

Tender No. T.16011/2/2018-EinC(P)/W-II/1

Cost of Tender document Rs. 1500.00

**TENDER DOCUMENT FOR
SUPPLY & INSTALLATION OF COMPUTER &
ACCESSORIES, NETWORKING EQUIPMENTS
AND METERS
(Under IPDS Phase-II IT Enablement)**



Power & Electricity Department
Govt. of Mizoram

The information provided by the bidders in response to this Tender Document will become the property of Power & Electricity Department, Govt. of Mizoram and will not be returned, Power & Electricity Department reserves the right to amend, rescind or reissue this Tender Document and all amendments will be advised to the bidders and such amendments will be binding on them. This document is prepared by Purchaser for Supply & Installation of Computer hardware & Accessories, Networking Equipments, Meters & GPS Based Survey. It should not be reused or copied or used either partially or fully in any form.

Section - I Invitation for Bids [IFB]

1. This invitation for bids follows the procurement notice inviting tender (Invitation for Bids) for the subject package(s). This shall also be available on **Power & Electricity Department, Govt. of Mizoram** website www.power.mizoram.gov.in from Date **01.07.2019**
2. **Power & Electricity Department, Govt. of Mizoram** (hereinafter referred to as **P&ED**) have been entrusted to execute the Project i.e., **Enablement of IT Application Phase-II for 12 (twelve) towns in Mizoram Under Integrated Power Development Scheme (IPDS)** on behalf of Government of Mizoram. The execution of the project shall be funded out of the proceeds of financial assistance to be received by Government of Mizoram from **Ministry of Power, Govt. of India through Power Finance Corporation Ltd. (PFC)** and the ownership of the project shall remain vested with Government of Mizoram. The project shall be executed by P&ED on turnkey basis and all eligible payment under the project shall be made from the proceeds of financial assistance to be received by Government of Mizoram. For the purpose of all procurement activities related to the aforesaid project, P&ED shall be referred to as 'Employer' and Government of Mizoram 'the Owner'.
3. P&ED, therefore, invites sealed bids from eligible bidders for the following on Domestic Competitive Bidding basis and bids must be accompanied by earnest money of 2% of the tender value:

SCOPE OF WORK	Name of towns	Tender Value (Rs in Crore)	Earnest Money (Rs in lakhs)
Supply & Installation of Computer & Accessories, Networking Equipments, Meters & GPS based Survey	Hnahthial	3.61	7.00
	Tlabung		
	Khawhai		
	Thenzawl		
	N. Vanlaiphai		
	Biate		
	Kawnpui		
	Mamit		
	Vairengte		
	Bairabi		
	Darlawn		
	Zawlnuam		

4. Minimum Eligibility Criteria /Pre-qualification criteria

The Bidder:

- A. Should be Original Equipment Manufacturers (OEM) / Authorized Dealer (AUD) / Distributor of OEM.
- B. Bidders quoting as Authorized Distributors / dealers of the manufacturer will be considered provided:
 - 1. The Bidder furnishes Authorization from the Manufacturer of Computer Hardware, Desktop PCs, Switches/Router, Spot Billing System, Meter etc. as per Annexure-II.
 - 2. The Bidder as authorized agent, has supplied installed and commissioned computer hardware and peripherals of the kind required by the Purchaser and has provided after sales service satisfactory and such computer hardware and peripherals must be in satisfactory operation for at least 2 years on the date of Bid Opening and must be providing annual maintenance services for the above Installations
- C. Should be a Registered Company.
- D. Should be in existence in core Computer hardware sales and services business for the last two (2) years.
- E. Should have direct support centers at Aizawl. In case of support through service partners, details of customers supports by the service partners to be attached.

Scope of Work

The scope of work under the subject package includes site survey, planning, design, engineering, assembly manufacturing, testing, supply, loading, transportation, unloading, insurance, delivery at site, handling, storage, installation, testing, commissioning and documentation of all items / materials required to complete IT enablement under IPDS Phase-II in all 12 towns under Integrated Power Development Scheme which inter-alia includes Supply & Installation of Computer & Accessories, network equipment, software integration and Installation of Meters and other related IT equipment & GPS Based Survey.

Schedule of Events

S.No.	Bid Reference	
1.	Purpose	Supply & Installation of Computers & Accessories, Networking equipments, Meters & GPS Based Survey
2.	Cost of Tender	Rs. 1500.00 (To be Submitted as Demand Draft/Banker's Cheque in favour of Engineer-in-Chief, Power & Electricity Department payable at Aizawl.
3.	Date of Sale of Tender	Dt. 01.07.2019 at Superintending Engineer Office, Works-II Branch from 10:00am to 4:00pm
4.	No.of Envelopes (Non window, Sealed) to be submitted.	02 (Two), containing : 1. Forwarding letter as per Annexure V , Pre Qualification and Technical Bids as per Annexure I , Manufactures Authorization Form as per Annexure II , Bid form as per Annexure III & Service Support Details as per Annexure IV 2. Financial Bid as per Annexure IX
5.	Date & Venue of Pre-bid meeting	Office of the Engineer-in-Chief, Power & Electricity Department, Kawlphetha, New Secretariat Complex, Khatla at 13:00 hrs dt. 09.07.2019
6.	Last Date of Submission of bids.	13:00 hrs , Dt. 25.07. 2019
7.	Venue, Date and Time of opening of Bids.	Office of the Engineer-in-Chief, Power & Electricity Department, Kawlphetha, New Secretariat Complex, Khatla at 14:00 hrs dt. 25.07. 2019
8.	Address for Submission of Bids.	Works-II Branch, Office of the Engineer-in-Chief, Power & Electricity Department, Kawlphetha, New Secretariat Complex, Khatla
9.	Completion Period	Supply and Installation of materials under the scope of work should be completed within 12 months from signing of Contract Agreement.

Section -II **Instruction for Bidders**

Introduction

The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents may result in the rejection of its bid and will be at the bidders own risk.

2. Pre-bid meeting / Clarification of Bids

2.1 The bidder or its official representative (not more than two members from each bidder) are invited to attend pre-bid meeting to be held on date and time at the venue mentioned in section I (Schedule of events). It is the responsibility of the Bidders representative (only one person per vendor) to be present at the venue of opening of Bids.

2.2 Clarification sought by bidder should be in writing (Letter) / Email and submitted before pre-bid meeting.

2.3 The text of the questions raised (without identifying the source of enquiry) and the response given by the Purchaser, together with amendment(s) to the bidding document, if any, will be intimated to the bidders within 2 working days after pre-bid meeting

2.4 In case of any clarification required by Purchaser to assist in the examination, evaluation and comparison of bids, Purchaser may, at its discretion, ask the Bidder for clarification. The response / Clarification shall be in writing and no change in the price of substance of the bid shall be sought, offered or permitted.

2.5 Technical Bid- Bidder should submit point by point compliance to the technical compliance and it should be included in the Bid. Any deviations from the specifications should be clearly brought out in the bid

2.6 Earnest Money Deposit of 2% of work value in Demand draft from any scheduled banks should be accompanied by the bidding documents

3. Amendment to the bidding document

3.1 At any time prior to the deadline for submission of Bids, the Purchaser, for any reason, whether, at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the Bidding Document, by amendment.

3.2 All prospective Bidders that have received the bidding Document from the Purchaser will be notified of the amendment in writing (letter/Email) and the said amendments will be binding on them.

3.3 In order to allow prospective Bidders reasonable time in which to take the amendment into account in preparing their fields, the Purchaser, at its discretion, may extend the deadline for the submission of Bids.

4. Cost of Bidding

The Bidder shall bear all the costs associated with the preparation and submission of its Bid, and the Purchaser will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Bidding process.

5 . Documents constituting the Bid

The Bidding document includes the following :

Invitation to Bid	Section I
Instruction for Bidding	Section II
General Terms and Conditions	Section III
Special Terms and Conditions	Section IV
Technical Specifications for Computer Hardware	Section V
Technical Bid (Pre Qualification)	Annexure I
Manufacture Authorization Form [MAF]	Annexure II
Bid Form	Annexure III
Service Support Details	Annexure IV
Forwarding Letter	Annexure V
Proforma of Indemnity	Annexure VI
Acceptance Criteria	Annexure VII
Undertaking of Authenticity for Hardware Items	Annexure VIII
Financial Bid (Price Schedule)	Annexure IX

6. Period of Validity of Bids

360 days from the last date of submission of tender document and shall be binding on the bidder, If, Purchaser chooses to place the purchase order (PO) or repeat order(s), on or before that date. The Purchaser, however, reserves the right to call for fresh quotes at any time during the period, if considered necessary.

7. Format and signing of Bid

- 7.1 The Bidder shall prepare and submit the original bid, clearly marking “ORIGINAL BID FOR SUPPLY OF COMPUTER & ACCESSORIES, NETWORKING EQUIPMENTS AND METERS” on the top of the cover. Technical and Commercial Bids should placed in two separate envelopes super scribed Technical and Commercial Bids respectively.
- 7.2 The Original bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person(s) duly authorized to bind the Bidder to the contract. The person(s) signing the bids shall initial all the pages of the bid documents.
- 7.3 Any interlineations, erasures or overwriting shall be valid only if they are initiated by the person signing the bids.

8. Sealing and Marking Of Bids

- 8.1 The bidder shall submit a sealed non-window envelope containing -
- Pre-qualification/minimum eligibility criteria Technical bid and payment for Rs. 1500/- towards application amount in sealed non-window envelope.
 - Financial bid in sealed non-window envelope.
- 8.2 The Bidder shall seal the first envelope containing Pre-qualification/Minimum Eligibility Criteria and Technical bid in NON-WINDOW. The envelope should be super scribed with "**BID FOR SUPPLY & INSTALLATION OF COMPUTER & ACCESSORIES, NETWORKING EQUIPMENTS, METERS & GPS BASED SURVEY – TECHNICAL PROPOSAL**".
- 8.3 The Bidder shall seal the second envelope containing Commercial Bid in NON-WINDOW. The envelope should be superscripted with "**BID FOR SUPPLY & INSTALLATION OF COMPUTER & ACCESSORIES, NETWORKING EQUIPMENTS, METERS & GPS BASED SURVEY - FINANCIAL PROPOSAL**".
- 8.4 The third envelope shall contain the first and second envelopes should be addressed to the Purchaser at the address given below:
- The Engineer-in-Chief,
Power & Electricity Department,
Govt. of Mizoram**
- 8.5 If the envelope is not sealed and marked, the Purchaser will assume no responsibility for the Bid's misplacement or its premature opening.
- 8.6 The bid should be submitted in person.

9. Last date for submission of Bids

Last date for bid submission is mentioned in Section I (Schedule of events).

- 9.1 In the event of the specified date for the submission of bid is, being declared a holiday for the Purchaser, the bids will be received upto the appointed time on the next working day.
- 9.2 The Purchaser may, at its discretion, extend the deadline for submission of Bids by amending the Bid Documents, in which case, all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 9.3 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser will be rejected and returned unopened to the bidder.
- 9.4 Modification And / Or Withdrawal of Bids:

Bids once submitted will be treated, as final and no further correspondence will be entertained. No bid shall be modified after the deadline for submission of bids.

The Purchaser has the right to reject any or all tenders received without assigning any reason whatsoever. The Purchaser shall not be responsible for non-receipt/non-delivery of the bid documents due to any reason whatsoever.

10. Documents Establishing Bidder's Eligibility and Qualification

- 10.1 The Bidder shall furnish, as part of its Bid, documents establishing the Bidder's eligibility to Bid and its qualifications to perform the contract.

- 10.2 The documentary evidence of the Bidder's qualifications to perform the Contract, if its Bid is accepted shall be established to the Purchaser's satisfaction:
- 10.3 That the Bidder has the Financial, Technical and Production/ Distribution/Service capability necessary to perform the contract:
- 10.4 That the Bidder meets the qualification criteria as required under Minimum Eligibility Criteria.
- 10.5 That adequate, specialized hardware, related software experts are already/available to ensure that the support services are responsive and the Bidder will assume total responsibility for the fault free operation of hardware, software and maintenance during the mandatory 3 year warranty period and provide necessary maintenance services for further period, if desired by the Purchaser after the end of warranty period.

11. The Purchaser's Right to accept any Bid and to reject any or all Bids

- 11.1 The Purchaser may at its discretion evaluate the vendors for supply of items detailed above based on the qualitative aspects broadly in respect of one or more of the following parameters:
 - Financial strength and market reputation
 - Annual Turnover for last 2 consecutive years
 - Spread of Network of service centers
 - Quality and Promptness of services support
 - Vendors ability to honor the commitments
 - Purchaser's own past experience
- 11.2 The Purchaser reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to placing of purchase order, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

12. Evaluation of Bids

- 12.1 Clarification of Bids-

During evaluation of Bids, the Purchaser, at its discretion, may ask the Bidders for clarification of the Bid. The request for clarification and the response shall be in writing (letter/e-Mail), and no change in the substance of the Bid shall be sought, offered or permitted.
- 12.2 Preliminary Examination /Pre-qualification
 - 12.2.1 In the first stage, Pre-qualification/Technical Bids will be opened. It is the responsibility of the bidder's representative to be present at the time, on the date and at the place specified in the tender document. The Bidder's representative who is present shall sign a in the bid opening register document evidencing their attendance.
 - 12.2.2 The Purchaser will examine the Bids to determine whether they are complete, the documents have been properly signed, supporting papers/documents attached and the bids are generally in order
 - 12.2.3 The Purchaser may, at its sole discretion, waive any minor infirmity, nonconformity or irregularity in a Bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder.
 - 12.2.4 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each Bid to the Bidding document. For purposes of these Clauses, a

substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations. The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, without recourse to extrinsic evidence. The Purchaser would also evaluate the Bids on technical parameters.

12.2.5 If a Bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

12.2.6 The Bidder is expected to examine all instructions, forms, terms and specification in the Bidding Document. Failure to furnish all information required by the Bidding Document or to submit a Bid not substantially responsive to the Bidding Document in every respect will be at the Bidder's risk and may result in the rejection of its Bid.

12.3 Arithmetic errors, if any, in the price breakup format will be rectified on the following basis:

If there is discrepancy between the unit price and the total price, which is obtained by multiplying the unit price with quantity, the unit price shall prevail and the total price shall be corrected unless it is a lower figure.

If the supplier does not accept the correction of errors, the bid will be rejected.

If there is discrepancy in the unit-price quoted in figures and words, the unit price, in figures or in words, as the case may be, which corresponds to the total bid price for the item shall be taken as correct.

If the vendor has not worked out the total bid price or the total bid price does not correspond to the unit price quoted either in words or figures, the unit price quoted in words shall be taken as correct.

12.4 The Purchaser may waive off any minor infirmity or nonconformity or irregularity in a bid, which does not constitute a material deviation, provided such a waiving, does not prejudice or effect the relative ranking of any bidder.

13. Contacting the Purchaser

13.1 Bidder shall NOT contact the Purchaser on any matter relating to its Bid, from the time of opening of Bid to the time a communication in writing about its qualification otherwise received from the Purchaser.

13.2 Any effort by the Bidder to influence the Purchaser in its decisions on Bid evaluation, Bid comparison may result in the rejection of the Bidder's Bid.

14. Award of Contract

14.1 The Purchaser will award the contract to the successful Bidder, out of the Bidders who have responded to Purchaser's tender as referred above, who has been determined to qualify to perform the contract satisfactorily, and whose Bid has been determined to be substantially responsive, and is the lowest evaluated Bid.

14.2 The Purchaser reserves the right at the time of award of contract to increase or decrease of the quantity of goods or services or change in location where equipments are to be supplied from what was originally specified while floating the tender without any change in unit price or any other terms and conditions.

Section - III

General Terms and Conditions

(These terms and conditions are generic in nature, which have been mentioned for the knowledge of the bidders and may be changed to specific terms and conditions with necessary changes with each Purchase Order as and when applicable)

1. Definitions

In this Contract the following terms shall be interpreted as indicated :

- 1.1 "The Purchaser" means Power & Electricity Department, Govt. of Mizoram.
- 1.2 "The Contract" means the agreement entered into between the Purchaser, represented by its Officer and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices there to and all documents incorporated by reference therein;
- 1.3 "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations
- 1.4 "The Goods" means all of the equipment, machinery., and/or other material's which the Supplier is required to supply to the Purchaser under the Contract;
- 1.5 "The Services" means these services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, , provision of technical assistance, training and other such obligations of the Supplier covered under the Purchase Contract.
- 1.6 "TCC" means the Terms and Conditions of Contract contained in this section;
- 1.7 "The Supplier/Contractor" or "the Vendor" means the individual or firm supplying or intending to supply the Goods and Services under this Contract; and

2. Use of Contract Documents and Information

- 2.1 The Supplier shall not, without the Purchaser's prior written concern disclose the Contract, or any provision thereof, or any specification, plan , drawing pattern sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 2.2 The Supplier will treat as confidential all data and information about the Purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser.

3. Subcontracts

- 3.1 The Supplier shall not assign subcontract to others, in whole or in part, their obligation to perform under the contract, except with the Purchaser's prior written consent. However

the services from the OEM directly will be given preference in case the partner is not in the geographical area.

- 3.2 The Supplier shall notify and obtain concurrence from the Purchaser in writing of all subcontracts/Franchisee awarded under the contract, if not already specified in the quotation. Such notification, in the original quotation or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 3.3 Subcontracts / Franchisees must comply with the provisions of TCC.

4. Delivery

- 4.1 The Bidder should deliver the goods/services within stipulated time as mentioned in Special terms and conditions from the date of Purchase Order.
- 4.2 Delivery of the Goods shall be made by the Supplier in accordance with the terms of the Purchase Contract. The vendor should take responsibility of the Goods till it reaches the delivery destination as informed by the Purchaser, transport to such place of destination in India, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier. Vendor shall organize the road Permits wherever required, any letter required for this will be given by the Purchaser.
- 4.5 The Purchaser will consider the inability of the Bidder to deliver or install all the equipment within the specified time limit, as a breach of contract and would entail the payment of Liquidation Damages on the part of the Bidder.

The liquidation damages represent an estimate of the loss or damage that the Purchaser may have suffered due to delay in performance of the obligations (relating to delivery, operationalisation, warranty, maintenance etc. of the deliverables) by the Bidder.

- 4.6 The Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum as specified in Special Terms and Conditions
- 4.7 Products shall be supplied in a ready to use condition along with all Cables, Connectors, Software Drivers, Manuals and Media etc,

5. Delivery and Documents

The details of shipping and/or other documents to be furnished by the Supplier are specified hereunder.

1. Original copy of Supplier's invoices showing contract number, goods description, quantity, unit price and total amount;
2. Manufacturer's / Supplier's warranty certificate:

6. Price

- 6.1 Prices quoted by the bidders should include all taxes, GST, packing & forwarding and transportation costs and insurance costs till the equipment is accepted & installed.

- 6.2 Once a contract price is arrived at, due to fluctuation in foreign currency, change in the duty/tax structure, changes in costs related to the materials and labour or other components or for any other reason if the price goes down, an equitable adjustment of the Contract price shall be made to fully take into account of any such change but otherwise, the price will remain firm.
- 6.3 The prices quoted shall be valid for a minimum period of Twelve months from the last date for submission of offers. However if the configuration becomes obsolete then a higher version or equal version of the same can be supplied post clarification to the Purchaser. The part/model no should be mentioned on the rollover model with no change in prices.
- 6.4 Further, subsequent to the orders being placed/agreement executed, the Bidder shall pass on to the Purchaser all fiscal benefits arising out of reductions in all Government Levies otherwise rates are firm during the entire contract period .

7. Terms of Payment

10% interest bearing advance on the start of project i.e. signing of contract agreement.

7.1 **Supply:**

7.1.1 **First Installment (60%):** Sixty percent (60%) payments against items of each town including taxes etc. shall be paid on receipt and acceptance of Materials on submission of documents indicated herein under:

- a. Evidence of dispatch (R/R or receipted L/R)
- b. Contractor's detailed invoice & packing list identifying contents of each shipment.
- c. Invoice certifying payments of Taxes for the direct transaction between Employer and Contractor,
- d. Copy of Certificate to the effect of payments of GST, levies etc. has been made against supply of materials through sub-vendors under the contract.
- e. Certified copy of Insurance policy/Insurance Certificate.
- f. Manufacturer's/Contractor's guarantee certificate of Quality.
- g. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer.
- h. Manufacturer's copy of Challan

- i. Submission of the Material Received & Handling over (MHRO) certificate by the Employer's representative that the item(s) have been received at site.
- j. Submission of certificate by Project Manager that materials have been supplied as per technical specification, scope of work & approved drawings enclosing certified copy of inspection reports and dispatch clearances.

Mobilization Advance against Supply shall be adjusted while making payments of this installment. In case of delay of project, the entire mobilization advance should get recovered from the contractor as per supply and erection contracts' works completion schedule respectively.

7.1.2 **Second Installment (30%):** Thirty percent (30%) payments against all items of each town shall be paid on following conditions:

- a. Evidence of dispatch (R/R or receipted L/R)
- b. Contractor's detailed invoice & packing list identifying contents of each shipment.
- c. Invoice certifying payments of Taxes for the direct transaction between Employer and Contractor,
- d. Copy of Certificate to the effect of payments GST, levies etc. have been made against supply of materials through sub-vendors under the contract.
- e. Certified copy of Insurance policy/Insurance Certificate.
- f. Manufacturer's/Contractor's guarantee certificate of Quality.
- g. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
- h. Manufacturer's copy of challan
- i. Submission of the certificate on measurement book by the Project Manager that the item(s) have been received,
- j. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
- k. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.

While releasing 2nd installment of 30% supply payment following adjustment shall be made:

- a. Balance initial mobilization advance shall be adjusted. Also, up-to-date accrued interest shall also be recovered.
- b. In case of delay of project, the entire mobilization advance shall get recovered at this stage.

7.1.3 Third and Final Installment (10%):

- a. The balance ten percent (10%) of payment against Supply contracts shall be released on successful supply of all materials of each town in the project and issuance of Taking over Certificate by the Employer.

7.2 Erection:

7.2.1 First Installment (90%): Ninety percent (90%) payments against Erection contracts shall be paid on erection, testing and commissioning of works and on submission of documents of all villages indicated herein under:

- a. Certified copy of Insurance policy/Insurance Certificate.
- b. Material reconciliation statement consisting of the materials utilized for erection, testing & commissioning vis-à-vis erection activity of the lot of villages.
- l. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
- m. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.

While releasing 1st installment of 90% erection payment following adjustment shall be made:

- a. Mobilization Advance against Erection shall be fully adjusted while making payments of first installment. Also, up-to-date accrued interest shall also be recovered.
- b. In case of delay of project, the entire mobilization advance shall get recovered from the contractor as per supply and erection contracts' works completion schedule respectively.

7.2.2 **Second and Final Installment (10%):**

- a. The balance ten percent (10%) of payment against Erection contracts shall be released on successful commissioning of the works, end to end test on Town wise and issuance of Operational acceptance and Taking over Certificate of the project.
- b. 'Commissioning' for the purpose of payments shall mean satisfactory completion of all supplies, erection, commissioning checks and successful completion of all site tests and continuous energisation of the equipment/ materials as per the Contract and to the satisfaction/approval of the Employer.
- c. On submission of the certificate by the Project Manager that the equipment/materials have been erected, tested and commissioned.
- d. On certification of Project Manager for reconciliation of materials and payments.
- e. On certification of Project Manager that assets under the project are created and are taken over by Employer.

All the payments will be made by Engineer-in-Chief, Power & Electricity Deptt.

Vendor will be required to furnish the documentary proof of delivery, and acceptance duly signed by Purchaser officials while claiming the payments.

- 7.2 Supplier will be entirely responsible for applicable present and future, duties, levies, charges, license fees, GST etc. in connection with delivery of goods at site including incidental services and commissioning.
- 7.3 The Bidder must accept the payment terms proposed by the Purchaser, The financial bid submitted by the Bidder must be in conformity with the payment term proposed by the Purchaser. Any deviation from the proposed payment terms would not be accepted. The Purchaser shall have the right to withhold any payment due to the Bidder, in case of delays or defaults on the part of the Bidder. Such withholding of payment shall not amount to a default on the part of the Purchaser,
- 7.4 All Payments will be made to the Bidder in Indian Rupee only.

8. Technical Information

- 8.1 The technical documentation involving detailed instruction for operation and maintenance, users' manual etc., is to be delivered with every unit of the equipment supplied. The language of the documentation should be English.
- 8.2 The Models offered should strictly conform to the specifications given in the product literature and these models should be supported for a minimum period of Five years (3 YEARS AS WARRANTY AND 4th AND 5th YEARS ARE CARE PACK WARRANTY DIRECTLY FROM OEM OR AMC WITH OEM OR THE VENDOR including warranty period and post warranty maintenance. The Models

proposed/ marked for withdrawal from the market and the models under quality testing should not be offered. Purchaser shall reserve right to ask for PROOF OF CONCEPT on working of the newly introduced Models in the market, if offered on the agreed terms & conditions.

- 8.3 When the configuration/ feature required is not available in a particular model, the next available higher configuration model shall be offered.
- 8.4 In addition to the above, if any additional/ enhanced configuration is suggested in view of technological changes, it may be furnished as optional feature with/without cost duly explaining the additional utility of the offered model in both the technical offer document as well as Commercial Offer document. However, the basic quote should be confined only to the configuration/ model offered for.
- 8.5 Two or more models can be offered, if they conform to the technical specifications given. However, the vendor shall offer only one main option for bid evaluation out of the models offered and the same shall be mentioned on the MODEL OFFERED. Vendor may offer alternate options for consideration of the Purchaser, if required.

9. Acceptance

- 9.1 The acceptance / performance test will be performed and commissioning of all the components of the solution at the sites. Complete hardware and Software as specified in the tender must have been supplied by the Bidder prior to commencement of the tests. The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option as per the acceptance criteria as defined in **Annexure VII**. The acceptance will involve trouble free operation for seven **consecutive days** at site. The Bidder will be responsible for setting up and running the acceptance test without any extra cost to the Purchaser.
- 9.2 In the event of hardware and software failing to pass the acceptance test, a period not exceeding three weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserves the right to get the corresponding component replaced by the Bidder at no extra cost to the Purchaser or to cancel the order and recall all the payments made by the Purchaser to the bidder.
- 9.3 Successful conduct and conclusion of the acceptance tests for the installed components shall also be the sole responsibility and at the cost of the Bidder.
- 9.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the shipment of the goods.

10. Acceptance Certificate

On successful completion of acceptability test, receipt of deliverables etc, for the equipment and after the Purchaser is satisfied with the working on the system, the acceptance certificate signed by the Bidder and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of acceptance of the system and the WARRANTY of the Hardware starts from that date.

11. Governing language

- 11.1 The Contract shall be written in English. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in English.
- 11.2 The technical documentation involving detailed instruction for operation and maintenance, users' manual etc. is to be delivered with every unit of the equipment supplied. The language of the documentation should be English.

12. Applicable laws

- 12.1 The Contract shall be interpreted in accordance with the laws prevalent in India.
- 12.2 Compliance with all applicable laws: The Bidder shall undertake to observe, adhere to, abide by, comply with and notify the Purchaser about all laws in force or as are or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them and all purposes of this Tender and shall indemnify, keep indemnified, hold harmless, defend and protect the Purchaser and its employees/ officers/staff/ personnel/ representatives/ agents from any failure or omission on its part to do so and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from.
- 12.3 Compliance in obtaining approvals/ permissions/ licenses: The Bidder shall promptly and timely obtain all such consents, permissions, approvals, licenses, etc., as may be necessary or required for any of the purposes of this project or for the conduct of their own business under any applicable Law, Government Regulation/Guidelines and shall keep the same valid and in force during the term of the project, and in the event of any failure or omission to do so, shall indemnify, keep indemnified, hold harmless, defend, protect and fully compensate the Purchaser and its employees/officers/staff/personnel/ representatives/agents from and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from and the Purchaser will give notice of any such claim or demand of liability within reasonable time to the bidder.

13. Performance security

The vendor/supplier has to provide Performance Security equivalent to 10% of the contract value in the form of Performance Bank Guarantee for proper fulfillment of the contract, which will include the warranty period, and completion of the performance obligations including warranty obligations. The performance security will cover 60 days beyond the date of contract completion.

13.1 Performance Guarantee:

The Vendor will be required to furnish an unconditional Bank guarantee for a sum equivalent to 10% of the contract price for the due performance of the contract in the format prescribed by the purchaser within 14 days from issue of LoA & Bank Guarantee of an amount equivalent to 10% of contract value and valid for WARRANTY period. The performance guarantee to be submitted within ONE month after acceptance of goods and before release of full and final payment of

the Contract for indemnifying the Purchaser against any default / failure in execution of contract, as per the format provided by Purchaser.

14. Insurance

- 14.1 The Bidder is responsible for acquiring insurance for all components, equipment and software. The goods supplied under the Contract shall be fully insured.
- 14.2 The insurance shall be valid for a period not less than three months after date of delivery. If the vendor fails to obtain insurance cover and any loss or damage occur, the vendor will have to replace the items with new ones without any cost to the Purchaser.
- 14.3 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India, transport to such place of destination in India, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier
- 14.4 Should any loss or damage occur, the Bidder shall .
- a. initiate and pursue claim till settlement, and
 - b. Promptly make arrangements for repair and / or replacement of any damaged item/s irrespective of settlement of claim by the underwriters.

15. Inspections and tests

- 15.1 Inspection and Quality Control tests before evaluation, prior to shipment of Goods and at the time of final acceptance are as follows:
Provided that the Purchaser may, at its sole discretion , waive inspection of goods having regard to the value of the order and / or the nature of the goods and/or any other such basis as may be decided at the sole discretion of the Purchaser meriting waiver of such inspection of goods.

In the event of the hardware and software failing to pass the acceptance test, as per the specifications given, a period not exceeding three weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserves the right to cancel the Purchase Order.

- 15.2 Nothing stated herein above shall in any way release the Supplier from any warranty or other obligations under this Contract.
- 15.3 The Supplier shall provide complete and legal documentation of Systems, all subsystems, operating systems, compiler, system software and the other software. The Supplier shall also provide licensed software for all software products, whether developed by it or acquired from others. The Supplier shall also indemnify me Purchaser against any levies/penalties on account of any default in this regard.
- 15.4 On successful completion of acceptability test, receipt of deliverables, etc., and after the Purchaser is satisfied with the working on the system, the acceptance certificate will be signed by the, Testing Agency and the representative of the Purchaser

16. Warranty

- 16.1 The Bidder warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Bidder further warrants that all the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Bidder, that may develop under normal use of the supplied Goods in the conditions prevailing at the final destination.
- 16.2 On-site comprehensive warranty: The warranty would be on-site and comprehensive in nature and back to back support from the OEM. The vendor will warrant all the hardware and software for defects arising out of faulty design, materials and media workmanship etc. for a period of Three years from the date of acceptance of the hardware. The vendor will provide support for Operating Systems and other pre installed software components during the warranty period of the hardware on which these software & operating system will be installed. Defective hardware shall be replaced by the vendor at its own cost, including the costs of transport. Vendor's hardware engineer will be report/call at the Purchaser offices within two hours of reporting breakdown through telephone/email or fax or courier nearest to vendor's office and repair the same at earliest.
- 16.3 The Purchaser shall promptly notify the Bidder in writing/e-mail/fax or any claims arising under warranty.
- 16.4 Upon receipt of such notice the Bidder shall as mentioned below, repair or replace the defective goods or parts thereof, without any cost to the Purchaser.
- 16.5 The Bidder must provide the following warranties:
(a) The equipment proposed is complete in every way.
(b) The hardware/software specification, capabilities and performance characteristics are as stated in the Bidder's proposal and accompanying documentation.
- 16.6 In case an equipment, peripheral or components (such as CPU, SMPS, Circuit Boards, monitors, etc.) are taken away for repairs, the vendor shall provide a similar standby equipment so that the equipments can be put to use in the absence of the originals/replacements without disrupting the Purchaser's regular work.
- 16.7 If during operation, the down time of any piece of equipment or component thereof does not prove to be within reasonable period, the Supplier shall replace the unit of component with another of at least the same performance and quality, with no cost to the Purchaser.
- 16.8 Free **on-site maintenance** services shall be provided by Supplier during the period of warranty. After expiry of warranty period, the vender will enter into AMC/or care pack directly from OEM agreement with the Purchaser for providing post warranty maintenance of equipment viz. Computer System, Peripherals, UPS, Systems Software & other software for a period normally not less than 5 years, at the discretion of the Purchaser, The AMC charges/rate should be quoted separately, if required by the Purchaser.

12. Post Warranty Maintenance :

The selected vendor will enter into AMC (Annual Maintenance Contract) with the Purchaser if so desired by the Purchaser, for post warranty maintenance. However the Purchaser will have the right to go with any other vendor for AMC if so desired by the Purchaser.

The hardware supplied should be maintained by the vendor for at least 3 years from the date of acceptance by the Purchaser + 4th and 5th year on AMC or care pack directly from the OEM. The Purchaser may negotiate AMC charges while entering into AMC. AMC should cover the total equipment along with OS etc procured from the vendor with maintenance support by Fax, e-mail, telephone and on site support, if any required & Minimum of 4 Preventive Maintenance calls during the year as per the requirement of the Purchaser In the case Authorized/Channel Partner, AMC charges Shall also include the cost for the arrangement with OEM for maintenance of spare, providing support, update (if any required) for providing AMC support for period.

13. Patent Rights

In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, industrial design rights, etc. arising from the use of the Goods or any part thereof in India, the Supplier shall act expeditiously to extinguish such claim. If the Supplier fails to comply and the Purchaser is required to pay compensation to a third party resulting from such infringement, the Supplier shall be responsible for the compensation including all expenses, court costs and lawyer fees. The Purchaser will give notice to the Supplier of such claim, if it is made, without delay.

14. Force majeure

If the performance as specified in this order is prevented, restricted, delayed or interfered by reason of Fire, explosion, cyclone, floods, War, revolution, acts of public enemies, blockage or embargo, Any law, order, proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government including restrict trade practices or regulations, Strikes, shut down or labor disputes which are not instigated for the purpose of avoiding obligations herein, or Any other circumstances beyond the control of the party affected, then notwithstanding anything here before contained, the party affected shall be excused from its performance to the extent such performance relates to prevention, restriction, delay or interference and provided the party so affected uses its best efforts to remove such cause of non-performance and when removed the party shall continue performance with utmost dispatch.

If a Force Majeure situation arises, the Bidder shall promptly notify the Purchaser in writing of such condition, the cause thereof and the change that is necessitated due to the conditions. Until and unless otherwise directed by the Purchaser in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

15. Forfeiture of performance security

The Purchaser shall be at liberty to set off/adjust the proceeds of all the performance security towards the loss, if any, sustained due to the supplier's failure to complete its obligations under the contract. This is without prejudice to the Purchaser's right to proceed against the Supplier in the event of the security being not enough to fully cover the loss / damage.

16. Penalty for Default Delivery

If the vendor fails to deliver the items within stipulated period, Purchaser will impose a penalty of 1 % of the order value for the late delivered item for each weeks delay or part thereof. Subject to maximum of 10% of value of the late delivered items.

In case the delay exceeds five weeks, Purchaser reserves the right to cancel the order and in such a case, the vendor will have to repay Purchaser the advance paid, if any, with 12% p.a. interest, unconditionally. In such an event vendor will not be entitle to or recover from Purchaser any amount by ways of damages, loss or otherwise. If orders are cancelled due to non delivery, the vendor will be debarred by the Purchaser for participating in any future tenders floated by the Purchaser.

17. Termination

The Purchaser may at any time terminate the contract by giving written notice to the Bidder if the Bidder becomes bankrupt or otherwise insolvent and collapsed. In this event, termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

The Purchaser reserves the right to cancel the contract in the event of happening one or more of the following Conditions:

- Failure of the successful bidder to accept the contract and furnish necessary documents within specific days of receipt of purchase contract as stated in the Purchase order;
- Delay in offering equipment for pre-delivery Inspection;
- Delay in delivery beyond the specified period;
- Delay in completing acceptance tests / checks beyond the specified periods;
- Serious discrepancy in hardware noticed during the pre-dispatch factory inspection; and In addition to the cancellation of purchase contract, the Purchaser reserves the right to appropriate the damages through encashment of Performance Guarantee given by the Bidder.

24. Resolution of Disputes

It will be the Purchaser's endeavor to resolve amicably any disputes or differences that may arise between the Purchaser and the Bidder from misconstruing the meaning and operation of the Tender and the breach that may result.

In case of Dispute or difference arising between the Purchaser and a Supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act 1996. The Arbitrators shall be chosen by mutual discussion between the Purchaser and the Supplier OR in case of disagreement each party may appoint an arbitrator and such arbitrators may appoint an Umpire before entering on the reference. The decision of the Umpire shall be final & binding.

The Bidder shall continue work under the Contract during the arbitration proceedings unless otherwise directed in writing by the Purchaser or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator or the umpire, as the case may be, is obtained.

Arbitration proceedings shall be held at Aizawl, Mizoram , India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English; Notwithstanding anything contained above, in case of dispute, claim & legal action arising out of the contract, the parties shall be subject to the jurisdiction of courts at Aizawl, Mizoram , India only.

Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or E-mail or fax and confirmed in writing to the other party's specified address. The same has to be acknowledged by the receiver in writing.

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

Section IV
Special Terms and Conditions

1. Cost Details

The price should include all levies/ taxes like Service tax, GST, Sales Tax, Transportation, insurance, Packing and Forwarding, Customs, Excise, traveling charges, support service during warranty etc. Item wise breakup of all applicable taxes must be mentioned in the Invoice.

2. Terms of Delivery

All items should be delivered within 3 months from the date of purchase order at Purchaser's location/office.

Vendor will have to verify all these items within one week from the date of delivery in the presence of Purchaser officials at respective location/offices.

3. Warranty

The vendor should provide comprehensive on-site **warranty of THREE YEARS** from the date of acceptance for all the hardware items.

The Warranty should be BACK TO BACK from OEM

SEC-V TECHNICAL SPECIFICATION

Layer II Switch: (DES 1024A 24 port 10/100 Switch)

1. General

- 1.1 The Layer II Switch general specification should be such that it should have fast Ethernet, with 24X10/100 switch.
- 1.2 It should have an address table size of 8K entries using an encryption logarithm.

2. Power Device

- 2.1 The switch should be of AC 120/230 V Power supply with operating Frequency of 50/60 Hz.
- 2.2 The operational power consumption of the device should be of watt and should be.

Power On (Standby)	Maximum power
1. DC input: 1.43 watt	1. DC input: 6.42 watt
2. AC input: 2.01 watt	2. AC input: 7.80 watt

3 Networking

- 3.1 The cable type for the switch is proposed to be Ethernet 100Base-TX or Ethernet 10Base-T.
- 3.2 It should contain subcategory such as network hub and switches with port quantity of 24.
- 3.3 The Layer switch should follow the IEEE standards (IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-Tx Fast Ethernet, IEEE 802.3az Energy Efficient Ethernet, IEEE 802.3x flow control).
- 3.4 Data transfer Rate.

Fast Ethernet	Ethernet
1. 100 Mbps Half Duplex	1. 10 Mbps Half Duplex
2. 200 Mbps Full Duplex	2. 20 Mbps Full Duplex

4 Miscellaneous

- 4.1 The minimum operating temperature of the device should be 32 °F and with the maximum operating temperature of 104 °F.
- 4.2 The operating humidity range of the device should be 10-95%.
- 4.3 The model should be 1024A with PC compatibility.

Routers for MPLS/VPN Network(DSL-N10 Wireless ADSL Modem Routers)

The proposed Router for the Network is DSL-N10 Wireless ADSL Modern Router.
The Device have 5dBi high gain antenna.
The DSL-N10 can provide up to four wireless network.
Technical Specification

Network Standard	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.3, IEEE 802.3u,
Antenna	Detachable 5 dBi antenna x 1
LED Indicator	Power, ADSL, Internet, WLAN, LAN
Button	WPS Button, Reset Button, Power Switch, Wireless on/off Switch
Ports	1 x RJ11 for ADSL and 4 x RJ45 for
Operating Frequency	2.4 GHz
Memory	4MB Flash/32MB SDRAM for Wi-Fi and 1MB Flash/2MB SDRAM for
Output power	b mode : 17-19 dBm

	z mode : 15-17 dBm a mode : 15-
Power Adapter	AC Input : 100-240V (50-60Hz) DC Output: 12V/1A Power Consumption: 12 W Max
Operating Temperature	-10°C to 50°C
Storage Temperature	-40°C to
Operating Humidity	5% to 95%
Storage Humidity	5% to 95%

Cable

1. Scope
The cable used for computers and its given requirement
2. The IEC standard cable C13 and C14
3. The pin spacing for the cable **chord is 1**
4. Earth contact should be available.
5. Rewirable of the chord is allowed_
6. Technical parameters

Maximum operating Currey	1 OA
Maximum operating Tempmase	70°C
Maximum operating Voltage	230 V
Operating Frequency	50/ 60 Hz

Jacks

1. 230V AC power supply.
2. Device should contain ink/line **inpui azint plug**.
3. Should include speaker output jack_
4. Include USB port.
Device should contain Ethernet tRItItO
6. VGA (Video Graphics Array) stuvaa-41 Biztiark.
7. Device should support Serial RS-233
8. eSATA (External Serial Advanced Tent) should be available.
9. Parallel (DB25) port should be **avarikantr** follow IEEE-1284 standard.
10. The device should contain dispialk pod.

Equipment's Chords

- 1 VGA (Vedio Graphics **.A.rrayt**

Compatibility	Till 1080p,HDTV,PS3, XBOX360,PC _SI EREO
Material	Plastic
Brand	UBLINK
Item Wei tt	99.8e
Resolution	1080p

2 DVI (Digital Visual Interface)

Compatibility	HDTV, Video Projector, LCD etc
Connector	24 pin Connector
Resolution	1080p
Speed	4.95 Gbps
Brand	BlueRigger
Item Weight	141g

3 HDMI (Avolon)

Resolution	720p, 1080i, 1080p
Compatibility	HDMI, Audio return channel, Ethernet
Speed	10.2 Gbps
Item Weight	249g

4 Ethernet Cable

Speed	1000 Mbps
Type	RJ45
Bandwidth	250 MHz
Length	50m

GPRS/CDMA/EDGE/3G MODEM

1. The GPRS ESERV Modem shall be suitable for satisfactorily working under the following condition.

Max. Ambient Temperature	70°C
Min. Ambient Temperature	-5°C
Max. Relative Humidity	100%
Min. Relative Humidity	26%
Altitude	Below 1000 meters above mean sea level

2. Supply voltage

- 2.1 The supply voltage to the modem should be 230/240 V.
- 2.2 In case of phase to neutral 3X240V AC and 415V in phase to phase supply.
- 2.3 The voltage variation should be between -40% to +20%.
- 2.4 Operating frequency of the device should be 50Hz +/- 5%.
- 2.5 The range of the power factor should be +1 to -1.

3. Hardware (Basic configuration)

- 3.1 The device should be 32bit RISC processor.
- 3.2 It should contain 8MB flash memory.
The device also should contain 32MB SDRAM memory.

4. Others

- 4.1 The device should have built in Temperature sensor.
Built in real time clock should also be available.

5. Network interface of GPRS

- 5.1 Internal module and SIM card socket.
- 5.2 FME external antenna connector (50Q).
- 5.3 85.6 kbps GPRS download speed.
- 5.4 21.4 kbps GPRS uplink speed. 5.5 USSD support.

6. Serial Port

- 6.1 RS-232 / RS 485 DTE, Male DB-9 connector.
- 6.2 Full serial and modem signals.
- 6.3 Speed 300 - 460 800 bps.
- 6.4 Data bits - 7 or 8, stop bits - 1 or 2.
- 6.5 Parity - None, Even, Odd.
- 6.6 Flow control - None, RTS/CTS.
- 6.7 Protection - 15 kV ESD and short circuit.
Console - RS-232, 19200 bps, 8 data bits.

7. Network Protocol

- 7.1 The follow protocol should be follow by the network are PPP, IP, ICMP, UDP, TCP, ARP, DNS, DHCP, FTP, TFTP, HTTP, POP3, SMTP.

Hand Held Billing Machine (Pigmy PMR Hand Held Billing Machine)

Description

The specification covers design, manufacture and supply of Hand Held Spot Billing computer system and its accessories meant for carrying out spot billing for LT category of consumers, comprising of domestic, commercial and industrial consumers.

The Spot Billing system shall consist of a Hand Held Equipment (HHE) and a separate Portable Printer (PP), connected to each other suitably. This scheme of two independent units provides for redundancy and better equipment utilization in the event of failure of any one unit. Specification of Handheld Equipment Unit and Portable printer are described below:

The handheld Equipment (HHE) shall have the capability to collect and store meter readings at any time of the meter reading route and should be capable of issue of bill with PP attached to the HHE

The unit shall be able to obtain all type of readings (kWh, kVAh, kVARh and max demand KW/KVA) on any particular route without requiring:

- Reprogramming of the HHE.
- Physical change of software contained within the unit while in the field.
- Access through special software menus contained within a given route/program.

Keyboard

Input / Output ports (I/O Ports)

The HHE shall have a minimum one RS-232 Serial Port conforming to standard PC to communicate for Uploading and Downloading of meter data to / from the Billing system . This port must be compatible for connecting peripherals such as bar code reader, printer, battery charger, loader charger etc. The HHE with an infrared port for communication will be preferred

A Real Time Clock (RTC) shall be provided in the HHE, with the a minimum of 10 years battery back up

Battery

The battery capacity must be sufficient for at least 8 hours of meter reading

The HHE must come with a power management system designed to conserve power

The HHE must come with an integrated intelligent fast charge capability that allows for full charge in 5 hours

To reduce the equipment down time and inventories, there shall be provision to charge the HHE battery without being removed from the equipment. A suitable battery charger for charging of HHE battery shall be provided

The HHE should have low-battery detection and automatic cutoff feature to avoid further drain of the battery

Memory

The total RAM memory at least 8 MB or higher and be able to store approximately 1,000 readings

Flash ROM memory (if required) of at least 512 KB or higher (BIOS, DOS, COMMUNICATION and SETUP)

Carrying Method

A hand strap must be provided with each unit and must provide ease of use for right or left handed use

Charging / Communications Cradles

The communications/charging cradle will be housed in a suitable material that can be wall or table top mounted

It will have the capability of recharging the HHE unit and also provide the communication port connection to the computer

The cradle will be capable of communicating with the host computer at minimum 19,200 bps

HHE should have printer port to attach portable printer. Hand held hardware and OS should support various type and make of Impact printers and Thermal paper printers

Specification of printers

Printer should be powered only during printing and should be software controlled by HHE. Printer offered should be portable, handy, and rugged Impact printers. Indicative requirement of printers is as follows :-

- 24Col. Alphanumeric
- High speed (2.7lines/sec)

2 KVA UPS (Off Line, SRC 2000 x 4-cc APC Smart-UPS 2000 VA)

1. The device should meet the specific details

Output Power Capacity	1400 Watts / 2000 VA
Max Configurable Power (Watts)	1400 Watts / 2000 VA
Nominal Output Voltage	230V
Output Voltage Note	Configurable for 220 : 230 or 240 nominal output voltage
Output Voltage Distortion	Less than 3%
Output Frequency (sync to mains)	50/60 Hz +/- 3 Hz user adjustable +/-
Other Output Voltages	220, 240V
Crest Factor	3 : 1
Waveform Type	Sine wave
Output Connections	(1) Hard Wire 3-wire (H N + G) (Battery Backup) , (8) IEC 320 C13 (Battery
Bypass	Built-in Bypass
Battery	24v, inbuilt

2. The input specification of the device.

Nominal Input Voltage	230V
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Input Frequency	50/60 Hz +/- 5 Hz (auto sensing)
Input Connections	IEC-320 C20
Cord Length	2.44 meters
Input voltage range for main	160 - 280 V
Input voltage adjustable range for mains operation	100 - 280V
Other Input Voltages	220 , 240
Maximum Input Current	0A
Input Breaker Capacity	0A

3. Surge protection and filtering

Surge energy rating	420 Joules
Filtering	Full time multi-pole noise filtering : 0.3% IEEE surge let-through : zero clamping response time : meets UL
Data Line Protection	RJ-45 Modem/Fax protection (four wire dual line)

4. Physical description of the device

Maximum Height	175.0 mm
Maximum Width	432.0 mm
Maximum Depth	457.0 mm
Net Weight	26.2 kg

5. Operating environment of the device

Operating Environment	0 - 40 °C
Operating Relative Humidity	0 - 95 %
Operating Elevation	0-3000 meters
Storage Temperature	-20 - 50 °C
Storage Relative Humidity	0 - 95 %
Storage Elevation	0-15000 meters
Audible noise at 1 meter from surface of unit	55.000 dB
Online Thermal Dissipation	652.000 BTU/hr

IP Phone (cisco IP Phone IP 7960G/7940G)

1. The operating temperature should be in the range of 32°F to 104°F (0 to 40°C).
2. The operating relative humidity is 10% to 95% which is noncondensing.
3. The storage temperature of the device is 14 °F to 140°F (-10 to 60°C).
4. The height and width of the device are 8 inches and 10.5 inches.
5. The device power supply should be 100 to 240V AC supply when using an AC adapter, 50 to 60 Hz frequency with 0.5A.
6. The device power supply should be 48 VDC with 0.2A when using the in- line power over the network cable.
7. For 10 Mbps two pair of category 3 cable should be used and two pair of category 5 cable For 100Mbps.
8. Most phone are deployed approximately around 100m.
9. The cable used for different connection are
RJ-11 for the handset connection.
 RJ-45 jack for the LAN connection (labeled "10/100 SW").
 RJ-45 jack for a second 10BASE —T compliant connection (labeled "10/100" PC").
10. Differentiated Services Code Point (DSCP) tagging
11. Support for G.711μ, G.711a and G.729a/b audio compression codecs.
12. Software upgrade supported using a Trivial File Transfer Protocol (TFTP) server
13. Voice activity detection, silence suppression, comfort-noise generation, and error concealment.
14. H.323 / SIP Support.

Meters

Feeder Meter & DT Meter

1. Objective & Scope

This specification shall cover design, engineering, manufacture, assembly, inspection, testing at manufacturers works before dispatch, packing, supply and delivery at destination (including transit insurance), 0.5 S accuracy class fully static 3 phase-4 wire CT-PT operated three-vector energy meter works along with other metering accessories such a metering cabinet, CTs and PTs of relevant accuracy class etc. detailed out in the specification. The meter shall be suitable for measurement of different electrical parameters as per the energy and power demand requirement in an AC balanced/unbalanced system over a power factor range of zero lag to unit to zero lead. These meters should have communication port to interface for remote meter reading (AMR Compatible).

2. Application

- a) As Boundary Meters for Ring fencing of an Area -0.5S class.
- b) In Substation on incoming/Outgoing HT feeders -0.5S class.
- c) On Distribution Transformers — 0.5S class.
- d) HT Consumers — 0.5S class.

3. Working Environment

As per IS 14697-1999 (reaffirmed 2004). Meter to perform satisfactorily under Non-Air conditioned environment (within stipulations of IS), IP 51 housing for indoor use and IP 55 degree of protection and sealing arrangement for outdoor use. The meter shall be suitable designed for satisfactory operation under the hot and hazardous tropical climate conditions and shall be dust and vermin proof. All the parts and surface, which are subject to corrosion, shall either be made of such material or shall be provide with such protective finish, which provided suitable protection to them from any injurious effect of excessive humidity.

4. Service Condition

The meter shall be suitable for satisfactory continuous operation under the following tropical conditions:

Maximum Ambient temperature	45°C
Relative Humidity	10 to 99%(Condensing)
Maximum annual rainfall	2500 mm
Maximum wind velocity	47 m/sec
Maximum altitude above mean sea	Up to 1500 m
Isoceraunic level	60 days/year
Seismic level (Horizontal	Zone-V
Average number of	40 (5 months)
Minimum ambient temperature	-10°C

5. General Technical Requirement

Type	AMR Compatible Static, 3 Ph, 4 Wire Tri vector Energy Meter (Export/Import type for Boundary/ring fencing/interface HT meters) & (Import type for DTR and consumer LT meter)
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Frequency	50Hz±5%
Accuracy class	0.5S
Secondary Voltage	Suitable for operation from 110V Ph-Ph or 63.5V Ph-N(for HT)& 3 x 415V for DTR meters(LT)
Basic Current(Ib)	-/1 Amps and/or -/5 Amps
Maximum Continuo is Current	2.0Ib, Starting and Short time current shall be as per IS-14697
Power Consumption	i) The active and apparent power consumption, in each voltage circuit at reference voltage, reference temperature, reference frequency shall not exceed 1.5W and 8VA ii) The apparent power taken by each current circuit, at basic current, reference frequency, reference temperature shall not exceed 1.0 V
Power Factor	0.0 Lag-Urity-0.0 Lead
Design	Meter shall be designed with, application specific integrated circuit (asic) or micro-controller; shall have no moving part; electronic component shall be assembled on printed circuit board using surface mounting technology; factory calibration using high accuracy (0.05 class) software test bench. Assembly of electronic component shall be as per ANSI/IPC _ 610 standard.
Communication port	Companion Specification for IEC 62056 series of standards, DLMS/COSEM

6. General Electrical Requirement

6.1 Starting Current

The meter shall start and continue to register at the current 0.1 % Ib.

6.2 Running with No Load

When the 115% of rated voltage is applied with no current flowing in the current circuit, the meters shall not register any energy and test output of the meter shall not be more than one pulse/count on "no load".

6.3 Power Supply Variation

The extreme power supply variation (which an operating meter should withstand without damage and without degradation of its meteorological characteristics when it is subsequently operated under its operating conditions) is as follows.

Voltage : 70% to 120% of Vref

Frequency: 45 Hz to 55 Hz

6.4 Accuracy

The class of accuracy of the meter shall be 0.5s, the accuracy should not drift with time.

7. Manufacturing Process, Assembly and Testing

Meters shall be manufactured using latest and 'state of the art' technology and methods prevalent in electronics industry. The meter shall be made from high accuracy and reliable surface mount technology (SMT) components. All inward flow of major components and subassembly parts (CT, PT, RTCs/Crystal, LCDs, LEDs, power circuit electronic components etc.) shall have batch and source identification. Multilayer 'PCB' assembly with TTH'(Plated through Hole) using surface mounted component shall have adequate track clearance for power circuits. SMT component shall be assembled using automatic 'pick-and-place' machines, Reflow Soldering oven, for stabilized setting of the components on 'PCB'. For soldered PCBs, cleaning and washing of cards, after wave soldering process is to be carried out as a standard practice. Assembly line of the manufacturing system shall have provision for testing of sub-assembled cards. Manual placing of components and soldering,

to be minimized to items, which cannot be handled by automatic machine. Handling of 'PCB' with ICs/C-MOS components, to be restricted to bare minimum and precautions to prevent 'ESD' failure to be provided. Complete assembled and soldered PCB should undergo functional testing using computerized Automatic Test Equipment.

8. General & Constructional Requirement

The case, winding, voltage circuit, sealing arrangements, registers, terminal block, terminal cover & name plate etc, shall be in accordance with the relevant standards. The meter should be compact & reliable in design, easy to transport & immune to vibration & shock involved in the transportation & handling. The construction of the meter should ensure consistence performance under all conditions especially during extreme cold/storms/heavy rains/very hot weathers. The insulating materials used in the meter should be non-hygroscopic, non-ageing & have tested quality. The meter should be sealed in such a way that the internal parts of the meter become inaccessible.

- 8.1 Meters shall be designed and constructed in such a way so as to avoid causing any danger during use and under normal conditions. However, the following should be ensured
 - a) Personal safety against electric shock
 - b) Personal safety against effects of excessive temperature
 - c) Protection against spread of fire
 - d) Protection against penetration of solid objects, dust and water
 - e) Protection against fraud
 - f) Protection against pilferage
- 8.2 Meter base and cover shall be joined with ultrasonic welding in addition to use of directional screws. The meter should be housed in a safe, high grade engineering plastic / polycarbonate casing, which is of projection mounting type and is dust/moisture proof, conforming to IP-51 & IP 55 of BIS 12063 / IEC 529, vermin proof and sturdy. (For LT CT operated meter only)
- 8.3 All insulating material used in the construction of meters shall be non-hygroscopic, non-ageing and of tested quality. All parts that are likely to develop corrosion shall be effectively protected against corrosion during operating life by providing suitable protective coating.
- 8.4 The meter shall be supplied with a transparent extended terminal block cover (ETBC). The meter base, meter cover, terminal block and ETBC shall be made of unbreakable high grade fire resistant non-flammable reinforced, polycarbonate (not bake lite) or equivalent high grade engineering plastic, which should form an extension of meter cases and have terminal holes and shall be of sufficient size to accommodate insulation of the conductors, meeting the requirement of IS 14697.1999 / CBIP.88 The extended terminal block cover should be separately sealable at two places and housed at the bottom of the meters and once sealed should prevent unauthorized tampering. The terminal block should have sufficient insulating properties, mechanical strength and should have house plated solid brass/steel terminals with two fixing screws per terminal. The terminals should be designed to withstand high overload with cage clamp.
- 8.5 The meter shall have an operation indication device such as a blinking LED. The operation indicator shall be visible from the front window and capable of being monitored conveniently with suitable testing equipment.
- 8.6 The meter-base, meter cover, terminal block and ETBC shall be made of unbreakable, high grade, fire resistant, reinforced, non-flammable, polycarbonate or equivalent high grade and good quality engineering plastic certified by CIPET.
- 8.7 The manner of fixing the conductors to the terminal block shall ensure adequate and durable contact such that there is no risk of loosening or undue heating. Screw connections transmitting contact force and screw fixing which may be loosened and tightened several times during the life of the meter shall be such that the risk of corrosion resulting from contact

with any other metal part is minimized. Electrical connections shall be so designed that contact pressure is not transmitted through insulating material. The internal diameter of the terminal holes shall be 5.5 minimum. The clearance and creep age distance shall conform to relevant clause of IS14697:1999/CBIP technical report No.88

- 8.8 The entire and construction shall be capable of withstanding stresses likely to occur in actual service and rough handling during transportation. The meter shall be convenient to transport and immune to shock and vibration during transportation and handling.
- 8.9 It should be possible to check the healthiness of phase voltages by displaying all the voltages on the meter display.
- 8.10 The meter shall have three fixing holes, one at the top and two at the bottom. The top hole shall be provided with a special clip at the back of the meter so that holding screw is not accessible to the consumer after fixing the meters. The lower fixing screws shall be provided under the sealed terminal cover. The requisite fixing screws shall be supplied with each meter.
9. Electromagnetic Compatibility
- a) Immunity to electromagnetic disturbance
- b) Radio Interference suppression. The meter shall not generate noise which could interfere with other equipment and shall work satisfactorily as per relevant standard
10. Other salient feature of meters
- a) It should be possible to check the healthiness of phase voltages by displaying all the voltages on the meter display.
- b) The meter must be readable in power off condition. For that a battery back-up of suitable capacity shall be provided. Push button for the **normal** display shall also be used for battery back-up display in power off condition for the manual **mode** reading of the auto display parameters. It must be possible to power up the battery by **means of** an external source or by the HHU itself for reading the meter in power off condition by the **HHU**. **In** case of an external source an inductive coupling arrangement shall be provided so that it **should** not be possible to damage the circuit of the meter by applying excess voltage directly in the meter. It must also be possible to triggered the battery to power up the meter in case of power failure from the remote server for reading the meter.

Boundary Meters

1. Scope

This specification covers design, manufacturer, testing, supply and delivery of ISI mark HT three phase four wire CT/PT operated 1 Amps or 5 **Amps** fully static and AMR Compatible Tri-vector Energy Meter The meter shall be suitable for measurement of Different electrical parameters like Active Energy (kWh), Reactive Energy (kVArh), Apparent Energy (kVAh), Demand import/export mode etc.

2. Environmental Condition

Maximum ambient temperature	55°C
Maximum ambient temperature in	50°C
Minimum Temperature of air in shade	5°C
Maximum daily average temperature	40°C
Maximum yearly weighted average temperature	32°C
Relative humidity	10 to 95%
Maximum annual rainfall	1450 mm
Maximum wind pressure	150 Kg/m ²
Maximum altitude above mean sea	1000 mtrs
Isoceraunic level	50 days/year

3. General Technical Requirement

Type	Three phase, four wire 1 Amp or 5 Amps fully static AMR compatible TOD Tri-vector Energy meter having import export Energy recording facility with optical & RS 232 Port as per category B of IS: 15959/2011 for the used as boundary meter
Frequency	50Hz \pm 5%
Accuracy class	0.5S (For active and reactive
PT Secondary voltage	63.56 Ph-N
Rated Voltage	110 Ph-Ph or 63.5 Ph-N
Voltage Range	+15% to -30% of rated voltage
PT Ratio	11/0- kV / 110/V3V
CT Ratio	1/1 Amps ;5/5 Amps
Basic Current (Ib)	1 Amps; 5 Amps
Maximum Continuous Current	
Starting Current	0.1% of Ib
Power Consumption	The active and apparent Power consumption, in each circuit, at reference voltage, reference temperature and reference frequency and shall not exceed 1.5 W and 8 VA. The apparent power taken by each current circuit, at basic current, reference frequency and reference
Power Factor	0.0 Lag — 0.0 Lead
Design	Meter shall be designed with application specific integrated circuit or micro controller; shall have no moving parts; electronic components shall be assembled on printed circuit board using surface mounting
Power Supply	SMPS

4. General Mechanical Requirement

Meters shall be designed and constructed in such a way so as to avoid causing any danger during use and under normal conditions. However, the following should be sure

- a) Personal safety against electric shock.
- b) Personal safety against effects of excessive temperature.
- c) Protection against spread of fire.
- d) Protection against penetration of solid objects, dust and water.
- e) Protection against fraud.
- f) Protection against pilferage.
- g) Meter base and cover shall be joined with ultrasonic welding in addition to use of Directional screws. The meter should be housed in a safe, high grade engineering plastic / polycarbonate casing, which is of projection mounting type and is dust/moisture proof, conforming to IP-51 & IP 55 of BIS 12063 / IEC 529, vermin proof and sturdy. (For LT CT operated meter only).

- 4.1 All insulating material used in the construction of meters shall be non-hygroscopic, non-ageing and of tested quality. All parts that are likely to develop corrosion shall be effectively protected against corrosion during operating life by providing suitable protective coating.
- 4.2 The meter shall be supplied with a transparent extended terminal block cover (ETBC). The meter base, meter cover, terminal block and ETBC shall be made of unbreakable high grade fire resistant nonflammable reinforced, polycarbonate (not Bakelite) or equivalent high grade engineering plastic, which should form an extension of meter cases and have terminal holes and shall be of sufficient size to accommodate insulation of the conductors. meeting the requirement of IS 14697:1999 / CBI P.88 The extended terminal block cover should be separately sealable at two places and housed at the bottom of the meters and once sealed should prevent unauthorized tampering.
The terminal block should have sufficient insulating properties, mechanical strength and should have house plated solid brass/steel terminals with two fixing screws per terminal. The terminals should be designed to withstand high overload with cage clamp.
- 4.3 The meter shall have an operation indication device such as a blinking LED. The operation indicator shall be visible from the front window and capable of being monitored conveniently with suitable testing equipment.
- 4.4 The meter-base, meter cover, terminal block and ETBC shall be made of unbreakable, high grade, fire resistant, reinforced, non-flammable, polycarbonate or equivalent high grade and good quality engineering plastic certified by CIPET.
- 4.5 The manner of fixing the conductors to the terminal block shall ensure adequate and durable contact such that there is no risk of loosening or undue heating. Screw connections transmitting contact force and screw fixing which may be loosened and tightened several times during the life of the meter shall be such that the risk of corrosion resulting from contact with any other metal part is minimized. Electrical connections shall be so designed that contact pressure is not transmitted through insulating material. The internal diameter of the terminal holes shall be 5.5 mm minimum. The clearance and creep age distance shall conform to relevant clause of IS14697:1999/CBIP technical report No.88.
- 4.6 The entire construction shall be capable of withstanding stresses likely to occur in actual service and rough handling during transportation. The meter shall be convenient to transport and immune to shock and vibration during transportation and handling.
- 4.7 It should be possible to check the healthiness of phase voltages by displaying all the voltages on the meter display.

- 4.8 The meter shall have three fixing holes, one at the top and two at the bottom. The top hole shall be provided with a special clip at the back of the meter so that holding screw is not accessible to the consumer after fixing the meters. The lower fixing screws shall be provided under the sealed terminal cover. The requisite fixing screws shall be supplied with each meter.
5. Electromagnetic Compatibility
- a) Immunity to electromagnetic disturbance
The meter shall be designed in such a way that conducted or radiated electromagnetic disturbance as well as electrostatic discharge do not damage or substantially influence the meter and meter shall work satisfactorily under these conditions as per relevant standard.
NOTE: the disturbances to be considered are: -
- (a) Harmonics
 - (b) Voltage dips and short interruptions
 - (c) Conducted transients

Technical Specification of Work Station PC

Intel Configuration : CPU : Intel Core i3 7th Generation and above processor. Chipset : Intel latest version.

Memory : 4 GB 1333 MHz DDR3/DDR4 RAM with 32 GB Expandability. Hard Disk Drive : SATA 1TB 7200 rpm or higher. Monitor : 19.5 inch or larger LED/TFT Digital Color Monitor TCO- 05 certified. Keyboard : 104 keys Mouse : Optical with USB interface. Bays : 2 Nos. or above. Ports : 6 USB Ports including 2 USB 3.0 Ports. Cabinet : Small form factor; DVD ROM Drive : 8X or better DVD ROM writable Drive. Networking facility: 10/100/1000 on board integrated Network Port with remote booting facility. Operating System: Windows 10 Professional preloaded, with Media and Documentation and Certificate of Authenticity. OS Certifications: Windows 10 OS and Linux certification. Power supply SMPS Surge protected.

All computers and peripherals will be purchased from Branded/Original equipment manufacturers or authorized dealer/seller

Laser Printer : LaserJet : Single Function, Monochrome Laser, Print speed (Black, Normal Quality, A4) Minimum 23 ppm Media size supported : A4, A5, A6, B5, etc Ethernet interface compatible, USB Interface compatible, Automatic Duplex printing compatible, Windows OS support. Print Quality(Black, Best Quality) Up to 600x600 dpi (1200 dpi effective output), Pages per month Up to 8000 Three year warranty period.

Dot Matrix Printer : Dot Matrix Printer, Print Resolution : 600x600 dpi USB Printing support, Print Head: 24 Pin, Column : 136 Column.

Computer Table : Computer Table, Size 42" X 24" X 30" (L X W X H), made of 18 mm exterior grade, (Grade-I, Type-II) one-side laminated, pre-laminated board of approved colour as per BIS-12823 : 1990. The pre-laminated board shall have beading with 0.88 mm PVC, non-glued edge binding tape, which will be pasted, on the edges of the board with synthetic based adhesive. The computer table shall have provision for main Unit (CPU), monitor, drawer and sliding keyboard with sliders

Computer Chair : The seat and back are made of minimum 1.2 cm thick hot pressed plywood, upholstered with changeable fabric upholstery covers and moulded polyurethane form of high density together with injection moulded back spine covers. Minimum Back Size: 40.0 cm W x 25.0 cm H and Seat Size 45.0 cm W x 42.0 cm D. Chair should have a full 360 degree revolving mechanism with flexi back. Chair should have five prong pedestal with twin castors and pneumatic height adjustment.

TECHNICAL BID (PRE QUALIFICATION)

[All fields to be filled in duly and proof of the same to be attached separately] A. Pre – qualification

	Name of the Bidder			
	Address of the Bidder			
	Telephone	Fax	e-mail	Website
	Name of the Principal			
	Address of the Principal			
	Telephone	Fax	e-mail	Website
1	Contact Details of the person authorized to make commitments to POWER & ELECTRICITY DEPARTMENT, GOVT. OF MIZORAM Purchaser.			
	Name			
	Designation			
	Mobile No.			
	FAX No.			
	E-mail id			
2	Classification [Tick the appropriate box and attach MAF form as per format given in Annexure III]			
	OEM			
	AUD			
	Others, Pl specify			
	If, AUD or others Specify the Name and address of OEM			
3	Company Details [Registration certificate to be enclosed]			
	Type of Company [Govt./PSU/Pub. Ltd./Partnership/Proprietary.			
	Registration No., and date of registration			
	Year of Incorporation/Establishment			
	GST No. [copy to be enclosed]			
	Income Tax Number [copy to be enclosed]			
5	Service Support [Refer to Annexure V]			
	Information to be provided strictly as per the format given in Annexure V			

6	References [to attach proof] Names of two or more buyers (with Names of contact persons, their designations, complete postal address, telephone, tax, telex and e-mail addresses, location of installation etc.) to whom similar equipment are supplied installed and commissioned in the past two years and to whom reference may be made by the Trust regarding the Bidder's technical and delivery ability. Should include buyers to whom the bidder has supplied 50 Desktop PCs in single order for Desktops PCs.					
	Name	Address & Contact Details	Hardware Supplied(Qty)			
			Workstation PC	Networking Equipments	Computer Chair & Table	Meters

Note : Empanelled vendors also need to fill details.

Place :

Date :

Signature with Seal

**Manufactures Authorization From
[To be submitted along with Technical Bid]**

Ref.No:
To,

Date:

**The Engineer-in-Chief,
Power & Electricity Department,
Mizoram, Aizawl**

**Sub: Dated for supply of Computer & Accessories / Networking Equipment / Meters / GPS
Based Survey**

We _____ who are established and reputable
manufacturers of _____ having factories at
_____ and _____ do hereby authorize M/s
_____ **[Name and address of vender]** to submit a
bid and sign the contract with you for the goods manufactured by us against the above RfP No
_____ dated _____. We hereby extend our full guarantee and
warranty as per the clauses of contract based on the terms and conditions of the Ref for the
goods and services offered for supply by the above firm against the RfP.

Yours faithfully

[_____]
Name of the Manufacture

Note: This letter of authority should be on the letter head of the manufacturer and should be signed
by a person competent and having the power of attorney to bind the manufacturer. It should be
included by the bidder in its bid the hardware without demur, if already supplied and return the
money if any paid to us by you in this regard.

We undertake that, in competing for (and, if the award is made to us, in executing) the above
contract, we will strictly observe the laws against fraud and corruption in force in India namely
“Prevention of Corruption Act 1988”.

We agree that the Purchaser will have single point contract with us, at the address stated
below for the entire goods and services to be delivered by us in case our bid is accepted.

Address of Bidder for Single Point of contract

We understand that the Purchaser is not bound to accept the lowest of any bid the bank may
receive.

Dated _____ day of _____ 2019.

(Signature in the Capacity of)
Duly Authorized to sign bid for and on behalf of
(Name & Address of Bidder _____)

BID FORM

[To be submitted on the letterhead of the bidder along with Technical bid]

Ref No.

Date:

To,
The Engineer-in-Chief,
Power & Electricity Department,
Mizoram, Aizawl

Dear Sir,

Sub: RfP No.....Dated

For Supply & Installation of Computer & Accessories, Networking Equipment, Meters & GPS Based Survey

We, the undersigned, offer to supply and deliver equipments and services of Computer & Accessories, Networking Equipment & Meters in conformity with the tender.

We undertake, if our bid is accepted, to deliver the Goods in accordance with the delivery schedule specified in the Tender.

If our bid is accepted, we will provide Bank guarantee in your favor for a sum equivalent to 5% of the contract price for the due performance of the contract in the format prescribed by the purchaser.

We agree to abide by this bid for the period of 120 days from the last date of submission of tender document and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with Purchaser's written acceptance thereof and the Purchaser's notification of award shall constitute a binding Contract between us.

We hereby undertake to produce the certificate from our OEM supplier in support of above undertaking at the time of delivery/installation. It will be our responsibility to produce such letters from our OEM supplier's at the time of delivery or within a reasonable time.

We also undertake that in respect of licensed operating system if asked for by you in the purchase order, the same shall be supplied along with the authorized license certificate [e.g., product keys on certification of authenticity in case of Microsoft Windows operating system) and also that it shall be sourced from the authorized source (e.g., authorized Microsoft channel in case of Microsoft operating system).

In case of default and we are unable to comply with above at the time of delivery or during installation for the It hardware / software already billed, we agree to take back.

Service Support Details

SERVICE SUPPORT DETAILS							
Sl. No	Location	Whether local support available at the location [YES / NO]	In respect Column 2, if Response is "NO" Specify location from which support extended	Services support OWN of through Franchisee	Address and Telephone No. [for response specified in Column 4]	Working Days and Hours	No. of Service Engineer
1	2	3	4	5	6	7	8
1	Aizawl						

Annexure V

Forwarding Letter (To be submitted on company's letter head)

To:
The Engineer-in-Chief,
Power & Electricity Department,
Mizoram, Aizawl

Dear Sir,

Sub: For supply of Computer & Accessories, Networking Equipment & Meters

This is in reference to your above mentioned tender for the procurement of Computer & Accessories, Networking Equipment & Meters. Having examined the tender document, the receipt of which is hereby duly acknowledged, we the undersigned, hereby submit our proposal along with necessary supporting documents.

Further, we agree to abide by all the term and conditional as mentioned in the tender document. We have also noted that Purchaser reserves the right to consider/reject any or all applications without assigning any reason thereof.

Date/...../2019

Authorized Signatory.

Name :

Designation:

Annexure VI

Proforma of Indemnity

This is to certify that M/s _____ who have supplied **Computer & Accessories, Networking Equipment & Meters** to POWER & ELECTRICITY DEPARTMENT, GOVT. OF MIZORAM Purchaser, Aizawl vide order no _____ dated _____ 2018 have all required rights for the software, The software supplied by us is legal/ licensed copies.

Further, M/s _____ is willing to indemnify POWER & ELECTRICITY DEPARTMENT, GOVT. OF MIZORAM Purchaser any claims due to violation of any patents and copyrights for the software sold under licensing agreement from us. The above indemnity is limited to the software supplied by M/s _____ only.

For M/s _____
Signature with seal, name, designation and date

Annexure VII

Acceptance Criteria

The acceptance will be given after physical delivery of the items at respective location, successfully at respective Power & Electricity Department, Govt. of Mizoram Purchaser Offices/locations mentioned below :

SNo.	Nature of activity	Remarks
1	Physical Delivery of the Hardware / software items as per the PO and Hardware / Software configuration.	The vender has to deliver the items mentioned in the PO at Purchaser premises.
3	Acceptance Report	As a confirmation to the above activities mentioned at Sr. 1, vendor shall obtain duly signed acceptance report, MRHO Certificate from the Purchaser officials of respective locations and submit the same at the time of claiming final payments.

Annexure – VIII

**Undertaking of Authenticity for Hardware items
(To be signed by authority not lower than the Company Secretary of the Vendor)**

With reference to the Hardware items being quoted to you vide our quotation No : dated _____, we hereby undertake that all the components / parts / assembly / shall be original new components / parts / assembly / software only, from respective OEMs of the products and that no refurbished / duplicate / second hand components / parts / assembly / software are being used or shall be used.

We also undertake that in respect of license operating system if asked for by you in the purchase order, the same Shall be supplied along with the authorized license certificate [e.g., product keys on certification of authenticity in case of Microsoft Windows operating system] and al-sothat it shall be sourced from the authorized source (e.g., authorized Microsoft channel in case of Microsoft operating system).

Should you require, we hereby undertake to produce the certificate from our OEM supplier in support of above undertaking at the time of delivery/installation. It will be our responsibility to produce such letters from our OEM supplier's at the time of delivery or within a reasonable time.

In case of default and we are unable to comply with above at the time of delivery or during installation for the IT hardware /I software already billed, we agree to take back the Desktops and monitors without demur, if already supplied and return the money if any paid to us by you in this regard.

We (Vendor name) also take full responsibility of both parts & service SLA as per the content if there is any defect by our authorized services centre/reseller/SI etc.

Authorized Signatory

Name
Designation

Place

Date

FINANCIAL BID (PRICE SCHEDULE)

This form shall be used for towns without CC, DR and DC center. This form shall be repeated for towns (RAPDRP).

STANDARD BID SHEET FOR TOWN WITHOUT DATA/DR CENTER & CUSTOMER CARE

NAME OF TOWNS

BAIRABI, BIATE, DARLAWN, HNAHTHIAL, KAWNPUJ, KHAWHAI, MAMIT, N. VANLAIPHAJ, THENZAWL, TLABUNG, VAIRENGTE & ZAWLNUAM

Item Description	Type (Refer SRS Document for exact Technical Specifications)	Unit	Quantity	Unit Rate	Total Cost (per unit)	Freight & Insurance (per unit)	GST	Total Supply Costs	Installation Costs	Total Cost
				Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Hardware/ Equipment										
Switches										
Layer II Switch		No	32							
Sub Total										
Routers										
Router for MPLS/ VPN Network		No	32							
Sub Total										
Cabling System										
Cables, Jacks etc.		lot	32							
Workstation / Equipment Cords		lot								
Sub Total										
Hardware for AMR based Data Logging System										
GPRS/CDMA/EDGE/3G Modem		No	210							
DCU		No								
Sub Total										
Spot Billing System										
Hand Held Spot Billing Equipment connected with Portable Printer		No	46							
Sub Total										
UPS & Battery System										
2 KVA UPS		No	32							
Sub Total										
IP Telephony										
IP Phones		No	24							
Sub Total										
Workstation PCs, Printers & Others										
Workstation PC (including UPS, Computer chair, table etc.)		No	109							
Dot Matrix Printers		No	72							
Network LaserJet (B/W) Printer		No	12							
Bar Code Reader		No	72							
Sub Total										
Meters										
Feeders Meter		No	13							
Boundary Meters		No	6							
DT Meters		No	129							
HT Consumers		No	0							
Sub Total										
GPS based GIS Survey of Assets										
Procurement of Satellite Imagery of 2.5 m resolution, mono data type and creation of Base Map of project area.		Sq. Km	140							
Locating co-ordinates (Latitude-Longitude) using GPS, collection/updation of attribute database of following										
66/33, 66/11, 33/11 kV substations		Nos	12							
HT (66, 33, 11 kV) overhead lines/underground cables alongwith associated line equipments such as Poles, RMUs, Distribution Transformers, Capacitors etc.		Kms	686.08							
LT overhead lines and underground cables alongwith associated equipments such as poles, feeder pillar boxes etc.		Kms	210.92							
Preparation of digitized electrical network mapped on the base map in the pre-defined scale with features and attributes of assets collected through GPS survey for GIS application and tagging of Consumers connected with each 11 KV Feeder in GIS system to enable calculation of Feeder wise and Town wise Energy Audit (Feeder wise consumer list shall be provided by Utility)		Per Town	12							
Sub Total										
Total					0					

Note : Bidders are requested to note the following :

All the details must be provided as per format.

Masked commercial bids must be given with technical bid.

All the rates must be quoted in INR.

Date	Signature of Authorized Signatory.....
Place	Name of the Authorized Signatory
	Designation
	Name of the Organization
	Seal

Power & Electricity Department, Govt. of Mizoram

Delivery

1. Delivery of items will have to be made within 3 months' time from the date of receipt of order.
 2. In case of late delivery, penalty shall start of delivery period (i.e. three weeks from the date of receipt of order by the supplier).
 3. Penalty of 0.5% of total order amount per day for the period of two weeks and thereafter Penalty of 1% of the total order amount for next two weeks shall be imposed, after which order may be cancelled.
-
1. Installation period is two weeks from the date of delivery of all the equipment's in the order and penalty shall start if equipment have not been installed within two weeks of delivery.
 2. Penalty shall be 0.5% of the total order amount per day for two weeks and 1% of the order amount per day for another two weeks after which all the equipment's may be rejected and order cancelled.
-
1. During the warranty period the vendor's engineer shall make preventive maintenance visit twice a month on prefixed days and time.
 2. Terms and conditions to be followed during the warranty periods are attached separately with this document.

Terms and Condition during Warranty periods

The Company having warranty will maintain all machines in full working condition for the entire warranty period. The annual up time for the machine should not less than 97% .

Warranty

Includes all parts replacement and standby facilities .

Incase of System failure

The Complaint must be attended by company's engineer with in one calendar day after the complaint is reported.

For calls not requiring spare parts

The system will be made operational within one working day or three calendar days whichever is earlier , from the date call is registered.

For calls requiring spare parts

The System will be made operational within five working days or seven calendar days, whichever is earlier from the day call is registered.

Systems down time will be computed in number of calendar days. UIET, Power & Electricity Department, Mizoram will impose penalty on the Company, if the total annual income uptime is less than 97% .

Penalty

For down payment, penalty will be computed as follows:

Penalty per system per day = $3x(\text{cost of the system}/365)$ subject to a limit of total cost of the systems.

Note1:- It is important that the service Engineer must visit the labs on regular intervals, at least twice a month.

Note2: Computer, Printer and Meter etc will be purchased only through Branded/Original equipment
Manufacturers or authorized dealer/seller