks and costs, regardless of the conduct or outcome of the bidding process.

### **3.6.2. LANGUAGE OF BIDS:**

The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Tendering Authority, shall be written only in English Language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

### **3.6.3. BIDS ARE TO BE SUBMITTED IN TWO PARTS**

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The Bid shall be submitted within the specified time on <https://www.eproc.rajasthan.gov.in> in electronic format in the following manner:

**Part- A (Technical Bid): will contain**

- a) Cover 1: Fees (to be uploaded in pdf format)
  - (i) Copy of receipt of submission of Tender document fees
  - (ii) Copy of receipt of submission of Tender processing fee
  - (iii) Copy of receipt of submission of EMD (DD & BG)
  
- b) Cover 2: Techno-Commercial Bid (to be uploaded in pdf format):
  - (i) Complete Technical Bid comprising information in specified formats and schedules (Except the price schedule) including details & design of the proposed system(s) to meet out the work requirement together with its capabilities.
  - (ii) Supporting documents to ascertain the eligibility / qualification as per the QR requirements of this tender  

The Tendering Authority may require any bidder to furnish the documents in original or copy duly attested by Notary as the case may be for verification, in physical form on short notice of three working days.

**Part- B (Financial Bid): will contain**

- a) The Financial Bid for carrying out the scope of work defined for this project.
- b) The Financial Bid is to be submitted in excel file of BOQ.
- c) The Financial Bid will be opened only for the Bidders shortlisted on the basis of Technical Bid.
- d) The date of opening of such Financial Bids will be intimated on the e-proc website

**3.6.4. SUBMISSION OF PROPOSALS**

- a. Bidder shall submit their bid in electronic format, which shall be digitally signed and further signed & stamped on each page by the designated authorized representative of the Bidder. Bidder shall procure Digital Signature Certificate (DSC) as per the provisions mentioned in Note 2 of the NIT table.
- b. **Physical submission of bids is not allowed.** If asked by Tendering Authority the bidder is required to submit original technical bid in hardcopy which shall be the exact replica of online bid submitted. In case of any discrepancy between online and hardcopy Bid, the Bid submitted online shall prevail.

**3.6.5. FILLING OF BIDS**

- a. Bids shall be submitted on e-portal with the formats and schedules given in the Tender document duly filled in. The completed formats and schedules shall be considered as part of the contract documents in case the same Bidder becomes Successful Bidder. The Bids

## INSTRUCTION TO BIDDERS

- which are not in conformity to the schedules and formats of the Tender document, may not be considered.
- b. No alteration should be made to the format and schedules of the tender document. The Bidder must comply entirely with the Tender document.
  - c. Tender should be filled in only with ink or typed and must be submitted online after signing digitally.
  - d. All additions, alterations and over-writing in the bid must be clearly signed by the authorized representative of the bidder otherwise bid shall be summarily rejected.
  - e. The bidder must quote the prices strictly in the manner as indicated herein, failing which bid is liable for rejection. The rate/prices shall be entered in words as well as in figures. These must not contain any additions, alterations, over-writing, cuttings or corrections and any other marking which leave any doubt and further may result in rejection of such Bid.
  - f. The Tendering Authority will not be responsible to accept any cost involved in the preparation or submission of bids.
  - g. All bids and accompanying documents shall be addressed to JodhpurDiscom.

**3.6.6. ALTERNATIVE BIDS**

Alternative bids shall not be considered at all.

**3.6.7. BID PRICES**

- a. All the prices should be quoted only in Indian Rupees (INR) Currency.
- b. The prices quoted in BOQ.xls should be exclusive of service tax / GST and other government levies as applicable. The present rates of applicable taxes shall be indicated by the bidder in its Bid, which is subject to statutory variation and shall be borne by Discom.
- c. The bidder will furnish the break-up of the quoted price in Financial Bid according to the Section - FORMAT FOR FINANCIAL BID SUBMISSION, indicating rate and type of each tax clearly, as per the rates prevailing within 7 days before the bid date. Any statutory variation and imposing of new tax by government subsequent to bid submission/currency of Contract shall be on Discom account.
- d. The quantity of total no. of consumers mentioned in respective circle is on average basis and may increase or decrease. However the payment shall be made as per the actual no of consumers in the database at the end of the month for which system generated report shall be submitted.

**3.7. PERIOD OF VALIDITY OF BIDS**

- 3.7.1. The bid validity period is provided in the table mentioned in the NIT section. Bids mentioning a shorter validity period than specified are likely to be summarily rejected.
- 3.7.2. Tendering Authority may ask for extension in validity period. The Bidder will be at liberty to accept it or not. In case Bidder agrees to extend the validity period without changing his



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original offer, he will be required to extend validity period of the Bank Guarantee submitted against the EMD suitably.

**3.8. SIGNATURE OF BIDDER**

- 3.8.1. The bid must contain the name, address and place of business of the Bidder and must be signed and sealed by the designated Authorized Representative of the Bidder. The name of such person should also be typed or printed below the signature.
- 3.8.2. Bid by a partnership firm must be furnished with full names of all partners.
- 3.8.3. Bids by corporation/ company must be signed by the Authorized representative of the Bidder with the legal name of the corporation/ company.
- 3.8.4. Satisfactory evidence of authority (Power of Attorney) of the person signing on behalf of the Bidder shall be furnished with the bid.
- 3.8.5. The Bidder's name stated on the proposal shall be exact legal name of the firm.
- 3.8.6. Bids not conforming to the above requirements of signing shall be disqualified.

**3.9. DELAY IN BID SUBMISSION**

- 3.9.1. The tendering authority shall not consider any bid that arrives after the deadline for submission of bids as indicated in the NIT. Any bid received by the tendering authority after the deadline for submission of bids shall not be accepted.

**3.10. RECEIPT OF BIDS**

- 3.10.1. Bids shall only be received through <https://www.eproc.rajasthan.gov.in> website.

**3.11. WITHDRAWAL, SUBSTITUTION AND MODIFICATION OF BIDS**

- 3.11.1. A Bidder may substitute or modify its bid after it has been submitted before the deadline prescribed for submission of bids as per the e-tendering process but bidder cannot withdraw his bid after submitting it once.

**3.12. BID OPENING**

- 3.12.1. Jodhpur Discom shall perform the Bid opening at the specified place, date and time in the presence of bidders or their authorized representatives who may choose to be present.
- 3.12.2. Only the bids of those bidders who qualifies post the Technical Bid evaluation shall be eligible for Financial Bid opening. The date and time of Financial Bid opening to the technically qualified Bidders would be intimated later. The bidder who has quoted lowest shall be termed as the successful bidder.

**3.13. EVALUATION AND COMPARISON OF BIDS**

- 3.13.1. The evaluation of bids will be made in the following three stages:

**1st stage: Qualification Requirement (part 'A')**

## INSTRUCTION TO BIDDERS

Each bid shall be evaluated to ascertain the qualification of bidder with respect to the requirements laid down in this RFP.

**2nd stage: Technical Evaluation**

- a. Consequent upon identifying the bidders who are found eligible in 1st Stage the 2nd stage evaluation shall be carried out in following manner.
  - (i) Availability for No-Deviation Certificate. If any deviation is found, the bid shall be declared as non-responsive.
- b. Technical details and proposals submitted by the bidders shall be critically examined in line with objectives & scope of work mainly but not limited to the following criteria:
  - (i) Schematic diagram showing all the modules & components of the systems covered in the specification and integration with existing systems.
  - (ii) Description of the technical solution for achieving the integrations as shown in the above schematic diagram.
  - (iii) Compliance to the Functionalities of Solution offered.
  - (iv) Compliance to the proposed Software's as per the RFP along with the OEM & Versions.
  - (v) Compliance to the proposed Hardware as per the RFP along with the OEM, Make & Model.
  - (vi) Experience of the key professionals along with CV to be deployed.
  - (vii) Integration methodology with details of software/hardware's as per Industry Standards.
  - (viii) Adherence with the time period as per schedule of deliveries defined in the RFP along with the work break down schedule.
  - (ix) On the basis of the affirmation given by the bidder about availability of mandatory requirement, JdVVNL may formulate a method of demo. This demo shall be given by the bidder to JdVVNL on the notified date.

*Note: JdVVNL shall prepare the list of qualified bidders on the basis of above criterion and accordingly will be notified through e-portal for opening of financial bid.*

**3rd Stage: Financial Bid Evaluation**

- a. The Financial Bids which are opened shall be evaluated.
- b. The Purchaser will correct arithmetical errors during evaluation of Financial Bids on the following basis:
  - (i) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

## INSTRUCTION TO BIDDERS

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- (ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - (iii) If there is a discrepancy between words and figures, the amount in words shall prevail. However, where the amount expressed in words is related to an arithmetic error, the amount in figures shall prevail subject to (i) and (ii) above.
  - (iv) If there is a discrepancy between percentage and figures related to various taxes or levies, the percentage shall prevail over figure mentioned. However, where the amount expressed in percentage is related to an arithmetic error, the amount in figures shall prevail subject to (i) and (ii) above. It should also be noted that at time of payment against, the prevailing tax/levy rates will be used as on the date of approval of payment
  - (v) Except as provided in sub-clauses (i) to (iv) herein above, Tendering Authority shall reject the Price Proposal if the same contains any other computational or arithmetic discrepancy or error.
- c. If the Bidder does not accept the correction of errors, its Bid shall be disqualified and its EMD shall be forfeited
  - d. The bids will be evaluated and awarded as per the evaluation criteria that “The Bidders having lowest financial quote during Financial Bid Evaluation shall be considered as the L1 Bidders”.
  - e. The EMD of the other technically qualified Bidders shall be returned within 15 working days from the date of signing of Contract by the Discom with the successful Bidder.

**3.14. CONFIDENTIALITY**

- 3.14.1. Information relating to the examination, evaluation, comparison, and post qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the Contract award.
- 3.14.2. Any attempt by a bidder to influence the tendering authority or other officials of Discom in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions shall result in the rejection of his bid.
- 3.14.3. From the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Tendering Authority on any matter related to the Bidding process, he is allowed to do so in writing.

**3.15. NON-MATERIAL NON-CONFORMITIES**

- 3.15.1. Provided that a bid is substantially responsive, the Tendering Authority , to rectify omission in the bid related to requisite documents may request the bidder to submit the necessary information or documentation provided that the required information was in existence as on date of opening of bid. No new information created after opening of bid shall be considered.

**3.16. DISQUALIFICATION**

## INSTRUCTION TO BIDDERS

3.16.1. Tendering authority may at its sole discretion and at any time during the processing of bid, disqualify any bidder/ bid from the bid process on following grounds:

- (i) Any action on the part of the bidder to revise the rates/prices and modification in technical or commercial substance of Bid, at their own.
- (ii) Submission of any supplementary information unless & otherwise asked for at his own instance after the opening of the Bid may result in rejection of the Bid and also debar him from submission of Bid to the Discom at least for one year.
- (iii) The Bidder has been disqualified from any other Discom for any violation of code of conduct.
- (iv) In case of bidder not adhering to the format of financial offer given with this document the bid / offer may be rejected / non-responsive.
- (v) In case of any misapprehension at bidder level which may lead to wrong price bidding, Discom reserve the right to reject the bid or take necessary loading / unloading to arrive the correct price as per aspersion of Discom / tender specification. Accordingly the bidders are advised to ask to clarify about any misapprehension before bidding. No excuse shall be considered in this regard.
- (vi) Does not meet the Qualification Requirement (QR) as mentioned in the bidding document.
- (vii) During validity of the bid or its extended period, if any, increases his quoted prices.
- (viii) Has imposed conditions in his bid.
- (ix) Has made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
- (x) Has been black listed, by any utilities of India during Last 5 years.
- (xi) Has submitted bid which is not accompanied by required documentation and EMD/Tender document fees/Processing fees

**Note:** Bidders may specifically note that while processing the bid documents, if it is found, expressly or implied, that some bidders may have compounded in any manner whatsoever or otherwise joined to form a cartel resulting in delay/ holding up the processing of bids then the bidders so involved are liable to be disqualified for the contract as well as for a further period of two years from participation in any of the bids floated by any department, Govt. of Rajasthan.

### 3.17. AWARD OF CONTRACT

#### 3.17.1. ACCEPTANCE OF THE TENDER/BID AND NOTIFICATION OF AWARD

- a. After the selection of the Successful Bidder by the Tendering Authority within the validity period of Bid, shall inform such Bidder in writing by issuing Letter of Intent (LOI).
- b. The Successful Bidder shall send an acknowledgement the LOI to the Discom, post which Discom shall prepare and send a detailed work order to the Successful Bidder. In case, the Successful Bidder refuses to accept LOI, and not intent to perform the scope of work, the offer shall be rejected with forfeiture of its EMD and order may be placed to L2 bidder (provided he accepts the prices offered by L1 bidder).

## INSTRUCTION TO BIDDERS

- c. Discom shall issue Work Order to the Successful Bidder requiring him to do the following things within specified timeline. If the Bidder fails to do the following things within specified timeline, EMD of such Bidder may be forfeited and Tendering Authority of Discom may consider the next ranked bidder.
- (i) Written Letter of Acceptance of Work Order along with duly signed and sealed copy of such Work Order as token of such acknowledgement within 15 working days.
  - (ii) Submission of Performance Guarantee as required to be submitted under the Contract within 30 working days.
  - (iii) Signing of the Contract (based on the terms & conditions of this Tender Document) with the Discom within 15 working days after issue of Contract format by Discom to the Successful Bidder. In case any of the party (Discom and the Successful Bidder) is unable to sign the Contract within 15 working days, it shall inform the other party in advance regarding the same along with the reason and suitable time for signing of the Contract.
- d. Decision on bids shall be taken within original validity period of offers. If the decision on acceptance or rejection of a bid cannot be taken within the original bid validity period due to unavoidable circumstances, all the bidders shall be requested to extend validity period of their bids up to a specified date. It is discretion of bidder to accept the extension or not. Those bidders who do not accept shall be discontinued from the bid process and their EMD may be refunded.
- e. Until a formal Contract is prepared and signed, the Work Order/ LOI shall constitute a binding Contract.

**3.18. SIGNING OF CONTRACT**

- 3.18.1. The successful bidder will, on receipt of Work Order from the Discom enter into a contract with the DISCOM by jointly signing the Contract.
- 3.18.2. The draft of the Contract based on the terms & conditions, detailed in Section-II and Section-III will be forwarded to the successful bidder for execution by the Discom.
- 3.18.3. The Contract will be signed within fifteen days thereafter. The person to sign the Contract must be duly authorized by the Bidding entities.

**3.19. RESERVATION OF RIGHTS**

- 3.19.1. To take care of unexpected circumstances, Tendering Authority shall reserve the rights for the following:
- (i) Extend the last date & time for submission of the bids.
  - (ii) Amend the Tender Document at any time prior to the last date & time of submission of Bids.
  - (iii) To reject any bid without assigning any reasons.
  - (iv) Terminate or abandon the bidding procedure or the entire project whether before or after the receipt of bids.

## INSTRUCTION TO BIDDERS

- (v) Seek the advice of external consultants to assist JodhpurDiscom in the evaluation or review of bids.
- (vi) Make enquiries of any person, company or organization to ascertain information regarding the bidder and its bids.
- (vii) Reproduce for the purposes of the procedure the whole or any portion of the bids despite any copyright or other intellectual property right that may subsist in the bids.

*Note: Direct or indirect canvassing on the part of the Bidder or his representative would be a ground for disqualification of such Bidder from this process.*

### **3.20. LACK OF COMPETITION**

3.20.1. A situation may arise where, after evaluation of Bids, the Tendering Authority may end-up with one responsive bid only. In such a situation, the **Tendering authority act** as per **RTPP Rule 2013, CLAUSE 68, "Lack of Competition"** will be applicable and accordingly measures will be taken.

### **3.21. General**

- 3.21.1. Discom does not bind itself to accept the lowest or any bid or any part of the bid and shall not assign any reason(s) for the rejection of any bid or a part thereof.
- 3.21.2. The fact of submission of bid to the JodhpurDiscom shall be deemed to constitute an agreement between the Bidder and the Discom whereby such bid shall remain open for acceptance by the Discom and Bidder shall not have option to withdraw his offer, impair or derogate the same. If the Bidder is notified during the period of validity of bid that his bid is accepted by the Discom, he shall be bound by the terms of agreement constituted by his bid and such acceptance thereof by the Discom, until formal contract of the same bid has been signed between him and Discom in replacement of such agreement.
- 3.21.3. The successful bidder will have to sign the contract agreement for the proper fulfilment of the contract. In case of ambiguous or contradictory terms and conditions mentioned in the Tender Document/ Bid, interpretations as may be advantageous to Discom may be taken, if satisfactory clarification is not furnished within the prescribed period.
- 3.21.4. Discom will not be responsible for any cost or expenses incurred by the bidder in connection with preparation or submission of bids.
- 3.21.5. JodhpurDiscom reserves the right to:
  - a) Reject or accept any bid.
  - b) Cancel the bid process and reject all applications.
  - c) JodhpurDiscom shall neither be liable for any action nor be under any obligation to inform the bidders of the grounds for any of the above actions.

***Note: Discom has given some of the towns on Distribution Franchise basis like Bikaner City or MBC model or some other business model to third party, in such case following conditions shall apply:-***

- i) If the distribution franchise / 3<sup>rd</sup> party in other model continuous with the billing being carried out under this bid, the same shall be carried out by the contractor on terms & conditions specified in the letter of award.***

- ii) Any existing Distribution Franchisee / 3<sup>rd</sup> party in other model in JodhpurDiscom, even in RAPDRP areas, shall be extended all facilities and services by contractor (successful bidder) under same prices and terms if the Franchisee so desires.*

### **3.22. SPECIAL CONDITIONS of TENDER**

- 3.22.1. The system (comprising hardware and software) on the DC cloud and DR cloud which shall be scalable. The requirement of scalability may be arisen due to the following:
- a) Growth of consumer base in the area (Non-RAPDRP) under this tender.
  - b) With inclusion of consumers in RAPDRP Area with growth aspect.
- 3.22.2. The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall have mandatorily to be integrated with RAPDRP & Customer care system Discom shall facilitate for coordinating with bidder and ITIA. Bidder is solely responsible for complete integration necessary Pre-Requisites for such integration.
- 3.22.3. Apart from the above the system shall have capability for integration with 3rd party software for both Database as well as Application. Vendor has to integrate all 3rd party software as and when asked by JdVVNL provided that such system is SOA compatible.
- 3.22.4. Vendor has to mandatorily integrate with Feeder Monitoring System, Distribution Transformer Monitoring, SCADA or any other legacy system presenter will adopt in future (till project tenure of the bid) in Discom wherever DISCOM feel RMS data may require in / out to other system .
- 3.22.5. All the middleware in the form of Hardware, software & firmware required for such integration is part of scope of Work and included in the cost offered.
- 3.22.6. For integration, necessary support and requisite data / service library shall be shared / provided by both Bidder and Discom.
- 3.22.7. Google Map or any GIS map: - As per requirement of scope of work the user rights from respective GIS map provider is included in scope of work.
- 3.22.8. The contract period shall be initially for a period of 5 years from the date of award of contract. The contract period shall be extendable for further 2 years, on mutually agreed conditions.
- 3.22.9. If the services of the vendor are not as per the awarded work for three consecutive months after commencement of work then Discom will have liberty to terminate the contract.
- 3.22.10. The all Data in RMS is property of DISCOM and it is expected that bidder shall maintain the confidentiality & Integrity of data . A separate NDA (Non-Disclosure agreement) shall be signed by the successful bidder.
- 3.22.11. The Service provide will ensure the migration of all the master data, geo data and transaction data pertaining to consumer meter reading, billing, collection, complaints and any other items which may be critical and necessary for being available to run all the proposed applications, efficiently and effectively.
- 3.22.12. The Service provide shall transfer /upload the existing master data of old consumers / payment details / outstanding details / security deposit details / meter details / previous meter readings / instalment details and any other relevant data, which are required to run the proposed revenue and customer management application systems.
- 3.22.13. All the required license, license updates / Licenses renewal / AMC of Licenses, Hardware AMC, software updates, Change request mobile application updating is the responsibility of vendor within the quoted price till currency of contract.



## INSTRUCTION TO BIDDERS

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- 3.22.14. The system are for use in various geographical area of Discom and should be satisfactory for operation under tropical conditions of Rajasthan and shall be able to maintain the desired output and withstand a wide range of temperature & climatic experience in the area under scope.
- 3.22.15. Integration capabilities with future or present HES/MDA Software's/system for importing & exporting of meter data for billing, meter data analysis, forecasting, demand side management etc.
- 3.22.16. BI and Reporting tools for generation of MIS, Reports, Dashboards to help DISCOM Officers and Management in taking decisions for reducing losses, optimizing operations and enhancing customer satisfaction etc. All AENs, XENs, SEs, Chief Engineers, Corporate Office, Accounts Officers, JENs, AROs, Ledger Keepers and relevant officials shall use the system. **This is informative only but licensing shall be Enterprise Wide without constraint of number of users.**
- 3.22.17. The Software shall have an Energy Audit module for enabling energy audit at various levels with drill down options. The module shall have interfaces for integrating with Feeder Monitoring System, Distribution Transformer Monitoring, SCADA and other system's for importing/exchanging the Input Energy, interfaces for capturing and computing assessed energies, billed energies as various points for deriving the energy loss calculations.
- 3.22.18. All necessary Apps and software required for the Android based Smart Phones, PCs etc., to be deployed on the ground including Mobile Apps and Web services both for use by Discom personnel and Customers are to be provisioned for.
- 3.22.19. The system shall have provision to send SMS, EMAIL, Alerts etc., both for the enterprise users and consumers. The necessary SMS packages and SMS gateway will be provided by DISCOM and Email gateway shall be provided by the bidder at its own cost.
- 3.22.20. The system shall have provision to display all the key performance indicators as decided by the DISCOM in the dashboards and the same shall be displayed on video display units supplied at all sub divisions, divisions, zone, circle & DISCOM HQ as indicated in the RFP. As the system has been provisioned with COTS BI & standard report builder Tool, there shall be no limitations of number of reports through the system. The system has been designed in such a way that on the basis of input received per billing / or other system. This system can be utilized to deliver different reports. If any reports are not feasible through system then vendor has to provide the reports as per requirement of Discom, without any cost to Discom.
- 3.22.21. The system and constituent software modules would also need to interface with ERP systems being separately procured by Jodhpur Discom. This is desired to synchronize and streamline business processes, eliminate repetitive processes, improve the accuracy, consistency and security of data, simplify and organize inventory tasks and integrate accounting and financial reports.
- 3.22.22. The System shall have Mobile Device Management features inbuilt for managing all the enterprise mobile devices used/associated in/with the project. The software shall have specific feature of over the air updating of apps whenever updates or newer version are released.
- 3.22.23. The system shall have inbuilt GIS maps to facilitate the capture of electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps. The system should have facility to view the single line diagram of any feeder/feeders along with the HT, LT Network and the
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## INSTRUCTION TO BIDDERS

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- consumer information based on the options selected. The system shall help Feeder In-charges and O&M personnel for route mapping, locating asset/consumer, modifying or relocating the various information captured/available.
- 3.22.24. The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps.
- 3.22.25. Time is of essence in this Project. The successful Bidder is expected to implement the systems including supply of Android Smart Phones and field PCs/printers/devices for the project area as per the schedules indicated in the RFP.
- 3.22.26. The Contract will also necessitate providing Project Management and support personnel across the Discom in various Offices as listed.
- 3.22.27. JodhpurDiscom shall provide space, electricity etc. and requisite internet connectivity with sufficient bandwidth at Offices at Circle, Division and Sub Division. However SIM Card with GPRS/EDGE/3G/4G connectivity with suitable data packs for SBM (ANDROID Based Mobile Devices) is under the scope of the Agency. The offered solution should be savvy and should be capable run on 512 kbps bandwidth from data centre to client location.

***Note: The above Special Conditions of Contract and details are given in this document. Further illustrative work and requirements during the tenure of the contract for meeting business requirement of the systems shall be provided by the bidder.***

## Section 4. TERMS AND CONDITIONS

The Terms and Conditions of the contract shall prevail and shall be binding on the Agency and any change or variation expressed or impressed howsoever made shall be in operative unless expressly sanctioned by the JodhpurDiscom. The Bidder shall be deemed to have fully informed himself and to have specific knowledge of the provisions under terms and Conditions of this Tender Document mentioned hereunder:

### 4.1. DEFINITION OF TERMS:

- 4.1.1. In constructing these general conditions and the annexed specification, the following words shall have the meaning here in assigned to them unless there is anything in the subject of context in consistent with such construction. "JodhpurDiscom" shall mean the JodhpurVidyutVitrana Nigam Limited or JdVVNL, represented by Chairman/Managing Director and shall include their legal personal representative, successors and assignees.
- 4.1.2. The "Bidder" shall mean and include one or more persons or any firm or any company or body in corporate who has submitted the tender in response to "Invitation of Tender".
- 4.1.3. The "Agency / Contractor / successful bidder" shall mean the Bidder whose Bid has been accepted by Discom and shall include its heirs, legal representative, successors and assignees approved by the Discom.
- 4.1.4. The "Chairman/Managing Director" shall mean the Chairman/Managing Director, Discom.
- 4.1.5. The "Engineer" shall mean the Chief Engineer, Dy. Chief Engineer, Superintending Engineer, Executive Engineer, Assistant Engineer, Discom or other Engineer or Officer for the time being or from time to time duly authorized and appointed in writing by the customer to act as engineer or Inspector for the purpose of the contract. In case where no such engineer has been so appointed, the word "Engineer" shall mean the Discom or his duly authorized representative.
- 4.1.6. "Works" mean and include the work or works to be done by the Agency under the contract.
- 4.1.7. The "Contract" shall mean and include the following:
- (i) Notice Inviting Tender
  - (ii) Complete Tender document including its amendments if any.
  - (iii) Bid submitted by bidder.
  - (iv) EMD.
  - (v) Letter of Intent and its acknowledgement.
  - (vi) Security Deposit/ Performance Guarantees.
  - (vii) Detailed Work order.
  - (viii) Addenda that may hereafter be issued by the Discom to the Agency in the form of letter and covering letters and schedule of prices as agreed between the Agency and the Discom.
  - (ix) The agreements to be entered as per Tender Document.
  - (x) Requisite Power of Attorney in favour of the authorized signatory of the Bidder.
- 4.1.8. The "Specification" shall mean the specification; specific conditions annexed to the General Conditions, the contract schedule, and the annexure thereto, if any.

## TERMS AND CONDITIONS

- 4.1.9. The Month shall mean, English calendar month i.e. period of 30 days and week shall mean a period of 7 days.
- 4.1.10. The "Site" shall mean the place or places named in the contract and include, where applicable, the lands and buildings upon or in which the works are to be executed.
- 4.1.11. "Acknowledgement of Letter of Intent" shall mean the Bidder's letter conveying his acceptance of it being successful bidder and its intent to perform the contract.
- 4.1.12. "Acknowledgement of Work Order" shall mean the Bidder's letter conveying his acceptance of the tender as per the terms and conditions as been stated therein.
- 4.1.13. The "Contract Price shall mean the sum named in or calculated in accordance with the provisions of the contract purchase or any amendments thereto.
- 4.1.14. "Letter of Intent" Letter issued by Discom to the successful bidder informing him that the bidder is successful bidder.
- 4.1.15. "Work Order" shall mean the Discom' letter which may be issued in the way of letter containing detailed terms and conditions of the work and such other particulars which the Discom may like to convey to the Agency pending signing of a formal written Contract.
- 4.1.16. "Writing" shall include any manuscript type written or printed statement under or over signature or seal as the case may be.
- 4.1.17. The Work "Codes" shall mean the Indian Electricity Act/Electricity Supply act and Indian Electricity Rules and the rules made there under applicable in the State of Rajasthan on the date of Letter of Intent with such special modification thereof as may be specially stipulated by competent State Authorities i.e. Chief Electrical Inspector of Rajasthan.
- 4.1.18. Works importing "PERSON" shall include firms, Companies, Corporations and other bodies whether incorporated or not.
- 4.1.19. Words importing the singular only shall also include the plural and vice version where the context requires.
- 4.1.20. Terms and expressions not herein defined shall have the same meaning as one assigned to them in the Indian Contract Act (Act IX of 1872) and falling that in the General Clause Act, 1897).

**4.2. CONTRACT:**

- 4.2.1. After the selection of successful bidder Discom will issue Letter of Intent and subsequently a detailed Work Order to such bidder. A contract shall be entered into between Discom and the successful bidder.

**4.3. CONTRACT VALUE:**

- 4.3.1. Contract Value shall be termed as total order value as quoted / accepted by the Successful Bidder in the Financial Bid.

**4.4. CONTRACT PERIOD**

- 4.4.1. The contract period shall be initially for a period of 5 years from the date of award of contract. The contract period shall be extendable for further 2 years, on mutually agreed conditions.

**4.5. IMPLEMENTATION PERIOD:**

- 4.5.1. The implementation period of project for shall as defined in this document where in all the hardware, software, resources etc. should be installed/deployed.

**4.6. TERMINATION OF CONTRACT**

- 4.6.1. If the services of the vendor are not as per the awarded work for three consecutive months after commencement of work then Discom will have liberty to terminate the contract.

**4.7. FALL BACK ARRANGEMENT**

- 4.7.1. In the event of failure of the Agency to fulfil its obligations, duties and responsibilities as per the terms & conditions of the Contract, Discom shall interalia have the right, at any time to resort to fall back arrangement. Under such arrangement, Discom shall take charge of all facilities and systems whether in operation or under execution after giving suitable notice as provided in the Contract and can recover from the BGs & other holding of agency with Discom, the losses suffered due to such failure. If the BGs & other holding of agency is insufficient, the Agency shall pay the difference to Discom failing which Discom shall have right to recover the sum through legal or other means.
- 4.7.2. The Discom shall have the right in such circumstances to manage the system itself after taking charge of the facilities as above or through any other agency as it may deem fit and no claim of Agency for compensation in this respect shall be entered.
- 4.7.3. The Discom shall have the right in such circumstances to blacklist/bar/disqualify the Agency from submission of Bid to the any Discom(s) at least for one year.

**4.8. HANDING OVER ON TERMINATION/ PROJECT COMPLETION:**

- 4.8.1. The Contract shall require the Agency to cooperate in handing back the facilities, records, data backup and documents, latest software with documentations, manuals, etc. in good working order to Discom after termination of Contract.
- 4.8.2. Upon termination of the Contract, the Agency's authority to act in the area shall immediately cease. In order to smoothen the handing over process and not hampering the work, Discom shall arrange to award the Contract to other firm or may execute the work departmentally at-least 6 months before expiry of this Contract, the Agency/Discom staff may require to work along with the new agency for remaining period of Contract to enable the new agency to understand the process.
- 4.8.3. Upon Termination of the Contract, following equipment / items shall be handed over on A-IS-Condition as on last day of the contract:
- (i) All Utility Specific Data including Archives
  - (ii) All Desktop PCs , UPS and Printers and furniture
  - (iii) SBM ( ANDROID Based Mobile Devices)s
  - (iv) Barcode reader / QR Reader
  - (v) LAN with allied equipment
  - (vi) VDU and Video Wall
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- (vii) Transfer the license for COTS software and Database ( All Licenses cost / AMC cost as on date of Transfer shall be paid by the agency)
- (viii) Transfer the Source Code and Software for customization of COTS product & modules developed in the project .

#### **4.9. PERFORMANCE BANK GUARANTEE:**

- 4.9.1. A Performance Bank Guarantee equivalent to 10% (Ten percent) of Contract value shall be provided by the Successful Bidder within 15 days of receipt of Work Order from Discom by way of Bank Guarantee. The Performance Bank Guarantee shall be valid for three months in addition to the entire contract period. In case if the successful bidder provides a Performance Bank Guarantee for shorter duration (but not less than 24 months) then it would be the sole responsibility of the Successful Bidder to get the Performance Bank Guarantee extended well in advance to maintain the validity time. Discom may invoke the Performance Bank Guarantee without giving any information if validity of such Performance Security expires
- 4.9.2. The Bank guarantee in the prescribed format must be from the branch of any Nationalized/Scheduled Bank located in Rajasthan. The Agency may furnish Bank Guarantee on stamp paper of Rajasthan state and shall furnish a certificate of Banker that the stamp duty has been paid as per prevailing rules of that Rajasthan State.

#### **4.10. AGENCY TO INFORM HIMSELF FULLY**

- 4.10.1. The Contract shall be considered to have come into force from the date of its signing. The contractor shall be deemed to have carefully examined the Tender document including General Conditions, specifications and schedules. Also it shall deemed to have satisfied himself with the nature and character of the work to be executed and where necessary, of the site conditions and other relevant matters and details. Any information thus had or otherwise obtained from the Discom or the Engineer shall not in any way relieve the contractor from his responsibility for the supplying of the hardware, software and other equipment and executing the work in terms of the contract including all details and incidental works and supply all accessories or apparatus which may not have been specifically mentioned in the contract but necessary for ensuring complete erection and safe and efficient working of the equipment.

#### **4.11. CONTRACT DOCUMENTS**

- 4.11.1. The order placed under this Tender document shall be governed by the terms and conditions as incorporated in this Tender document and as given in the detailed work order. The terms and conditions as specified in this Tender document if differ from the terms indicated in the detailed work order the later shall prevail.
- 4.11.2. The contract shall for all purposes be construed according to the Laws of India and subject to jurisdiction of Rajasthan Courts only. For the due fulfilment of the contract, the Agency shall execute the Contract in the prescribed form, in prescribed number of copies on Rajasthan State Non-judicial stamp paper bearing stamp duty as applicable. The expenses of completing and stamping the Contract shall be borne by the Contractor. Such Contract shall be executed and signed by the authorized signatory of the Agency on each page thereof.

4.11.3. Such complete agreement form along with the contract documents together with a “Power of Attorney” in favour of the Executants shall be required to be returned to the Discom within a period of 15 days from the receipt of order duly signed on each page. One copy of the executed agreement duly signed by the Discom shall be sent to the supplier for his reference.

4.11.4. The contract documents shall mean and include the following: -

- (i) Contract agreement.
- (ii) Notice Inviting Tender
- (iii) Complete Tender document including its amendments if any.
- (iv) Bid submitted by bidder.
- (v) EMD.
- (vi) Letter of Intent and its acknowledgement.
- (vii) Security Deposit/ Performance Guarantees.
- (viii) Detailed Work order& its annexure.
- (ix) Addenda that may hereafter be issued by the Discom to the Agency in the form of letter and covering letters and schedule of prices as agreed between the Agency and the Discom.
- (x) The agreements to be entered as per Tender Document.
- (xi) Requisite Power of Attorney in favour of the authorized signatory of the Bidder.

#### 4.12. CHANGE OF QUANTITY/AREA

4.12.1. Change of Area :

- (i) This tender is meant for entire JodhpurDiscom; however at initial stage only Non RAPDRP area shall be served and at later stage the RAPDRP AREA may be included in the scope of bidder, at present details of RAPDRP / Non RAPDRP area is as under:

S.No.	Area	Consumers	11KV Feeders	Sub Divisions
1.	RAPDRP Area	14 Lacs	2080	47
2.	Non RAPDRP Area	25Lacs	8271	123

Note: these consumer nos are tentative (including all categories). These numbers also includes Permanent disconnected Consumer (PDC)

- (ii) If such area is added in the scope all the hardware software and services shall be rendered at par with this specification.
- (iii) The payment shall be given on the contract price for additional consumers on account of such addition.

4.12.2. Change of Quantity

- (i) The quantity of consumers may increase within area defined in this contract due to natural growth of consumer base.
- (ii) The quantity of consumers may be increased due to addition of RAPDRP areas& may also be decreased due to any reason like distribution franchisee / MBC model / any other reason.

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- (iii) The creation of new sub-divisions / divisions / circle / Zone is inevitable process of DISCOM to optimise their operation & monitoring. Hence bidder is expected to install define infra, hardware etc. for Sub-division / division / circle / Zone etc.
- 4.12.3. In any case payment shall be made on per consumer bill generation basis.
- 4.12.4. Since this is service contract in case of addition of consumers/change in area shall not be considered as additional order.
- 4.12.5. Vendor will have to maintain the all the Consumers data including PDC consumers.

**4.13. GIFTS AND COMMISSIONS ETC.**

- 4.13.1. Any gift, commission, or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with the Discom, shall be, in addition to any criminal liability which it may incur, subject of any loss or damage to the Discom resulting from any cancellation. The Discom shall then be entitled to deduct the amount so payable from any moneys otherwise due to the Agency under the contract.

**4.14. COMPLIANCE OF LABOUR LEGISLATION:**

- 4.14.1. The Agency shall discharge its liability of employer in respect of personnel to be engaged for delivering service under this Contract, as laid out in EPF and MP Act, 1952 ESI Act, 1948 (in ESI implemented area), workmen's compensation act, 1923 (in non ESI implemented area) contract labour (R&A) Act, 1970, Payment of Wages Act, 1936, Minimum Wags Act, 1948 or any other Act, Rules, Regulations as may be applicable. The Agency is required to get separate code under the provision of EPF and ESI Acts, if not already taken and deposit the employer's contribution along with employee subscription, as per rule and submit copy of challans at the time of claiming payment, as per Tender document, failing which an amount equivalent to employer's contribution and employees subscription shall be deducted from his each bill and deposited with the concerned authorities. The Agency shall be solely responsible for any consequences arising out of breach of any applicable legislations.
- 4.14.2. The Agency shall deploy **Skilled / Highly Skilled manpower** with necessary qualifications and experience as mentioned in the Tender Document. Agency shall pay salaries / wages to the manpower deployed through cheque/online transfer and submit Circle wise, Division wise Sub Division wise and Employee wise salary statement with all details such as Basic, DA, Conveyance, Bonus, EPF, ESI, PT, TDS, Net Salary etc. to Discom. Payment of wages / salaries paid in cash is strictly not allowed.
- 4.14.3. Accounts Officer of respective circle shall ensure compliance by the Agency with respect to labour law, minimum wages, Accidental Insurance, Workman compensation, EPF and ESI etc. Accounts Officer shall verify and certify the monthly Circle wise, Division wise Sub Division wise and Employee wise salary statement for release of payments to Contractor

**4.15. SAFETY OF SYSTEM**

- 4.15.1. The Agency shall be fully responsible for upkeep, operation, maintenance, security and safety of hardware, software, documents, data and other documents and records transferred to it and developed later. These documents and records shall be maintained in updated condition

and handed over back to Discom in good working order on completion of the contract or time to time basis as per scope of works as and when required by the Discom. Agency shall compensate to Discom any loss suffered by Discom due to default of the agency in this respect.

#### **4.16. INSURANCE**

4.16.1. The agency at his own cost shall arrange, secure and maintain all insurance (Equipment & manpower) as pertinent to the works and obligatory in terms of law to protect its interest and interest of Discom against all perils. The validity of insurance shall be valid till expiry of contract

#### **4.17. REMEDY ON AGENCY'S FAILURE TO INSURANCE**

4.17.1. If the Agency fails to effect and keep in force insurance referred to in clause 16 hereof or any other insurance which he may be required to effect under the terms of contract then the Jodhpur Discom may effect and keep in force any such insurance and pay such premium(s) as may be necessary for that purpose and from time to time deduct the amount so paid by the Discom as aforesaid from any money due or which may become due to the Agency or recover the same as debt from the Agency.

#### **4.18. LIABILITY FOR ACCIDENTS AND DAMAGES**

4.18.1. The Agency shall be liable for and shall indemnify the Discom in respect of all injury to person or damage to property resulting from the negligence of the Agency or his workman or from defective work but not from any other cause.

4.18.2. Provided that the Agency shall not be liable for any loss or profit or loss of Contract or any other claim made against the Discom not already provided for in the contract, not for any injury or damage caused by or arising from the acts of the DISCOM or of any other person or due to circumstances over which the agency has no control, not shall his total liability for loss, damage or injury under this clause exceed the total value of the Contract.

4.18.3. The Agency will indemnify and save harmless the Discom against all actions, suits, claims, demands, costs, or expenses arising in connection with injuries (other than such as may be attributable to the Discom or his employees) suffered prior to the date when the work shall have been taken over hereof by persons employed by the agency on the work, whether at common law or under the workman's compensation Act-1923 or any other statute in force at the date of contract relating to the question of the liability of employees for injuries suffered by employees and will if called upon to do so take out the necessary policy or policies of insurances to cover such indemnity.

4.18.4. The Agency shall insure against such liabilities with an insurer approved by the Discom and shall continue such insurance, during the whole of the time that any person(s) are employed by him on the works and shall when required produce to the Discom, such policy of insurance and the receipt for payment of the current premium.

#### **4.19. MAINTENANCE OF FACILITIES AND PERSONNEL**

4.19.1. The Agency shall maintain all requisite facilities at Jodhpur of its own as required to carry out the work as per the Tender document.



**4.19.2. Facilities:**

- (i) The Agency shall provide and maintain a controlling office with requisite infrastructure at Discom's office with proper staff & facilities like telephone with fax, mobile phone, Internet etc. at its own cost and shall remain open at all reasonable hours to receive communications.
- (ii) Space, Electricity, Water and other facilities at all concerned offices of DISCOM shall be provided by JodhpurDiscom without any cost chargeable to Agency.

**4.19.3. Personnel**

- (i) The Agency shall deploy exclusive supervisory and other personnel for efficient management of the work under contract. Apart from the personnel specified in the scope of work. However this contract is on service model, Agency shall be responsible for smooth & timely execution of work by appointing sufficient number of manpower.
- (ii) Manager or an alternate shall be available for communication during 9 am to 7 pm.
- (iii) Agency shall not change the Manager/nodal officer, provide that he has not left the service.
- (iv) Agency shall immediately inform the Discom about any change of personnel/contact numbers through Email and post.
- (v) **Agency shall issue identification cards (ID card) to all its personnel engaged in the work under the contract. The identification card duly signed by authorized signatory of managerial position of the agency. The format of such ID card shall be approved by concerned Discom Officer shall be consisting of key details of Resume and photograph of the concerned personnel along logo of the Agency. The Concerned Discom officer after countersigning these IDs, will return the same to the Agency for distribution to the concerned personnel. The IDs shall be handed over to the concerned Discomofficer after the completion of work under the contract.**

**4.19.4. Nodal Officer for Execution of Project:** After award of contract, to interact between the field offices and Agency, Discom shall appoint a Nodal Officer if required. Similarly, the Agency shall communicate the name of the authorized person(s) that would act as a Nodal Officer(s) from his side.

**4.20. AGENCY'S RIGHTS**

- 4.20.1. The Agency will be given rights to operate in the area during the Contract period for carrying out the work, which shall cease to exist on completion of the said period or on termination of the Contract.
- 4.20.2. The Agency's rights in the area will be working as an agent of Discom to implement the revenue management system.

**4.21. CONTRACT AGREEMENT**

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- 4.21.1. The Contract shall set out specific events of default by one party that will entitle the other party to terminate the Contract. The party committing an event of default, which is capable of being remedied, will be given a reasonable opportunity to remedy the default.
- 4.21.2. The Contract can however be otherwise terminated by either party by giving six-month notice and on terms to be mutually agreed which may include payment of suitable compensation for losses suffered by the other party due to such termination.
- 4.21.3. Agency shall indemnify Discom against any claims, demands, costs and expenses whatsoever which may be made against it, because of failure of the Agency or its representatives in the performance of their duties and negligence, any accident or injury to any person.

**4.22. MODE AND TERMS OF PAYMENT**

- 4.22.1. The agency shall submit sub division wise monthly invoice in triplicate to Sub-Division officer of JodhpurDiscom, as per the rates indicated in the Contract. The number of consumers shall be verified from MIS.
- 4.22.2. The payment will be made on per consumer bill generation basis. The payment shall commence after notification issued by SE(IT) certifying the receipt of all license/agreements of all COTS software and acceptance of other hardware and software.
- 4.22.3. The invoice shall be accompanied by the following:
- (i) Employee wise monthly wages statement.
  - (ii) EPF statements and challan.
  - (iii) ESI statements and challan.
  - (iv) Certifying 100% amount to be released.
- 4.22.4. 100% payment of monthly invoice shall be paid in following schedule.
- (i) The invoice shall be submitted within 7th of every month.
  - (ii) The SDO shall verify the invoice by 15th of every month and send the same to circle AO/Sr. AO(CPC)
  - (iii) The AO/Sr.AO(CPC) shall release the 100% Payment by 7th of next month.

**4.23. PRICE VARIATION**

- 4.23.1. On request of firm with supporting documents the price variation shall be computed as per below formula by SE(IT) / Nodal Officer on 1st of April month of every financial year (after the award of contract) and the price so derived shall be applicable for ensuing months only. In this regard SE(IT)/ Nodal Officer shall issue notification to all payment authorities.

**4.23.2. Price variation formula**

The price variation shall be applicable on the unit rates mentioned in the Contract. The percentage increase/decrease (rounded off up to two decimal) in price shall be worked out as under:

**B1**\_Rate of skilled labour per day as on date of Bid Submission, as published by the Govt. of Rajasthan for minimum wages to Labour per days, as per Act 1948.

**B2**\_Rate of skilled labour as published by Govt. of Rajasthan as on first day of April month for which price variation is to be allowed to the bidder for a period of 1<sup>st</sup> April to 31<sup>st</sup> March of that year.

**Formula:**  $PV = 0.20 \times \left( \frac{(B2-B1)}{B1} \times 100 \right)$  (where manpower component is considered as 20% of the total cost per consumer.

**Illustration:**

If the base rate of skilled Labour (B1) is Rs. 200 per day as date of Bidding, and the rate of skilled labour (B2) is Rs. 220 per day then on 1<sup>st</sup> the April of that particular year, price variation shall be calculated as below:

\* The price verification shall be applicable only on 1<sup>st</sup> April of each year.

$$PV \% = 0.20 \times \left( \frac{220 - 200}{200} \times 100 \right) = 2\%$$

***To avoid anomalies in working of Price variation, vendor shall develop an IT Tool for auto compilation of the PV. Such tool shall be verified / approved by the Discom***

**4.24. PENALTIES**

The following penalties shall be applicable on the Bidder:

4.24.1. **Milestone Defaults :** As mentioned against each mile stone / activity

4.24.2. **Penalty on account of default of Services \*:**

S.No.	Activity	Penalty
1	Penalty for not maintaining the minimum inventory of SBM (ANDROID Based Mobile Devices) machines/HHD (with portable printer set)	The Agency must maintain the minimum prescribed inventory of SBM (ANDROID Based Mobile Devices) machines. In case Agency maintains lesser number of SBM (ANDROID Based Mobile Devices) in a sub-division, penalty of Rs.100 per SBM (ANDROID Based Mobile Devices) per week shall be levied on the deficient quantity of machines.
2	Non-generation of bills due to the deficiency of service by the service provider (Including SMART PHONES problems, stationery, Connectivity, software etc.)	Twice the Contract unit Price awarded per consumer.
3	Non rectification/Problems in Re-customization of Software due to change in tariff.	0.5 % / week or part thereof on the monthly remuneration bill.
4	Non-availability of supporting manpower of Agency	One day leave shall be allowed per person per month, thereafter Rs.100/day/person shall be applicable.

**Note: - The Cumulative penalty shall not be higher than 10% of monthly invoice of each sub division**

**\*To avoid anomalies in working of penalties, vendor shall develop an IT Tool for auto compilation of the penalties . Such tool shall be verified / approved by the Discom.**

**4.25. IMPLEMENTATION AND ROLLOUT SCHEDULE**

- 4.25.1. The Agency has to submit the plan for customization and rollout of the scope of the work as per the terms and conditions of the award.
- 4.25.2. Penalty will be levied for delay in execution and rollout as per the Penalties given in this Tender document.
- 4.25.3. Time is the essence of the contract and hence the scope of work has to be completed as under.
- 4.25.4. Timeline for various modules will be as follows

**(i) Billing Module**

S. No.	Particular of activity	Time schedule desired	Penalty
1	Furnishing detailed specification/data sheet of all the software, hardware, cloud services etc. under the scope of the Agency.  MIS Dashboards, report formats has to be submitted for approval	Within 30 days from the date of awarding contract ( detailed work order)  <i>** If not furnished within 45 days, the order may be cancelled.</i>	Rs. 50,000/- (Rupees Fifty Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 7.5 Lakhs.
2.	Approval/ comments by Discom.	Within 15 days from the date of submission of point 1 above.	_____
3	Offer for Software and Hardware testing incorporating comments of Discom as per point No. 2	Within 60 days ** after activity as per point No. 2 above  <i>** If not offered within 75 days order may be cancelled</i>	Rs. 20,000/- (Rupees Ten Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 6 Lakhs.
4	Testing of the system by Discom	Within 15 days after activity as per point No. 3	
5	Deployment of the system and Functional operation of the system	Within 30 days after activity as per point No. 4.	Rs. 20,000/- (Rupees Ten Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 6 Lakhs.

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- (ii) **MIS Module** : within 75 days from the date of work order Rs. 20,000/- (Rupees Ten Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 6 Lakhs.
  - (iii) **GIS Module with SBM(mobile)** : within 60 days from the date of work order Rs. 20,000/- (Rupees Ten Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 6 Lakhs.
  - (iv) **Mobile application**: within 75 days from the date of work order Rs. 20,000/- (Rupees Ten Thousand) per day will be levied on Agency. The upper cap for Penalty will be Rs 6 Lakhs.
- 4.25.5. Discom shall provide the master data before above schedule
- 4.25.6. The Implementation Agency shall supply, the complete backup of data on quarterly basis in predefined (SQL) form and other along with required software to incorporate / read the data in soft copy in external hard Disk, and modifications details incorporated during the year shall also be provided in hard copy on yearly basis.
- 4.25.7. The Implementation Agency shall be responsible for proper storage of data of last 5+2 years (2 years active, 5 year archived) on dedicated secured storage device used for bill processing of the JodhpurDiscom and ensure proper care of data stored therein from being erased or mutilated / destroyed through in-advertence or fire or any hazard and will indemnify the JodhpurDiscom for the above data held in their charge from damages or destructions or loss due to any reason what-so-ever. Storage charges, insurance cover charges etc. for safe custody of data shall be borne by the agency.
- 4.25.8. Incorporation of the entire rules / tariff as amended from time to time for billing or which may affect the billing is to be incorporated/ adopted by the Implementation Agency free of cost immediately even if it requires insertion / deletion / modification of any field or the format of the field and modified / new report, which may be generated due to this modification or insertion / deletion, is to be generated by the Implementation Agency at no extra charges and reporting confirmation thereof within 48 hours of receipt of such instructions from the JodhpurDiscom. All monthly Backup Data along with output reports in operational mode with defined fields / predefined format (SQL Form) in uncompressed mode is also to be supplied by the Implementation Agency on external hard Disk free of cost to the designated officer every month.
- 4.25.9. The Implementation Agency shall have alternate arrangements to continue to execute the work in case of breakdown of their own system

## Section 5. DETAILED SCOPE OF WORK

### 5.1. EXISTING SYSTEM AT JODHPUR DISCOM

- 5.1.1. The area under JodhpurDiscom with Zonal offices, O&M circles and total no. of consumers is mentioned in the Introduction Section. Presently areas of Bikaner city which are under the jurisdiction of the Discom have been awarded to third party on Distribution Franchisee Model. Discom reserves the right to reduce the scope of work for other such area of jurisdictions given to the franchisees in the future.
- 5.1.2. On the other hand, if such Distribution Franchisees wish to adopt the facilities and services offered to the Discom, the successful bidder shall extend the same to such willing Franchisees at identical pricing and terms if the franchisee / agency so desire, subject to approval of Jodhpur Discom.
- 5.1.3. In general the Consumers are billed on bimonthly basis with high value consumers being billed on monthly basis. Currently the billing month is divided into 4 cycles and consumers are organised into binders based on the geographic area. The readings of above 18.5 KW / 25 HP consumers are being provided by the Discom for generation of bills. The reading of HT consumers is provided online either from the meter data acquisition system or from vendors systems in a specified format, the bills are then generated by the billing agencies. Various output reports are generated at pre-defined periodicity i.e. daily, weekly, monthly, quarterly and annual on pre-printed stationeries.

**Note: Before furnishing the bid the bidder may study the present billing and Customer Information system of Discom and contact to Tendering Authority. The functional requirement of the current system and services to be rendered would be at par or in addition to all the functionalities that are present in the current system. The bidder has to study the bill formats, various reports, MIS reports etc., that are currently being provided to ascertain the quantum of services.**

### 5.2. BROAD SCOPE OF WORK

The proposed system shall be developed for “Monthly Billing” as well as “Bi-monthly Billing”. The system should be capable to generate bills with required flexibility of duration. Generally, it may be fortnightly (only High value consumers), monthly and bi-monthly. However, it shall be governed by the requirement of JodhpurDiscom and / or directives of RERC, without any extra cost during the entire contract period.

The broad scope of work to be undertaken by the agency is provided below:

#### 5.2.1. Provision of the following services

- (i) Billing Module on COTS software
- (ii) Mobile Apps for Smart phones for various modules.
- (iii) Business Intelligence on COTS
  - a. Report Builder for report customization, generation, printing, exporting & publishing.
  - b. Business Intelligence Tool for Analytics and customized MIS Dash Board

## DETAILED SCOPE OF WORK

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- c. Development of Management Information System for information gathering of important parameters through mobile and Web Application
- (iv) New connection, load extension, load reduction, MCO, DCO, PDCO etc. management with required web and Mobile App.
  - (v) Cash Collection management with required Web and Mobile App.
  - (vi) Meter management with required Web and Mobile App.
  - (vii) Mobile applications for DISCOM Officers and Consumers.
  - (viii) Web and Mobile Application's for Feeder In charge.
  - (ix) Web Application, Mobile apps with integrated GIS tools for capturing various networkviz. Attributes, consumer indexing, creation of Single Line Diagram in hierarchical (Parent Child) views etc.
  - (x) Deployment of Video Display Unit at various Sub Division, Division, Circle, Zone and Corporate Office as per Quantities and specifications specified in the RFP.
  - (xi) Any other software/system for delivering the intended scope of the tender
  - (xii) Audited IT Tool for Penalty calculation and Price variation calculation
- 5.2.2. The entire System/Solution shall be deployed on Cloud preferably at DoIT. The sizing, installing, deployment, maintenance, security, up keeping shall be under the scope of the vendor. In case cloud services not rendered by DOIT then the Cloud service shall be made available with the empanelled / registered service providers of Government of India for cloud base services. The copy of agreement shall be made available before the commencement of work. The generic and specific guidelines issued by State & Central Government IT departments with respect to Hosting, Security, Vulnerability etc., have to be adopted and implemented during the tenure of the project. Discom shall be intimated of the cloud hosting and all related agreements and certificates.
- 5.2.3. To provide and maintain the required be on DR Cloud (1 : 1) and the same shall be hosted in a different Seismic Zone. Discom shall be intimated of the cloud hosting and all related agreements and certificates.
- 5.2.4. To provide and maintain the required Android based Smart phones as defined in the specification with the required warranty and insurance.
- 5.2.5. To provide and maintain the required hardware at various locations as defined in the specification.
- 5.2.6. To provide the required minimum manpower at:-
- (i) Central Location in intimation to DISCOM
    - a. Project Manager (1-No. at Discom HQ)
    - b. System Administrator (1-No)
    - c. Help desk and support operators (5 No's)
  - (ii) At the following DISCOM offices
    - a. Circle Manager (1-No. at each Circle)
    - b. IT supports personnel (One each at Sub Division, Division Level and Two at Circle level.)
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## DETAILED SCOPE OF WORK

- 5.2.7. To provide Stationery (pre-printed/plain) & Consumables for billing. Billing includes billing on monthly basis / bi-monthly / flexible and base billing for high value & HT consumers, payment receipts, notices to consumers, disconnection, termination, exception reports, reports, MIS and any other reports as indicated in the RFP. The vendor has to study the current system and the reports that are printed and shall assess the requirement's accordingly.
- 5.2.8. Replacement of cartridge for Laser printers and ribbons for Dot-Matrix printers, Line Printers and creation of LAN at Sub divisions and other offices shall be in the scope of vendor
- 5.2.9. To supply the furniture as defined in the specification.
- 5.2.10. SIM Card with GPRS/3G/4G connectivity charges on Android Smart Phones along with the required monthly data packs.
- 5.2.11. Change request, modification, new feature development, new development, new configuration, Updates, new integration requirements for all the software (COTS and other Software supplied) during the tenure of the contract shall be included within quoted price. This shall be applicable within the boundary of the system.
- 5.2.12. Data migration from the existing systems through a sustainable system. No payment shall be made for Data Migration. The bidder has to ensure that no data is lost in the process.
- 5.2.13. Training to be imparted to the Discom's designated personnel of the system and its operation.
- 5.2.14. OPTIONAL: Meter reading by deployment of the requisite qualified manpower by Agency (Shall not be part of evaluation).

### 5.3. THE DETAILS OF FUNCTIONALITIES AND SOFTWARE SYSTEMS

#### 5.3.1. Generic features of the Software Solution/System

- (i) Access Control with details of data/service access for different users
- (ii) Backup strategy
- (iii) Security and Encryption
- (iv) Confidentiality
- (v) Audit Trails
- (vi) Availability vis-à-vis Performance Metrics
- (vii) Monitoring and Test Tools
- (viii) Cloud Hosting & Delivery policies
- (ix) Software upgrades and updates
- (x) Service loss/ degradation severity definitions and remedial times, i.e. Disaster Recovery and Data protection plans
- (xi) Automatic Failover schemes in place
- (xii) Automatic updates and patch management
- (xiii) Scalability as per requirement.
- (xiv) Integration with existing applications

### 5.4. BILLING SYSTEM (MANDATORY COTS (SAP/ORACLE))

#### 5.4.1. Core Billing System

- a) The core module of Billing is to be provided on COTS software hence all the detailed billing and revenue management software's features/process & functionalities as published by



DETAILED SCOPE OF WORK

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- the COTS vendors of SAP/Oracle are to be provided, configured and customized as per the TCOS and business processes of JDVVNL.
- b) The web based application shall have the most robust, flexible and configurable billing engine for generation of bills on various modes and technologies that are adopted currently by the utilities thus providing the required flexibility to the Discom in adopting to the latest technology advancements for effective, transparent and timely billing.
- c) The system shall invariably support Spot Billing, Automated Spot Billing, Photo Spot Billing, Batch billing for consumers having load below 18.65 KW etc. Base Bills shall be generated for consumers having above 18.5 KW loads either by obtaining the reading directly from the AMR or the Smart Meter or by the way of input.
- d) The Spot billing software shall be developed for machines based on operating system like Android. The software at mobile shall also have provision for automated data downloading from the consumer meters, required protocols, API's shall be provided by the Discom. In case if the utility wants to use the Spot Billing machine only for reading capture the same shall be made available as configuration option. The Android based Smartphone and software shall also be configured for spot payment collection and spot capturing of other field information.
- e) Major features shall include:**
- (i) Capturing monthly/bi-monthly / or on any time spammeter readings of LT consumers by meter inspectors, via Spot Billing Machines (ANDROID based Mobile Devices) with the help of suitable ANDROID application
  - (ii) Online upload of meter reading data via GPRS if connectivity is available else store the readings locally and upload whenever connectivity is available.
  - (iii) Option of upload of meter reading data via WI-FI when the Feeder In charge/Meter Reader returns to the AEN Office premises at the end of the day
  - (iv) Downloading of Consumer Master Information into the Smart Phone online via WIFI/GPRS
  - (v) SMS to consumers once the Meter Reader starts his meter reading operations in his designated area. The SMS packages shall be provided by DISCOM.
  - (vi) SMS to the consumers for the billing amount in the Bill generated for continuous 3 days before due date of the bill.
  - (vii) SMS to consumers whose meter could not be read by the Meter Inspector for No Access .The SMS packages shall be provided by DISCOM.
  - (viii) SMS to consumers with reading details after the reading is captured .The SMS packages shall be provided by DISCOM.
  - (ix) System should be capable to capture Billing Parameters, e.g. Current KWH as well as Billing KW. Or it may be Current MDI, Events, kVAHetc as per prevailing tariff and availability of data in Meter.
  - (x) Able to take reading from the other system like Automated meter reading (AMR) for CT meters and in future, Smart Meters, etc. to avoid manual readings
  - (xi) Bill processing in centralized bill server for LT and HT consumers
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- (xii) On demand generation of bills and closing of accounts as per TCOS, in case of voluntary disconnection for LT consumers.
  - (xiii) Bill Correction, part bills, consolidated bills, group bills etc.
  - (xiv) Auto and manual entry of sundries
  - (xv) Auto and manual entry of meter updates
  - (xvi) Auto and manual process for updating various key parameters as per the TCOS & Business rules of DISCOM.
  - (xvii) Accounting of Instalments, part payments, Govt. subsidies, wave offs etc.
  - (xviii) Generation of Disconnection notice for non-payment (Except Stay from the Court /Settlement committee/VCR monitoring committee, Competent authority)
  - (xix) Updating and maintenance of security deposit for LT & HT consumers Maintainable SD calculation for LT & HT consumers
  - (xx) SD interest calculation for LT & HT consumers
  - (xxi) Additional SD instalment bill/ including generation of notices of enhance security as per TCOS of LT/HT consumers
  - (xxii) Processing of Bank Guarantee & Letter of Credit for HT consumers.
  - (xxiii) Advance Payment facility.
  - (xxiv) Net Metering, Open Access, Single Point Delivery etc. or any billing method come in future.
  - (xxv) Consumer History View at least last 3 years, Meter History View, Export & import of Consumers from one location to another location.
  - (xxvi) Transfer of consumer from one sub-division to another sub-division.
  - (xxvii) Upload meter image from SBM to the server through GPRS in real time or through sub-division computer at end of the day in case there are network issues.
  - (xxviii) The images will be stored in bill server of agency for past one year bills.
  - (xxix) The agency shall design a solution such that the stored images should get fully rendered within 5 seconds on any client machine.
- f) Special features for required for High Value Consumers i.e. HT/MIP**
- (i) Secure import of meter readings & billing parameters into the system from third party systems. Provision to upload billing parameters from CMRI/MRI etc., directly into the system, both in batch and single read modes. System shall have provisions to e-mail the bills, notices etc. in pdf format to the consumers.
  - (ii) Bills should generated after duly considering the imports and exports of energy (wind power, IEX), changes of meters, change of CT/PT, TOD Slabs as per tariff and business rules.
  - (iii) High Value Consumer bills are to be printed on large format (A4 plus).
  - (iv) HT bills are to be provide in 4 copies for each consumer.
  - (v) The system shall have provision to generate advanced FNB bills and the same shall provide in 8 copies each for each consumer.
  - (vi) Security deposit to be auto adjusted.
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DETAILED SCOPE OF WORK

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- g) The system shall provisions for accounting consumers with special meters like prepaid meters and shall support the entire meter-to-cash cycle or integrate with the third party systems for enabling the same.
- h) The system shall have role based user access and work flow based entry and approval process in built. Login & Biometric based security shall be enabled for all such approvals and transactions performed.
- i) The system shall also facilitate
  - (i) Registration of mobile number, email ID and date of birth of consumers
  - (ii) Duplicate bill
  - (iii) Registration for e-Bills
  - (iv) On-line payment of bills
  - (v) Statement of electricity bills vis-à-vis payments
  - (vi) Generation of duplicate receipt of payment deposit.
  - (vii) Viewing latest payment status
  - (viii) Daily consumption status for Smart meters
  - (ix) Application for new connection/additional load/meter change/bill correction etc.
  - (x) Transfer of Supply
  - (xi) Correction in mailing address
  - (xii) Augmentation of load / regularization for installation of AC
  - (xiii) Voluntary Disconnection activities
  - (xiv) Handling of consumer complaints and their resolution
  - (xv) System for informing non-usage of electricity during a certain period of time due to absence
  - (xvi) Reconnection of Supply
  - (xvii) SD refund tracker
  - (xviii) Viewing of meter information, consumption history and SD details
  - (xix) Energy calculator
  - (xx) Power consumption guide
  - (xxi) Reporting disruption of supply
  - (xxii) Reporting power theft
  - (xxiii) Request for bill tariff change

**5.4.2. Tariff & billing rule management**

- a) The software shall provide a UI based interface for configuring tariff and business rules.
- b) The software shall have provisions for retrospective and prospective billing.
- c) The software shall have provision to calculate part bills with variable bill period.
- d) The software shall have a flexible, user configurable tariff /TCOS and business rule management interface and almost all the changes can be configured without changing at the code level.

**5.4.3. Spot Billing Software/System**

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- a) The Web Based Software shall have provision to create, update and modify route traversal plans as per the billing schedules. The primary route traversal plans shall be 11KV FEEDER WISE.
- b) SBM (ANDROID Based Mobile Devices) Spot billing software shall facilitate bidirectional communication with the central server using standard mobile network (GPRS/EDGE/2G/3G/4G/LTE etc.).
- c) The Spot billing software on the SBM shall facilitate local storing of the data and based on the availability of connectivity the mobile data shall transfer the same to the central server.
- d) Automated data downloads with or without user intervention i.e. the pre billing data as per the route plans shall be automatically downloaded to the SBM (ANDROID Based Mobile Devices).
- e) Real-time data uploads to central server (bills)
- f) Meter readers / Feeder In-charge need not visit sub divisions.
- g) Features to downloading and uploading from central server through connecting through Wifi.
- h) The SBM (ANDROID Based Mobile Devices) software shall be auto updated from central server for tariff, data validation and other billing rules.
- i) The SBM machine shall be capable of generating bills both in online and offline mode. In offline mode, the bills shall be queued for updating to the central server and shall be updated once network is available in background.
- j) The SBM shall have the entire billing tariff built into it for generating bills along with incorporating all the business processes and rules associated with consumer billing, consumer status, meter status etc.
- k) The device software shall have options to capture the photo of the dial of the meter. Option to capture multiple photos to depict any abnormality shall also be provisioned.
- l) The device software shall have capabilities to record the GPS co-ordinates. The software should display the location accuracy for more accurate GPS capturing.
- m) The Software on the SBM shall be able to print the bill over to a blue tooth printer.
- n) The system shall have provision for Spot Cash Collection module with configuration option.
- o) Provision to load any other software shall be available and the same shall be developed and loaded as per the requirements of Discom.
- p) The SBM software shall have provisions to capture any other additional information like consumer mobile no, meter detail, observations etc.
- q) If the Discom wants to implement automated spot billing, then the bidder has to facilitate the same by making the required changes in the software during the contract period. The required protocols shall be provided by the Discom.
- r) SBM software shall have provision to generate various reports as defined by Discom from time to time.
- s) SBM software shall have features to download the DC notices from Central Server.
- t) Smart Phones provided for billing shall be secured i.e. Upon power on the smartphone shall directly launch only the authorized apps of the DISCOM and all other feature of the

- smartphone that are not used for DISCOM purpose shall not be enabled/available to the user.
- u) The data stored in the Smart Phones shall be secured with encryption and shall be tamper proof.
  - v) The SBM Software shall log all the critical events like app events, exceptions, system crash events, user events, network signal strengths, memory, data usage, battery usage and the same shall be available to be synced to the central server either upon user initiation or automatically synced to the central server along with the bill & other data.
  - w) Automated Spot Bill generation by direct downloading of meter data to the Android Smart Phone from communicable meters. The software shall facilitate downloading of billing parameters or the complete meter data or any desired parameters as specified by JDVVNL from time to time. The Android smart phone shall automatically generate the spot bill without manual punching/feeding of billing parameters.
  - x) The required Devices/Communication cables & accessories for establishing the connectivity between the meter with Optical/RS232/RS485 ports and the Android Smart Phone shall be provided by the bidder one set for every Android Smart Phone.
  - y) The required HHT for obtaining data from meters with LPR/RF/IR/IrDA communication features shall be provided by JDVVNL. However, the required cables and accessories for connecting the HHT to Android Smart Phone has to be provided by the bidder one set for every Android Smart Phone.
  - z) The meter data downloaded other than billing parameters shall be uploaded into the server software for further analysis.
  - aa) Bidder has to diligently examine and consider all the components required for enabling direct download of meter data from different makes/types of meters for automated spot bill generation which is one of the key deliverables.
  - bb) System shall be capable to store Meter change, New Connection and any other changes of infra at consumer end and malpractices, anomalies in consumer premises / meter.

#### **5.4.4. Mobile Device Management Information System**

Android Smart Phone device management module shall facilitate the management, administration, adding, removing, user management of ANDROID Based Mobile Devices'. In addition, the software shall have graphical user interface where the following features shall be available:

- a) To view the live status of device based on location, meter reader, sub division, division, circle, zone, DISCOM etc.
  - b) Group and view the devices based on Meter Readers, Sub Divisions etc.
  - c) The device view shall show the live details of the device indicating the operational hours, signal strength, battery status and last bill issued GPS location etc.
  - d) Sub Divisional officers shall be able to trace the meter readers and monitor progress on Google map.
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- e) The software shall have facility to log all the critical events of the devices as per the configuration.
- f) The Software shall have the facility to monitor the key parameters like battery, network, data usages.
- g) The software shall monitor the version of the software that is currently in the device and check for update, tariff and rule changes and update the same to the device.
- h) The software module shall have facility to trace the device life cycle.
- i) Any other feature that would increase the meter reading monitoring shall be made available as per Discom requirements from time to time.
- j) Software should maintain device IMEI, mobile number, SIM number etc.

## **5.5. REVENUE MANAGEMENT SYSTEM**

### **5.5.1. Payment Collection**

**This module shall cover the following functional requirements:**

- a) Handles the entire payment collection of the Discom
- b) Multi-tiered approach to handle operations at all levels
  - (i) Cashiers & Supervisors at the Cash Offices
  - (ii) Controlling Officers at Treasury Department/e-Gras/RTGS/NEFT
  - (iii) Senior Management
- c) Automatic generation of Cash Book
- d) Automatic generation of Lodgement Report
- e) Data integration with future ERP system for final accounting
- f) Integrates with other downstream ITESs of the company
- g) Role based security
- h) Extensive MIS to facilitate monitoring and Control
- i) Rigorous Data Validation Process to ensure data integrity
- j) Deployed Over a High Available Architecture
- k) Validation for deposit of cash only up to Rs. 20,000 per bill as per TCOS
- l) Validation for dishonoured cheque deposit second time as per TCOS
- m) Facility for periodic reconciliation as defined by JDVVNL with the payments imported from other agencies in all aspects including bank reconciliation.

**The payment collection module shall facilitate payment collection in various modes viz:**

- a) Payment collection by Feeder In-charge / meter readers over spot billing machines.
  - b) Payment collection by Discom officers using hand held device.
  - c) Payment collection through ATP.
  - d) Payment collection through dedicated cash counters.
  - e) Payment collection through online payment gateways, banks /debit & credit cards, authorized third parties / e-wallets, Kiosk etc.
  - f) Payment collection through E-mitra and other state government enabled kiosks/portals or systems.
  - g) Payments collected by manual receipts (payment stubs)
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- h) Payment collection through mobile app which shall further integrate with online payment gateway.
- i) Online Payment through digital wallets, Govt. Apps like BHIM, UPI Gateways and other future payment gateways or interfaces that may come during the tenure of the contract.

**Other payment Collection features**

- a) Provision to collect and account payments against bills and other miscellaneous heads. The payment collection system shall be secure and reliable and shall facilitate cash reconciliation at various levels.
  - b) Payment collection software should have dashboards and MIS reports for monitoring payment collection and reconciliation at various levels.
  - c) Payment collection module should have transaction based approval before the payments are posted and accounted.
  - d) The system should have the flexibility to accept full, partial advance payments. The system should also have the facility to centrally change these settings from time to time.
  - e) System should support group payment facility for acceptance of one single payment for set of consumer accounts. System should generate reconciliation reports for the same.
  - f) System must be capable of handling centralized or decentralized payment processing. System should be built with cash counter which can be installed at sub division offices & accounting sections which should work on real time data synchronization basis.
  - g) In case of internet is not available at sub division offices or internet is down for specific period of time then the system (spot billing devices and sub-division office) should have provision to work in offline mode.
  - h) The generation of receipt and printing should be continued and data has to be stored in local system. The system should be capable of holding and population of data on central servers for 24 hrs of operations or in multiple batches based on the need so that the performance of the system should not hamper. On restoration of internet payment details has to be transferred to central server.
  - i) System must be able to generate & send SMS/Email automatically to customer for every payment received as per the requirement and directions of DISCOM.
  - j) All payments should be associated with the login-id of the cashier or person who operates the cash counter. Each payment should include machine ID, Payment centre codes at which they were received, unique receipt number.
  - k) System should support acceptance of payment by reading the bar code/QR code for bills issue through Spot billing device& any other mode etc.
  - l) System should have the flexibility of reversal of payments in case of cheque dishonour. Blocking of further payment by cheque till a defined timeframe.
  - m) System should have the logic of defining the distribution of the payments against the bills based on the specific order or as defined by utility like Tax, Interest, Revenue etc.
  - n) System should generate centralized collection report and closing of collection process (cash book) on daily basis with relevant approval.
  - o) System should have the facility of generation of ASD notices.
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- p) System should support monthly payment reconciliation process.
- q) System shall have provisions to display payment received from various channels.

#### **5.5.2. Disconnection and Reconnection Management System**

- a) The web based software shall have provision to identify the consumers liable for disconnection and shall have provision to generate notices, lists, send email and SMS alerts to consumer as well as Discom official.
- b) The web based software shall have provisions to generate various MIS reports for enabling effective disconnection and reconnection.
- c) The web based software shall have work flow based rules for permanent disconnected consumers until they are permanently disconnected and dismantled including the process for adjustment of deposit and preparation of final bill and write-off's.
- d) The web based software shall have provision to enable record on field disconnection status through hand held devices if desired by the DISCOM.
- e) The web based software shall have facility to push the disconnection list and reconnection list to the mobile apps installed on the SBM (ANDROID Based Mobile Devices) for implementing disconnection and reconnection.
- f) The web based software shall have provision to generate Dis-Connection notice as per Discom Norms, which can be downloaded and printed through Android based Smart Phone.
- g) Mobile app for effecting disconnection and reconnection shall be provided by the bidder.
- h) Mobile app user shall have the provision to capture the inspection details at the time of field visit. Complete flow shall be provided for the disconnection and reconnection.
- i) The system shall have work flow based module for facilitating the disconnection to permanent disconnection and dismantling by generating all the required notices including the adjustment of deposit etc.

#### **5.5.3. New Connection Management System**

- a) The new connection module shall facilitate the entry of new consumers into the system either by the way of
  - (i) Keying in the data
  - (ii) Importing from a third party system
  - (iii) Bulk uploads through csv files etc.
  - (iv) Online Web Application based on Work Flow as per the Business rules, Tariff,SOP& TCOS of the DISCOM.
- b) The module for work flow shall be for processing of new consumer application. The application shall have inbuilt document management system for uploading and storing all the require documents for new connection. Further the consumer shall be able to track the status of the applications and shall receive email, SMS alerts on the application stage and status. The modules shall incorporate all the existing stages and business rules involved in processing the new consumer application. Comprehensive dashboards and reports shall



- depict the number of applications received and applications at each stage and if the applications are being processed within as the regulatory standards.
- c) The web based application shall also have comprehensive input screens for entering the new consumer details from the consumer application files. Scan and upload the relevant documents for future use. The entered details after approval shall result in the first bill generation of the consumer.
  - d) The module shall facilitate bulk importing of master data of consumers created from third party systems/schemes where bulk connections are released and data is provided in soft digital form.
  - e) The module shall have functionalities for inter division transfer of consumer master data and merging of accounting units etc.
  - f) The Module shall facilitate grouping of consumers based on various requirements for group bill generation etc.
  - g) Bulk field electrical network re-alignments like updating of feeder code, TC reorganization etc., shall be facilitated in batch mode for making the changes quickly.
  - h) The status of the applications, application pending at various stages shall be made available through drill down dashboards right from corporate level to the sub division or OM level. Provision shall be made to display the KPI information in the Video Display Units located at various offices.
  - i) This module shall include the following features:**
    - (i) Receipt of Application Details – online / Offline
    - (ii) Site inspection, wherever necessary and capturing of techno-commercial information from site.
    - (iii) Scrutiny of Inspection report by appropriate authority.
    - (iv) Sending of “Offer Letter” (intention to provide supply) and Security Deposit Bill to the applicant – through e-mail/ courier. Offer letter mentions the compliances that are required to be met by the applicant.
    - (v) Meeting of compliances by applicant including the payment of Security Deposit Bill.
    - (vi) Transfer of static as well as payment related data to Billing Software for generation of a new consumer.
    - (vii) Sending of data to Site Office for execution of job when all compliances are met – relevant data is transferred electronically to Site Office System (SOS).
    - (viii) Receiving job completion and meter installation / exchange related data electronically from SOS post execution of job.
    - (ix) Transfer of meter installation data to Billing Software for inducting the applicant as a Consumer.

## **5.6. FEEDER INFORMATION SYSTEM**

- 5.6.1. It is intended that certain parameters pertaining to 11 KV Feeders would be captured by the Feeder In charge / Discom Officers for energy audit, performance monitoring, operation and management. Agency has to provide both mobile app and web interface for entering the

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- required data, capturing the inputs, etc. The utility will facilitate historical data to the successful bidder.
- 5.6.2. As Android Smart Phone with GPS capturing capabilities are going to be used, the software solution should have a GIS module wherein the consumer information, network asset information, any other information that is captured by the field personnel can be displayed on a GIS map with provision to edit, update etc. The various elements shall be distinctly depicted with different icons/colour etc. The main objective shall be to extensively use this module for depicting the consumer information, assets and for enabling and planning different day to day operation and maintenance activities of the DISCOM. The cost of the acquiring the necessary licences if required shall be factored into the bid and the same shall be valid during the tenure of the contract.
- 5.6.3. A mobile app having functionalities to facilitate the field personnel in recording the various network elements for creating the single line diagram shall be provided. The back-end software shall have provisions for depicting the Single Line Diagram with options of expansions of LT network up to consumer level.
- 5.6.4. For capturing the various HT & LT components of the distribution network Feeder wise for creation and depiction in the form of a Single Line Diagram. The module shall facilitate the authorized officers in accurately mapping the various branches, sub branches and multiple branches as per the actual site data. Provision shall be provided to update, edit/relocate or modify any asset captured.
- 5.6.5. Agency has to develop comprehensive MIS reports and Dashboards depicting the various parameters captured. The Drill down dash boards/MIS Reports shall have data grouping and data agitations at various levels i.e. DTC, Feeder, Sub Station, Sub Division, Division, Circle, Zone and Discom level.
- 5.6.6. The bidder shall provide both the mobile app and web module in the software to facilitate the various functionalities of the feeder In-charge. A brief of functionalities but not limited as under:
- Provision to assign, reassign, delete feeder to authorise officer.
  - List the consumers, DTC connected to the feeder
  - Provision to enter the feeder reading/consumption at varying intervals for assessing the energy availability, consumption, losses etc. Provision should also be available for fetching reading through DCU/Modem etc.
  - Provision to enter the DTC reading/consumption manually. Provision should also be available for fetching reading through DCU/Modem etc.
  - Provision to Add/Modify/Delete the Feeder information like the meter make, CTPT, initial reading, status of meters, supply information etc.
  - The software shall facilitate the authorized officers in arriving at the energy audit at desired intervals.
  - The Data in the mobile app shall reside local and shall assist the authorized officers in monitoring the critical parameters without the necessity of actually accessing the central server.
  - The software shall have alerts, dashboards, reminders to give 360 degree view of the energy consumption and related parameters for energy audit and monitoring purpose.

- i) Any other input and reporting formats that are required shall be finalized during the execution stage with the selected bidder.

## 5.7. GIS INFORMATION SYSTEM

- 5.7.1. The software shall facilitate consumer tagging as per the electricity distribution network. The binders can be re-organized substation wise, feeder wise / distribution transformer wise. During the initial 4 months the required information on the location of the consumer (DTC, Feeder etc.,) shall be provided by DISCOM/Meter Readers. The software shall have options to bulk upload the same and then organize billing as per Sub Station, Feeder and DTC wise.
- 5.7.2. The software shall have provision for tagging, re-tagging, updating features based on GIS referencing.
- 5.7.3. The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps.
- 5.7.4. The software shall facilitate creation of route plans, route maps to enable efficient billing in a timely manner and to facilitate re-organization of existing networks, geographic area etc., as desired by the DISCOM.
- 5.7.5. The software shall facilitate new consumer updating as and when new consumers are added.
- 5.7.6. The software shall have provision to implement billing at desired periods and thus suitably re-organize the route plans and consumer indices.

### 5.7.7. Functional Requirement of GIO tagging (Assets and Consumers)

- a) The GIS module on Google map should be integrated with the various core processes of Billing / Collection / Disconnection/ energy auditing etc. The system should have provision for capturing, storing, checking, integrating, analyzing and displaying geo data related to positions on the Earth's surface and data related to attributes of the assets / Customers in Discom area. Basic functionalities should be provided by the service provider is the following.
  - (i) Display of all Billing information data on the Google Map with status of the billed information.
  - (ii) Display of arrears information on the Google Map
  - (iii) Display of Collection information on the Map.
  - (iv) Display of the location information of the Meter Readers on the Google Map.
  - (v) Location MR / Consumer through Latitude and Longitude Coordinates previously stored in the system.
  - (vi) Complete workflow of other systems should be seamlessly integrated with the core processes of the Billing and collection and no separate activity should be initiated to achieve the above objective.

**Note: Discom does not envisage full-fledged GIS system, open source GIS software's like Google Maps to display the various MIS other information as envisaged in the RFP which can be incorporate into the application should be provided.**

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## 5.8. CONSUMER INFORMATION & SERVICE SYSTEM

- 5.8.1. The following indicative requirements with regards to implementation of web portal / mobile applications to facilitate real time customer services:
- a) The Home page shall provide a brief description about the site, the various functionalities it provides and promotional features or any kind of advertisement for special programs can be placed in this page. Login Component is provided and registered users may login using their username and password. New Users can also register by clicking on the First Time Users Register link. The Forgot Password link helps the user to retrieve their password.
  - b) The Log In page shall ask the registered users for their username and password while the new members can also register through this page.
  - c) The user is asked for personal, security and account information in this page before registering.
  - d) The user is asked for his first name, last name, zip code, birthday and his primary email address before being provided with the security question.
  - e) The new password is sent to the user by email / SMS to his primary email address or registered mobile number as recorded in his profile, on answering the question correctly.
  - f) Once the user has logged in, he can change his credentials i.e. Username and Password by clicking on the Change Credentials link
  - g) There will be a "My Accounts" page, which is the landing page for the users with multiple accounts. The screen contains a brief summary of all the accounts such as the account name, address, balance, due date and the account status.
  - h) There will be a "Single Account" page, which will be the landing page for the customers. The screen contains a description of the account. Any status messages pertaining to the account involving immediate user action is also presented here.
  - i) There will be a "Consumption History Page" that provides an account of the usage for the last 12 months graphically. A more detailed analysis is provided in a tabular format listing the meter reading date, the reading, consumption, number of days, charges etc.
  - j) The consumption calculator popup is provided to help the user calculate the usage between any two given dates.
  - k) The Bill Summary page gives a record of the Billing amounts and Payments made by the customer over the last few months.
  - l) The user is provided with the options of registering in Online Billing and also continues with paper bills.
  - m) The View and Pay Bill page presents a short summary of the bill. The user can also view the bill in PDF format by clicking on the link 'View Bill as PDF'.
  - n) The user is provided with different modes of payment namely Credit Card / Debit card / Net Banking / Mobile Wallet etc. On providing the valid credentials payment can be made directly from the site. The online payment shall be processed through secured payment gateways
  - o) There should be provisions for the user to pay multiple bills

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- p) There should be a “Manage Accounts” page which shall help the user to manage all his consumer accounts from a single page
- q) There should be a “Service Requests” page that will allow customer to lodge request for services such as new connection, disconnection, load change, name change, category change, meter shifting etc. Depending on the regulatory/utility requirements user is required to submit the documents.
- r) There will be a “Service Status” screen which is read only screen which the user can view. Status of various pending requests for the customer such as load change, name change, category change, meter shifting etc. are listed here.
- s) Under the “Complaint” page, user can log his complaint using a drop down menu and also enter some text. A “Complaint Status” page shall provide the user a read only screen to view the complaint status
- t) “Report Power Failure” screen contains static data related to the power failure. The contact number is mentioned in case any power failure occurs. The user calls up the number and reports the power failure and necessary action is taken to restore the power connection.
- u) Update Profile screen enables the user to update his/her profile information. The user can edit the personal information and click on Update Changes button to save those changes.

## 5.9. MOBILE APPS DEVELOPMENT, DEPLOYMENT & MAINTENANCE

5.9.1. The APPs developed should have the following basic characteristics and features:

- a) The platform’s used for development of mobile apps should support development of Hybrid Applications/Native Apps.
- b) UserInterfaceandUserExperience of mobile App is to be designed toensurethattheserviceisuserfriendly.
- c) Design of consistent visual elements and Web Portal & Mobile Apps architecture that is scalable andexpandable.
- d) Resolution independent Mobile Apps that will automatically expand/compress itself as per the device screen resolution and should be as per standards ofW3C.
- e) Delivery of mobile applications should be in the form of a published mobile application on Android mobile phone) .
- f) Integration with any existing applications through SOA (service oriented architecture) - Web services/API/ JSON, Social Media platformetc.
- g) The solution Framework, tools, technology of mobile App Development platform should be submitted along with technical proposal and should be able to address the future scalability requirements, in terms of bothapplication(toaddnewservices)andinfrastructureandbackend.
- h) ThemobileAppsshouldprovideanupdatefeatureincaseofnewlypublishedversion.
- i) The mobile applications will be hosted on mobile applications platforms (App store, Play store, Microsoft etc.) whereas the web portal/application and services and related APIs will be hosted on servers/ cloud environment.

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- j) Provide technical documentation, design, architecture, technology, tools, etc. which will be used to develop Mobile Apps.
- k) Integrate with the backend systems (user profile and registration, authentication, application processing, push notifications, etc.).
- l) The data must be fetched from predefined data in central database and all the data should be directly updated to the central database
- m) The complete solution proposed must be SOA compliant and preferably based on secured open standards.
- n) Vendor should have experience in hosting the mobile Apps and updating new versions as and when required. Vendor should provide all the details and should be part of technical proposal.
- o) Mobile applications developed on development platform provided by the bidder should run on all types of handsets/TAB/Smart phone existing as well as new handsets coming in the market. The bidder shall provide upgrades/patches etc.
- p) The platform should provide the means to manage subscriptions of push notification services etc.
- q) Mobile applications to be implemented in pursuance to the International & industry standard implementation standards and procedure for successful implementation of the project.

**5.9.2. Mobile Apps for Consumers**

The DISCOM is already in implementation of mobile application for consumers and expected to bidder to integrate with RMS system. In project tenure if DISCOM would like discard the existing application and ask to develop the new mobile application for consumer then Bidder need to do with following features:

- a) To operate in Android, Windows and iOS operating systems
- b) Access of 'Quick Bill Pay' where the consumer may pay the bill on the go by furnishing only the consumer id; multiple bills may be paid by this option
- c) Consumer may apply for and check the status of New Connection/Additional/reduction load application etc.
- d) Consumer may access his personal details like Assessment, consumption & bill paid for the last 3 years , and so on; more than one customer id (if any) may be added to a registered account
- e) Consumer may access the consumption calculator to check the energy consumption patterns.
- f) Fresh complaints can be lodged and previous complaints tracked via the app
- g) Consumer may also request for:
  - (i) Request Duplicate Bill
  - (ii) Augmentation of load / regularization for installation of AC
  - (iii) Informing non-usage of electricity during a certain period of time due to absence
  - (iv) Registration of mobile no., email-id, DOB
  - (v) Energy calculator
  - (vi) e-Bill registration

- h) One touch call / e-mail facility
- i) Reporting of cases of theft through the App
- j) The consumer can stay updated with regard to the company, new launches, services, outages, useful tips, through social media tabs for Facebook, Twitter, and WhatsApp which are available in the App
- k) HT consumers can get the following through the App:
  - (i) A summary of their account details are available here
  - (ii) Latest Bill along with the amount to be paid and the due date can be viewed
  - (iii) Payment History of the last 12 months are available in the app
- l) Consumption history of the last 12 months are available in the App
- m) All the features of the consumer web self-services shall be available on the mobile app.

### 5.9.3. **Mobile Apps for Field Work Force**

The android Smart Phone is expected to be a very important tool through which various activities of the utility are expected to be carried out. The proposed app should be developed with role based access to users (Consumers, DiscomOfficers/Officials and Feeder In charge & Meter Reader).

Following features will be required in the Apps system.

- a) For Consumer- View & Download bill, Billing history, Bill payment, Receipt & Payment History, Lodge Complaint, Grievance status tracking etc.
  - b) For DiscomOfficers/Officials- Monitor billing progress, revenue realization, consumer billing history, payments and location on Google map etc.
  - c) Instant alerts (Group Messaging) feature to the individual/group, Supply alerts on selected criteria (33 and 11KV Feeder, Village, Binder, Tariff Category, DTs etc.)
  - d) For Feeder In charge & Meter Reader-
    - (i) Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders)
    - (ii) Meter Reading directly from Meter through Optical Port and generation of billing and cash collection at spot.
    - (iii) On spot updating of activities such as Meter Change, Disconnection, Reconnection and photographs as proof of completion of activity
  - e) Disconnection and reconnection module giving information about the arrears pending and route map for tracing the location of consumer premises.
  - f) Capturing the Disconnection and Reconnection details.
  - g) Capturing of Field inspection details in new connection process.
  - h) Capturing the location wise asset details during asset replacement/repair for assets like Feeders, Meters, CT/PT, Transformers, etc.
  - i) Tracing the location of Meter reader /Feeder In-charge by sub division officers on real time basis
  - j) These apps should be capable of display of information on a Google Map on the Smart Phone.
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- k) **Capturing various feeder information:** The bidder shall capture the feeder information in a hierarchal manner as per the format to be provided by the Discom at the time of award of contract.
- l) The app should be able to capture any other information in the forms published by the MIS reporter enabling the officers to key in the details and view the same on drill down formats.

#### **5.9.4. Web Based Information / Monitoring Systems with Mobile App for Officers**

- a) Agency shall develop an application which include feature of both Web-App and Native Mobile App for Discom Officials.
- b) The Application shall be based on the four pillars:
  - (i) Information provided by the Field Level Officers through this Application
  - (ii) Information extracted from the existing database servers of Discom
  - (iii) Information which is provided as targets by the Corporate Office through this Application
  - (iv) Information which is computed through information provided in (i), (ii) & (iii) i.e. analytics through What-If (Scenario Analysis)
- c) The mechanism for monitoring of Central and State Government Schemes shall also have to be done in discussion of Discom which means formats of these schemes and filling of information as per point 2 above for these schemes.
- d) The Agency shall develop a feature in Application which will enable filling of information in set time periods for field level officers and target to be filled by Corporate Office.
- e) The agency shall develop a feature in application which will enable Fault Rectification Team (FRT) to provide an input on the complaints received for the resolution. FRT shall receive the complaints assigned for the rectification. Each complaint shall have Turn Around Time (TAT) response.
- f) Level of approval shall be added for the information from the field before being integrated to the total system.
- g) Agency shall have to design the proper analytic computations for various other fields.
- h) The Information shall be compiled at various levels and adequate dashboard for various levels shall be created.
- i) The information shall be collated in the intermediate database server which shall be taken up by Agency.

#### **5.9.5. Other application required to be loaded on ANDROID Based Mobile Devices**

- a) Capturing details of asset replacement like Meter, Transformer, CT/PT etc.
  - b) Estimation of bill of material during new connection process.
  - c) Consumer complaint and theft / un-authorized use, recording/photography
  - d) Communication module to exchange real-time messages between the subdivision and device.
  - e) Mobile app for MIS Information
  - f) Mobile App's for displaying the information with required functionalities obtained by integrating with existing systems
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- g) Mobile apps for vigilance, MRT & Audit Teams.
- h) Any other apps as desired from time to time by Discom shall be developed by the bidder without any extra cost.

### **5.10. ENERGY AUDIT**

The Software shall have exhaustive Energy Audit features that is:

- 5.10.1. The Software shall have features to link the consumer to DTC, DTC to Feeder and Feeder to Sub Station. The required coding convention in consultation with the DISCOM has to be adopted so that each consumer at a DISCOM level have a unique code.
- 5.10.2. The software shall facilitate bulk upload based network assignment and realignment. That is the data for the realignment or alignment shall be provided in XLS sheets and the same shall be uploaded and the linking should get updated.
- 5.10.3. The system shall be able to abstract Energy sent data from respective systems and display it on the Dash Board.
- 5.10.4. The system shall enable capturing of consumption recorded at DT, Feeder, Sub Station, Boundary meters for arriving at the Total Energy Input at various hierarchies for calculation of energy losses.
- 5.10.5. The Energy audit reports as per the formulas provided shall have facility to arrive at the assessed energy if any as specified by DISCOM.
- 5.10.6. The Drill Down Energy Dashboard shall facilitate drill down up to DTC from the Corporate Level.
- 5.10.7. The module shall have various standard and adhoc reports for displaying the energy losses at various levels.
- 5.10.8. The module shall facilitate merging of feeders, splitting of feeders based on the input file provided.
- 5.10.9. The module shall facilitate import or consumption related details from third party existing systems and the AMI/SCADA systems that may be deployed by JDVVNL during the contract tenure.
- 5.10.10. The Software shall facilitate integration with existing feeder monitoring system of JDVVNL and future systems that shall be deployed for AMR/AMI.
- 5.10.11. The data obtained for all the monitoring points shall be consumed for energy audit and the audit details shall be made available for display of the same in dashboards, pre-defined reports, graphs, pushed to mobile apps, published on portals, exchanged with central and other state agencies as and when authorized and intimated by JDVVNL.
- 5.10.12. The energy audit parameters and details shall also be displaced on google maps/GIS maps with various options and filters for display.

### **5.11. METER DATA INFORMATION SYSTEM**

- 5.11.1. The system shall support storage, archiving, retrieval & analysis of meter data and various other MIS functionalities along with validation & verification algorithms. It shall act as a central data repository. The system shall have capability to import raw or validated data in defined formats and export the processed and validated data to various other systems in the agreed format. It shall support built-in analytics & reporting and shall provide validated data for

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- upstream systems such as Billing, Consumer Information System and Customer Care, Outage Management etc. The system shall be capable of supporting third party Pre-payment options.
- 5.11.2. The System shall also support the future requirement of utility regarding AMI, Smart Meter etc.
- 5.11.3. A robust and scalable system solution is required for accepting, validating, and processing of non-AMI/legacy meter data taken manually, through Android Smart phones etc., from conventional and AMR meters with scale-up provisions. Subsequently, integrating multiple AMI Head end systems would be needed when JodhpurDiscom rollout Smart Meters commercially.
- 5.11.4. Meter data collection and data management (Direct or from third party system)
- a) Meter data processing and generation of billing determinants for all types and category of consumers, including Net-metering and open access consumers.
  - b) Maintaining a single meter data repository catering to different HES / MDAS
  - c) Supporting VEE (Validation, Estimations and Editing). Real-time validations shall ensure ready-to use meter data.
  - d) Integration to Utility / Third party Consumer portal / mobile apps
  - e) Universal calculation engine with mathematical, logical and statistical operators
  - f) Built-in Analytics / Reporting feature
  - g) Exception management and Service Order generation
  - h) Capability to support Net-Metering billing
  - i) Ability to interface third party Prepayment application
  - j) Theft and revenue loss identification through usage pattern and through drop in consumption.
  - k) Capability to identify 'No consumption', 'Drop in consumption', 'Abnormal usage pattern', 'Irregular consumption pattern' and advance of registers in case of disconnected / not in use cases.
  - l) Capability to identify consumers with higher energy consumptions and consumers with lower energy consumptions, area wise / DT wise / category wise.
  - m) Analysis on maximum, moderate and minimum sale of electricity, area wise / DT wise, for growth analysis and subsequent network planning.
  - n) Perform load analysis for different groups and categories of consumers.
  - o) Analysis of VEE exceptions based on severity and other business rules.
  - p) Analysis of Smart meter rollout progress to help senior management track the progress.
  - q) Analysis of Smart meter events & activities performed.
  - r) Analysis of quality & timeliness of interval data received

## **5.12. MANAGEMENT INFORMATION SYSTEM DASHBOARDS & REPORTS**

### **5.12.1. Development of Management Information System**

At present certain information is being sent by various field officers to corporate office in certain formats where the same is compiled. The system takes lot of time for generation of information at field to compilation at corporate level.

To smoothen the process and curtail time of field officers, curtail use of stationery it is envisaged that there should be a web based system where:

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- a) Field officers from the level of Feeder in charge to the Zonal CE can provide key parameters/information on predefined manner to the system through mobile app and web app.
- b) The system after receipt of all such information shall compile and consolidate in a customized/specify formats and publish through report builder.
- c) Frequency and number of reports which is possible through the input data on combination and permutation techniques can be customized through system as per specific user requirement.

**5.12.2. Features of the system shall be**

- a) Agency shall develop an Application which include feature of both Web-App and Mobile App for Discom Officials.
- b) The Application shall be based on the four pillars:
  - (i) Information provided by the Field Level Officers through this Application
  - (ii) Information extracted from the existing database servers of Discom
  - (iii) Information which is provided as targets by the Corporate Office through this Application
  - (iv) Information which is computed through information provided in (i), (ii) & (iii) i.e. analytics through What-If (Scenario Analysis)
- c) The mechanism for monitoring of Central and State Government Schemes shall also have to be done in discussion of Discom which means formats of these schemes and filling of information for these schemes.
- d) The Agency shall develop a feature in Application which will enable filling of information in set time periods for field level officers and target to be filled by Corporate Office.
- e) The agency shall develop a feature in application which will enable Fault Rectification Team (FRT) to provide an input on the complaints received for the resolution. FRT shall receive the complaints assigned for the rectification. Each complaint shall have Turn Around Time (TAT) response.
- f) Level of approval shall be added for the information from the field before being integrated to the total system.
- g) Agency shall have to design the proper analytic computations for various other fields.
- h) The Information shall be compiled at various levels and adequate dashboard for various levels shall be created. The various reports after such compilation shall be published on the system.
- i) The information shall be collated in the intermediate database server which shall be taken up by Agency.

**5.12.3. Reporting System & Dashboards**

- a) The web based system shall have dashboards that depict the various key performance parameters at various levels based on the user on real time basis in a hierarchy structure.
- b) The web based system shall have an inbuilt BI tool for analytics.

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- c) A complete list of the existing and required MIS reports shall be provided to the finalized bidder for assessment.
  - d) Further the Agency has to provide or implement any other reports, dashboards etc., as required by the DISCOM during the contract period.
  - e) The agency will generate the MIS/Output reports etc. of Jodhpur Discom integrating data of the agency and data of HCLI / legacy data.
  - f) The web based application shall have provision for custom Report Builder which shall facilitate users to define and generate the reports.
  - g) Bidder shall have provide a Separate Reputed BI Tool and Report Builder in the system with following features:
    - (i) Capex Planning for DTR with everyday monitoring module
    - (ii) Module for Customer Profiling
    - (iii) Root Cause analysis for repetitive customer complaints
    - (iv) Monitoring and predictive modules for Losses
    - (v) Module for effective customer call grouping.
    - (vi) Dashboard for daily / monthly monitoring by Management
    - (vii) Module for effective control over material consumption for faults / new connections etc.
    - (viii) Module for effective reduction in customer footfalls
    - (ix) Dashboard to analyse customer growth, complaints & its duration etc. and operator shall be able to analyse this on map.
    - (x) Dashboard for high-level overview of arrears, collectibles, write offs data, pay plans, and payment arrangements for the selected period.
    - (xi) The Application shall have the features for building custom forms for gathering information and publishing on the system for periodical review by management and for displaying on the VDU & Video Wall. The various forms shall be designed, developed and deployed from time to time and published for entry/key in at various levels. The system shall also have facility for custom form building.
    - (xii) The information collected from the various published forms shall be stored hierarchically and consolidated reports automatically formed at various hierarchy levels of sub division, division, circle, zone etc.
    - (xiii) The reports and dashboards shall have drill down features to drill down to the nth level.
    - (xiv) The forms shall be responsive and shall be accessible from any device like Mobile Phone, Tablets, Desktops, etc.

**5.12.4. Business Intelligence Tool (BI Tool)**

The system shall have separate and independent BI tool of Repute Make for analysis of consumer data, billing data, payment data, consumer profiling etc. The software shall further facilitate forecasting and trending analysis for defined parameters given by Discom from time to time. The dashboards and reports shall be displayed on the VDU and shall have drill down features for nth level aggregation or expansion.

**5.12.5. External / Internal Audit System**

The system shall have facility to provide a Dashboard/UI for Revenue Audit by external and internal audit for various revenue and billing information at sub divisions and other offices.

The system shall be capable to prepare the observation including undercharges, mainly the following records but not limited to be checked and audited:

- a) Checking of physical cash balances.
- b) Checking record of cash section. Form A-9, PCCB/Scroll and PCB, timely remittances of money collected and reconciliation with bank statement.
- c) Checking of output 6-A, B, C & D with stubs/ Scrolls & to report suspicious cases of embezzlement/ financial irregularities.
- d) Reconciliation of amount received through PCCB and posted against consumer A/c as per MIS.
- e) Checking of debit raised or not in cases of dishonoured cheques along with LPS and Bank Charges.
- f) Whether cash collection is done by outside agencies, if yes, intimate name of Kiosk (under e-mitra/CSC) and DeGS where receipts to consumers are issued by affixing rubber stamp in place of computerised receipt.
- g) Checking of consumer ledger with binder &/or other related records.
- h) Checking of CC&AR registers for unauthorised/irregular debit/credit causing financial loss to the Nigam.
- i) Checking of deficiencies in input advice and output reports related to billing i.e. CB-4, CB-12 & CB-15 with 16 ABC output reports etc.
- j) Checking of left out outstanding and negative balances against the consumers.
- k) Detailed audit of various type of connections and ensuring correct billing thereof.
- l) Ensuring 100% transfer of Master Data as well as outstanding from one billing agency to another or transfer from one sub-division to another/new created sub-division (if applicable).
- m) Compliance of DCO's, MCO's & RCO's and pendency of LR & SR in billing in case of meter change.
- n) Checking of billing of temporary connections.
- o) Checking of debit raised / average charged in case of stopped / defective meters, theft, malpractices cases and other charges in view of compliance of A-30 Nigam's orders and arrange to propose debit in consumer's account.
- p) Correctness of billing in view of Nigam's TCOS, tariff and circulars / orders issued time to time.
- q) Irregularities in the records of HT (other than large industrial power consumers), MIP and SIP consumers.
- r) Checking of M/F as per JIR of consumers who are being billed on power factor basis.
- s) Detailed audit of SIP, MIP and other category consumers having sanctioned/ connected load 25 HP (18.65 KW) or above and MDI has exceeded 50KVA thrice in a financial year and under assessment

- t) Checking of billing of load extension / reduction cases.
- u) Under charges for any irregularities noticed during audit period in case of a consumer will be made for whole period irrespective of audit period.
- v) Checking of A-49 register in reference to pendency of SCOs for compliance, pendency of SCOs for billing, delay in issue of first bill and breach of priority in release of connections.
- w) Checking of VCR cases for assessment & logical conclusions thereof.
- x) Checking of settlement of dues along with implementation of decisions.
- y) Verification of pendency of SOSD & compliance of previous ICR.
- z) The verification of amount charged to the consumer in their accounts through CC&AR. Number and date of the same is to be recorded in SOSD sheet duly signed from AEN and ARO of the sub division concerned.
- aa) Any other works related to revenue audit assigned by the Management.

### **5.13. SYSTEM SUPPORT WITH TICKETING**

- 5.13.1. The Web based system should have online context sensitive help, user manuals and centralized ticketing system for Support.
- 5.13.2. The application users shall have provision to raise tickets; a unique ticket number shall be assigned.
- 5.13.3. The web based application shall have tools to track the ticket number for status update and resolution.
- 5.13.4. The web based application shall have configurable escalation matrix inbuilt for escalation of support issues.
- 5.13.5. The web based application shall have dashboards and MIS on the ticket status and resolution.

### **5.14. CALL CENTRE MODULE**

- 5.14.1. Presently, a centralized call centre (CCC) is functional at Jodhpur for the entire Discom area. It is functional through the CCC application developed under R-APDRP.
  - 5.14.2. The entire hardware, ACD and manpower has been deployed by the agency already engaged by Discom for the CCC work and is currently working 24x7.
  - 5.14.3. The bidder / vendor under this tender enquiry shall have to develop a state of art and highly modern CCC application fully integrated with the RMS system in whole.
  - 5.14.4. The CCC application should support complaint lodging facility through various means like IVRS, mobile app, consumer information system, social media, etc.
  - 5.14.5. The CCC application should have features for complaint escalation at various levels of the Discom.
  - 5.14.6. The CCC application should also have functionality / features for vehicle tracking system.
  - 5.14.7. The CCC application should be able to generate various reports and access shall be available to designated officers of the Discom through web portal / mobile app.
  - 5.14.8. Any other feature / functionality as required by the Discom
  - 5.14.9. The bidder / vendor under this tender enquiry shall have to develop and provide only the suitable CCC application as required by the Discom. The operation of the 24x7 call center including related hardware like PCs, ACD etc and manpower shall be under the scope of Discom (agency already engaged by Discom).
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## 5.15. SPECIAL FEATURES & CONDITIONS

### 5.15.1. Data exchange with other systems

The proposed solution shall be capable to exchange the database information with existing RAPDRP software and upcoming new ERP system on continuous basis so as to enable Discom to have a common MIS. MIS data has to be updated within 6 Hrs of completion of day i.e. post mid night and before 6 A.M.

The Software shall have interfaces to integrate with online payment gateways, third party payment systems like e-mitra and energy audit system. The system shall be built SOA, using standard set of technical specifications of web services and can be integrated with any system. Middleware in the form of Hardware, Software or firmware if required, shall be deployed by Agency as part of scope of work to integrate with the existing and upcoming new system in full-fledged data sharing and as touch points.

### 5.15.2. SMS and E-mail Alerts

The web based application shall have in built features for sending SMS and email alerts to users based on the requirement of the DISCOM. The required SMS gateways shall be provided by DISCOM, however email gateway shall be provided by the agency. DISCOM desires to send alerts on various events to consumers like meter reading ,bill generation, due date, payment reminder, payment collection, disconnection, supply / shutdown alerts etc.

5.15.3. The application shall be accessed over secure internet with 128 Bit Encryption. Latest encryption technology shall be used for securing the data transmission and access by multiple users.

5.15.4. The data architecture, Table Structure, Triggers, Stored Procedures, and Scripts used should be shared with DISCOM. Any manual update on the live system shall be approved by DISCOM and results of change should be shared / communicated with DISCOM. DISCOM shall be the absolute owner of the data. The administrator rights with the password shall be handed over to DISCOM. The Web based software should be accessible over the internet (broadband) and shall be designed to work on low band width and. The software shall have minimum possible response times for data access, report generation and data queries as per industry standards and approved by DISCOM. The software shall be scalable and there should not be any restriction on the number of users/consumers with compromising the response time. All the Licences shall be in the name of JodhpurDiscom.

5.15.5. The system shall be sustainable and certain tests shall be carried out from initial stage to final acceptance stage. Further regression test shall be carried out whenever there is change in tariff or business logic.

5.15.6. Two factor authentication system shall be implemented i.e. both password and biometric. The supply & maintenance of required biometric devices at the all the levels shall be in the scope of bidder. For critical transactions OTP based approval system in addition to the above shall be implemented. All transactions shall be logged and have two stage authentication i.e. marker and approver.

5.15.7. System should be capable to generate consumer Pass Book indicating Bill issued, payment made, and Security Deposit. This Pass Book shall be available for entire year indicating all transactions made during the year by the consumer.



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- 5.15.8. As the system has been provisioned with BI & report builder Tool, there shall be no limitations. The system has been designed in such a way that on the basis of input received per billing / or other system. This system can be utilized to deliver different reports.
- 5.15.9. The system's shall have provision to handle start-to-end all aspects of the customer life cycle i.e. from the service connection, meter reading, and field work to rating, billing, payments processing, and collections and delivery of comprehensive contact centre capabilities, customer relationship management etc. The system is intended to usher in transparency and customer delight. The system shall have be secure, flexible, scalable, and adaptable for future requirements of Discom. It should ensure billing accuracy, quickly comply with new regulatory mandates, track payments, credit and collections activities easily, minimizing write-offs, offer extensive and user-friendly customer services and help the Discom with rich analytics to stop leakages and bring down techno-commercial losses rapidly.
- 5.15.10. Training to be imparted to the designated DISCOM personnel of the system and its operation. Onsite Training has to be imparted to at least Two Ledger Keeper, One ARO and three JENS, One AEN at each Sub Division.
- 5.15.11. Printing of Ledgers, DC Notices, Amnesty Notices, PF Notices, Lock Notices, DC Orders, Security Notice, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports, MIS reports etc. and delivering to the respective Accounts Officer.
- 5.15.12. Any other incidental service that is required for achieving the objectives as per the tender specifications.
- 5.15.13. Integration: The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall be considered as master of Feeder Monitoring System, Mobile Application and accordingly shall be integrated with the same and also with RAPDRP system and forthcoming future system (during currency of Contract) for which necessary catalogue services of RAPDRP system shall be provided by Discom. All the middleware in the form of Hardware, software & firmware required for such integration shall be deployed by agency as part of scope of Work with no additional cost to Discom.
- 5.15.14. The requisite Middleware has to be deployed by bidder and it should be interoperable with RDBMS and other sub components.
- 5.15.15. A comprehensive list of generic functionalities required in the Billing Software has been specified in the document. However, the Agency has to take into consideration the various central and stage government IT initiative that are being carried out or intended to be carried out and develop the additional modules or features as and when inputs/requirements are provided during the contract period. Agency shall do the detailed requirement gathering to figure out the exact requirement in accordance with the above recommendations. No additional payment or charges shall be claimed either for grounds up development or for change management requested.

## 5.16. IT INFRASTRUCTURE

The Minimum Technical specifications of IT Infrastructure are defined as under, however the bidder may supply higher version of the infrastructure at the time of deployment.

- 5.16.1. **The Bill of Material Tabulated**  
**IT Infrastructure to be deployed at each level in Non RAPDRP & RAPDRP area**



## DETAILED SCOPE OF WORK

(Each line item quantity should be multiply with respective column numbers to reach total quantity)

Sl no	Item Description	Sub Divisions	Divisions	Circles	Zones	Discom HQ / SE(IT)	10% Spare to be kept at Circle Office	Total Quantity
	<b>Numbers --&gt;</b>	<b>170</b>	<b>43</b>	<b>11</b>	<b>3</b>	<b>1</b>		
1	Desktop PCs	4	1	3	3	3	Yes	850
2	80 Column Printer / Slip Printer for Cash Counter	1	0	0	0	0		170
3	UPS (1x 2KVA– 4hrs backup)	1	0	0	0	1		171
4	UPS (1x 1KVA– 2hrs backup)	0	1	1	1	0		57
5	Network Laser printer	1	0	0	0	0		170
6	Laser printer	0	1	1	1	1		58
7	Bar Code / QR Reader	1	0	5	0	0		225
8	Line Matrix Printer	0	0	1	0	0		11
9	Visual Display Unit (LED TV 32 Inches)	1	1	1	1	0		227
10	12-Panel Video Wall (LED TV 46 Inches)	0	0	0	0	1		1
11	Furniture: Computer Table, Chairs for all PC's	4	1	3	3	3	Yes	850
12	No. of ANDROID Smart Phones, ***	0	0	0	0	0	Yes	5000
13	Bluetooth Mobile printer, ***	0	0	0	0	0	Yes	5000
14	Power Bank, Accessories etc ***	0	0	0	0	0	Yes	5000
15	GPRS / 2G / 3G / 4G SIMs with necessary Data Packs for 60 months	0	0	0	0	0	Yes	5000
16	Electrical Equipment & Fittings and Site Preparation	1	1	1	1	1		250

\*\*\*Quantity considering the replacement of item after 2.5 years

**Note:**

- i. In case if any new Feeder, Sub-Division, Division, Circle, Zone are created during the tenure of the contract, requisite hardware as above shall be provided by Agency without any extra cost.
- ii. Item no 12,13&14 shall be replaced after 2.5 years of the contract period without any extra cost. If the contract is extended beyond 5 years, then these item shall be replaced with new one.
- iii. All the above items shall be BRAND NEW and refurbished material shall not be allowed.

- iv. The vendor shall have back to back arrangement with respective OEM vendor for Technical support, Annual Maintenance / warranty etc. For entire contract period for which necessary certificate / authorization form shall be enclosed with the bid.**

**5.16.2. To supply and maintain the required Android Smart Phones & Accessories.**

Smart Phones with Accessories shall be handed over to AEN / ARO of the Sub-Division and in case of loss, damage by Meter Reader / Feeder in-charge, the same shall be replaced by Agency within 3-working days from date of written report from AEN/ARO. Above charges against loss, damage if due to Discom fault shall be paid to the vendor as per prevailing market price.

No.	Description	Specification
1.	Display	Form factor –Bar, Screen type- Touch screen, Screen size- min of 4.5 inches, and resolution- min of 480X 584.
2.	Processor	Quad Core processor.
3.	Memory	Min 2 GB RAM. Internal memory of min 8 GB, with extendable upto of 32 GB
4.	Camera features	5MP with autofocus and flash
5.	Operating System	Android OS of latest
6.	Carrier networks	2G- GSM 850 / 900 / 1800 / 1900, 3G- HSDPA 900 / 2100, 4G/LTE
7.	Data	GPRS, EDGE, Wifi, 3G,4G,LTE
8.	Battery	Type- Li-Ion, Capacity- min of 1750mAH,
9.	Local Connectivity	Support latest mobile Wifi
10.	Bluetooth	Version 4.0 or higher supporting BLE
11.	GPS	GPS &aGPS for both stand alone and hybrid and should be able to get GPS co-ordinates without mobile network.
12.	USB	USB OTG Support
13.	Power Bank	Micro USB connector, min of 12001-19000 mAh of battery capacity, Lithium-ion battery type, Power requirement at min of DC 5V 2.1A, 1A DC 5 V, Power output at min of DC 5V 2.1A, 1A DC 5 V. Facility to charge Mobile and Bluetooth Printer simultaneously.
14.	Mobile Printer	The printer shall support wired/wireless connectivity and shall have provision to print on 3” thermal stationery. Shall have black mark detection facility to detect the start and end of the bill. Shall have battery backup for printing about 200 bills per day and shall be chargeable from the power bank. “The printer shall be chargeable from the battery bank and suitable cables shall be supplied along with the printer”.
15.	Make & Model	The Android Smart Phone supplied shall be the latest model series and shall be from SAMSUNG/LG/ASUS/MOTOROLA/LENOVA /PANSONIC/ VIVO/HTC/Nokia / MI

## DETAILED SCOPE OF WORK

16.	Cables / Devices	I. One set of Cable / Devices for automatically downloading Meter Data from optical port of Meter to Android Smart Phone with all the required and associated accessories shall be provided. II. One set of cable / devices for automatically downloading meter data for LPR HHT to android smart phones with all required / associated accessories.
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**Note: The insurance of SBM (ANDROID BASED MOBILE DEVICES) against damage and theft shall be arranged by the Agency at its own cost till currency of the Contract.**

## DETAILED SCOPE OF WORK

**5.16.3. To supply and maintain the hardware at Sub-divisions / Divisions / Circles**

No.	Particulars	Sub-division / Division / Circle
1.	Desktop PCs	3 Nos to each Sub-Division, 1 No to each Division, 3 Nos to each Circle
2.	Cash Counter	1 No PC with 80 Colum Dot matrix printer/slip printers at Sub-Division cash counter.
3.	UPS	1x 2KVA– 4hrs backup for each Sub-Division 1X1KVA-2hrs backup for each Division, Circle and Zone
4.	Network Laser printer	1 Nos at each Sub-Division
	Laser Printer	1 Nos at each Division, Circle, Zone &Discom HQ
5.	No. of ANDROID Smart Phones, Bluetooth Mobile printer, Power Bank, Accessories etc	<b>Mobile devices have been calculated based on, no. of consumers. In city area 1Mobile, printer, Power bank etc. to be provided per 1000 consumers &amp; in Rural Area same hardware is to be provided per 650 consumers.</b> 10% Spares devices shall be given to the custody of Accounts Officer of respective circle. <u>For every 2 ½ years the Android Smart Phones and Accessories shall be replaced(Android Phone, Printer, Power Bank).</u> If order is extended beyond 5 years all Android Smart Phones and accessories shall be replaced.
6.	Bar Code / QR Reader	1 Nos at each sub division. 5 Nos. As spare with AO
7	Line Matrix Printer	1 Nos at each Circle
8.	Visual Display Unit ( LED TV)	One each at Sub Division, Division Level, Circle level, Zonal Level
9.	Video Wall	One Number at Corporate Office

**5.16.4. MINIMUM SPECIFICATION OF DESKTOP PC:**

Processor	Minimum Intel core i3.
Memory	4 GB RAM
Hard Disk Drive	500 GB HDD or Higher
Monitor Color	47 cm or larger (18.5 inch or larger) Monitor
Keyboard	104 keys
Mouse	Optical with USB interface
Operating System	Windows 10 or higher and Anti-Virus software along with necessary licenses
Networking facility and Power Management	As per industry Standard

**5.16.5. MINIMUM SPECIFICATION OF DOT-MATRIX PRINTER:**

DETAILED SCOPE OF WORK

Item	Required Parameter
Speed	350 CPS or higher
No. of Pins	24 Pin, Letter Quality
Columns	80 or higher

**5.16.6. SPECIFICATION OF LASER PRINTER / NETWORK LASER PRINTER**

Type Dry Type Laser Electro Photocopy
Speed 32 PPM or higher for A4 in normal mode, first page out 10 Seconds
Paper Size A4 and Legal Including Envelops & letter
Interface Centronics Parallel with Printer Cable USB with cable
Port & Fast Ethernet 10/100 Internal Print Server in EIO Slot
OS Support drivers to be provided
Cartridge output with 5%, Coverage on Letter Size, Paper in Normal Mode

**5.16.7. MINIMUM SPECIFICATION OF UPS 1 & 2 KVA**

- a) Power Conditioning, Automatic self-test, Transformer-block spaced outlets., software monitoring support, Microprocessor based
- b) Input voltage: 160-280V, output Voltage: 230V+/-5%, Frequency: 50 Hz +/- 5%, Transfer time: 2-5 milisecs
- c) Cold start facility, 120min. backup on computer load, Alarm on battery mode, overload and low battery,
- d) Maintenance-free sealed Lead-Acid battery SMF 12V of EXIDE, AMARON, QUANTA or equivalent make.
- e) AVR for regulated output, no load shutdown or sleep mode, software shutdown, surge protection, EMI/RFI filter, cold start, over load and short circuit protection.

**5.16.8. MINIMUM SPECIFICATION OF BAR CODE SCANNER**

- f) Should scan all type of barcode VCC, EAW/RSS/EAW-3 code-93, code-128, UPC-A, UPC-E, EAW-8 i.e. all standard linear barcodes
- g) Bright LED and Beeper with adjustable volume
- h) Should withstand multiple drops of about more than 6 feet height
- i) Should work on any OS with plug and play and without external power supply
- j) Quick scanning of minimum 150 scans per second.
- k) Should record small and large barcode up to 6" width and 9" away
- l) Hands free stand.
- m) Should be able to record/scan even poorly printed scan.
- n) Should communicate through USB port

**5.16.9. MINIMUM SPECIFICATION OF QR CODE SCANNER**

As per industry standards & prevailing IS.

**5.16.10. MINIMUM SPECIFICATION OF LOCAL AREA NETWORK – IN EACH SUB-DIVISION**

- a) Provide a 24 port 10/100 mbps fast Ethernet switch with jack panel to be placed in a rack
- b) CAT 5e structured cabling with casing and capping and I/Os etc.
- c) At each location, the LAN (Local Area Network) that shall comprise cable, casing and mini 8 port switch where numbers of PCs are more than one shall be done by Agency.

**5.16.11. VIDEO DISPLAY UNIT AND VIDEO WALL**

- a) Video wall 12 panel for Corporate Office. The configuration of single panel is specified below. The required accessories for video streaming from various sources including computer systems shall also be the part of supply.

<b>Video Wall Specs (Only digital signage display models)</b>	
Panel	
Diagonal Size	46"
Resolution	1920*1080 (Full HD)
Pixel Pitch(mm)	0.17675(H) X 0.53025(V)
Active Display Area(mm)	1018.08(H) X 572.67(V)
Brightness(Typ.)	450 nit
Contrast Ratio	5000:01:00
Viewing Angle(H/V)	178:178
Response Time(G-to-G)	4ms
Display Colours	16.7M
Colour Gamut	72%
Haze	0%
<b>Features</b>	
Key Features	LED Slim Video Wall Built-in MagicInfo Player S2, SSSP 2.0
Special Features	H/W: WiFi Module Embedded, SD Card Slot, Super Clear Coating, Temperature Sensor, Pivot Display, Clock Battery (80hrs Clock Keeping), Built in Speaker (10W x 2ch)
	S/W:ACM Support (Advanced Color Management), Magic Clone (to USB), Auto Source Switching & Recovery,RS232C/RJ45 MDC , Plug and Play (DDC2B), PIP/PBP, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain(HDCP Support), Smart Scheduling, Smart F/W update, Built In MagicInfo Player S2, Video Wall (10X10), Firmware Update by Network, LFD New Home Screen, PC-less Video Wall, Predefined Template for Vertical Usage, Multi Channel, Mobile Control, Event Schedule, Backup Player

## DETAILED SCOPE OF WORK

Internal Player	YES
Processor	1GHz Quad Core CPU
Main Memory Interface	1.5GB Dual 48bit DDR3-933 (1866MHz)
Graphics	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES
Storage (FDM)	8GB (1.2GB Occupied by O/S, 6.8GB Available, )
Multimedia	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG,VP8 Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc
Accessories	Media Controller, format converters, mixtures and if any special hardware and software's required for displaying shall be provided.

**5.16.12. Video Display Unit at Sub Division (Only digital signage display models)**

Feature	Description
Device	LED
Screen Size	32"/ 80 CM
Resolutions	Full HD 1920 X 1080
Display Type	Flat
IPS Panel	Yes
Aspect Ratio	16:9, Original, Full Wide, 4:3,
Audio Output	20 W
Smart TV Platform	OS ( Supplied by Manufacturer)
WI-FI	Built IN
Full Web Browser	YES
WiFi Direct	YES
Miracast™	Yes
Network File Browser	Yes
Media Player	Yes
USB	Yes
Audio Codec	AC3(Dolby Digital), EAC3, HE-AAC, AAC, MP2, MP3, PCM, DTS, DTS-HD, DTS Express, RA, WMA
Ports	2 HDMI, 2 USB, LAN 1 etc
PowerSupply (Voltage, Hz)	100~240Vac, 50~60Hz
Accessories	To connect CPU or Computer System.

**5.17. MANPOWER**

5.17.1. The following number of resources would be required:

- a) Project Manager (1-No.)
- b) System Administrator (1-No.)
- c) Help desk and support operators (5 No's.)

- d) Circle Manager (1-No. at each Circle)
- e) IT supports personnel (One each at Sub Division, Division Level and Two at Circle level).

**Note: Skilled / Highly Skill man power shall be deployed and copy of documents of above personnel deployed at Billing Control Centre & Discom HQ shall be submitted to O/o SE (IT) and personnel deployed at Circle, Division and Sub-Division to the O/o Circle AO.**

5.17.2. As such the agency shall not frequently change the office in charge/nodal officer, frequently. The Agency shall furnish documents regarding the experience of the key personnel proposed to be employed by him.

5.17.3. The experience for such personnel shall not be less than the following, for which the Agency shall furnish the details of the employees to be deployed after awarding of contract:

- a) Project Manager: The candidate must be Degree in Engineering / M.C.A / MBA with at least 5 years of experience to handle such works. Or any Degree with minimum 10 years of experience in Utility Billing / CIS / CRM projects.
- b) System Administrator: The candidate must be Degree in Engineering / M.C.A / MBA with at least 5 years of experience of handling live production applications.
- c) Circle Manager: The candidate must be Diploma / Degree in Engineering/M.C.A / MBA with at least 3 years of experience to handle such works.
- d) IT support personnel at Sub Division, Division and Circle Level: The candidate must be minimum Graduate / Post Graduation with at least 3 yrs. of experience and trained to handle the Billing and Revenue Management software, MIS reports & Output reports and processes of printing etc. The persons so deployed in sub-division should have complete knowledge on both hardware & application. Likewise the persons so deployed in Division & circle level shall be well versed with Smart Phone / SBM (ANDROID Based Mobile Devices) for immediate repair of the same.
- e) Help Desk and Support Operator: These persons must have graduate and have diploma in Computers, have one year experience to handle such works.

5.17.4. Discom has right to verify the above at any time.

**5.18. DETAILS OF THE SUB DIVISIONS, DIVISIONS, CIRCLES, ZONAL OFFICES IN DISCOM:**

<b>Circle : 12</b> (1 Bikaner City Circle has been given on DF)
<b>Zonal Office: 3</b>
<b>Division : 43</b>
<b>Total Sub Divisions: 170</b> (R-APDRP Area: 47 Sub-Divisions, Non-RAPDRP: 123 Sub-Divisions).
<b>Total Feeders: 10351</b> (R-APDRP Area: 2080, Non-RAPDRP: 8271).

**5.19. TO SUPPLY STATIONERY & CONSUMABLES ON MONTHLY BILLING MODE:**

- 5.19.1. The required stationery and consumables for Spot Billing Devices for bill generation.
- 5.19.2. The required stationery and consumables at Sub Division for printing bills (LT & HT), payment receipts at cash counters & MIS reports generation.



DETAILED SCOPE OF WORK

- 5.19.3. The required stationery and consumables at Circle level for printing of Ledgers, DC Notices, DC Order, Security Notices, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports and MIS reports.
- 5.19.4. Replacement of cartridge of Laser Printer and Ribbons for Line Printer, Dot Matrix printer

**5.20. MINIMUM SPECIFICATION FOR STATIONERY**

<b>PRE-PRINTED THERMAL PAPER FOR SPOT BILLING</b>		
Smoothness	Min 550	
Brightness %	Min 75	
Tensile Strength KN/m	MD 2.0	CD 1.0
Tearing Strength mN	MD 200	CD 200
Heat Resistance	Max 0.2	Min 1.0
Moisture resistance	Max 0.2	Min 1.0
Light Resistance	Max 0.2	Min 1.0
Dynamics Colour response	0.32mj / dot. Min 1.10	
Static Colour Response (70 deg C)	Max 0.2	
Length: 12 Inches		
Width: 76 to 78 mm		
GSM: 80 GSM.		
Multi-colour: 5 Colours		

**5.21. TO SUPPLY THE FURNITURE**

- 5.21.1. **Branded New** Furniture (Computer Table, Chairs, requisite electrical equipment) at Sub-Division, Division, Circle and Data Centre shall be deployed in following manner:
- a) Circle Office / Division Office / Sub Division Office: Computer Table, Chair for all PCs and Line Printer etc. Deployed One Table, Chair to each person deployed

**5.22. OUTPUT REPORTS AND MIS REPORTS:**

<b>S. No.</b>	<b>Name of Report</b>	<b>Frequency</b>	<b>Hard / Soft Copy</b>
1	PDC Consumers List	Quarterly	Soft Copy
2	Amnesty Notice	Yearly	Hard Copy
3	Consumer Annual Ledger	Yearly	Soft & Hard Copies
4	Annual Ledger for Subdivision	Report	Soft & Hard Copies
5	Output-4. Disconnection Notice Cum Order	Weekly	Hard Copy
6	Output-5.Consumer Ledger Summary	Weekly	Hard Copy
7	Output6(A) Date Wise Payments	Weekly	Soft Copy
8	Output6(B)Payments Summary	Weekly	Soft Copy
9	Output6(C) Un-Posted	Weekly	Soft Copy
10	Output8(A). Outstanding More Than 500 And Upto 5000	Weekly	Soft Copy
11	Output8(B). Outstanding More Than 5000 And Upto 10000	Weekly	Soft Copy
12	Output8(C). Outstanding More Than 10000	Weekly	Soft Copy
13	Output9. Summary of Energy Billing	Weekly	Soft Copy
14	Output4.Dc Notice Summary	Weekly	Soft Copy
15	Output5. Consumer Ledger Summary	Weekly	Soft Copy
16	Output16(A). Cb-4 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
17	Output16(A). Cb-15 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
18	Output16(C). Cb-12 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
19	Output19. List of Newly Sanctioned Installations	Weekly	Soft Copy
20	Output20/21. Delay in Issuing of New Connection	Weekly	Soft Copy
21	Output22&23. List of Connections Lying Disconnected for > 2 Months and Sr Not Removed	Weekly	Soft Copy
22	Output26. Premises/Meter Locked for More Than 2 Months	Weekly	Soft Copy
23	Output26(A). List of Defective Meters	Weekly	Soft Copy
24	Output25. Variation of Energy	Weekly	Soft Copy
25	Output26(A). List of Defective Meters, age wise	Weekly	Soft Copy
26	Output26(B). List of Burnt Meters age wise	Weekly	Soft Copy
27	Output26(C). List of Stopped Meters age wise	Weekly	Soft Copy
28	Output26(D). List of Broken Glass Meters age wise	Weekly	Soft Copy
29	Output26(E). List of Faulty Meters age wise	Weekly	Soft Copy
30	Output26(F). List of Body Seal Broken Meters	Weekly	Soft Copy
31	Output26(G). List of Consumers Who's Reading Not Received	Weekly	Soft Copy
32	Output26(H)-List of Consumers Having Area Without Supply & Display Out	Weekly	Soft Copy
33	Output32. Notice for Enhancement of Security Deposit	Weekly	Soft Copy

**DETAILED SCOPE OF WORK**

<b>S. No.</b>	<b>Name of Report</b>	<b>Frequency</b>	<b>Hard / Soft Copy</b>
34	Output36. List of Zero Consumption Consumers	Weekly	Soft Copy
35	Output37. List of Unauthorized consumers including Illegal Restoration of Supply by Consumers	Weekly	Soft Copy
36	Output38. List of Doubtful Cases	Weekly	Soft Copy
37	Output39. Consumer Billed On Average but Consumption More Than Average	Weekly	Soft Copy
38	Output40. More Than One Payment	Weekly	Soft Copy
39	Output41. More Than One Sundry	Weekly	Soft Copy
40	Ledger Wise Monthly Outstanding	Weekly	Soft Copy
41	Ledger Wise Monthly Govt. Outstanding	Weekly	Soft Copy
42	MIS	Weekly	Soft & Hard Copies
43	Output 10-Summary of Consumers Not Billed and Billed On Average Basis	Weekly	Soft Copy
44	Output 10a-Age wise Abstract Summary of Defective/Lock Meter Consumers	Weekly	Soft Copy
45	Output 14-Category Wise Month End Position of Assessment Realization and Arrears	Weekly	Soft Copy
46	Output 15a-Age Wise Analysis of Arrears as on Month End	Weekly	Soft Copy
47	Output 15b-Analysis of Realization	Weekly	Soft Copy
48	Output 18a-Feederwise Consumption Analysis - Non Agriculture	Weekly	Soft Copy
49	Output 18b-Feederwise Consumption Analysis- Agriculture	Weekly	Soft Copy
50	Output 18c-Feederwise Summary of Energy Sold, Assessment, Realization & Outstanding	Weekly	Soft Copy
51	Sub Division and Division Wise-18abc	Weekly	Soft & Hard Copies
52	Circle Wise-18abc	Monthly	Soft & Hard Copies
53	Output 27-List of Consumer Whose Recovery to be Deferred as Per Court's/ Settlement Committee's Order	Monthly	Soft Copy
54	Output 28-List of Defaulting Consumer's Whose Recovery of Outstanding Under Installment	Monthly	Soft Copy
55	Output 29-Manufacture Wise Report of Working Condition of Meter	Monthly	Soft Copy
56	Output 31-List of Change of Defective, Stopped and Burnt Meters More Than Twice in Last 12 months	Monthly	Soft Copy
57	Output 33-List Showing Balance of Advance Deposit and No. Of Installment Due to Be Allowed	Monthly	Soft Copy
58	Output 34-Energy Billing Assessment & realization Summary for the Month	Monthly	Soft Copy
59	Output 35-Statement of Showing the Levy of Power Factor Surcharge/Incentive Allowed on Power Factor	Monthly	Soft Copy
60	5%Rebate Allowed Due to Meter Remain Defective /Stopped More Than 2 Month & Amount Capacitor	Monthly	Soft Copy

## DETAILED SCOPE OF WORK

S. No.	Name of Report	Frequency	Hard / Soft Copy
	Surcharge Levied		
61	List of consumers having power factor less than 0.75	Monthly	Soft Copy
62	1.Metered Consumers Billed on Average Basis	Monthly Reports For Circle, Sr.AO (Zone), CAO (B&R)	Soft Copy
63	2.Summary of Consumers Billed on Average Basis		Soft Copy
64	3.Agewise Summary of Defective Meters		Soft Copy
65	4.Agewise Summary SDO-code Wise		Soft Copy
66	5.Output 35 Power Factor		Soft Copy
67	6.Annexure A, Minimum Charges		Soft Copy
68	7.Tariff Subsidy Domestic and Agriculture		Soft Copy
69	8.Cycle Wise Ed Assessed		Soft Copy
70	9.Defective ABS SDO-wise		Soft Copy
71	List of Consumers whom Rebate has been given.		
72	List of UDR Notice and LRF Notice		Soft Copy
73	Energy Audit Report for 33KV Feeders in Urban Areas	Sub-Division, Division, Circle, Zone, Discom	Soft & Hard Copies
74	Energy Audit Report for 11KV Feeders in Urban Areas and Rural Areas		Soft & Hard Copies
75	Energy Audit Report for Distribution Transformers in Urban Areas		Soft & Hard Copies
76	Energy Audit Report all Industrial Areas		Soft & Hard Copies

**Note: Circle Wise MIS report format shall be given after the award of the contract.**

**5.23. NEW CONNECTION REPORTS**

S. No.	Requirement	Frequency	Hard / Soft Copy
1	Application Pendency Report	(In-Detail, In-Summary) Tariff wise, Load wise, Reading date wise, Date range wise, Month wise, MR wise, Sub-division wise, Division wise, Circle wise, Zone wise, DTC wise, Feeder wise, Sub-Station wise, Town wise, other Hierarchy Wise on demand.	Soft Copy
2	New connections serviced		Soft Copy
3	Temporary connections serviced		Soft Copy
4	Addl. Load serviced		Soft Copy
5	No. Of load reductions		Soft Copy
6	Merging of installations		Soft Copy
7	Bifurcation of installation		Soft Copy
8	Name change		Soft Copy
9	Tariff change		Soft Copy
10	Rebates sanctioned		Soft Copy
11	DTC's Added		Soft Copy
12	DTC's Removed		Soft Copy
13	Feeders added		Soft Copy
14	Feeders removed		Soft Copy
15	Stations removed		Soft Copy
16	Stations added		Soft Copy
17	Installations surrendered		Soft Copy
18	Installations permanently disconnected		Soft Copy

## DETAILED SCOPE OF WORK

S. No.	Requirement	Frequency	Hard / Soft Copy
19	Installations serviced with meters – consumer borne		Soft Copy
20	Installations serviced with meters – company borne		Soft Copy
21	Installations serviced without meters		Soft Copy
22	No. Installations regularized		Soft Copy
23	Scheme wise installations serviced		Soft Copy
24	Capacity additions		Soft Copy
25	Sanctioned/ Connected load		Soft Copy

## **Section 6. TECHNICAL PROPOSAL SUBMISSION SHEETS**

**Technical offer to be furnished by the bidder on its letter head and each page signed by the authorised signatory**

- **An affidavit as per section 7.2, indicating that all the information, affirmation made in this proposal shall be complied with.**
- **The Technical offer shall be given strictly in same sequence of order as given in this document.**

To,  
**The Superintending Engineer [IT]**  
**JodhpurVidyutVitrana Nigam Limited**  
**New Power House Premises**  
**Jodhpur-342003**

SUB: Submission of Bid for “REVENUE MANAGEMENT SYSTEM ON SAAS (SYSTEM AS A SERVICE) BASIS” against TN-IT-09.

Dear Sir,

We hereby submit our bid for “Revenue Management System on SAAS (System as a Service) Basis” spread across Jodhpur DISCOM against TN-IT-09.

We, the undersigned, declare that:

**A. Declaration**

- 1) We have examined and have no reservations to the Bidding Document, including Addenda No. (if Any):
- 2) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule, and the specifications mentioned in the bid document.
- 3) We are submitting our bids for with complete set of enclosures.
- 4) We are submitting our Bid as Single Bidding company.
- 5) We agree for execution of tendered work as per the terms & conditions as specified in this Tender Document.
- 6) We hereby confirm that the bid comply all requirements set out in the bidding document and NO TECHNICAL and COMMERCIAL Deviation are contained in the Bid.
- 7) We understand that the Bids with Deviation from the requirement laid down in this document shall be considered as NON Responsive
- 8) The prices are as mentioned in BOQ.
- 9) The prices quoted are valid for a period of 90 days from the date of opening of “Financial- bids”
- 10) The quoted / agreed prices are exclusive of the following applicable Taxes (As per prevailing rates):

Enclose details of taxes included in the prices

S. No.	Name of Tax/Charges	Rate of Tax/Charges

- 11) We have noted the standard terms of payment and undertake to abide by the same.
- 12) The execution of work shall strictly be in accordance with work completion schedule as given in the Tender Document. In case we fail to execute the work as indicated therein as per the tender specifications, the penalty provisions shall be applicable as per provisions of the Contract.
- 13) The material supplied by us shall conform your specification

- 14) We confirm that we agree to adhere to all the commercial terms and conditions as well as the technical stipulation of your specification and there is No Deviation. Such acceptance has also been confirmed in prescribed schedules of this offer.
- 15) We confirm that we are qualified for bidding in terms of Qualification Requirements specified in the bidding documents and have submitted the requisite qualification Certificate & data / documents with the bid.
- 16) Until a formal contract is prepared and executed, this together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.
- 17) We understand that the quantity mentioned in the financial schedule is just for evaluation purpose, any payment shall be made on the basis of actual numbers.
- 18) We understand that JodhpurDiscom reserves the right to invite detailed proposals from any private entrepreneur-company; irrespective of the fact whether the company or entrepreneur has been pre-qualified.
- 19) We also understand that the JodhpurDiscom reserves the right to reject any or all of the bids without assigning any reason thereof.
- 20) We undertake that we shall use the core billing module for Commercially Off The Shelf (COTS), either SAP or ORACLE, which may be readily fine-tuned to the requirements of Discom. We undertake to carry out all necessary System Integration work to ensure that the COTS software offered meets all the requirements specified and needed for JodhpurDiscom.
- 21) We understand that the prices quoted in the BOQ are as defined in the RFP & the financial evaluation of the L-1 bidder shall be per Bid Document.**
- 22) We agree to abide by all the conditions governing the proposals and decisions of the JodhpurDiscom.

**B. General Profile of the Bidder**

Kindly attach a copy of latest RoC to substantiate the information furnished against general profile of the bidder

Details	Responses
Bidding Entity Nature	
Full legal name of the firm	
Year of establishment	
Registered Office Address	
Address for Correspondence	
Authorized person(s) to be contacted	



## TECHNICAL PROPOSAL SUBMISSION SHEETS

Telephone number(s)	
Email id	
Fax number	
Names, Addresses, Contact Emails and Mobile Nos. of the Key Management Personnel of Firm such as MD/Directors/CEO, etc.	
Type of the firm Private limited/Public limited/Government sector /other	
Whether registered under companies act, Partnership Act, or any other act applicable for registration of Firms in India	
Registration Number & Date	
Field organization and resources to be deployed for the proposed job	
No. of Projects executed in Utilities in past 5-years.	

We hereby certify that the above information is correct.

(Please enclose the ownership structure of the company, Incorporation Certificate, MOA, AOA duly attested by Company Secretary/ Director of the Company).

### C. Financial Capabilities

#### CERTIFICATE OF FINANCIAL QUALIFICATION

S. No	Financial Year	Turn Over (In INR)	Whether Net Worth Positive or NOT (Select as applicable)	Whether Net Profit earned or not? (Select as applicable)
1	FY 2015-2016		YES/NO	YES/NO
2	FY 2016-2017		YES/NO	YES/NO
3	FY 2017-2018		YES/NO	YES/NO

TECHNICAL PROPOSAL SUBMISSION SHEETS

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(Turnover / Net Worth/ Net Profit shall be as per the currently applicable accounting standards prescribed by Institute of Chartered Accountants of India)

We hereby certify that the above information is correct.

(Signature of the Statutory Auditor of the Bidder)

(Note: Enclose audited Financial Statements/ Annual Report of the aforementioned FYs duly signed by the Chartered Accountant. If audited balance sheets for the FY 2017-18 are not readily available then the provisional balance sheets signed and certified by the company Chartered Accountant shall be submitted.).

**D. Compliance to Technical Specifications and other requirement of Software**

Refer to Technical Specifications, for details. Please respond to each specification in following format. Copy first three columns from Functional requirement of package given in this document.

**Note: Bidder has to Fill in Column “Bidders Response” with “Yes” or “No”, in case of response given “Yes” in column 3, to be supported with catalogues for COTS / screen shots for other than COTS.**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
<b>A</b>	<b>Generic features of the Software Solution/System</b>			
1.	Access Control with details of data/service access for different users	YES	-	
2.	Backup strategy	-	YES	
3.	Security and Encryption	YES	-	
4.	Confidentiality	YES	-	
5.	Audit Trails	YES	-	
6.	Availability vis-à-vis Performance Metrics	-	YES	
7.	Monitoring and Test Tools	YES	-	
8.	Cloud Hosting & Delivery policies	-	YES	
9.	Software upgrades and updates	-	YES	
10.	Service loss/ degradation severity definitions and remedial times, i.e. Disaster Recovery and Data protection plans	-	YES	
11.	Automatic Failover schemes in place	YES	-	
12.	Automatic updates and patch management	-	YES	
13.	Scalability as per requirement.	-	YES	
14.	Integration with existing applications	-	YES	
<b>B</b>	<b>Billing System COTS (SAP/Oracle)</b>			
<b>I</b>	<b>Core Billing System</b>			

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	The core module of Billing is to be provided on COTS software hence all the detailed billing and revenue management software's features/process & functionalities as published by the COTS vendors of SAP/Oracle are to be provided, configured and customized as per the TCOS and business processes of JDVVNL.	YES	-	
2	The web based application shall have the most robust, flexible and configurable billing engine for generation of bills on various modes and technologies that are adopted currently by the utilities thus providing the required flexibility to the Discom in adopting to the latest technology advancements for effective, transparent and timely billing.	YES	-	
3	The system shall invariably support Spot Billing, Automated Spot Billing, Photo Spot Billing, Batch billing for consumers having load below 18.65 KW etc.	Yes	-	
4	Base Bills shall be generated for consumers having above 18.5 KW loads either by obtaining the reading directly from the AMR or the Smart Meter or by the way of input.	-	Yes	
5	The Spot billing software shall be developed for machines based on operating system like Android.	Yes	-	
6	The ANDROID software shall also have provision for automated data downloading from the consumer meters	Yes	-	
7	In case if the utility wants to use the Spot Billing machine only for reading capture the same shall be made available as configuration option	-	Yes	
8	The Android based Smartphone and software shall be configurable for spot payment collection and capturing other field information.	Yes	-	
li	<b>Major features shall include:</b>			

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	Capturing monthly/bi-monthly meter readings of LT consumers by meter inspectors, via Spot Billing Machines (ANDROID based Mobile Devices) with the help of suitable ANDROID application	-	Yes	
2	Online upload of meter reading data via GPRS if connectivity is available else store the readings locally and upload whenever connectivity is available.	Yes	-	
3	Option of upload of meter reading data via WI-FI when the Feeder In charge/Meter Reader returns to the AEN Office premises at the end of the day	Yes	-	
4	Downloading of Consumer Master Information into the Smart Phone online via WIFI/GPRS	-	Yes	
5	SMS to consumers once the Meter Reader starts his meter reading operations in his designated area. The SMS packages shall be provided by DISCOM.	-	Yes	
6	SMS to the consumers for the billing amount in the Bill generated for continuous 3 days before due date of the bill.	-	Yes	
7	SMS to consumers whose meter could not be read by the Meter Inspector for No Access.The SMS packages shall be provided by DISCOM.	-	Yes	
8	SMS to consumers with reading details after the reading is captured.The SMS packages shall be provided by DISCOM.	-	Yes	
9	System should be capable to capture Billing Parameter, Current KWH as well as Billing KW.	Yes	-	
10	Automated meter reading (AMR) for CT meters and in future, Smart Meters, thus doing away with manual readings	-	Yes	
11	Bill processing in centralized bill server for LT and HT consumers	Yes	-	
12	On demand generation of bills and closing of accounts as per TCOS,in case of voluntary disconnection for LT consumers.	Yes	-	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
13	Bill Correction, part bills, consolidated bills, group bills etc.	Yes	-	
14	Auto and manual entry of sundries	-	Yes	
15	Auto and manual entry of meter updates	-	Yes	
16	Auto and manual process for updating various key parameters as per the TCOS & Business rules of DISCOM.	Yes	-	
17	Accounting of Instalments, part payments, Govt. subsidies, wave offs etc.		Yes	
18	Generation of Disconnection notice for non-payment (Except Stay from the Court /Settlement committee/VCR monitoring committee, Competent authority)	Yes	-	
19	Updating and maintenance of security deposit for LT & HT consumers Maintainable SD calculation for LT & HT consumers	-	Yes	
20	SD interest calculation for LT & HT consumers	-	Yes	
21	Additional SD instalment bill/ including generation of notices of enhance security as per TCOS of LT/HT consumers	-	Yes	
22	Processing of Bank Guarantee & Letter of Credit for HT consumers.	-	Yes	
23	Advance Payment facility.	-	Yes	
24	Consumer History View at least last 3 years, Meter History View, Export & import of Consumers from one location to another location.	Yes	-	
25	Special Conditions/features required for High Value Consumers i.e. HT/MIP	-	Yes	
26	Secure import of meter readings & billing parameters into the system from third party systems. Provision to upload billing parameters from CMRI/MRI etc., directly into the system, both in batch and single read modes.	Yes	-	
27	Bills should generate after duly considering the imports and exports of energies(wind power, IXA), changes of meters, change of CT/PT, TOD Slabs as	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	per tariff and business rules.			
28	High Value Consumer bills are to be printed on large format (A4 plus ).	-	Yes	
29	HT bills should provide in 4 copies for each consumer.	-	Yes	
30	The system shall have provision to generate advanced FNB bills and the same shall provide in 8 copies each for each consumer.	Yes	-	
31	Security deposit to be auto adjusted.	-	Yes	
32	The system shall provision for accounting consumers with special meters like prepaid meters and shall support the entire meter-to-cash cycle or integrate with the third-party systems for enabling the same.	-	Yes	
33	The system shall have role based user access and work flow based entry and approval process in built. Login & Biometric based security shall be enabled for all such approvals and transactions performed.	-	Yes	
lii	<b>The system shall also facilitate:</b>			
1	Registration of mobile number, email ID and date of birth of consumers	Yes	-	
2	Duplicate bill	-	Yes	
3	Registration for e-Bills	-	Yes	
4	On-line payment of bills	-	Yes	
5	Statement of electricity bills vis-à-vis payments	-	Yes	
6	Viewing latest payment status	-	Yes	
7	Daily consumption status for Smart meters	-	Yes	
8	Application for new connection / additional load	-	Yes	
9	Transfer of Supply	-	Yes	
10	Correction in mailing address	-	Yes	
11	Augmentation of load / regularization for installation of AC	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
12	Voluntary Disconnection activities	-	Yes	
13	Handling of consumer complaints and their resolution	-	Yes	
14	System for informing non-usage of electricity during a certain period of time due to absence	-	Yes	
15	Reconnection of Supply	-	Yes	
16	SD refund tracker	-	Yes	
17	Viewing of meter information, consumption history and SD details	-	Yes	
18	Energy calculator	-	Yes	
19	Power consumption guide	-	Yes	
20	Reporting disruption of supply	-	Yes	
21	Reporting power theft	-	Yes	
22	Request for bill tariff change	-	Yes	
iv	<b>Tariff &amp; billing rule management</b>			
1	The software shall provide a UI based interface for configuring tariff and business rules.	Yes	-	
2	The software shall have provisions for retrospective and prospective billing.	-	Yes	
3	The software shall have provision to calculate part bills with variable bill period.	-	Yes	
4	In a nut shell the software shall have a flexible, user configurable tariff /TCOS and business rule management interface and almost all the changes can be configured without changing at the code level.	-	Yes	
v	<b>Spot Billing Software/System</b>			
1	The Web Based Software shall have provision to create, update and modify route traversal plans as per the billing schedules. The primary route traversal plans shall be FEEDER WISE.	Yes	-	
2	SBM (ANDROID Based Mobile Devices) Spot billing software shall facilitate bidirectional communication with the central server using standard mobile	Yes	-	



## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	network			
3	The Spot billing software on the SBM shall facilitate local storing of the data and based on the availability of connectivity the mobile data shall transfer the same to the central server.	Yes	-	
4	Automated data downloads with or without user intervention i.e. the pre-billing data as per the route plans shall be automatically downloaded to the SBM (ANDROID Based Mobile Devices).	-	Yes	
5	Real-time data uploads to central server (bills)	-	Yes	
6	Meter readers / Feeder In-charge need not visit sub divisions.	-	Yes	
7	Features to downloading and uploading from central server through connecting through Wifi.	-	Yes	
8	The SBM (ANDROID Based Mobile Devices) software shall be auto updated from central server for tariff, data validation and other billing rules	-	Yes	
9	The SBM machine shall be capable of generating bills both in online and offline mode. In offline mode, the bills shall be queued for updating to the central server and shall be updated once network is available in background.	-	Yes	
10	The SBM shall have the entire billing tariff built into it for generating bills along with incorporating all the business processes and rules associated with consumer billing, consumer status, meter status etc.	Yes	-	
11	The device software shall have options to capture the photo of the dial of the meter. Option to capture multiple photos to depict any abnormality shall also be provisioned.	Yes	-	
12	The device software shall have capabilities to record the GPS co-ordinates. The software should display the location accuracy for more accurate GPS capturing.	Yes	-	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
13	The Software on the SBM shall be able to print the bill over to a blue tooth printer.	Yes	-	
14	The system shall have provision for spot cash collection module with configuration option.	Yes	-	
15	Provision to load any other software shall be available and the same shall be developed and loaded as per the requirements of Discom.	-	Yes	
16	The SBM software shall have provisions to capture any other additional information like consumer mobile no, meter detail, observations etc.	-	Yes	
17	If the Discom wants to implement automated spot billing, then the bidder has to facilitate the same by making the required changes in the software during the contract period.	-	Yes	
18	SBM software shall have provision to generate various reports as defined by Discom from time to time.	-	Yes	
19	SBM software shall have features to download the DC notices from Central Server.	-	Yes	
20	Smart Phones provided for billing shall be secured i.e. Upon power on the smartphone shall directly launch only the authorized apps of the DISCOM and all other feature of the smartphone that are not used for DISCOM purpose shall not be enabled/available to the user.	-	Yes	
21	The data stored in the Smart Phones shall be secured with encryption and shall be tamper proof.	-	Yes	
22	The SBM Software shall log all the critical events like app events, exceptions, system crash events, user events, network signal strengths, memory, data usage, battery usage and the same shall be available to be synced to the central server either upon user initiation or automatically synced to the central server along with the bill & other data.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
23	Automated Spot Bill generation by direct downloading of meter data to the Android Smart Phone from communicable meters. The software shall facilitate downloading of billing parameters or the complete meter data or any desired parameters as specified by JDVVNL from time to time. The Android smart phone shall automatically generate the spot bill without manual punching/feeding of billing parameters.	Yes	-	
24	The meter data downloaded other than billing parameters shall be uploaded into the server software for further analysis.	-	Yes	
	<b>Mobile Device Management Information System</b>			
1	Android Smart Phone device management module shall facilitate the management, administration, adding, removing, user management of ANDROID Based Mobile Devices'. In addition, the software shall have graphical user interface where the following features shall be available.	Yes	-	
2	To view the live status of device based on location, meter reader, sub division, division, circle, zone, DISCOM etc.	-	Yes	
3	Group and view the devices based on Meter Readers, Sub Divisions etc.	-	Yes	
4	he device view shall show the live details of the device indicating the operational hours, signal strength, battery status, last bill issued GPS location etc.	-	Yes	
5	Sub Divisional officers shall be able to trace the meter readers and monitor progress on Google map.	Yes	-	
6	The software shall have facility to log all the critical events of the devices as per the configuration.	-	Yes	
7	The Software shall have the facility to monitor the key parameters like battery, network, data usages.	Yes	-	
8	The software shall monitor the version of the software that is currently in the device and check for update, tariff and rule changes and update the same	Yes	-	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	to the device.			
9	The software module shall have facility to trace the device life cycle.	-	Yes	
10	Any other feature that would increase the meter reading monitoring shall be made available as per Discom requirements from time to time.	-	Yes	
	<b>Revenue Management System</b>			
	<b>Payment Collection</b>			
1	This module shall cover the following functional requirements:			
2	Handles the entire payment collection of the Discom	Yes	--XX--	
3	Multi-tiered approach to handle operations at all levels <ul style="list-style-type: none"> <li>• Cashiers &amp; Supervisors at the Cash Offices</li> <li>• Controlling Officers at Treasury Department/e-Gras/RTGS/NEFT</li> </ul>	-		
4	Senior Management	-	Yes	
5	Automatic generation of Cash Book	-	Yes	
6	Automatic generation of Lodgement Report	-	Yes	
7	Data integration with future ERP system for final accounting	-	Yes	
8	Integrates with other downstream ITESs of the company	-	Yes	
9	Role based security	-	Yes	
10	Extensive MIS to facilitate monitoring and Control	-	Yes	
11	Rigorous Data Validation Process to ensure data integrity	-	Yes	
12	Deployed Over a High Available Architecture	-	Yes	
13	Validation for deposit of cash only up to Rs. 20,000 per bill as per TCOS	-	Yes	
14	Validation for dishonoured cheque deposit second time as per TCOS	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
15	Facility for periodic reconciliation as defined by JDVVNL with the payments imported from other agencies in all aspects including bank reconciliation.	-	Yes	
	<b>The payment collection module shall facilitate payment collection in various modes viz:</b>	-	Yes	
1	Payment collection by Feeder In-charge / meter readers over spot billing machines.	Yes	-	
2	Payment collection by Discom officers using hand held devise.	-	Yes	
3	Payment collection through ATP.	-	Yes	
4	Payment collection through dedicated cash counters.	-	Yes	
5	Payment collection through online payment gateways, banks /debit & credit cards, authorized third parties.	-	Yes	
6	Payment collection through E-mitra and other state government enabled kiosks/portals or systems.	-	Yes	
7	Payments collected by manual receipts (payment stubs)	-	Yes	
8	Payment collection through mobile app which shall further integrate with online payment gateway.	-	Yes	
9	Online Payment through digital wallets, Govt. Apps like BHIM, UPI Gateways and other future payment gateways or interfaces that may come during the tenure of the contract.	-	Yes	
	<b>Other payment Collection features</b>			
1	Provision to collect and account payments against bills and other miscellaneous heads. The payment collection system shall be secure and reliable and shall facilitate cash reconciliation at various levels.	-	Yes	
2	Payment collection software should have dashboards and MIS reports for monitoring payment collection and reconciliation at various levels.	Yes	-	
3	Payment collection module should have transaction based approval before the payments are posted and	-	Yes	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	accounted.			
4	The system should have the flexibility to accept full, partial advance payments. The system should also have the facility to centrally change these settings from time to time.	Yes	-	
5	System should support group payment facility for acceptance of one single payment for set of consumer accounts. System should generate reconciliation reports for the same.		Yes	
6	System must be capable of handling centralized or decentralized payment processing. System should be built with cash counter which can be installed at sub division offices & accounting sections which should work on real time data synchronization basis.		Yes	
7	In case of internet is not available at sub division offices or internet is down for specific period of time then the system (spot billing devices and sub-division office) should have provision to work in offline mode.		Yes	
8	The generation of receipt and printing should be continued and data has to be stored in local system. The system should be capable of holding and population of data on central serves for 24 hrs of operations or in multiple batches based on the need so that the performance of the system should not hamper. On restoration of internet payment details has to be transferred to central server.		Yes	
9	System must be able to generate & send SMS/Email automatically to customer for every payment received as per the requirement and directions of DISCOM.		Yes	
10	All payments should be associated with the login-id of the cashier or person who operates the cash counter. Each payment should include machine ID, Payment centre codes at which they were received, unique receipt number.		Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
11	System should support acceptance of payment by reading the bar code for bills issue through Spot billing device.		Yes	
12	System should have the flexibility of reversal of payments in case of cheque dishonour. Blocking of further payment by cheque till a defined timeframe.	Yes	Yes	
13	System should have the logic of defining the distribution of the payments against the bills based on the specific order or as defined by utility like Tax, Interest, Revenue etc.		Yes	
14	System should generate centralized collection report and closing of collection process (cash book) on daily basis with relevant approval.		Yes	
15	System should have the facility of generation of ASD notices.		Yes	
16	System should support monthly payment reconciliation process.		Yes	
	<b>Disconnection and Reconnection Management System</b>		Yes	
1	The web based software shall have provision to identity the consumers liable for disconnection and shall have provision to generate notices, lists, send email and SMS alerts to consumer as well as Discom official.	Yes	Yes	
2	The web based software shall have provisions to generate various MIS reports for enabling effective disconnection and reconnection.	Yes	Yes	
3	The web based software shall have work flow based rules for permanent disconnected consumers until they are permanently disconnected and dismantled including the process for adjustment of deposit and preparation of final bill and write-off's.	-	Yes	
4	The web based software shall have provision to enable record on field disconnection status through hand held devices if desired by the DISCOM.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
5	The web based software shall have facility to push the disconnection list and reconnection list to the mobile apps installed on the SBM (ANDROID Based Mobile Devices) for implementing disconnection and reconnection.	-	Yes	
6	The web based software shall have provision to generate Dis-Connection notice as per Discom Norms, which can be downloaded and printed through Android based Smart Phone.	-	Yes	
	Mobile app for effecting disconnection and reconnection shall be provided by the bidder.	-	Yes	
1	Mobile app user shall have the provision to capture the inspection details at the time of field visit. Complete flow shall be provided for the disconnection and reconnection.	-	Yes	
2	The system shall have work flow based module for facilitating the disconnection to permanent disconnection and dismantling by generating all the required notices including the adjustment of deposit etc.	-	Yes	
	<b>New Connection Management System</b>			
1	The new connection module shall facilitate the entry of new consumers into the system either by the way of i) Keying in the data ii) Importing from a third-party system iii) Bulk uploads through csv files etc.	Yes	-	
2	Online Web Application based on Work Flow as per the Business rules, Tariff,SOP& TCOS of the DISCOM.	-	Yes	



**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
3	The module for work flow shall be for processing of new consumer application. The application shall have inbuilt document management system for uploading and storing all the require documents for new connection. Further the consumer shall be able to track the status of the applications and shall receive email, SMS alerts on the application stage and status. The modules shall incorporate all the existing stages and business rules involved in processing the new consumer application. Comprehensive dashboards and reports shall depict the number of applications received and applications at each stage and if the applications are being processed within as the regulatory standards.	-	Yes	
4	The web based application shall also have comprehensive input screens for entering the new consumer details from the consumer application files. Scan and upload the relevant documents for future use. The entered details after approval shall result in the first bill generation of the consumer.	-	Yes	
5	The module shall facilitate bulk importing of master data of consumers created from third party systems/schemes where bulk connections are released and data is provided in soft digital form.	-	Yes	
6	The module shall have functionalities for inter division transfer of consumer master data and merging of accounting units etc.	-	Yes	
7	The Module shall facilitate grouping of consumers based on various requirements for group bill generation etc.	-	Yes	
8	Bulk field electrical network re-alignments like updating of feeder code, TC reorganization etc., shall be facilitated in batch mode for making the changes quickly.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
9	The status of the applications, application pending at various stages shall be made available through drill down dash boards right from corporate level to the sub division or OM level. Provision shall be made to display the KPI information in the Video Display Units located at various offices.	-	Yes	
	<b>This module shall include the following features:</b>	-	Yes	
1	Receipt of Application Details – online / Offline	Yes	-	
2	Site inspection, wherever necessary and capturing of techno-commercial information from site.	-	Yes	
3	Scrutiny of Inspection report by appropriate authority.	-	Yes	
4	Sending of “Offer Letter” (intention to provide supply) and Security Deposit Bill to the applicant – through e-mail/ courier. Offer letter mentions the compliances that are required to be met by the applicant.	-	Yes	
5	Meeting of compliances by applicant including the payment of Security Deposit Bill.	-	Yes	
6	Transfer of static as well as payment related data to Billing Software for generation of a new consumer.	-	Yes	
7	Sending of data to Site Office for execution of job when all compliances are met – relevant data is transferred electronically to Site Office System (SOS).	-	Yes	
8	Receiving job completion and meter installation / exchange related data electronically from SOS post execution of job.	-	Yes	
9	Transfer of meter installation data to Billing Software for inducting the applicant as a Consumer.	-	Yes	
	<b>Feeder Information System:</b>			

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	It is intended that certain parameters pertaining to 11 KV Feeders would be captured by the Feeder In charge / Discom Officers for energy audit, performance monitoring, operation and management. Agency has to provide both mobile app and web interface for entering the required data, capturing the inputs, etc. The utility will facilitate historical data to the successful bidder.	Yes	-	
2	As Android Smart Phone with GPS capturing capabilities are going to be used, the software solution should have a GIS module wherein the consumer information, network asset information, any other information that is captured by the field personnel can be displayed on a GIS map with provision to edit, update etc. The various elements shall be distinctly depicted with different icons/colour etc. The main objective shall be to extensively use this module for depicting the consumer information, assets and for enabling and planning different day to day operation and maintenance activities of the DISCOM. The cost of the acquiring the necessary licences if required shall be factored into the bid and the same shall be valid during the tenure of the contract.	Yes	-	
3	A mobile app having functionalities to facilitate the field personnel in recording the various network elements for creating the single line diagram shall be provided. The back end software shall have provisions for depicting the Single Line Diagram with options of expansions of LT network up to consumer level.	Yes	-	
4	For capturing the various HT & LT components of the distribution network Feeder wise for creation and depiction in the form of a Single Line Diagram. The module shall facilitate the Feeder In-charge in accurately mapping the various branches, sub braches and multiple branches as per the actual site data. Provision shall be provided to update, edit/relocate or modify any asset captured.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
5	Agency has to develop comprehensive MIS reports and Dashboards depicting the various parameters captured. The Drill down dash boards/MIS Reports shall have data grouping and data agitations at various levels i.e. DTC, Feeder, Sub Station, Sub Division, Division, Circle, Zone and Discom level.	-	Yes	
6	The bidder shall provide both the mobile app and web module in the software to facilitate the various functionalities of the feeder In-charge. A brief of functionalities but not limited as under:	Yes	-	
7	Provision to assign, reassign, delete feeder to feeder In-charge.	Yes	-	
8	List the consumers, DTC connected to the feeder	Yes	-	
9	Provision to enter the feeder reading/consumption at varying intervals for assessing the energy availability, consumption, losses etc.	-	Yes	
10	Provision to enter the DTC reading/consumption manually.	-	Yes	
11	Provision to Add/Modify/Delete the Feeder information like the meter make, CTPT, initial reading, status of meters, supply information etc.	-	Yes	
12	The software shall facilitate the Feeder In-charge in arriving at the energy audit at desired intervals.	-	Yes	
13	The Data in the mobile app shall reside local and shall assist the Feeder In-charge in monitoring the critical parameters without the necessity of actually accessing the central server.	-	Yes	
14	The software shall have alerts, dashboards, remainders to give 360 degree view of the energy consumption and related parameters for energy audit and monitoring purpose.	-	Yes	
15	Any other input and reporting formats that are required shall be finalized during the execution stage with the selected bidder.	-	Yes	
	<b>GIS Information System</b>			

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	The software shall facilitate consumer tagging as per the electricity distribution network. The binders can be re-organized substation wise, feeder wise / distribution transformer wise. During the initial 4 months the required information on the location of the consumer (DTC, Feeder etc.,) shall be provided by DISCOM/Meter Readers. The software shall have options to bulk upload the same and then organize billing as per Sub Station, Feeder and DTC wise.	Yes	--	
2	The software shall have provision for tagging, re-tagging, updating features based on GIS referencing.			
3	The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps.	Yes	-	
4	The software shall facilitate creation of route plans, route maps to enable efficient billing in a timely manner and to facilitate re-organization of existing networks, geographic are etc., as desired by the DISCOM.	-	Yes	
5	The software shall facilitate new consumer updating as and when new consumers are added.	Yes	-	
6	The software shall have provision to implement billing at desired periods and thus suitably re-organize the route plans and consumer indices.	-	Yes	
	<b>Functional Requirement of GIO tagging (Assets and Consumers)</b>			
1	The GIS module on Google map should be integrated with the various core processes of Billing / Collection / Disconnection/ energy auditing etc. The system should have provision for capturing, storing, checking, integrating, analyzing and displaying geo data related to positions on the Earth's surface and data related to attributes of the assets / Customers in Discom area. Basic functionalities should be provided by the service provider is the following.	Yes	-	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
2	Display of all Billing information data on the Google Map with status of the billed information.	-	Yes	
3	Display of arrears information on the Google Map	-	Yes	
4	Display of Collection information on the Map.	-	Yes	
5	Display of the location information of the Meter Readers on the Google Map.	-	Yes	
6	Location MR / Consumer through Latitude and Longitude Coordinates previously stored in the system.	-	Yes	
7	Complete workflow of other systems should be seamlessly integrated with the core processes of the Billing and collection and no separate activity should be initiated to achieve the above objective.	-	Yes	
<b>Consumer Information &amp; Service System</b>				
The following indicative requirements with regards to implementation of web portal / mobile applications to facilitate real time customer services:				
1	The Home page shall provide a brief description about the site, the various functionalities it provides and promotional features or any kind of advertisement for special programs can be placed in this page. Login Component is provided and registered users may login using their username and password. New Users can also register by clicking on the First Time Users Register link. The Forgot Password link helps the user to retrieve their password.	-	Yes	
2	The Log In page shall ask the registered users for their username and password while the new members can also register through this page.	-	Yes	
3	The user is asked for personal, security and account information in this page before registering.	-	Yes	
4	The user is asked for his first name, last name, zip code, birthday and his primary email address before being provided with the security question.	-	Yes	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
5	The new password is sent to the user by email / SMS to his primary email address or registered mobile number as recorded in his profile, on answering the question correctly.	-	Yes	
6	Once the user has logged in, he can change his credentials i.e. Username and Password by clicking on the Change Credentials link	Yes	-	
7	There will be a "My Accounts" page, which is the landing page for the users with multiple accounts. The screen contains a brief summary of all the accounts such as the account name, address, balance, due date and the account status.	-	Yes	
8	There will be a "Single Account" page, which will be the landing page for the customers. The screen contains a description of the account. Any status messages pertaining to the account involving immediate user action is also presented here.	-	Yes	
9	There will be a "Consumption History Page" that provides an account of the usage for the last 12 months graphically. A more detailed analysis is provided in a tabular format listing the meter reading date, the reading, consumption, number of days, charges etc.	Yes	-	
10	The consumption calculator popup is provided to help the user calculate the usage between any two given dates.	-	Yes	
11	The Bill Summary page gives a record of the Billing amounts and Payments made by the customer over the last few months.	-	Yes	
12	The user is provided with the options of registering in Online Billing and also continues with paper bills.	-	Yes	
13	The View and Pay Bill page presents a short summary of the bill. The user can also view the bill in PDF format by clicking on the link 'View Bill as PDF'.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
14	The user is provided with different modes of payment namely Credit Card / Debit card / Net Banking / Mobile Wallet etc. On providing the valid credentials payment can be made directly from the site. The online payment shall be processed through secured payment gateways	-	Yes	
15	There should be provisions for the user to pay multiple bills	-	Yes	
16	There should be a "Manage Accounts" page which shall help the user to manage all his consumer accounts from a single page	-	Yes	
17	There should be a "Service Requests" page that will allow customer to lodge request for services such as new connection, disconnection, load change, name change, category change, meter shifting etc. Depending on the regulatory/utility requirements user is required to submit the documents.	-	Yes	
18	There will be a "Service Status" screen which is read only screen which the user can view. Status of various pending requests for the customer such as load change, name change, category change, meter shifting etc. are listed here.	-	Yes	
19	Under the "Complaint" page, user can log his complaint using a drop down menu and also enter some text. A "Complaint Status" page shall provide the user a read only screen to view the complaint status	-	Yes	
20	"Report Power Failure" screen contains static data related to the power failure. The contact number is mentioned in case any power failure occurs. The user calls up the number and reports the power failure and necessary action is taken to restore the power connection.	-	Yes	
21	Update Profile screen enables the user to update his/her profile information. The user can edit the personal information and click on Update Changes button to save those changes.	-	Yes	



## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	<b>Mobile Apps development, deployment &amp; maintenance</b>			
1	The platform's used for development of mobile apps should support development of Hybrid Applications/Native Apps.	-	Yes	
2	User Interface and User Experience of mobile App is to be designed to ensure that the service is user friendly.	-	Yes	
3	Design of consistent visual elements and Web Portal & Mobile Apps architecture that is scalable and expandable.	-	Yes	
4	Resolution independent Mobile Apps that will automatically expand/compress itself as per the device screen resolution and should be as per standards of W3C.	-	Yes	
5	Delivery of consumer App and Officers mobile applications should be in the form of a published mobile application on each platform in the market place (Google/ Andriod Play store, Apple store and MS Windows etc.) .	-	Yes	
6	Integration with any existing applications through SOA (service oriented architecture) - Web services/API/ JSON, Social Media platform etc.	-	Yes	
7	The solution Framework, tools, technology of mobile App Development platform should be submitted along with technical proposal and should be able to address the future scalability requirements, in terms of both application (to add new services) and infrastructure and backend.	-	Yes	
8	The mobile Apps should provide an update feature in case of newly published version.	-	Yes	
9	The mobile applications will be hosted on mobile applications platforms (Apple store, Android Play store, Microsoft etc.) whereas the web portal/application and services and related APIs will be hosted on servers/ cloud environment.	Yes	--	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
10	Provide technical documentation, design, architecture, technology, tools, etc. which will be used to develop Mobile Apps.	-	Yes	
11	Integrate with the backend systems (user profile and registration, authentication, application processing, push notifications, etc.).	-	Yes	
12	The data must be fetched from predefined data in central database and all the data should be directly updated to the central database	-	Yes	
13	The complete solution proposed must be SOA compliant and preferably based on secured open standards.	-	Yes	
14	Vendor should have experience in hosting the mobile Apps and updating new versions as and when required. Vendor should provide all the details and should be part of technical proposal.	-	Yes	
15	Mobile applications developed on development platform provided by the bidder should run on all types of handsets/TAB/Smart phone existing as well as new handsets coming in the market. The bidder shall provide upgrades/patches etc.	-	Yes	
16	The platform should provide the means to manage subscriptions of push notification services etc.	-	Yes	
17	Mobile applications to be implemented in pursuance to the International & industry standard implementation standards and procedure for successful implementation of the project.	-	Yes	
	<b>Mobile Apps for Consumers</b>	-	Yes	
	This shall support following features:		-	Yes
1	To operate in Android, Windows and iOS operating systems	-	Yes	
2	Access of 'Quick Bill Pay' where the consumer may pay the bill on the go by furnishing only the consumer id; multiple bills may be paid by this option	-	Yes	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
3	3. Consumer may apply for and check the status of New Connection/Additional/reduction load application	-	Yes	
4	4. Consumer may access his personal details like Assessment, consumption & bill paid for the last 3 years , and so on; more than one customer id (if any) may be added to a registered account	-	Yes	
5	5. Consumer may access the consumption calculator to check the energy consumption patterns.	-	Yes	
6	6. Fresh complaints can be lodged and previous complaints tracked via the app	-	Yes	
Consumer may also request for:		-	yes	
1	Request Duplicate Bill	-	Yes	
2	Augmentation of load / regularization for installation of AC	-	Yes	
3	Informing non-usage of electricity during a certain period of time due to absence	-	Yes	
4	Registration of mobile no., email-id, DOB	-	Yes	
5	Energy calculator	-	Yes	
6	e-Bill registration	-	Yes	
7	One touch call / e-mail facility	-	Yes	
8	Reporting of cases of theft through the App	-	Yes	
9	The consumer can stay updated with regard to the company, new launches, services, outages, useful tips, through social media tabs for Facebook, Twitter, and WhatsApp which are available in the App	-	Yes	
HT consumers can get the following through the App:				
1	A summary of their account details are available here	-	Yes	
2	Latest Bill along with the amount to be paid and the due date can be viewed	-	Yes	
3	Payment History of the last 12 months are available in the app	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
4	Consumption history of the last 12 months are available in the App	-	Yes	
5	All the features of the consumer web self-services shall be available on the mobile app.	-	Yes	
	<b>Mobile App for Field Work Force:</b>			
1	The android Smart Phone is expected to be a very important tool through which various activities of the utility are expected to be carried out.			
2	The proposed app should be developed with role based access to users (Consumers, Discom Official and Feeder In charge & Meter Reader.	-	Yes	
	Following features will be required in the Apps system.			
3	For Consumer- View & Download bill, Billing history, Bill payment, Receipt & Payment History, Lodge Complaint, Grievance status tracking	-	Yes	
4	For Discom Officials- Monitor billing progress, revenue realization, consumer billing history, payments and location on Google map.	-	Yes	
5	Instant alerts (Group Messaging) feature to the individual/group, Supply alerts on selected criteria (33 and 11KV Feeder, Village, Binder, Tariff Category, DTs etc.)	-	Yes	
	For Feeder In charge & Meter Reader-			
6	Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders)	-	Yes	
7	Meter Reading directly from Meter through Optical Port and generation of billing and cash collection at spot.	-	Yes	
8	On spot updating of activities such as Meter Change, Disconnection, Reconnection and photographs as proof of completion of activity	-	Yes	
9	Disconnection and reconnection module giving information about the arrears pending and route map for tracing the location of consumer premises.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
10	Capturing the Disconnection and Reconnection details.	-	Yes	
11	Capturing of Field inspection details in new connection process.	-	Yes	
12	Capturing the location wise asset details during asset replacement/repair for assets like Feeders, Meters, CT/PT, Transformers etc.	-	Yes	
13	Tracing the location of Meter reader /Feeder In-charge by sub division officers on real time basis	-	Yes	
14	These apps should be capable of display of information on a Google Map on the Smart Phone.	-	Yes	
15	Capturing various feeder information: The bidder shall capture the feeder information in a hierarchal manner as per the format to be provided by the Discom at the time of award of contract.	-	Yes	
16	The app should be able to capture any other information in the forms published by the MIS reporter enabling the officers to key in the details and view the same on drill down formats.	-	Yes	
	<b>Web Based Information and Monitoring Systems with Mobile App for Officers</b>			
1	Agency shall develop an application which include feature of both Web-App and Native Mobile App for Discom Officials.	Yes	-	
2	Agency shall have to design the proper analytic computations for various other fields.	-	Yes	
3	The Information shall be compiled at various levels and adequate dashboard for various levels shall be created.	-	Yes	
4	The information shall be collated in the intermediate database server which shall be taken up by Agency.	-	Yes	
	<b>Other application required to be loaded on ANDROID Based Mobile Devices</b>			
1	Capturing details of asset replacement like Meter, Transformer, CT/PT etc.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
2	Estimation of bill of material during new connection process.	-	Yes	
3	Consumer complaint and theft / un-authorized use, recording/photography	-	Yes	
4	Communication module to exchange real-time messages between the subdivision and device.	-	Yes	
5	Mobile app for MIS Information	-	Yes	
6	Mobile App's for displaying the information with required functionalities obtained by integrating with existing systems	-	Yes	
7	Mobile apps for vigilance, MRT & Audit Teams.	-	Yes	
8	Any other apps as desired from time to time by Discom shall be developed by the bidder without any extra cost.	-	Yes	
	<b>Energy Audit</b>			
	The Software shall have exhaustive Energy Audit features that is:			
1	The Software shall have features to link the consumer to DTC, DTC to Feeder and Feeder to Sub Station. The required coding convention in consultation with the DISCOM has to be adopted so that each consumer at a DISCOM level have a unique code.	Yes	-	
2	The software shall facilitate bulk upload based network assignment and realignment. That is the data for the realignment or alignment shall be provided in XLS sheets and the same shall be uploaded and the linking should get updated.	-	Yes	
3	The system shall be able to abstract Energy sent data from respective systems and display it on the Dash Board.	-	Yes	
3	The system shall enable capturing of consumption recorded at DT, Feeder, Sub Station, Boundary meters for arriving at the Total Energy Input at various hierarchies for calculation of energy loses.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
4	The Energy audit reports as per the formulas provided shall have facility to arrive at the assessed energy if any as specified by DISCOM.	-	Yes	
5	The Drill Down Energy Dashboard shall facilitate drill down up to DTC from the Corporate Level.	-	Yes	
6	The module shall have various standard and adhoc reports for displaying the energy losses at various levels.	-	Yes	
7	The module shall facilitate merging of feeders, splitting of feeders based on the input file provided.	-	Yes	
8	The module shall facilitate import or consumption related details from third party existing systems and the AMI/SCADA systems that may be deployed by JDVVNL during the contract tenure.	-	Yes	
9	The Software shall facilitate integration with existing feeder monitoring system of JDVVNL and future systems that shall be deployed for AMR/AMI.	-	Yes	
10	The data obtained for all the monitoring points shall be consumed for energy audit and the audit details shall be made available for display of the same in dashboards, pre-defined reports, graphs, pushed to mobile apps, published on portals, exchanged with central and other state agencies as and when authorized and intimated by JDVVNL.	-	Yes	
11	The energy audit parameters and details shall also be displaced on google maps/GIS maps with various options and filters for display.	-	Yes	
	<b>Meter Data Information System</b>			

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	The system shall support storage, archiving, retrieval & analysis of meter data and various other MIS functionalities along with validation & verification algorithms. It shall act as a central data repository. The system shall have capability to import raw or validated data in defined formats and export the processed and validated data to various other systems in the agreed format. It shall support built-in analytics & reporting and shall provide validated data for upstream systems such as Billing, Consumer Information System and Customer Care, Outage Management etc. The system shall be capable of supporting third party Pre-payment options.	-	Yes	
2	The System shall also support the future requirement of utility regarding AMI.	-	Yes	
3	A robust and scalable system solution is required for accepting, validating, and processing of non-AMI/legacy meter data taken manually, through Android Smart phones etc., from conventional and AMR meters with scale-up provisions. Subsequently, integrating multiple AMI Head end systems would be needed when JodhpurDiscom rollout Smart Meters commercially.	-	Yes	
4	Meter data collection and data management (Direct or from third party system)	-	Yes	
5	Meter data processing and generation of billing determinants for all types and category of consumers, including Net-metering and open access consumers.	-	Yes	
6	Maintaining a single meter data repository catering to different HES / MDAS	-	Yes	
7	Supporting VEE (Validation, Estimations and Editing). Real-time validations shall ensure ready-to use meter data.	-	Yes	
8	Integration to Utility / Third party Consumer portal / mobile apps	-	Yes	
9	Universal calculation engine with mathematical, logical and statistical operators	-	Yes	



## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
10	Built-in Analytics / Reporting feature	-	Yes	
11	Exception management and Service Order generation	-	Yes	
12	Capability to support Net-Metering billing	-	Yes	
13	Ability to interface third party Prepayment application	-	Yes	
14	Theft and revenue loss identification through usage pattern and through drop in consumption.	-	Yes	
15	Capability to identify 'No consumption', 'Drop in consumption', 'Abnormal usage pattern', 'Irregular consumption pattern' and advance of registers in case of disconnected / not in use cases.	-	Yes	
16	Capability to identify consumers with higher energy consumptions and consumers with lower energy consumptions, area wise / DT wise / category wise.	-	Yes	
17	Analysis on maximum, moderate and minimum sale of electricity, area wise / DT wise, for growth analysis and subsequent network planning.	-	Yes	
18	Perform load analysis for different groups and categories of consumers.	-	Yes	
19	Analysis of VEE exceptions based on severity and other business rules.	-	Yes	
20	Analysis of Smart meter rollout progress to help senior management track the progress.	-	Yes	
21	Analysis of Smart meter events & activities performed.	-	Yes	
22	Analysis of quality & timeliness of interval data received	-	Yes	
23	Management Information System Dashboards & reports	-	Yes	
	<b>A. Development of Management Information System</b>			
1	Field officers from the level of Feeder in charge to the zonal CE can provide key parameters/information on predefined manner to	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	the system through mobile app and web app.			
2	The system after receipt of all such information shall compile and consolidate in a customized/specify formats and publish through report builder.	-	Yes	
3	Frequency and number of reports which is possible through the input data on combination and permutation techniques can be customized through system as per specific user requirement.	-	Yes	
<b>Features of the system shall be:</b>				
1	Agency shall develop an Application which include feature of both Web-App and Mobile App for Discom Officials.	-	Yes	
2	The Application shall be based on the four pillars:	-	Yes	
	a. Information provided by the Field Level Officers through this Application b. Information extracted from the existing database servers of Discom c. Information which is provided as targets by the Corporate Office through this Application d. Information which is computed through information provided in (a), (b) & (c) i.e. analytics through What-If (Scenario Analysis)	-	Yes	
3	The mechanism for monitoring of Central and State Government Schemes shall also have to be done in discussion with Discom which means formats of these schemes and filling of information as per point 2 above for these schemes.	-	Yes	
4	The Agency shall develop a feature in Application which will enable filling of information in set time periods for field level officers and target to be filled by Corporate Office.	-	Yes	
5	Level of approval shall be added for the information from the field before being integrated to the total system.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
6	Agency shall have to design the proper analytic computations for various other fields.	-	Yes	
7	The Information shall be compiled at various levels and adequate dashboard for various levels shall be created.	-	Yes	
8	The information shall be collated in the intermediate database server which shall be taken up by Agency.	-	Yes	
	<b>B. Reporting System &amp; Dashboards</b>	-	Yes	
1	The web based system shall have dashboards that depict the various key performance parameters at various levels based on the user on real time basis in a hierarchy structure.	-	Yes	
2	The web based system shall have an inbuilt BI tool for analysis.	-	Yes	
3	A complete list of the existing and required MIS reports shall be provided to the finalized bidder for assessment.	-	Yes	
4	Further the Agency has to provide or implement any other reports, dashboards etc., as required by the DISCOM during the contract period.	-	Yes	
5	The web based application shall have provision for custom report builder which shall facilitate users to define and generate the reports.	-	Yes	
Bidder shall provide a separate reputed BI with Report Builder in the system with following features			-	Yes
A	Capex Planning for DTR with everyday monitoring module	-	Yes	
B	Module for Customer Profiling	-	Yes	
C	Root Cause analysis for repetitive customer complaints	-	Yes	
D	Monitoring and predictive modules for Losses	-	Yes	
E	Module for effective customer call grouping.	-	Yes	
F	Dashboard for daily / monthly monitoring by Management	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
6	Module for effective control over material consumption for faults / new connections etc.	-	Yes	
7	Module for effective reduction in customer footfalls	-	Yes	
8	Dashboard to analyse customer growth, complaints & its duration etc. and operator shall be able to analyse this on map.	-	Yes	
9	Dashboard for high-level overview of arrears, collectibles, write offs data, pay plans, and payment arrangements for the selected period.	-	Yes	
10	The Application shall have the features for building custom forms for gathering information for periodical review by management and for displaying on the VDU & Video Wall. The various forms shall be designed, developed and deployed from time to time and published for entry/key in at various levels. The system shall also have facility for custom form building.	-	Yes	
11	The information collected from the various published forms shall be stored hierarchically and consolidated reports automatically formed at various hierarchy levels of sub division, division, circle, zone etc.	-	Yes	
12	The reports and dashboards shall have drill down features to drill down to the nth level.	-	Yes	
13	The forms shall be responsive and shall be accessible from any device like Mobile Phone, Tablets, Desktops etc.	-	Yes	
	<b>Business Intelligence Tool (BI Tool)</b> The system shall have separate and independent BI tool of repute make for analysis of consumer data, billing data, payment data, consumer profiling etc. The software shall further facilitate forecasting and trending analysis for defined parameters given by Discom from time to time. The dashboards and reports shall be displayed on the VDU and shall have drill down features for nth level aggregation or expansion.	Yes	--XX--	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	<b>External / Internal Audit System</b>			
1	The system shall have facility to provide a Dashboard/UI for Revenue Audit by external and internal audit for various revenue and billing information's at sub divisions and other offices.	-	Yes	
	The system shall be capable to prepare the observation including undercharges, mainly the following records are to be checked and audited:	-	Yes	
	i. Checking of physical cash balances.	-	Yes	
	ii. Checking record of cash section. Form A-9, PCCB/Scroll and PCB, timely remittances of money collected and reconciliation with bank statement.	-	Yes	
	iii. Checking of output 6-A, B, C & D with stubs/ Scrolls & to report suspicious cases of embezzlement/ financial irregularities.	-	Yes	
	iv. Reconciliation of amount received through PCCB and posted against consumer A/c as per MIS.	-	Yes	
	v. Checking of debit raised or not in cases of dishonoured cheques along with LPS and Bank Charges.	-	Yes	
	vi. Whether cash collection is done by outside agencies, if yes, intimate name of Kiosk (under e-mitra/CSC) and DeGS where receipts to consumers are issued by affixing rubber stamp in place of computerised receipt.	-	Yes	
	vii. Checking of consumer ledger with binder &/or other related records.	-	Yes	
	viii. Checking of CC&AR registers for unauthorised/irregular debit/credit causing financial loss to the Nigam.	-	Yes	
	ix. Checking of deficiencies in input advice and output reports related to billing i.e. CB-4, CB-12 & CB-15 with 16 ABC output reports etc.	-	Yes	
	x. Checking of left out outstanding and negative balances against the consumers.	-	Yes	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	xi. Detailed audit of mobile tower connections and ensuring correct billing thereof.	-	Yes	
	xii. Ensuring 100% transfer of Master Data as well as outstanding from one billing agency to another or transfer from one sub-division to another/new created sub-division (if applicable).	-	Yes	
	xiii. Compliance of DCO's, MCO's & RCO's and pendency of LR & SR in billing in case of meter change.	-	Yes	
	xiv. Checking of billing of temporary connections.	-	Yes	
	xv. Checking of debit raised / average charged in case of stopped / defective meters, theft, malpractices cases and other charges in view of compliance of A-30 Nigam's orders and arrange to propose debit in consumer's account.	-	Yes	
	xvi. Correctness of billing in view of Nigam's TCOS, tariff and circulars / orders issued time to time.	-	Yes	
	xvii. Irregularities in the records of HT (other than large industrial power consumers), MIP and SIP consumers.	-	Yes	
	xviii. Checking of M/F as per JIR of consumers who are being billed on power factor basis.	-	Yes	
	xix. Detailed audit of SIP, MIP and other category consumers having sanctioned/ connected load 25 HP (18.65 KW) or above and MDI has exceeded 50KVA thrice in a financial year and under assessment their against.	-	Yes	
	xx. Checking of billing of load extension / reduction cases.	-	Yes	
	xxi. Under charges for any irregularities noticed during audit period in case of a consumer will be made for whole period irrespective of audit period.	-	Yes	
	xxii. Checking of A-49 register in reference to pendency of SCOs for compliance, pendency of SCOs for billing, delay in issue of first bill and breach of priority in release of connections.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
	xxiii. Checking of VCR cases for assessment & logical conclusions thereof.	-	Yes	
	xxiv. Checking of register maintained for settlement of dues along with implementation of decisions.	-	Yes	
	xxv. Verification of pendency of SOSD & compliance of previous ICR.	-	Yes	
	xxvi. The amount charged to the consumer is to be got debited in their accounts through CC&AR. Number and date of the same is to be recorded in SOSD sheet duly signed from AEN and ARO of the sub division concerned.	-	Yes	
	xxvii. Any other works related to revenue audit assigned by the Management.	-	Yes	
	<b>System Support with Ticketing</b>	-	Yes	
1	The Web based software should have online context sensitive help, user manuals and centralized ticketing system for Support.	Yes	-	
2	The application users shall have provision to raise tickets, a unique ticket number shall be assigned.	-	Yes	
3	The web based application shall have tools to track the ticket number for status update and resolution.	-	Yes	
4	The web based application shall have configurable escalation matrix inbuilt for escalation of support issues.	-	Yes	
5	The web based application shall have dashboards and MIS on the ticket status and resolution.	-	Yes	
	<b>Special Features &amp; Conditions</b>	-	Yes	
	Data exchange with other systems			
1	The proposed solution shall be capable to exchange the database information with existing RAPDRP software and upcoming new ERP system on continues basis so as to enable Discom to have a common MIS. MIS data has to be updated within 6 Hrs of completion of day i.e. post mid night and before 6 A.M.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
2	The Software shall have interfaces to integrate with online payment gateways, third party payment systems like e-mitra and energy audit system. The system shall be built SOA, using standard set of technical specifications of web services and can be integrated with any system.	-	Yes	
3	Middleware in the form of Hardware, Software or firmware if required, shall be deployed by Agency as part of scope of work to integrate with the existing and upcoming new system in full-fledged data sharing and as touch points.	-	Yes	
4	B. SMS and Email Alerts: The web based application shall have in built features for sending SMS and email alerts to users based on the requirement of the DSICOM. The required SMS and email gateways shall be provided by DISCOM. DISCOM desires to send alerts on various events to consumers like meter reading, bill generation, due date, payment reminder, payment collection, disconnection, supply / shutdown alerts etc.	-	Yes	
	<b>The application shall be accessed over secure internet with 128 bit encryption.</b> Latest encryption technology shall be used for securing the data transmission and access by multiple users	-	Yes	



**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
1	The data architecture, Table Structure, Triggers, Stored Procedures, and Scripts used should be shared with DISCOM. Any manual update on the live system shall be approved by DISCOM and results of change should be shared / communicated with DISCOM. DISCOM shall be the absolute owner of the data. The administrator rights with the password shall be handed over to DISCOM. The Web based software should be accessible over the internet (broadband) and shall be designed to work on low band width and. The software shall have minimum possible response times for data access, report generation and data queries as per industry standards and approved by DISCOM. The software shall be scalable and there should not be any restriction on the number of users/consumers with compromising the response time. All the Licences shall be in the name of JodhpurDiscom.	-	Yes	
2	The system shall be sustainable and certain tests shall be carried out from initial stage to final acceptance stage. Further regression test shall be carried out whenever there is change in tariff or business logic.	-	Yes	
3	Two factor authentication system shall be implemented i.e. both password and biometric. The supply & maintenance of required biometric devices at the all the levels shall be in the scope of bidder. For critical transactions OTP based approval system in addition to the above shall be implemented. All transactions shall be logged and have tow stage authentication i.e. marker and approver.	-	Yes	
4	System should be capable to generate consumer Pass Book indicating Bill issued, payment made, and Security Deposit. This Pass Book shall be available for entire year indicating all transactions made during the year by the consumer.	-	Yes	

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
5	As the system has been provisioned with BI & report builder Tool, there shall be no limitations. The system has been designed in such a way that on the basis of input received per billing / or other system. This system can be utilized to deliver different reports.	-	Yes	
6	The system's shall have provision to handle start-to-end all aspect's of the customer life cycle i.e. from the service connection, meter reading, and field work to rating, billing, payments processing, and collections and delivery of comprehensive contact centre capabilities, customer relationship management etc. The system is intended to usher in transparency and customer delight. The system shall have secure, flexible, scalable, adaptable for future requirements of Discom. It should ensure billing accuracy, quickly comply with new regulatory mandates, track payments, credit and collections activities easily, minimizing write-offs, offer extensive and user-friendly customer services and help the Discom with rich analytics to stop leakages and bring down techno-commercial losses rapidly.	-	Yes	
7	Training to be imparted to the designated DISCOM personnel of the system and its operation. Onsite Training has to be imparted to at least Two Ledger Keeper, One ARO and three JENS, One AEN at each Sub Division.	-	Yes	
8	Printing of Ledgers, DC Notices, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports, MIS reports and delivering to the respective Accounts Officer.	-	Yes	
9	Any other incidental service that is required for achieving the objectives as per the tender specifications.	-	Yes	

## TECHNICAL PROPOSAL SUBMISSION SHEETS

No.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	May be customised before commencement (2)	
10	Integration: The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall be considered as master of Feeder Monitoring System, Mobile Application and accordingly shall be integrated with the same and also with RAPDRP system and forthcoming future system (during currency of Contract) for which necessary catalogue services of RAPDRP system shall be provided by Discom. All the middleware in the form of Hardware, software & firmware required for such integration shall be deployed by agency as part of scope of Work with no additional cost to Discom.	-	Yes	
11	The requisite Middleware has to be deployed by bidder and it should be interoperable with RDBMS and other sub components.	-	Yes	
12	O. A comprehensive list of generic functionalities required in the Billing Software has been specified in the document. However, the Agency has to take into consideration the various central and stage government IT initiative that are being carried out or intended to be carried out and develop the additional modules or features as and when inputs/requirements are provided during the contract period. Agency shall do the detailed requirement gathering to figure out the exact requirement in accordance with the above recommendations. No additional payment or charges shall be claimed either for grounds up development or for change management requested	-	Yes	

Please provide a summary of versions of various modules, if the proposed solution is a product. Use following format:-

**Table 4.1: Details of Product Offered**

Name of product	Module details	Version and year of release



TECHNICAL PROPOSAL SUBMISSION SHEETS

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**Table 4.2:**

Name of product	DISCOM	URL

**E. Hardware Technical Specifications**

Refer to Technical Specifications, for details. Please respond to each specification in following format.

**Table5: Technical Specifications of Hardware**

Sl no	Description	Specification	Compliance (Yes / No)	Make & Model Proposed
1	Android Smart Phone			
	Display	Form factor –Bar, Screen type- Touch screen, Screen size- min of 4.5 inches, and resolution- min of 480X 584.		
	Processor	Quad Core processor.		
	Memory	Min 2 GB RAM. Internal memory of min 8 GB, with extendable upto of 32 GB		
	Camera features	5MP with autofocus and flash		
	Operating System	Android OS of latest		
	Carrier networks	2G- GSM 850 / 900 / 1800 / 1900, 3G- HSDPA 900 / 2100, 4G/LTE		
	Data	GPRS, EDGE, Wifi, 3G,4G,LTE		
	Battery	Type- Li-Ion, Capacity- min of 1750mAH,		
	Local Connectivity	Support latest mobile Wifi		
	Bluetooth	Version 4.0 or higher supporting BLE		
	GPS	GPS &aGPS for both stand alone and hybrid and should be able to get GPS co-ordinates without mobile network.		
	USB	USB OTG Support		
2	Power Bank	Micro USB connector, min of 12001-19000 mAh of battery capacity, Lithium-ion battery type, Power requirement at min of DC 5V 2.1A, 1A DC 5 V, Power output at min of DC 5V 2.1A, 1A DC 5 V. Facility to charge Mobile and Bluetooth Printer simultaneously.		
3	Mobile Printer	The printer shall support wired/wireless connectivity and shall have provision to print on 3” thermal stationery. Shall have black mark detection facility to detect the start and end of the bill. Shall have battery backup for printing about 200 bills per day and shall be chargeable from the power bank. “The printer shall be chargeable form the battery bank and suitable cables shall be supplied		

## TECHNICAL PROPOSAL SUBMISSION SHEETS

Sl no	Description	Specification	Compliance (Yes / No)	Make & Model Proposed
		along with the printer”.		
4.	Cables/Devices	Cables/Devices for automatically downloading meter readings form meter to Android Phone along with the required accessories		
4	<b>Desktop PC</b>			
	Processor	Minimum Intel core i3.		
	Memory	4 GB RAM		
	Hard Disk Drive	500 GB HDD or Higher		
	Monitor Color	47 cm or larger (18.5 inch or larger) Monitor		
	Keyboard	104 keys		
	Mouse	Optical with USB interface		
	Operating System	Windows 10 or higher and Anti-Virus software along with necessary licenses		
	Networking facility and Power Management	As per industry Standard		
5	<b>UPS</b>			
	Power Conditioning, Automatic self-test, Transformer-block spaced outlets., software monitoring support, Microprocessor based			
	Input voltage: 160-280V, output Voltage: 230V+/-5%, Frequency: 50 Hz +/- 5%, Transfer time: 2-5 mili sec			
	Cold start facility, 120min. backup on computer load, Alarm on battery mode, overload and low battery			
	Maintenance-free sealed Lead-Acid battery SMF 12V of EXIDE, AMARON, QUANTA or equivalent make.			
	AVR for regulated output, no load shutdown or sleep mode, software shutdown, surge protection, EMI/RFI filter, cold start, over load and short circuit protection			
	Network Laser printer			
	Type Dry Type Laser Electro Photocopy			
	Speed 32 PPM or higher for A4 in normal mode, first page out 10 Seconds			
	Paper Size A4 and Legal Including Envelops & letter			
	Interface Centronics Parallel with Printer Cable USB with cable			
	Port & Fast Ethernet 10/100 Internal Print Server in EIO Slot			
	OS Support drivers to be provided			
	Cartridge output with 5%, Coverage on Letter Size, Paper in Normal Mode			
6	<b>Network Laser printer</b>			

## TECHNICAL PROPOSAL SUBMISSION SHEETS

Sl no	Description	Specification	Compliance (Yes / No)	Make & Model Proposed
	Type Dry Type Laser Electro Photocopy			
	Speed 32 PPM or higher for A4 in normal mode, first page out 10 Seconds			
	Paper Size A4 and Legal Including Envelops & letter			
	Interface Centronics Parallel with Printer Cable USB with cable			
	Port & Fast Ethernet 10/100 Internal Print Server in EIO Slot			
	OS Support drivers to be provided			
	Cartridge output with 5%, Coverage on Letter Size, Paper in Normal Mode			
7	<b>Bar Code Reader</b>			
	Should scan all type of barcode VCC, EAW/RSS/EAW-3 code-93, code-128, UPC-A, UPC-E, EAW-8 i.e. all standard linear barcodes			
	Bright LED and Beeper with adjustable volume			
	Should withstand multiple drops of about more than 6 feet height			
	Should work on any OS with plug and play and without external power supply			
	Quick scanning of minimum 150 scans per second			
	Should record small and large barcode up to 6" width and 9" away			
	Hands free stand			
	Should be able to record/scan even poorly printed scan			
	Should communicate through USB port			
8	<b>Biometric Reader</b>			
9	<b>Line Matrix Printer</b>			
10	<b>Dot matrix printer/slip printer</b>			
	Speed	350 CPS or higher		
	No. of Pins	24 Pin, Letter Quality		
	Columns	80 or higher		
11	<b>Local Area Network</b>			
	24 port 10/100 mbps fast Ethernet switch with jack panel to be placed in a rackCAT 5e structured cabling with casing and capping and I/Osetc			
12	<b>Video Wall Specs (Only digital signage display models)</b>			
	Panel			
	Diagonal Size	46"		
	Resolution	1920*1080 (Full HD)		
	Pixel Pitch(mm)	0.17675(H) X 0.53025(V)		
	Active Display Area(mm)	1018.08(H) X 572.67(V)		
	Brightness(Typ.)	450 nit		

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

<b>Sl no</b>	<b>Description</b>	<b>Specification</b>	<b>Compliance (Yes / No)</b>	<b>Make &amp; Model Proposed</b>
	Contrast Ratio	5000:01:00		
	Viewing Angle(H/V)	178:178		
	Response Time(G-to-G)	4ms		
	Display Colours	16.7M		
	Colour Gamut	72%		
	Haze	0%		
	Feature			
	Key Features	LED Slim Video Wall Built-in MagicInfo Player S2, SSSP 2.0		
	Special Features	H/W: WiFi Module Embedded, SD Card Slot, Super Clear Coating, Temperature Sensor, Pivot Display, Clock Battery (80hrs Clock Keeping), Built in Speaker (10W x 2ch)		
		S/W:ACM Support (Advanced Color Management), Magic Clone (to USB), Auto Source Switching & Recovery, RS232C/RJ45 MDC, Plug and Play (DDC2B), PIP/PBP, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain(HDCP Support), Smart Scheduling, Smart F/W update, Built In MagicInfo Player S2, Video Wall (10X10), Firmware Update by Network, LFD New Home Screen, PC-less Video Wall, Predefined Template for Vertical Usage, MultiChannel, Mobile Control, Event Schedule, Backup Player		
	Internal Player	YES		
	Processor	1GHz Quad Core CPU		
	Main Memory Interface	1.5GB Dual 48bit DDR3-933 (1866MHz)		
	Graphics	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES		
	Storage (FDM)	8GB (1.2GB Occupied by O/S, 6.8GB Available, )		
	Multimedia	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG,VP8 Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc		
	Accessories	Media Controller, format converters,		



## TECHNICAL PROPOSAL SUBMISSION SHEETS

Sl no	Description	Specification	Compliance (Yes / No)	Make & Model Proposed
		mixtures and if any special hardware and software's required for displaying shall be provided.		
13	<b>Video Display Unit at Sub Division (Only digital signage display models)</b>			
	Feature	Description		
	Device	LED		
	Screen Size	32"/ 80 CM		
	Resolutions	Full HD 1920 X 1080		
	Display Type	Flat		
	IPS Panel	Yes		
	Aspect Ratio	16:9, Original, Full Wide, 4:3,		
	Audio Output	20 W		
	Smart TV Platform	OS (Supplied by Manufacturer)		
	WI-FI	Built IN		
	Full Web Browser			
	WiFi Direct			
	Miracast™			
	Network File Browser			
	Media Player			
	USB			
	Audio Codec	AC3(Dolby Digital), EAC3, HE-AAC, AAC, MP2, MP3, PCM, DTS, DTS-HD, DTS Express, RA, WMA		
	Ports	2 HDMI, 2 USB, LAN 1 etc		
	PowerSupply (Voltage, Hz)	100~240Vac, 50~60Hz		
	Accessories	To connect CPU or Computer System.		

**F. Approach and Methodology**

**The Approach and Methodology to be furnished with following parameter:**

- i. Understanding of Purchaser and its requirement with clear mention of the deliverables. Schematic diagram showing all the modules & components of the systems covered in the specification and integration with existing systems.
- ii. Description of the technical solution for achieving the integrations as shown in the above schematic diagram
- iii. Project Team Structure
- iv. Resource planning and estimation
- v. Risk planning
- vi. Detailed work plan with timelines

***a. Understanding of Utility and its requirement of Purchaser and its requirement with clear mention of the deliverables. Schematic diagram showing all the modules & components of the systems covered in the specification and integration with existing systems.***

Bidder should depict complete understanding of the as-is system of the Utility based on the information provided in the Bid Document. It should also require to list down all the deliverables that has been planned as a part of the overall project with timelines. Also provide details of prior interaction with Utility, if any.

***b. Description of technical solution for achieving the integrations.***

Please provide details of methodology followed by your organization in successfully implementing similar projects. Also highlight the special steps that your organization/ consortium intends to take in order to ensure that the change from current system to proposed one will be smooth and effective.

***c. Project Team Structure***

In this section please provide detail of the team that would be deployed by your organization to execute the project. Please provide details of the team structure in the following format:

**Table7: Proposed Project Team Structure**

Name of Staff	Position Assigned	International or Domestic	Firm	Employment status with the firm (Full time/ Associate)	Education (Degree, Year, Institution)	Area of Expertise and number of years of relevant experience	Task Assigned
A. Professional Staff							
B. Support Staff							

**d. Resource planning and estimation**

Bidder shall provide detailed staffing schedule of the professional and support staff in the following format:

- For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: IT administrator, field survey staff etc.).
- Months are counted from the start of the assignment. For each staff indicate separately staff input for off-site and on-site work.

**Table8: Proposed Resource Planning and Estimation**

No.	Name of Staff	Position	Staff Input							Total
			In Weeks	W1	W2	W3	W4	W5	.....	
	A. Professional Staff									
	B. Support Staff									

**e. Risk planning**

Bidder shall assess underlying risks in implementation of the Project and detail out the methodology to mitigate them. It may include development of a risk assessment matrix indicating severity of the risk, chance of its occurrence and its mitigation approach.

**Table9: Risk Planning**

Risk description	Risk category	Probability (%)	Impact  (High/medium/low) with impact description	Mitigation strategy

**f. Detailed work plan with timelines**

Please refer Schedule of Completion for the format.

S.NO.	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED	CONFIRMATION OF TIME SCHEDULE AS PER BIDDER (YES/NO)

## TECHNICAL PROPOSAL SUBMISSION SHEETS

S.NO.	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED	CONFIRMATION OF TIME SCHEDULE AS PER BIDDER (YES/NO)
1	Furnishing detailed specification/data sheet of all the software, hardware, cloud services etc. under the scope of the Agency. MIS Dashboards, report formats has to be submitted for approval	Within 30 days from the date of awarding contract ( detailed work order)  <i>** If not furnished within 45 days, the order may be cancelled.</i>	
2	Approval/ comments by Discom.	Within 15 days from the date of submission of point 1 above.	
3	Offer for Software and Hardware testing incorporating comments of Discom as per point No. 2	Within 60 days ** after activity as per point No. 2 above  <i>** If not offered within 75 days order may be cancelled</i>	
4	Testing of the system by Discom	Within 15 days after activity as per point No. 3	
5	Deployment of the system and Functional operation of the system	Within 30 days after activity as per point No. 4.	

**G. Project Experience and Confirmation of Pre - Qualification Requirement**

Bidder shall provide details of projects with application modules and other requirements (as mentioned in Eligibility Criteria,) which have been successfully completed during the last 3 financial years.

Please do not supply the names of clients who are no longer using your product/system.

The bidder is required to submit the details of Pre-Qualification documents in the table no 12 & 13 as the case may be.

Bidders need to submit the details as per the format in the table provided.

Table: The details of the same should be included in the following format and necessary supporting documents should be attached

**Table11: Details of Project Experience**

SI. No	Name of project	Brief Scope necessarily including role played by Bidder, modules implemented, sector classification	Owner of Project assignment (Client name)	Cost of assignment	Date of Awarded commencement	Date of completion	Was assignment satisfactorily completed	Was it a Power Sector Project? (Y/N) Provide Detail

**Table 12 : QUALIFICATION REQUIREMENT**

Note:

- In case of non-furnishing the requisite documents along with the bid, the bid will be considered as non-responsive and bid may be summarily rejected.**
- Irrespective of meeting the above qualification requirements, none of the consulting companies engaged by JodhpurDiscom as on 13.07.18 for IT Projects can bid for this tender.**

S. No.	Criteria	Supporting Documents Required
<b><i>For Companies / Proprietary Firms / Partnership Firms</i></b>		
A.	Bids can be submitted by a Company incorporated under applicable Companies Act /Proprietary Firm/ Partnership Firm incorporated under applicable Partnership Act	<b>Self-Declaration along with the following:</b> <ul style="list-style-type: none"> <li>• Copy of Self-Attested Incorporation Certificate in case of Company</li> <li>• Copy of Self-Attested Partnership Deed</li> </ul>

## TECHNICAL PROPOSAL SUBMISSION SHEETS

S. No.	Criteria	Supporting Documents Required
	and fulfilling the criteria mentioned in the subsequent points	<ul style="list-style-type: none"> <li>• Copy of Self-attested latest Income Tax Return</li> </ul>
<b>A.1</b>	i. The Bidders shall be minimum CMMI level 5 and shall have ISO 9001:2008 latest version valid for at least six months after submission of bid. ii. The Bidder shall have experience of implementing Web based billing and Revenue Management System through offered COTS** (SAP/Oracle) software in at least 3 Power Distribution utilities in India during last five years i.e. from Apr-2013 to June-2018 for a continuous period of 12 months in each utility. iii. Out of the above projects the billing operation for at least 20 lakhs consumer base should be in running condition in multiple /one project, if this condition is met through multiple project at least one project should be with 10 lakhs consumer base.	<b>Documents to be uploaded:</b> <ul style="list-style-type: none"> <li>• CMMI Certificate issued by SEI / CMMI institute.</li> <li>• Work orders issued in the name of the bidder by various Power Distribution utilities.</li> <li>• Performance/Work Completion Certificates issued by respective Distribution utilities for the orders issued.</li> </ul>
<b>Or</b>		
	i. The Bidders shall have ISO 9001:2008 & ISO 27001:2013 latest version valid for at least three months after submission of bid. ii. The Bidder shall have experience of implementing Web based billing and Revenue Management System through COTS** (SAP/Oracle) software in at least 3 Power Distribution utilities in India during last five years i.e. from Apr-2013 to Jun-2018 for a continuous period of 12 months in each utility. iii. Out of the above projects the billing operation for at least 30 lakhs consumer base should be in running condition in multiple /one project, if this condition is	<b>Documents to be uploaded:</b> <ul style="list-style-type: none"> <li>• Valid ISO certificate issued by accredited organisation.</li> <li>• Work orders issued in the name of the bidder by various Power Distribution utilities.</li> <li>• Performance/Work Completion Certificates issued by respective Distribution utilities for the orders issued.</li> </ul>

## TECHNICAL PROPOSAL SUBMISSION SHEETS

S. No.	Criteria	Supporting Documents Required
	met through multiple project at least one project should be with 20 lakhs consumer base.	
<b>A.2</b>	i. The Bidder should have a minimum average annual turnover of Rs. 30 Cr (Gross Turnover of 90Cr in last 3 years) in last three Financial Years (2015-16, 2016-17, 2017-18) ii. The Bidder should be profit making in the last 3 financial years (2015-16, 2016-17, 2017-18). iii. The Bidder should have positive net worth as on 31st March, 2018	<ul style="list-style-type: none"> <li>• Copy of the audited statement of accounts (P&amp;L Account &amp; Balance Sheet) duly certified by the Chartered Accountant along with certificate stating the Turnover, Profit, Net Worth shall be submitted as a proof. If final accounts of FY 2017-18 are not available provisional certificate duly certified by CA shall be submitted as a proof.</li> <li>• Adequate proofs as mentioned above duly certified by Chartered Accountant to be provided.</li> </ul> <p><b>Note:</b> Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets.</p>
<b>A.3</b>	The Bidder should not have been black listed by any power utility in India.	Self-Declaration for No Blacklisting on the appropriate stamp paper.

**\*\* The System Integrator shall produce an undertaking that the Core Billing Module shall be COTS, either SAP or ORACLE.**

**Table 13: QUALIFICATION REQUIREMENT**

S. No.	Criteria	Supporting Documents Required
<b>For Power Distribution Utilities</b>		
B	The Power Distribution Utilities irrespective of above QR may also bid subject to fulfilling the following requirements:	
B.1	i. Should have Distribution license / Franchisee for Electricity Distribution from the respective Regulator.	



## TECHNICAL PROPOSAL SUBMISSION SHEETS

S. No.	Criteria	Supporting Documents Required
	ii. Billing in their area of operation is being carried out through COTS** (Commercially off the Shelf) platform (SAP/ORACLE). iii. The System being used for at least 20 Lakhs consumers in its area of operation cumulatively for a continuous period of 12 months during last 3 years Apr-2015 to Jun-2018. iv. Such project shall be in running condition as on 13-07-18 v. The undertaking that the core Billing Module used under this Bid shall be SAP / ORACLE should be produced.	

**\*\* The System Integrator shall produce an undertaking that the Core Billing Module shall be COTS, either SAP or ORACLE.**

**2. Team details (CVs)**

Use the following format for key personnel who would be involved in the project. Please include details of team members proposed to implement the project. Please ensure that the CV has a maximum length of 3 pages.

In case of replacement of Supplier personal from the project team, Supplier is required to submit to the nominated Utility personal the CV of the new person with equivalent or better education qualification and relevant professional experience who will be joining the team and get in duly approved. The new person can start working in the project only after his/her CV has been approved by the Utility.

**Table 14: Format of Curriculum Vitae**

<b>1.</b>	<b>Proposed Position:</b>			
<b>2.</b>	<b>Name of Firm</b>			
<b>3.</b>	<b>Name of Staff:</b>			
<b>4.</b>	<b>Date of Birth:</b>		<b>Nationality:</b>	
<b>5.</b>	<b>Education:</b>			
	<b>Year</b>	<b>Degree/Examination</b>	<b>Institute/Board</b>	
<b>6.</b>	<b>Membership of Professional Associations:</b>			
<b>7.</b>	<b>Other Training:</b>			
<b>8.</b>	<b>Countries of Work Experience:</b>			
<b>9.</b>	<b>Languages:</b>			
	<b>Language</b>	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>

**TECHNICAL PROPOSAL SUBMISSION SHEETS**

<b>10.</b>	<b>Employment Record:</b>		
	<b>From</b>	<b>To</b>	<b>Employer</b>
			<b>Positions Held</b>
<b>11.</b>	<b>Detailed Tasks Assigned:</b>	<b>12.</b>	<b>Work Undertaken that best illustrates capability to handle the tasks assigned:</b>
	•		
<b>13.</b>	<b>Certification:</b>		
I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.			
Signature of person		Date:	
Full name of person :			
Signature & Name of Authorised person(Bid Signing Authority) verifying the facts			

**3. Details of Key Personnel's**

The bidder has to deploy specialized and experienced resources for the successful and timely completion of the project. It is therefore desirable that the key personnel in the team as under :

<b>Project Manager</b>	
<b>Functional leads</b>	

<b>Technical Lead- Interface/ data conversion/ customization</b>	
------------------------------------------------------------------------------	--

The Bidder shall provide the key personnel namely the Project Manager, Functional Leads, Technical Leads and any other Specialist/Analysts required as appropriate. They need to have sufficient experience as specified above (profile of teams) in terms of relevance and number of years required to implement the proposed System. They are to be assigned to the project on full time basis. Should the profile of any personnel be not acceptable to Discom, Discom will require the IP to suitably replace such personnel.

If for any reason beyond the control of the system, their arises a need to replace any personnel, the IP shall provide a replacement person of equivalent or better qualification and experience, subject to the written approval of Discom.

**4. Facility Management Services Plan**

The detail plan for FMS shall be given in accordance with the tender Document. In case of deviations, the same should be clearly indicated in Deviation sheet.

**5. Project Management Practices**

Please provide high-level details of the project management practices that will be followed to manage the project. The project management practices would include (but not be limited to) details of:-

- Bidder must provide details of how they envisage the contract being managed including principles such as (but not limited to) joint planning and control mechanisms; regular and active review meetings; Project management of individual work streams and overall program management of the entire service; Performance reporting
- Bidder should outline their proposed governance structure and designate a Service Manager to co-ordinate their activities and provide a focal point of contact to which Utility can refer on any matter concerning the service.
- Reporting lines and decision-making powers within the bidder’s organization must be explained

- Reporting formats and templates that would be followed by the bidders
- Outline the proposed escalation procedures in the event that issues arise.

**6. Quality Assurance**

- Quality of service - Suppliers must provide details of their proposed approach to quality assurance to ensure the quality of services in accordance with the tender document. This should include:
  - Responsibility of quality of service;
  - How the supplier will ensure quality service is provided;
  - How quality will be measured
  - Does your company (and consortium partner) have any quality certification / Assessment? If so, please provide your responses for the following:

**Table16: Details of Certification**

Description	Bidder's Response
Certification / Assessment Name	
Who issued the certification/assessment?	
When was the certification/assessment obtained?	
Does this certification/assessment process involve periodic reviews and observations/ remarks after such review? If so, please provide details and specify when your company is due for its next quality review?	

- Please specify your company's process for product development and enhancements.

**7. Documentation**

Please provide a list and brief description of all user documents that will be provided along with the software package. This must include the following minimum documents:

- System and administration manuals
- Technical support handbook
- User Manuals
- Error Messages and their Meanings



- Training Manuals
- Analysis & Design Manuals with the relevant data flow diagrams, entity relationship diagrams, schemas etc.
- Additions/ changes to the documents after upgrades and
- Operations Manuals.

**8. Check List**

S. No	Pre-Qualification Requirement	Yes / No
1.	Is the cover letter attached with the bid proposal	
2.	Is the tender cost attached with the proposal	
3.	Is the Earnest Money attached with the proposal	
4.	Is the certificate as to corporate principal	
5.	Is the bidder-company statistics attached with the proposal	
6.	Is the bid structure according to proposal	
7.	Is the technical specification requirement of application packages attached with the proposal	
8.	Is the hardware technical specifications attached with the proposal	
9.	Is the Manufacturer's Authorization Form attached with the proposal	
10.	Is the necessary certificate / authorization for back to back arrangement with respective OEM vendor for Technical support , Annual Maintenance / warranty etc. enclosed with the proposal	
11.	Is the Approach and Methodology attached with the proposal	
12.	Is the Project Experience and Confirmation of Pre-Qualification Requirement attached with the proposal	
13.	Is the Team Details (CVs) attached with the proposal	
14.	Is the Details of Key Personnel's attached with the proposal	
15.	Is Firm Detail attached with the bid proposal	
16.	Is the Facility Management Services Plan attached with the proposal	
17.	Is the Project Management Practices attached with the proposal	
18.	Is the Quality Assurance attached with the proposal	
19.	Is the Documentation Details attached with the proposal	
20.	Is the Confirmation of No-Deviation and Deviation Sheet attached with the proposal	
21.	Is the Supporting Documents to Substantiate Meeting of Pre-Qualification requirement attached with the proposal	
22.	Does the bid proposal contains the part B that is the financial proposal in a sealed envelope	
23.	Is financial offer enclosed is duly sealed and super-scribed as provided in tender document	

TECHNICAL PROPOSAL SUBMISSION SHEETS

S. No	Pre-Qualification Requirement	Yes / No
24.	Has the bidder provided project organization structure	
25.	Has the bidder provided schematic flow of information	
26.	Are the technical and commercial proposals enclosed that are duly sealed and super-scribed as provided in tender document	
27.	Are all the pages of the proposal signed by an authorized representative of the bidder's firm (in case of consortium, then from the leading member's firm)	
28.	Does the bid contains the name, address and place of business of the person or persons making the bid and is the bid signed and sealed by the bidder under his usual signature.	
29.	Is satisfactory evidence of authority of the person signing on behalf of the Bidder furnished with the bid	
30.	Is the bidder's name stated on the proposal same as that of the legal name of the firm	
31.	Do any / all erasures or other changes in the bid documents bear the initials of the person signing the bid	
32.	Are all entries and amendments also signed	
33.	Are all pages of the attached tender specification document signed, as a token of acceptance of the terms and conditions, except those mentioned in the deviation list	

(Signature).....

Date :

(Name).....

Place :

(Designation).....

(Common Seal).....



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## Section 7. OTHER UNDERTAKINGS

### 7.1. CONFIRMATION OF “NO DEVIATION” IN TECHNICAL / COMMERCIAL TERMS AND CONDITIONS OF THIS TENDER

(To be furnished on Bidder’s Letterhead.)

Bidder's Name & Address:

To

The Superintending Engineer (IT)

JodhpurVidyyutVitrana Nigam Limited

New Power House Premises

Jodhpur-342003

Dear Sirs,

Sub: Confirmation for “No Deviation” in Technical / Commercial terms & conditions of TN-IT-09

We hereby confirm that there is no deviation in technical / commercial terms & conditions stipulated in the bidding documents and we agree to adhere the same strictly.

(Signature).....

(Name).....

(Designation).....

(Common Seal).....

Date :

Place :

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**7.2. UNDERTAKING FOR VARIOUS INFORMATION FURNISHED**

**(To be furnished on appropriate non-judicial Stamp Paper of Rs. 100/-, duly notarized)**

Bidder's Name & Address:

To  
The Superintending Engineer (IT)  
JodhpurVidyutVitrana Nigam Limited  
New Power House Premises  
Jodhpur-342003

Dear Sir,

Sub: Undertaking for various information against TN-IT-09

We hereby confirm that that all the information against this bid and all other Certificates etc. furnished are correct and if in future Discom discover that any information furnished is not true, same may lead to the rejection of bid or termination of contract.

(Signature).....

(Name).....

(Designation).....

(Common Seal).....

Date :

Place :

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### 7.3. BIDDER'S AUTHORISATION CERTIFICATE

(To be furnished on Bidder's Letterhead.)

To,

The Superintending Engineer (IT)  
JodhpurVidyutVitrana Nigam Limited  
New Power House Premises  
Jodhpur-342003

[Reference No. ]

I/ We <Name/ Designation> hereby declare/ certify that <Name/ Designation> is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with Tender/ NIT reference No. \_\_\_\_\_ dated \_\_\_\_\_. He/ She is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Thanking you,

Name of the Bidder: -

Verified Signature:

Authorised Signatory: -

Seal of the Organization: -

Date: \_\_\_\_\_

Place: \_\_\_\_\_

***Please attach the board resolution / valid power of attorney in favour of person signing this authorizing letter.***



**7.4. POWER OF ATTORNEY IN FAVOUR OF AUTHORISED SIGNATORY OF THE BIDDER**

*(To be stamped Non-Judicial Stamp Paper of Rs. 500/- duly notarized in name of the Bidding Entity)*

## 7.5. FORMAT OF BANK GUARANTEE

*(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper should be in the name of the issuing Bank)*

Bank Guarantee No.: .....

Date: .....

To: *(insert Name and Address of Employer)*

WHEREAS M/s. .... *(insert name of Bidder)*..... having its Registered/Head Office at ..... *(insert address of the Bidder)* ..... *(hereinafter called "the Bidder")* has submitted its Bid for the performance of the Contract for.....*(insert name of the Package)*.....under.....*(insert Specification No)*.....*(hereinafter called "the Bid")*

KNOW ALL PERSONS by these present that WE ..... *(insert name & address of the issuing bank)* ..... having its Registered/Head Office at .....*(insert address of registered office of the bank)*..... *(hereinafter called "the Bank")*, are bound unto JodhpurViduytVitaran Nigam Limited *(hereinafter called "the Employer")* in the sum of .....*(insert amount of Bid Security in figures & words)*..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Seal of the said Bank this ..... day of ..... 20....

THE CONDITIONS of this obligation are:

- (1) If the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form; or
- (2) If the Bidder does not accept the corrections to arithmetical errors identified during preliminary evaluation of his bid pursuant to Tender document; or
- (3) If, as per the requirement of Qualification Requirements the Bidder is required to submit any Undertaking/Agreement and he fails to submit the same, duly attested by Notary Public of the place(s) of the respective executant(s) along with the Bid within ten days from the date of intimation of post – bid discussion; or
- (4) in the case of a successful Bidder, if the Bidder fails within the specified time limit
  - (i) to sign the Contract Agreement, in accordance with Tender document, or
  - (ii) to furnish the required performance security, in accordance with the Tender document. or

OTHER UNDERTAKINGS

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(5) In any other case specifically provided for in the Tender document.

We undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it, owing to the occurrence of any of the above-named CONDITIONS or their combination, and specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including ..... (*insert date, which shall be the date 180 days from the date of Technical Bid Opening*)....., and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

[*Signature of the authorised signatory(ies)*]

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

POA Number \_\_\_\_\_

Contact Number(s): Tel. \_\_\_\_\_ Mobile \_\_\_\_\_

Fax Number \_\_\_\_\_

Email \_\_\_\_\_

Seal of the Bank \_\_\_\_\_

Witness:

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

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Contact Number(s): Tel. \_\_\_\_\_ Mobile \_\_\_\_\_

Email \_\_\_\_\_

Note:

1. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee]:

Quote

“Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed \_\_\_\_\_ (value in figures) \_\_\_\_\_ [ \_\_\_\_\_ (value in words) \_\_\_\_\_ ].
2. This Bank Guarantee shall be valid upto \_\_\_\_\_ (validity date) \_\_\_\_\_ .
3. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before \_\_\_\_\_ (validity date) \_\_\_\_\_ .”

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## 7.6. SELF DECLARATION OF NO BLACKLISTING

**(To be furnished on appropriate non-judicial Stamp Paper of Rs. 100/-, duly notarized)**

To,

The Superintending Engineer (IT)  
JodhpurVidyutVitrana Nigam Limited  
New Power House Premises  
Jodhpur-342003

In response to the NIT Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for {Project Title}, as an Owner/ Partner/ Director/ Auth. Sign. Of \_\_\_\_\_, I/ We hereby declare that presently our Company/ firm \_\_\_\_\_, at the time of bidding: -

- a. possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Discom;
- b. have fulfilled my/ our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
- c. is having unblemished record and is not declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central government/ PSU/ UT.
- d. does not have any previous transgressions with any entity in India or any other country during the last three years
- e. does not blacklisted by any of the Central/State power utilities in India for fraudulent and corrupt practices
- f. is not insolvent in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and is not the subject of legal proceedings for any of the foregoing reasons;
- g. does not have, and our directors and officers not have been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a contract within a period of three years preceding the commencement of the contract, or not have been otherwise disqualified pursuant to debarment proceedings;



OTHER UNDERTAKINGS

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- h. does not have a conflict of interest as mentioned in the bidding document which materially affects the fair competition.
- i. will comply with the code of integrity as specified in the bidding document.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken as per the provisions of the applicable Act and Rules thereto prescribed by GoR, my/ our security may be forfeited in full and our bid, to the extent accepted, may be cancelled

Thanking you,

Signature.....

In the capacity of.....

Duly authorised to sign Proposal for And on behalf of.....

Seal of the Organization: -

Date.....

Place.....

## Section 8. FORMAT FOR FINANCIAL BID SUBMISSION

(Not to be filled here)

**(Financial offer has to be furnished in BOQ excel file).**

To,  
The Superintending Engineer [IT]  
Jodhpur Vidyut Vitran Nigam Ltd.,  
New Power House Premises  
Jodhpur - 342003.

**SUB: "REVENUE MANAGEMENT SYSTEM ON SAAS (SYSTEM AS A SERVICE) BASIS" against TN-IT-09**

Dear Sir,

We have procured the bid documents for engagement of Agency for "REVENUE MANAGEMENT SYSTEM ON SAAS (SYSTEM AS A SERVICE) BASIS". We are submitting our financial proposal as hereunder:

Figures in Rs.

S.No	PARTICULARS	Unit price (Price quoted for per consumer bill generation per month	No. of consumers	Total Price for 60 months
1	Services as per specifications per consumer bill generation per month			
2	<b>OPTIONAL: Meter reading by deployment of the requisite manpower (shall Not be part of evaluation)</b>			

The quoted prices are exclusive of applicable service tax/GST any statutory variation and imposing new tax by government shall be on Discom account.

**The prices quoted in the BOQ are as defined in the RFP & the financial evaluation of the L-1 bidder shall be as per RFP.**

Name: \_\_\_\_\_

[Authorized Signatory]

## Section 9. ANNEXURES – BILL OF MATERIAL

### 9.1. Bill of Material for Hardware to be deployed:

List of hardware to be deployed in each office as defined below:

Sl no	Item Description	Make & Model	OEM Name
1	Desktop PCs		
2	80 Column Printer / Slip Printer for Cash Counter		
3	UPS (1x 2KVA– 4hrs backup)		
4	UPS (1x 1KVA– 2hrs backup)		
5	Network Laser printer		
6	Laser printer		
7	No. of ANDROID Smart Phones, ***		
8	Bluetooth Mobile printer, ***		
9	Power Bank, Accessories etc ***		
10	GPRS / 2G / 3G / 4G SIMs with necessary Data Packs		
11	Bar Code Reader		
12	QR Reader		
13	Line Matrix Printer		
14	Visual Display Unit (LED TV 32 Inches)		
15	12-Panel Video Wall (LED TV 46 Inches)		
16	Furniture: Computer Table, Chairs for all PC's		
17	Electrical Equipment & Fittings and Site Preparation		

### 9.2. Bill of Material for the Software to be deployed as mentioned below:

S.No.	Application Module and System Software Name	Proposed OEM Solution