NEPAL ELECTRICITY AUTHORITY

(A Government of Nepal Undertaking)

Distribution and Consumer Services Directorate

Smart Metering & Automation Department



International Competitive Bidding (ICB) Single Stage Two Envelope Procedure

Bidding Document For

Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meters with Pilfer Proof Meter Box as per Technical Specifications and Scope of Works.

Issued on: 10 July 2025

Invitation for Bids No.: NEA/DCSD/SMAD/ICB-081/82-01
Contract Identification No.: NEA/DCSD/SMAD/ICB-081/82-01

Abbreviations

BDS..... Bid Data Sheet BD Bidding Document DCS...... Delivery and Completion Schedule DP Development Partner EQC Evaluation and Qualification Criteria GCC General Conditions of Contract GoN¹ Government of Nepal ICC..... International Chamber of Commerce IFB Invitation for Bids ITB Instructions to Bidders LGRS List of Goods and Related Services NCB National Competitive Bidding PAN Permanent Account Number PPMOPublic Procurement Monitoring Office SBD..... Standard Bidding Document SBQ..... Schedule of Bidder Qualifications SCC..... Special Conditions of Contract SR Schedule of Requirements TS..... Technical Specifications VAT Value Added Tax

¹ "GoN" word indicates all public entities according to Public Procurement Act, 2063



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Invitation for Bids

Nepal Electricity Authority

Distribution and Consumer Services Directorate

Durbarmarg, Kathmandu

Date of publication: 10 July 2025

Invitation for Bids No.: NEA/DCSD/SMAD/ICB-081/82-01

- 1. Nepal Electricity Authority, Distribution and Consumer Services Directorate invites electronic bids from eligible bidders for the procurement of Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meter with Plifer Proof Meter Box as per Technical Specification and Scope of Works under International Competitive Bidding Single Stage Two Envelope.
- 2. Under the Single Stage, Two Envelope Procedure, Bidders are required to submit simultaneously two separate sealed envelopes, one containing (i) the Technical Bid and the other (ii) the Price Bid, both in turn enclosed in one sealed envelope as per the provision of ITB 23 of the Bidding Document.
- 3. Eligible Bidders may obtain further information and inspect the bidding documents at the office of Nepal Electricity Authority, Distribution and Consumer Services Directorate, Smart Metering & Automation Department, Durbarmarg, Kathmandu (Ph. No.01-4153198, Email: smsg@nea.org.np) or may visit PPMO egp system www.bolpatra.gov.np/egp.
- 4. Bidders who choose to submit their bid electronically may download the bidding documents for e-submission from PPMO's e-GP system **www.bolpatra.gov.np/egp**. Bidders submitting their bid electronically should deposit the cost of bidding document in the following account as specified below.

Cost of Bid Document: NPR 10,000 (Ten Thousand only)
Name of the Bank: Everest Bank Ltd., Baghbazar
Name of the Office: Nepal Electricity Authority

Office Account No.: 04400105200628

- 5. Electronic bids must be submitted through PPMO's e-GP system www.bolpatra.gov.np/egp on or before 12:00 Hours on 24 August 2025. Bids received after this deadline will be rejected.
- 6. The bids will be opened in the presence of Bidders' representatives who choose to attend at 13:00 Hours on 24 August 2025 at the office of Nepal Electricity Authority, Distribution and Consumer Services Directorate, Durbarmarg, Kathmandu Bids must be valid for a period of 120 days from the date of bid opening and must be accompanied by a bid security or scanned copy of the bid security in pdf format in case of e-bid, amounting to a minimum of USD 40,000.00 (or equivalent amount in NPR, the selling exchange rate for which shall be that of published by Nepal Rastra Bank in the day of publication of the Invitation of Bids), which shall be valid for 30 days beyond the validity period of the bid.
- 7. If the last date of purchase and /or submission falls on a government holiday, then the next working day shall be considered as the last date. In such a case the validity period of the bid and bid security shall remain the same as specified for the original last date of bid submission.



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Section I. Instructions to Bidders

A. General

- 1. Scope of Bid
- 1.1 In connection with the Invitation for Bids *indicated in the Bid Data Sheet (BDS)*, the Purchaser as *indicated in the BDS* issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in Section V, Schedule of Requirements. The name, identification, and number of contracts (packages/lots) are *indicated in BDS*.
- 1.2 Throughout this Bidding Document:
 - (a) the term "in writing" means communicated in written form with proof of receipt.
 - (b) if the context requires, singular means plural and vice versa; and
 - (c) "day" means calendar day.
- 2. Source of Funds
- 2.1 GoN Funded: In accordance with its annual program and budget, approved by the GoN, the Purchaser intends to apply a portion of the allocated budget to eligible payments under the contract(s) *indicated in the BDS* for which this Bidding Document is issued.

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- DP Funded: The GoN has applied for or received financing (hereinafter called "funds") from the Development Partner (hereinafter called "the DP") *indicated in the BDS* toward the cost of the project *named in the BDS*. The GoN intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
- 2.2 DP Funded: Payment by the DP will be made only at the request of the GoN and upon approval by the DP in accordance with the terms and conditions of the financing agreement between the GoN and the DP (hereinafter called the "Loan Agreement") and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the GoN shall derive any rights from the Loan Agreement or have any claim to the funds.
- 3. Fraud and Corruption
- 3.1 Procuring Entities as well as Bidders, suppliers and contractors and their sub-contractors shall adhere to the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this:
 - (a) the Purchaser adopts, for the purposes of this provision, the terms as defined below:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - (ii)"fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly



- misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation.
- (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.
- (v) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an investigation; (b) making false statements to investigators in order to materially impede an investigation; (c) failing to comply with requests to provide information, documents, or records in connection with an investigation; (d) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (e) materially impeding GoN/DP's contractual rights of audit or access to information; and
- (vi) "integrity violation" is any act which violates Anticorruption Policy, including (i) to (v) above and the following: abuse, conflict of interest, violations of GoN/DP sanctions, retaliation against whistleblowers or witnesses, and other violations of Anticorruption Policy, including failure to adhere to the highest ethical standard.
- (b) the Purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the contract.
- (c) DP will cancel the portion of the financing allocated to a contract if it determines at any time that representative(s) of the GoN or of a beneficiary of DP-financing engaged in corrupt, fraudulent, collusive, or coercive practices or other integrity violations during the procurement or the execution of that contract, without the GoN having taken timely and appropriate action satisfactory to DP to remedy the situation.
- (d) DP will impose remedial actions on a firm or an individual, at any time, in accordance with DP's Anticorruption Policy and related Guidelines (as amended from time to time), including declaring ineligible, either indefinitely or for a stated period of time, to participate in DP-financed, -administered, or -supported activities or to benefit from an DP-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent,



- collusive, coercive, or obstructive practices or other integrity violations; and
- (e) The Supplier shall permit the GoN/DP to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the GoN/DP, if so, required by the GoN/DP.
- 3.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement:
 - (a) give or propose improper inducement directly or indirectly,
 - (b) distortion or misrepresentation of facts,
 - (c) engaging in corrupt or fraudulent practice or involving in such act,
 - (d) interference in participation of other competing bidders,
 - (e) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
 - (f) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Purchaser the benefit of open competitive bid price,
 - (g) Contacting the Purchaser with an intention to influence the Purchaser with regards to the bids or interference of any kind in examination and evaluation of the bids during the period from the time of opening of the bids until the notification of award of contract.
- 3.3 PPMO, on the recommendation of the Procuring Entity may blacklist a Bidder for a period of one (1) to three (3) years for its conduct including on the following grounds and seriousness of the act committed by the bidder:
 - (a) if convicted by a court of law in a criminal offence which disqualifies the Bidder from participating in the contract,
 - (b) if it is established that the contract agreement signed by the Bidder was based on false or misrepresentation of Bidder's qualification information,
 - (c)if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for, or in executing, a GoN/DP-financed contract.
 - (d) if the Successful Bidder fails to sign the Contract.
- 3.4 A bidder declared blacklisted and ineligible by the GoN, Public Procurement Monitoring Office (PPMO) and/or the DP in case of DP funded project, may be ineligible to bid for a contract during the period of time determined by the GoN, PPMO and/or the DP including credit information bureau of Nepal.
- 3.5 In case of a natural person or firm/institution/company which is



- already declared blacklisted and ineligible by the GoN, any other new or existing firm/institution/company owned partially or fully by such Natural person or Owner or Board of director of blacklisted firm/institution/company; shall not be eligible bidder.
- 3.6 Furthermore, Bidders shall be aware of the provisions of GCC 34.1(c).

4. Eligible Bidders

- 4.1 This Invitation for Bids is open to eligible Bidders from all countries, except for any *specified in the BDS*.
- 4.2 A Bidder may be a natural person, private entity, governmentowned entity (subject to ITB 4.5) or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture (JV). The maximum number of parners in JV shall be as **specified in BDS**. In the case of a JV:
 - (a) all parties to the JV shall be jointly and severally liable; and
 - (b) a JV shall nominate a representative who shall have the authority to conduct all businesses for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.
- 4.3 A Bidder shall not have a conflict of interest. Any Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:
 - (a) have controlling shareholders in common.
 - (b) receive or have received any direct or indirect subsidy from any of them.
 - (c) have the same legal representative for the purposes of this Bid.
 - (d) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder or influence the decisions of the Purchaser regarding this bidding process.
 - (e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid: or
 - (f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods and services that are the subject of the bid.



- (g) a Bidder that has a close business or family relationship with a professional staff of the Procuring Entity.
- 4.4 A Bidder that is under a declaration of ineligibility by the GoN/DP in accordance with ITB 3.4, at the date of the deadline for bid submission or thereafter, shall be disqualified. The list of debarred firms is available at the electronic address **specified in the BDS**.
- 4.5 A GoN-owned enterprise may also participate in the bid if it is legally and financially autonomous, it operates under commercial law, and it is not a dependent agency of the Purchaser.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.
- 4.7 Firms shall be excluded in any of the cases, if
 - (a) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.
 - (b) DP Funded: as a matter of law or official regulation, GoN prohibits commercial relations with that country, provided that the DP is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required.
 - (c) DP Funded: a firm has been determined to be ineligible by the DP in relation to their guidelines or appropriate provisions on preventing and combating fraud and corruption in projects financed by them.
- 4.8 A bidder and all parties constituting the Bidder shall have the nationality of an eligible country as defined by the concerned DP for DP funded projects.
- 4.9 The domestic Bidder who has obtained Permanent Account Number (PAN) and Value Added Tax (VAT) registration certificate(s) and Tax clearance certificate or proof of submission of tax return from the Inland Revenue Office shall only be eligible. The foreign bidder submitting the documents *indicated in the BDS* at the time of bid submission and a declaration to submit the document(s) *indicated in the BDS* at the time of contract agreement shall only be eligible.
- 4.10 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- 5.1 All goods and related services to be supplied under the contract are eligible, unless their origin is from a country *specified in the BDS*.
- 5.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied.

5. Eligible Goods and Related Services



- 6. Site Visit
- 5.3 The nationality of the firm/Bidder that produces, assembles, distributes, or sells the goods shall not determine their origin.
- 6.1 For goods contracts requiring installation/ commissioning/ networking or similar services at site, the Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site and obtain all information that may be necessary for preparing the Bid and entering into a contract for the supply of goods and related services.
- 6.2 The Bidder should ensure that the Purchaser is informed of the visit in adequate time to allow it to make appropriate arrangements.
- 6.3 The costs of visiting the Site shall be at Bidder's own expense.

B. Contents of Bidding Document

- 7. Sections of the Bidding Document
- 7.1 The Bidding Document consists of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read and construed in conjunction with any Addenda issued in accordance with ITB 9.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (**BDS**)
- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms

PART 2 Supply Requirements

• Section V. Schedule of Requirements

PART 3 Conditions of Contract and Contract Forms

- Section VI. General Conditions of Contract (GCC)
- Section VII. Special Conditions of Contract (SCC)

Section VIII. Contract Forms

- 7.2 The Purchaser will reject any Bid submission (in case of hard copy submission) if the Bidding Document was not purchased directly from the Purchaser, or through its assigned office as stated in the invitation for bids or has not deposited (in case of electronically submission) the cost of Bidding Document as stated in the invitation for bids.
- 7.3 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document as well as in Amendments, if any. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.
- 7.4 The Invitation for Bids issued by the Purchaser is not part of the Bidding Document
- 8. Clarification of Bidding Document/ Prebid meeting
- 8.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Purchaser in writing at the Purchaser's address *indicated in the BDS* or raise any question or curiosity during the pre-bid meeting if provided for in accordance with ITB 8.2. The Purchaser will respond in



- writing to any request for clarification, provided that such a request is received within the time limit *specified in the BDS* prior to the deadline for submission of Bids. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the Bidding Document as a result of clarification, it shall do so following the procedure under ITB 9 and 24.2.
- 8.2 The purchaser may organize a pre-bid meeting of Bidders at least fifteen (15) days before the deadline for submission of Bids at the place, date, and time as *specified in the BDS* to provide information relating to Bidding Documents, Technical specifications, and the like matters. Should the purchaser deem it necessary to amend the Bidding Document as a result of clarification, it shall do so following the procedure under ITB 9 and ITB 24.2.

9. Amendment of Bidding Document

- 9.1 At any time prior to the deadline for submission of the Bids, the Purchaser may amend the Bidding Document by issuing addenda.
- 9.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document directly from the Purchaser.
- 9.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB 24.2.

C. Preparation of Bids

10. Cost of Bidding

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

11. Language of Bid

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

12. Documents Comprising the Bid

- 12.1 The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in ITB 12.2 and the other the Price Bid containing the documents listed in ITB 12.3, both envelopes enclosed together in an outer single envelope.
- 12.2 The Technical Bid shall comprise the following:
 - a) Letter of Technical Bid.



- b) Bid Security in accordance with ITB 21.
- c) alternative technical bids, at Bidder's option and if permissible, in accordance with ITB 14.
- d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22.
- e) documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid.
- f) documentary evidence in accordance with ITB Clauses 18 and 31, that the Goods and Related Services conform to the Bidding Document.
- g) documentary evidence in accordance with ITB 19 establishing the Bidder's qualifications to perform the contract if its Bid is accepted; and
- h) any other required documents, which is not against the provision of Procurement Act/Regulation/Directives and Standard Bidding Document issued by PPMO, *required in the BDS*.
- 12.3 The Price Bid submitted by the Bidder shall comprise the following:
 - a) Price Bid Submission Letter and the applicable Price Schedules, in accordance with ITB 13, ITB 15, and ITB 16.
 - b) alternative Price Bid corresponding to the alternative Technical Bid, if permissible, in accordance with ITB 14; and
 - c) any other document required in the BDS.
- 12.4 The Bidder is solely responsible for the authenticity of the submitted documents.
- 12.5 The Technical Bid shall not include any financial information related to the Price Bid. A Technical Bid containing such material financial information shall be declared non-responsive.

13. Bid Submission Letter and Price Schedules

- 13.1 The Bidder shall submit the Technical Bid Submission Letter and the Price Bid Submission Letter using the form furnished in Section IV, Bidding Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled with the information requested.
- 13.2 The Bidder shall submit, as part of the Price Bid, the Price Schedules for Goods and Related Services, according to their origin as appropriate, using the forms furnished in Section IV, Bidding Forms.
- 14. Alternative Bids
- 14.1 Unless otherwise *indicated in the BDS*, alternative bids shall not be considered.
- 15. Bid Prices and Discounts
- 15.1 The prices and discounts quoted by the Bidder in the Letter of Price bid and in the Price Schedules shall conform to the requirements specified below.



- 15.2 The Bidder shall complete the appropriate Price Schedule, and the sources of Goods schedules included herein, stating the unit prices, total cost per item, the total Bid amount, and the expected countries of origin of the Goods to be supplied under the contract.
- 15.3 All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is substantially responsive, the corresponding adjustment shall be applied in accordance with ITB 39.3. Unit rates and prices for all items in the Schedule of Supply shall be expressed in positive values. If unit rates and prices are expressed in negative values, the bid will be rejected.
- 15.4 The price to be quoted in the Letter of Price Bid shall be the total price of the Bid excluding any discounts offered. The absence of the total bid price in the Letter of Price Bid may result in the rejection of the Bid.
- 15.5 If the Bidder intends to offer any unconditional discount, it shall always be expressed at a fixed percentage and that shall not vary as the quantity varies and be applicable to each unit rate. The discount and methodology for its application shall be quoted in the Letter of Price Bid.
- 15.6 The terms EXW, CIF, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, on the date of the Invitation for Bids or as specified in the BDS.
- 15.7 Prices shall be quoted as specified in each Price Schedule included in **Section IV**, **Bidding Forms**. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. Prices shall be entered in the following manner:
 - (a) For Goods manufactured in Nepal:
 - a) the price of the goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties, Value Added Tax and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of goods quoted ex works or ex factory, or on the previously imported goods of foreign origin quoted ex warehouse, ex showroom, or off-the-shelf.
 - b) Value Added Tax and all other taxes applicable in Nepal and payable on the Goods if the Contract is awarded to the Bidder.



c) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified in the BDS.

the total price for the item.

- (b) For Goods manufactured outside Nepal, to be imported:
 - (i) the price of the goods quoted CIF (named port of destination), or CIP (border point), or CIP (named place of destination), named place of destination as **specified in the BDS.**
 - (ii) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) **specified in the BDS.**
 - (iii) in addition to the CIP prices specified in (b)(i) above, the price of the Goods to be imported may be quoted FOB port of shipment (or FCA, as the case may be) or CPT (named place of destination), if so, **specified in the BDS**; and
 - (iv)the total price for the item.
- (c) For Goods manufactured outside Nepal, already imported:
 - [For previously imported Goods, the quoted price shall be distinguishable from the original import value of these Goods declared to customs and shall include any rebate or mark-up of the local agent or representative and all local costs except import duties and taxes, which have been and/or have to be paid by the Purchaser. For clarity the bidders are asked to quote the price including import duties, and additionally to provide the import duties and the price net of import duties which is the difference of those values.]
 - (i) the price of the Goods, including the original import value of the Goods; plus, any mark-up (or rebate); plus, any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported.
 - (ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported.
 - (iii) the price of the Goods, obtained as the difference between (i) and (ii) above.
 - (iv) any sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder.
 - (v) the price for inland transportation, insurance, and other local services required to convey the



Goods from the named place of destination to their final destination (Project Site) **specified in the BDS:** and

- (vi) the total price for the item.
- (d) For Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:
 - (i) the local currency cost component of each item comprising the Related Services; and
 - (ii) the foreign currency cost component of each item comprising the Related Services, inclusive of all custom ruties, Value Added Tax and other taxes aplicable in the Purchaser's country, payable on the related services, if the contract is awarded to the Bidder.
- 15.8 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise *specified in the BDS*. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 32. However, if in *accordance with the BDS*, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.
- 15.9 If so, indicated in ITB 1.1, Bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Bidders wishing to offer any price discount for the award of more than one Contract shall specify in their Price Bids the price discount applicable to each package, or alternatively, to individual Contracts within the package. Price discounts shall be submitted in accordance with ITB 15.7, provided the Price Bids for all lots are submitted and opened at the same time.

16. Currencies of Bid

- 16.1 Bid prices shall be quoted in the following currencies:
 - a) Bidders may express their bid price in any fully convertible currency. If a Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three currencies in addition to the Nepalese currency.
 - b) All expenditures that are to be incurred in Nepal for i) inland transportation and related costs, ii) all taxes, and iii) local currency cost component of related services other than inland transportation and other services should be expressed in the Bid in Nepalese currency and will be payable in Nepalese currency.

17. Documents Establishing the

17.1 To establish their eligibility in accordance with ITB 4, Bidders shall:



Eligibility of the Bidder

- a) complete the eligibility declarations in the Bid Submission Letter, included in Section IV, Bidding Forms; and
- b) if the Bidder is an existing or intended JV in accordance with ITB 4.2, submit a copy of the JV Agreement, or a letter of intent to enter into such an Agreement. The respective document shall be signed by all legally authorized signatories of all the parties to the existing or intended JV, as appropriate.
- c) submit the copy of the documents *specified in Section III*, *Evaluation and Qualification Criteria*.
- 18. Documents
 Establishing the
 Conformity of
 the Goods and
 Related Services
 to the Bidding
 Document
- 18.1 To establish the conformity of the Goods and Related Services to the Bidding Document, the Bidder shall furnish as part of its Technical Bid the documentary evidence that the Goods and Related Services conform to the requirements specified in Section V, Supply Requirements.
- 18.2 The documentary evidence may be in the form of literature, drawings, or data, and shall consist of a detailed item-by-item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to those requirements, and if applicable, a statement of deviations and exceptions to the provisions of Section V, Schedule of Requirements.
- 18.3 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.
- 18.4 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in Section V, Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in Section V, Schedule of Requirements.
- 19. Documents
 Establishing the
 Qualifications of
 the Bidder
- 19.1 To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the evidence indicated for each qualification criteria specified in Section III (Evaluation and Qualification Criteria). The documentary evidence of the Bidder's qualifications to fulfil the contract, if his bid is accepted, shall establish to the Purchaser's satisfaction that the Bidder meets each of the qualification criterion specified.
- 19.2 If so, *required in the BDS*, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section



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- IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Nepal and take care of the warranty provided.
- 19.3 If so, *required in the BDS*, a Bidder that does not conduct business within Nepal shall submit evidence that it will be represented by an Agent in Nepal equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.
- 19.4 A foreign Bidder wishing to have or already having a local agent shall state the following:
 - a. Name and address of the Agent/Representative,
 - b. The Agent/Representative providing type of services,
 - c. Amount of commission if the Agent/Representative is entitled to get such payment and if it participates in the procedure of payment,
 - d. Other agreement with Agent/Representative, if any,
 - e. Bidder shall certify in the Letter of Authorization as follows:

"We certify that the statement and disclosure made by us on the above are complete and true to the best of our knowledge and belief",

If the agent has not been appointed:

- a. Source of information about tender invitation,
- b. The remuneration given to the individual or firm/company or organization to work on its behalf for submitting tender, representation in the bid opening and other required action in connection with the tender,
- c. Transfer or handover evidence of foreign currency exchanged which required to be submitted with the tender,
- d. If the bank account of any Nepali citizen has been used for the exchange of foreign currency specify the name of the individual and his address. If the foreign currency has been exchanged by self, then the certificate of currency exchange.
- 19.5 If a foreign Bidder in its Bid, has not provided the information mentioned in ITB 19.4 or has submitted its bid stating that the Bidder does not have a local agent and later it is proved that the bidder has a local agent or it is proved that the commission mentioned in the Bid is less than the commission received by the local agent then the Purchaser shall initiate proceedings to blacklist such bidder in accordance with ITB 3.3.
- 20. Period of Validity of Bids
- 20.1 Bid shall remain valid for a period *specified in the BDS* after the bid submission deadline date prescribed by the purchaser. If the prescribed bid submission deadline date falls on a government holiday, then the next working day shall be considered as the bid submission deadline date. In such case the validity period of the bids shall be considered from the original



bid submission deadline date. A bid valid for a shorter period shall be rejected by the purchaser as nonresponsive.

- 20.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 21, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid and to include any additional conditions against the provisions specified in Bid Documents.
- 21. Bid Security
- 21.1 The Bidder shall furnish as part of its bid, in original form a Bid Security as *specified in the BDS*. In case of e-submission of bid, the Bidder shall upload scanned copy of Bid security letter at the time of electronic submission of the bid. The Bidder accepts that the scanned copy of the Bid security shall, for all purposes, be equal to the original. The details of original Bid Security and the scanned copy submitted with e-bid should be the same otherwise the bid shall be non-responsive.
- 21.2 If a bid security is specified pursuant to ITB 21.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder's option:
 - 16.1.1 original copy of an unconditional bank guarantee from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law or.
 - 16.1.2 original copy of an unconditional bank guarantee from commercial foreign bank or.
 - 16.1.3 original copy of cash deposit voucher in the Purchaser's Account as *specified in BDS*.

In case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another form acceptable to the purchaser. The form must include the complete name of the Bidder. The Bid Security shall be valid for a minimum of thirty (30) days beyond the end of the validity period of the bid, or beyond any period of extension if requested under ITB 20.2.

The bid security issued by any foreign Bank outside Nepal must be counter guaranteed by a Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal.

21.3 If a bid Security is required in accordance with ITB 21.1, any Bid not accompanied by an enforceable and substantially compliant Bid Security in accordance with ITB 21.2, shall be rejected by the Purchaser as nonresponsive. In case of e-Submission, if the scanned copy of an acceptable bid security letter is not uploaded with the electronic bid, then bid shall be rejected.



- 21.4 If a Bid Security is specified pursuant to ITB 21.1, the Bid Security of unsuccessful Bidders shall be returned within three (3) days upon the successful Bidder's' furnishing of the required performance security and signing of the Contract Agreement pursuant to ITB 44.1 and 45.1.
- 21.5 If a Bid Security is specified pursuant to ITB 21.1, the Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has furnished the required Performance Security and signed the Contract Agreement.
- 21.6 The Bid Security may be forfeited:
- (a) a Bidder requests for withdrawal or modification of its bid, except as provided in ITB 20.2
 - (i) during the period of bid validity specified by the Bidder on the Letter of Bid, in case of electronic submission.
 - (ii) from the period twenty-four hours prior to bid submission deadline up to the period of bid validity specified by the Bidder on the Letter of Bid, in case of hard copy submission.
- (b) a Bidder changes the prices or substance of the bid while providing information pursuant to clause 29.1.
- (c) a Bidder involves in fraud and corruption pursuant to clause 3.1.
- (d) the successful Bidder fails to:
 - (i) furnish performance security in accordance with ITB 44.1.
 - (ii) sign the Contract in accordance with ITB 45.1; or
 - (iii) accept the correction of arithmetical errors pursuant to clause 36.
- 21.7 The Bid Security of a JV must be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB 17.1 (b).

22. Format and Signing of Bid

22.1 The Bidder shall prepare one original set of the Technical Bid and one original set of the Price Bid as described in ITB 12 and clearly mark each "ORIGINAL - TECHNICAL BID" and "ORIGINAL - PRICE BID". Alternative bids, if permitted in accordance with ITB 14, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the Technical Bid and the Price Bid, in the number specified in the BDS and clearly mark them "COPY NO... - TECHNICAL BID" and "COPY NO... - PRICE BID". In the event of any discrepancy between the original and the copies, the original shall prevail.

In case of e-submission of bid, the Bidder shall submit his bid electronically in PDF or online forms files as specified in ITB Clause 23.1(b). If a Bidder submits both the electronic bid and a bid in hard copy within the bid submission deadline, then the submitted Bids shall be accepted for evaluation provided that



- the facts and figures in hard copy confirm to those in electronic bid. If there is any major discrepancy in fact and figures in the electronic bid and bid in hard copy, it shall be treated as two separate bids from one Bidder and both the Bids shall be disqualified, as per ITB Clause 4.3 (e).
- 22.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as *specified in the BDS* and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for unamended printed literature, shall be signed or initialed by the person signing the bid
- 22.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

23. Sealing and Marking of Bids

- 23.1 Unless otherwise **specified in BDS**, Bidders shall submit their bids by electronic or by mail/ by hand/ by courier. Procedures for submission, sealing and marking are as follows:
 - (a) Bidders submitting bids by mail, by hand or by Courier shall enclose the original of the Technical Bid, and the original of the Price Bid and each copy of the Technical Bid and Price Bid, including alternative bids, if permitted in accordance with ITB 14, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL TECHNICAL BID", "ORIGINAL PRICE BID", "ALTERNATIVE" and "COPY No.... TECHNICAL BID" and "COPY NO.... PRICE BID" as appropriate. These envelopes containing the original and the copies shall then be enclosed in one single envelope.
 - (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedure specified in this clause.
 - i. The bidder is required to register in the e-GP system https://www.bolpatra.gov.np/egp following the procedure specified in e-GP guideline.
 - ii. Interested bidders may either purchase the bidding document from the Employer's office as specified in the Invitation for Bid (IFB) or bidders may download the IFB and bidding document from e-GP system.
 - iii. The registered bidders need to maintain their profile data required during preparation of bids.
 - iv. In order to submit their bids, the cost of the bidding document can be deposited as specified in IFB. In addition, electronic scanned copy (.pdf format) of



- the bank deposit voucher/cash receipt should also be submitted along with the technical bid.
- v. The bidder can prepare their technical and price bids using data and documents maintained in bidder's profile and forms/format provided in bidding document by Employer. The bidder may submit bids as a single entity or as a joint venture. The bidder submitting bid in joint venture shall have to upload joint venture agreement along with partner(s) Bolpatra ID provided during bidder's registration.
- vi. Bidders (all partners in case of JV) should update their profile data and documents required during preparation and submission of their technical bids.
- vii. In case of bid submission in JV, the consent of the partners shall be obtained through the confirmation link sent to the registered email address and the partners shall have to acknowledge their confirmation.

The required forms and documents shall be part of technical bids.

No.	Document	Requirement	Remarks
1.	Letter of Technical Bid	Mandatory	PDF
2.	Bid Security/Bank Guarantee	Mandatory	PDF
3.	Company registration Certificate	Mandatory	PDF
4.	VAT registration Certificate	Mandatory (for domestic bidders only)	PDF
5.	Business Registration Certificate	Mandatory	PDF
6.	Tax Clearance Certificate/Tax return submission evidence/evidence of time extension	Mandatory (for domestic bidders only)	PDF
7.	Power of Attorney of Bid signatory	Mandatory	PDF
8.	Bank Voucher for cost of bid document	Mandatory	PDF
9.	Joint venture agreement	Mandatory in case of JV Only	PDF



10.	Qualification Documents	Mandatory	PDF
11.	Technical Specification	Mandatory	PDF or Online Forms
12.	Delivery and Completion Schedule	Mandatory	PDF or Online Forms
13.	Additional documents] specified in ITB 12.2 (h)	Mandatory (If any)	PDF

The required forms and documents shall be part of price bids.

No.	Document	Requirement	Remarks
1.	Letter of Price Bid	Mandatory	PDF
2.	Completed Price Schedule	Mandatory	Online Forms
3.	Additional Documents specified in ITB 12.3 (c)	Mandatory (If any)	PDF

Note:

- a) The documents specified as "Mandatory" should be included in e-submission and non-submission of the documents shall be considered as non-responsive bid.
- b) Bidders (all partners in case of JV) should verify/update their profile documents as appropriate for the specific bid before submitting their bid electronically.
- viii. After providing all the details and documents, two separate bid response documents i.e technical bids and price bids will be generated from the system. Bidders are advised to download and verify the response documents prior to bid submission.
- ix. For verifying the authentic user, the system will send one time password (OTP) in the registered email address of the bidder. The system will validate the OTP and allow bidders to submit their bid.
- x. Electronically submitted bids can be modified and/or withdrawn through a system. The bidder may modify their bids multiple times online within bid submission date and time specified in e-GP system. Once a Bid is withdrawn, the bidder won't be able to submit another bid response for the same bid
- xi. The Bidder / Bid shall meet the following requirements and conditions for e-submission of bids.
 - aa) The e-submitted bids must be readable through PDF reader.



- bb) The facility for submission of bid electronically through e-submission is to promote transparency, non-discrimination, equality of access, and open competition in the bidding process. The Bidders are fully responsible to use the e- submission facility properly in e-GP system as per specified procedures and in no case the Employer shall be held liable for Bidder's inability to use this facility.
- cc) When a bidder submits an electronic bid through the PPMO e-GP portal, it is assumed that the bidder has prepared the bid by studying and examining the complete set of the Bidding documents including specifications, drawings and conditions of contract.
- 23.2 The inner and outer envelopes shall:

bear the name and address of the Bidder.

be addressed to the Purchaser in accordance with ITB 24.1; and bear the specific identification of this bidding process indicated in BDS 1.1.

- 23.3 The outer envelope and the inner envelope containing the Technical Proposal shall bear a warning not to open before the time and date for the opening of Technical Bid in accordance with ITB 27.1.
- 23.4 The inner envelope containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 27.7
- 23.5 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the bid.

24. Deadline for Submission of Bids

- 24.1 Bids must be received by the Purchaser at the address and no later than the date and time *indicated in the BDS*. In case of esubmission, the standard time for e-submission is Nepal Standard Time as set out in the server. The e-procurement system will accept the e-submission of bid from the date of publishing of notice and will automatically not allow the esubmission of bid after the deadline for submission of bid.
- 24.2 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document in accordance with ITB 9, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended. However, the time available to submit bids shall not be less than five (5) days since amendment in bidding document.

25. Late Bids

25.1 The Purchaser shall not consider any Bid - Technical or Price - that arrives after the deadline for submission of Bids, in accordance with ITB 24. Any Bid received by the Purchaser



26. Withdrawal, or Modification of Bids

after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

26.1 A bidder may withdraw or modify its bid after it has been submitted either in hard copy or by e-Submission. Once a Bid is withdrawn, bidder shall not be able to submit another bid for this bidding process. Procedures for withdrawal or modification of submitted bids are as follows:

GoN Funded:

- (i) Bids submitted in hard Copy.
 - a) Bidders may withdraw or modify its bids by sending a written notice in a sealed envelope, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 22.2 before 24 hours prior to the last deadline of submission of bid. The corresponding modification of the bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with ITB 22 and ITB 23, and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL", "MODIFICATION;" and
 - (aa) received by the Purchaser 24 hours prior to the deadline prescribed for submission of bids, in accordance with ITB 24.

DP Funded:

- a) Bidders may withdraw or modify their Bid Technical or Price – after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 22.2. The corresponding modification of the Bid must accompany the respective written notice. All notices must be
 - (a) prepared and submitted in accordance with ITB 22 and ITB 23, and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," and "MODIFICATION;" and
 - (aa) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 24.
- ii) E-submitted bids.
 - a) Bidder may submit modification or withdrawal prior to the deadline prescribed for submission of bids through e-GP system by using the forms and instructions provided by the system. Once a Bid is withdrawn, bidder shall not be able to submit another bid for the same bid.
- 26.2 Bids requested to be withdrawn in accordance with ITB 26.1
 - (i) shall be returned unopened to the Bidders after the end of the bid opening process.
- 26.3 The following provisions apply for withdrawal or modification of the Bids:



a) GoN Funded

In case of bids submitted in hard copy no bid shall be withdrawn or modified in the interval between 24 hours prior time of the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

In case of e-submitted bids no bids shall be withdrawn or modified in the interval between deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid submission form or any extension there of.

b) **DP Funded**

No Bid may be withdrawn or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid or any extension thereof.

- 26.4 Except in case of any modification or correction in bid document made by procuring entity, Bidder may submit request for withdrawal or modification only one time.
- 26.5 In case of hard copy bid, no bid may be withdrawn if the bid has already been modified; except in case of any modification or correction in bid document by procuring entity.
- 26.6 Request for withdrawal or modification must be made through the same medium of submission. Request for withdrawal or modifications through different medium shall not be considered.

27. Bid Opening

- 27.1 The Purchaser's bid opening committee shall conduct the opening of Technical Bids in public in the presence of the bidder or its representative who chooses to attend at the address, date and time *specified in the BDS*. The Price Bids will remain unopened and will be held in the custody of the Employer until the specified time of their opening. If the Technical Bid and Price Bid are submitted together in one envelope, the Employer shall reject the entire Bid.
- 27.2 The opening committee shall download the e-submitted Technical Bid files. The e-procurement system allows the Purchaser to download the e-submitted Technical Bid files (report) only after the bid opening date and time after login simultaneously by two members of the Bid Opening Committee.
- 27.3 Electronically submitted Technical Bid shall be opened at first at the same time and date as *specified above*. Electronic Bids shall be opened one by one and read out. The e-submitted Technical Bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files shall be considered incomplete.
- 27.4 Before opening the bids, the opening committee shall separate the envelopes of the bids received after the deadline of bid



submission, the envelopes containing an application given for WITHDRAWAL, MODIFICATION of bids and the envelopes of bids duly registered. The bids received after the deadline of submission shall be returned to the concerned bidder unopened. Then envelopes marked "WITHDRAWAL" shall be opened first, read out, and recorded, and the envelope containing the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal notice is not accompanied by a copy of the valid authorization pursuant to ITB 22.2, the withdrawal shall not be permitted, and the corresponding Bid will be opened. Next, envelopes marked "MODIFICATION" shall be opened, read out, and recorded with the corresponding Bid. No Bid shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at bid opening. Only envelopes that are opened, read out, and recorded at bid opening shall be considered further. Price Bids, both Original and Modification, will remain unopened in accordance with ITB 27.1.

- 27.5 All other envelopes holding the Technical Bid shall be opened one at a time, and the following read out and recorded: the name of the Bidder; whether there is a modification; the presence of a Bid Security, and any other details as the Purchaser may consider appropriate. Only Technical Bids read out and recorded at bid opening shall be considered for evaluation. No Bid shall be rejected at bid opening except for late bids, in accordance with ITB 25.1.
- 27.6 The opening committee shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, or modification; and the presence or absence of a Bid Security. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted bids in time and posted online when electronic bidding is permitted. The Bidders' representatives who are present shall also be requested to sign an attendance sheet.
- 27.7 At the end of the evaluation of the Technical Bids, the purchaser will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for an award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the purchaser. Bidders shall be given at least 15 days' notice for the opening of Price Bids.
- 27.8 The purchaser will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially nonresponsive to the requirements of the Bidding Document and return their Price Bids unopened.



- 27.9 The purchaser shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, on the date, and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 27.10 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded:
 - (a) the name of the Bidder.
 - (b) whether there is a modification.
 - (c) the Bid Prices, including any discounts and alternative offers; and
 - (d) any other details the purchaser may consider appropriate.
 - Only Price Bids, discounts, modifications, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. No Bid shall be rejected at the opening of Price Bids.
- 27.11 The purchaser shall prepare a record of the opening of Price Bids that shall include, as a minimum, the name of the Bidder, the Bid Price (per lot/package if applicable), any discounts, modifications, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.

E. Evaluation and Comparison of Bids

28. Confidentiality

- 28.1 Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the Contract award; thereafter, information will be disclosed in accordance with ITB 43.1.
- 28.2 Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post-qualification of the Bids or Contract award decisions may result in the rejection of its Bid.
- 28.3 Notwithstanding ITB 28.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.

29. Clarification of Bids

29.1 To assist in the examination, evaluation, comparison, and postqualification of the Technical and Price Bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by the Bidder with regard to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Technical Bid or prices in the



Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Bids, in accordance with ITB 36. In case of e-submission of bid, upon notification from the purchaser, the bidder shall also submit the original of documents comprising the Technical and Price Bids as per ITB 12.2 and ITB 12.3 for verification of submitted documents for acceptance of the e-submitted bid.

- 29.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the purchaser's request for clarification, its Bid may be rejected.
- **30. Deviations,** 30.3 Reservations,

and Omissions

- 30.1 During the evaluation of bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Document.
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
 - (c) "Omission" is the failure to submit part, or all of the information or documentation required in the Bidding Document.
- 31. Examination of Technical Bid
- 31.1 The purchaser shall examine the Technical Bid to confirm that all documents and technical information requested in ITB 12.2 have been submitted. If any of these documents or information (except alternative Technical Bid which is optional) is missing, the bid shall be rejected.
- 31.2 In case of e-submission bids, the Employer shall confirm that all the documents and information requested in ITB 23.1 have been submitted. If any of these documents or information is missing, the bid shall be rejected.
- 32. Determination of Responsiveness of Technical Bid
- 32.1 The Purchaser's determination of the responsiveness of a Bid is to be based on the contents of the Technical Bid itself, as defined in ITB 12.2.
- 32.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,
 - (a) if accepted, would:
 - affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in Section V, Schedule of Requirements; or
 - (ii) limits in any substantial way, inconsistent with the Bidding Document, the Purchaser's rights, or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
- 32.3 The Purchaser shall examine the technical aspects of the bid in particular, to confirm that all requirements of Section V,



- Schedule of Requirements have been met without any material deviation or reservation.
- 32.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 32.5 In case of e-submission bids, the purchaser evaluates the bid on the basis of the information in the electronically submitted bid files. If the Bidder cannot substantiate or provide evidence to establish the information provided in e-submitted bid through documents/clarifications as per ITB Clause 29.1, the bid shall not be considered for further evaluation.
- 32.6 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation if public entity receives instruction from Government of Nepal.
- 32.7 Except in case of e-submission, the Financial Bid of the bidder, which is evaluated as substantially non-responsive in technical bid, shall be returned to the respective bidders.
- 33.1 The Purchaser may regard a Bid as responsive even if it contains minor deviations that do not materially alter or depart from the characteristics, terms, conditions, and other requirement set forth in the Bidding Document or if it contains errors or oversights that are capable of being corrected without affecting the substance of the Bid.
- 33.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify non-material non-conformities or omissions in the Bid related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 33.3 Provided that a Bid is substantially responsive, the Purchaser shall rectify non-material non-conformities or omissions. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section III, Evaluation and Qualification Criteria.
- 33.4 If small differences are found such as in technical specification, description, feature which does not make the bid to be rejected, then the cost, which is calculated to the extent possible due to such differences, shall be included while evaluating bid.
- 33.5 If the value is found fifteen percent more than the quoted amount of the bidder on account of small differences pursuant to ITB

33. Non-material non-conformities



32.4, such bid shall be considered irresponsive in substance and shall not be considered for evaluation.

34. Qualification of the Bidder

- 34.1 The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders meet the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).
- 34.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 19.1.
- 34.3 An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.

35. Examination of Price Bids

- 35.1 The purchaser shall examine the Price Bid to confirm that all documents and financial information requested in ITB 12.3 have been submitted. If any of these documents or information (except an alternative Price Bid which is optional) is missing, the bid shall be rejected.
- 35.2 In case of e-submission bids, the purchaser shall confirm that all the documents and financial information requested in ITB 23.1 have been submitted. If any of these documents or information is missing, the bid shall be rejected.

36. Correction of Arithmetical Errors

- 36.1 During the evaluation of Price Bids, the Purchaser shall correct arithmetical errors on the following basis:
 - a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected.
 - b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected; and
 - c) If there is a discrepancy between the bid price in the Summary of price schedule and the bid amount in item (c) of the Letter of Price Bid, the bid price in the Summary of price schedule will prevail and the bid amount in item (c) of the Letter of Price Bid will be corrected; and
 - d) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a), (b) and (c) above.
- 36.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be rejected, and the bid security shall be forfiteed.



- 37. Conversion to Single Currency
- 38. Goods manufactured in Nepal to be procured
- 39. Evaluation and Comparison of Price Bids

- 37.1 For evaluation and comparison of Price Bids, all bid prices expressed in the amounts in various currencies shall be converted into Nepalese Rupees using the selling exchange rates established by Nepal Rastra Bank and on the on the date **specified in the BDS**.
- 38.1 If the price of goods manufactured in Nepal, are higher up to fifteen percent than that of manufactured in foreign countries, the goods manufactured in Nepal shall be prefered in the evaluation of the Bids as specified in BDS.
- 38.2 for granting such preference pursuant to 38.1, the bidder must submit the country of origin issued by competent authority.
- 39.1 The Purchaser shall evaluate and compare all substantially responsive Bids to determine the lowest evaluated bid.
- 39.2 To evaluate a Price Bid, the Purchaser shall only use all the criteria and methodologies defined in this Clause and in Section III, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted.
- 39.3 To evaluate a Price Bid, the Purchaser shall consider the following:
 - a. the bid price as quoted in accordance with ITB 15 as specified in BDS.
 - b. adjustment for correction of arithmetic errors in accordance with ITB 36.1.
 - c. adjustment due to discounts offered in accordance with ITB 15.7
 - d. adjustment for nonmaterial nonconformities in accordance with ITB 33.3.
 - e. adjustment due to application of the evaluation criteria specified in the BDS from amongst those set out in Section III (Evaluation and Qualification Criteria). These criteria may include factors related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services which shall be expressed to the extent practicable in monetary terms to facilitate comparison of bids unless otherwise specified in Section III; and
 - f. adjustment due to the application of a margin of preference in accordance with ITB clause 38.
- 39.4 The Purchaser's evaluation of a bid will exclude and not take into account:
 - a) in the case of Goods offered from within Nepal, all sales tax and all other taxes, applicable in Nepal and payable on the Goods if the Contract is awarded to the Bidder.
 - b) in the case of Goods offered from outside Nepal, all customs duties, sales tax, and other taxes, applicable in Nepal and payable on the Goods if the Contract is awarded to the Bidder; and



- c) any allowance for price adjustment during the period of performance of the Contract, if provided in the Bid.
- 39.5 If this Bidding Document allows Bidders to quote separate prices for different lots/packages, and to award multiple Contracts to a single Bidder, the methodology to determine the lowest evaluated price of the Contract combinations, including any discounts offered in the Letter of Price Bid, is specified in Section III (Evaluation and Qualification Criteria).
- 39.6 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation if public entity receives instruction from Government of Nepal.
- 40. Purchaser's
 Right to Accept
 Any Bid, and to
 Reject Any or
 All Bids
- 40.1 The Purchaser reserves the right to accept or reject any Bid, and to cancel the bidding process and reject all Bids at any time prior to the Contract award, without thereby incurring any liability to the Bidders.

F. Award of Contract

- 41. Award Criteria
- 41.1 The Purchaser shall select to award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 42. Purchaser's
 Right to Vary
 Quantities at
 Time of Award
- 42.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section V, Schedule of Requirements, provided this does not exceed the percentages *indicated in the BDS*, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Document.
- 43. Notification of Intention to Award
- 43.1 The Purchaser shall notify the concerned Bidder whose bid has been selected in accordance with ITB 41.1 within seven days of the selection of the bid, in writing that the Purchaser has intention to accept his/her bid and shall Inform via the Letter of Intention included in the Contract Forms and the information of name, address and amount of selected bidder shall be given to all other bidders who submitted the bid.
- 43.2 If no bidder submits an application pursuant to ITB 46.1 within a period of seven days of providing the notice under ITB 43.1, the Purchaser shall accept the bid selected in accordance with ITB 41.1 prior to the expiry of bid validity period, and notification of award shall be communicated to the bidder to furnish the performance security and sign the contract within fifteen days.
- 43.3 In Case, a corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of



44. Performance Security

Director of the firm/institution /company or any partner of JV such bidder's bid shall be excluded from the evaluation if public entity receives instruction from Government of Nepal.

- **44.1** Within fifteen (15) days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the GCC, as specified below from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal using Sample Form for the Performance Security included in Section VII (Contract Forms or another form acceptable to the Purchaser.
 - i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.
 - ii) For the bid price of the bidder selected for acceptance is more than 15 (fifteen) percent below of the cost estimate, the performance security amount shall be determined as follows:

Performance Security Amount = [(0.85 x Cost Estimate - Bid Price) x 0.5] + 5% of Bid Price.

The Bid Price and Cost Estimate shall be exclusive of Value Added Tax.

44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security and blacklisting. In that event the Purchaser shall award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

45. Signing of Contract

- **45.1** The successful Bidder shall sign the contract in the form included in section VIII after the submission of performance security in accordance with ITB 44.
- **45.2** At the same time, the Employer shall affix a public notice on the result of the award on its notice board and make arrangement for causing such notice to be affixed on the notice board also of the *District Coordination Committee, District Administration Office, Provincial Treasury and Controller Office and District Treasury and Controller Office.* The Employer may make arrangements to post the notice into its website, if it has; and if it does not have, into the website of the Public Procurement Monitoring Office, identifying the bid and lot/package numbers and the following information: (i) the result of evaluation of bid; (ii) date of publication of notice inviting bids; (iii) name of newspaper; (iv) reference number of notice; (v) item of procurement; (vi) name and address of bidder making contract and (viii) contract Price.
- 45.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, within thirty days of the date of



- issuance of notification pursuant to ITB 43.1, requests in writing the grounds on which its bid was not selected.
- 45.4 If the bidder whose bid has been accepted fails to sign the contract as stated ITB 45.1, the Public Procurement Monitoring Office shall blacklist the bidder on recommendation of the Public Entity.

46. 46. Complaint and Review

- 46.1 If a Bidder dissatisfies with the Procurement proceedings or the decision made by the Purchaser in opening of the price bid or the intention to award the Contract, it may file an application to the Chief of the concerning Public Entity of the Purchaser within seven (7) days of providing the notice under ITB 27.8 and ITB 43.1 by the Public Entity, for review of the proceedings stating the factual and legal grounds.
- 46.2 An application filed after the deadline pursuant to ITB 46.1 shall not be processed.
- 46.3 The chief of Public Entity of the Purchaser shall, within five (5) days after receiving the application, give its decision with reasons, in writing pursuant to ITB 46.1:
 - (a) whether to suspend the procurement proceeding and the procedure for further proceedings to be adopted; or
 - (b) whether or not to reject an application.
 - No application can be submitted before the Review Committee for review against the decision made by the chief of the Public Entity for the Bid amount up to the value *as stated in BDS*.
- 46.4 If the Bidder is not satisfied with the decision of the Public Entity in accordance with ITB 46.3, or the decision by the Public Entity is not given within five (5) days of receipt of application pursuant to ITB 46.1, it can, within seven (7) days of receipt of such decision, file an application to the Review Committee of the GoN, stating the reason of its disagreement on the decision of the chief of Public Entity and furnishing the relevant documents, provided that its Bid amount is above the amount as stated in ITB 46.3. The application may be sent by hand, or by post, or by courier, or by electronic media at the risk of the Bidder itself.
- 46.5 Late application filed after the deadline pursuant to ITB 46.4 shall not be processed.
- 46.6 Within three (3) days of the receipt of application from the Bidder, pursuant to ITB 46.4, the Review Committee shall notify the concerning Public Entity of the Purchaser to furnish its procurement proceedings and comments on the issue, pursuant to ITB 46.3.
- 46.7 Within three (3) days of receipt of the notification pursuant to ITB 46.6, the Public Entity shall furnish the copy of the related documents along with its comment or reaction of complaint to the Review Committee.
- 46.8 The Review Committee, after inquiring from the Bidder and the Public Entity, if needed, shall give its decision within one (1)



- month after receiving the application filed by the Bidder, pursuant to ITB 46.4.
- 46.9 The Bidder, filing application pursuant to ITB 46.4, shall have to furnish a cash amount or Bank guarantee from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law *as stated in BDS* with the validity period of at least ninety (90) days from the date of the filing of application pursuant to ITB 46.4. Application filed without furnishing the security deposit shall not be processed.
- 46.10 If the claim made by the Bidder pursuant to ITB 46.4 is justified, the Review Committee shall have to return the security deposit to the applicant, pursuant to ITB 46.9, within seven (7) days of such decision being made.
- 46.11 If the claim made by the Bidder pursuant to ITB 46.4 is rejected by the Review Committee, the security deposit submitted by the Bidder pursuant to ITB 46.9 shall be forfeited.



Section II. Bid Data Sheet



A. Introduction

- ITB 1.1 The number of the Invitation for Bids (IFB) is: NEA/DCSD/SMAD/ICB-081/82-01
- ITB 1.1 Name of the Purchaser: Nepal Electricity Authority (NEA), Distribution and Consumer Services Directorate, Smart Metering and Automation Department
- ITB 1.1 Name and Identification number of the Contracts (Packages/Lots): NEA/DCSD/SMAD/ICB-081/82-01
- ITB 2.1 Source of Fund: GoN/NEA

Name of contract/s: NEA/DCSD/SMAD/ICB-081/82-01: Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meter with Plifer Proof Meter Box as per Technical Specification and Scope of Works.

- **ITB 4.1** Bidders from the following countries are not eligible: *Not Applicable*
- ITB 4.2 Maximum number of partners in a joint venture shall be: 3 (three)
- **ITB 4.4** A list of debarred firms is available at www.ppmo.gov.np and www.cibnepal.org.np.
- **ITB 4.9** The foreign Bidder at the time of bid submission shall submit:
 - Company/ Firm Registration Certificate (including clear merger history, if any) and Business Registration Certificate, in the respective country of the bidder
 - Tax Registration Certificate in their respective country
 - Statement and disclosure of local agent/representative as specified in ITB 19.4:
 - i. A foreign bidder wishing to have or already have a local agent should state the following:
 - 1. Name and address of the agent / representative.
 - 2. Amount of commission the agent / representative is entitled to get, currency of payment and mode of payment.
 - 3. Other agreement with agent / representative, if any.
 - ii. If the bid has been submitted stating that no local agent has been appointed and later on if is found that local agent had been appointed or if it is proved that the amount of commission stated is less than the actual amount then the bidder will be fined an amount equivalent to the amount to be received by the agent and action will be taken as per the Public Procurement Act (GoN).

The foreign Bidder at the time of bid submission shall declare to submit at the time of contract agreement: None.

- Resident foreign bidder shall submit PAN/VAT registration certificate and tax clearance certificate or proof of submission of income return for fiscal year 2080/81 at the time of bid submission
- ITB 5.1 Goods and related services to be supplied from the following countries are not eligible: *Not Applicable*



B. Bidding Document

ITB 8.1 For clarification purposes only, the Purchaser's address is:

Attention: The Director, Smart Metering & Automation Department Name of the Purchaser: Distribution and Consumer Services Directorate

Address: Durbar Marg, Kathmandu, Nepal

Telephone: + 977 (01) 4153198 E-Mail Address: smsg@nea.org.np

- **ITB 8.1** The purchaser will respond in writing to any request for clarification provided that such a request is received no later than 10 days prior to the deadline for submission of bid.
- **ITB 8.2** Pre-Bid meeting *Not Applicable*.

C. Preparation of Bids

- **ITB 11.1** The language of the Bid is: English/Nepali
- ITB 12.2 The Bidder shall submit the following additional documents with its Bid. The bid without these additional documents shall be considered incomplete and shall be rejected:
 - (i) If the Bidder is not Manufacturer, then the Bidder shall submit Manufacturer's Authorization Letter in the format provided.
 - (ii) The proposed manufacturer shall possess valid **ISO 9001:2015 Quality Management System Certificate** with design and manufacture in scope for the plant where the manufacture is done. The Bidder shall furnish a copy of the ISO certificate along with the offer.
 - (iii) For the proposed manufacturer(s), the bidder shall furnish copies of Type Test reports as Specified in section V Scheduel of Requirements.
- ITB 12.3 The Bidder shall submit with its Price Bid the following additional documents: *None* (c)
- **ITB 14.1** Alternative Bids *shall not be* permitted.
- **ITB 15.7** The Incoterms edition is: *2020*.
- ITB 15.7 Final Destination (Project Site): Central Store, Hetauda.

(a) iii, (b)

ii & (c) v

- ITB 15.7 For Goods offered from outside the Purchaser's country, the Bidder shall quote prices
 (b) i using the following Incoterm: CIP (Destination)
- **ITB 15.7** In addition to the CIP price specified in ITB 15.7 (b)(i), the price of the Goods (b) iii manufactured outside Nepal may be quoted: *Not Applicable*
- **ITB 15.8** The prices quoted by the Bidder shall not be Adjustable.



- ITB 18.3 Period of time the Goods are expected to be functioning (for the purpose of spare parts): *Not Applicable*
- ITB 19.2 A Manufacturer's Authorization letter is required for all the items listed in Section V Schedule of Requirements.
- **ITB 19.3** The Bidder *is not* required to include with its bid, evidence that it will be represented by an Agent in Nepal.
- **ITB 20.1** The bid validity period shall be *120* days.
- **ITB 21.1** The bid must be accompanied by bid security with the following requirements:

The amount and the currency of the Bid Security shall be USD 40,000.00 (or equivalent amount in NPR, the selling exchange rate for which shall be that of published by Nepal Rastra Bank in the day of publication of the Invitation of the Bids).

The bid security shall be *valid for a minimum of 30 days* beyond the bid validity period.

- ITB 21.2 If the Bidder wishes to submit the Bid Security in the form of cash, the cash should be deposited in Deposit Account No.: NEA Current Account 04400105200628 at Everest Bank Ltd., Baghbazar, Kathmandu and submit the receipt of the deposited amount of cash along with the bid.
- ITB 22.2 The written confirmation of Authorization to sign on behalf of the Bidder shall consist of: *Power of Attorney to sign the bid*

D. Submission and Opening of Bids

- **ITB 23.1** Bidders shall have the option of submitting their bids by electronic only.
- ITB 24.1 For bid submission purposes only, the Purchaser's address is:

The Director, Smart Metering & Auotmation Department, Nepal Electricity Authority, Durbar Marg, Kathmandu, Nepal.

ITB 24.1 The deadline for bid submission is:

Date: 24 August 2025 Time: 12:00 Hours

- ITB 24.1 If the last date of purchasing, submission and opening of Bid falls on a government holiday then the next working day shall be considered as the last day without any change in the time and place as fixed.
- **ITB 27.1** The bid opening shall take place at:

Date: 24 August 2025 Time: 13:00 Hours

Place: Smart Metering & Automation Department, Nepal Electricity Authority Durbarmarg, Kathmandu, Nepal



E. Evaluation and Comparison of Bids

- The date for the selling exchange rate shall be 24 August 2025, which is the original date of bid opening specified in ITB 27.1.
- ITB 38.1 Domestic preference shall apply, and the application methodology shall be as stipulated in Section III (Evaluation and Qualification Criteria).
- ITB 39.3 Bids will be evaluated lot by lot/package (maybe multiple or single). If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. An item not listed in the Price Schedule shall be assumed to be not included in the bid, and provided that the bid is substantially responsive, the average price of the item quoted by substantially responsive bidders will be added to the bid price and the equivalent total cost of the bid so determined will be used for price comparison.
- The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: [refer to Schedule III, Evaluation and Qualification Criteria]
 - (a) Deviation in Delivery schedule: *No*
 - **(b)** Deviation in payment schedule: *No*
 - (c) the cost of major replacement components, mandatory spare parts, and service: *No*.
 - (d) the availability of spare parts in Nepal and after-sales services for the equipment offered in the bid: *No*
 - (e) the projected operating and maintenance costs during the life of the equipment: *No*

the performance and productivity of the equipment offered: No

F. Award of Contract

- The maximum percentage by which quantities may be increased is: 15%

 The maximum percentage by which quantities may be decreased is: 15%
- ITB 46.3 No application can be submitted before the Review Committee for review of the decision made by the chief of the Public Entity for the bid amount less than the value of Twenty Million (NRs. 20,000,000)
- The bidder, filling application pursuant to ITB 46.4, shall have to furnih a cash amount ot Bank guarantee equal to ten percent (10 %) of bid security in case of complaint against decision pursuant to ITB 27.8 and one percent (1%) of its quoted Bid amount in case of complaint against decision pursuant to ITB 43.1



Section III. Evaluation and Qualification Criteria

The purpose of the Evaluation and Qualification Criteria (EQC) is to specify the criteria that the Purchaser will use to evaluate the Bids to determine the lowest evaluated substantially responsive bid and post-qualify the lowest-evaluated Bidder. The Purchaser must prepare the EQC and include it as a part of the Bidding Document. The EQC is not a Contract document and, therefore, it is not a part of the Contract.

Table of Criteria

1. Evaluation Criteria

- 1.1 Technical Criteria
- 1.2 Domestic Preference
- 1.3 Economic Criteria
- **1.4** Multiple Contracts

2. Qualification Criteria



Evaluation Criteria

1.1 Technical Criteria

These criteria should specify the minimum technical level that Goods and Related Services have in order to comply with Section V. Schedule of Requirements. Whenever possible, these criteria should be evaluated on a pass–fail system, with a minimum acceptable level for each criteria enumerated.

However, a minor deficiency in technical compliance may not be cause for rejection of the Bid. The cost of making any good deficiency should likewise be added to the Bid Price concerned. The most frequently used methods are assigned to the non-conforming items or components, prices based on similar methods described above under Scope, with the price of the nonconforming items or components deducted.

The cost of all quantifiable deviations or deficiencies from the technical requirements specified in Section V. Schedule of Requirements shall be evaluated. The Procuring Entity will make its own assessment of the cost of these deviations or deficiencies for the purpose of ensuring fair comparison of Bids.

1.2 Domestic Preference

- 1.2.1 If the BDS so specifies, the Procuring Entity will grant a margin of preference to goods manufactured in Nepal. The nationality of the manufacturer or supplier is not a condition for such eligibility. The methods and stages set forth hereunder shall be followed in the evaluation and comparison of bids.
- 1.2.2 For comparison, responsive bids shall be classified in one of the following three groups:
 - (a) **Group A:** bids exclusively offering goods manufactured in for which (i) labor, raw material, and component from within Nepal account for 30 percent or more of the EXW price of the product offered, and (ii) the production facility in which those goods will be manufactured or assembled has been engaged in manufacturing/ assembling such goods at least since the time of bid submission.
 - (b) **Group B:** all other bids offering goods manufactured in Nepal.
 - (c) **Group C:** bids offering goods manufactured outside Nepal that have been already imported or that will be directly imported.
- 1.2.3 The following adjustment method is used:
 - (a) The price quoted for goods in bids of groups A and B shall include all duties and taxes paid or payable on the basic materials or component purchased in the domestic market or imported but shall exclude the value added tax and similar taxes on the finished product. The price quoted for goods in bids of group C shall be on CIP (place of destination), which is exclusive of customs duties and other import taxes already paid or to be paid.
 - (b) In the first step, all evaluated bids in each group shall be compared to determine the lowest bid in each group. Such lowest evaluated bids shall be compared with each other and if, as a result of this comparison, a bid from group A or group B is the lowest, it shall be selected for the award.



(c) If as a result of the comparison under paragraph three above, the lowest evaluated bid is a bid from group C, the lowest evaluated bid from group C shall be further compared with the lowest evaluated bid from group A after adding to the evaluated price of goods offered in the bid from group C, for the purpose of this further comparison only, an amount equal to fifteen (15%) percent of the CIP bid price. The lowest evaluated bid determined from this last comparison shall be selected.

1.3 Economic Criteria

1.3.1 Adjustment for Scope

1.3.1.1 Local Handling and Inland Transportation

If the Purchaser wishes to consider during bid evaluation the costs for inland transportation, insurance, and other services within Nepal incidental to delivery of the goods to their final destination, then the Purchaser must define these service items in Section V. Schedule of Requirements, List of Goods and Related Services; and

Bidders must be required to quote for these service items as part of their bid price in the PRICE SCHEDULE FOR RELATED SERVICES TO BE OFFERED FROM OUTSIDE AND WITHIN NEPAL provided in Section IV, Bidding Forms.

In such case, the following provision should be used:

Costs for inland transportation, insurance, and other incidental costs for delivery of the goods from the EXW premises, or port of entry, or border point to Project Site as defined in Section V. Schedule of Requirements, shall be quoted in the PRICE SCHEDULE FOR RELATED SERVICES TO BE OFFERED FROM OUTSIDE AND WITHIN NEPAL provided in Section IV, Bidding Forms. These costs will be taken into account during bid evaluation. If a Bidder fails to include such costs in its Bid, then these costs will be estimated by the Procuring Entity based on published tariffs by the rail or road transport agencies, insurance companies, or other appropriate sources, and added to EXW or DDP or CIP price.

1.3.1.2. Minor Omissions or Missing Items

The cost of minor omissions or missing items in the scope of supply, services, etc. should be added to the Bid Price to allow for Bid comparison on an equal basis. The price adjustment should be based on a reasonable estimate of the cost by the executing agency, engineer, consultant or bid evaluation committee, taking into consideration the corresponding quoted prices from other conforming Bids. The price adjustment should be based on the fair price of the omitted item. The most frequently used methods to assign a price to the missing item:

- (i) equal to the highest price quoted for the same item by the other Bidders; or
- (ii) equal to the average price quoted for the same item by the other Bidders; or
- (iii) estimated by the Procuring Entity.

Of these three methods the Procuring Entity should preferably use (i) or (ii), as Bidders frequently challenge (iii) because of its lack of transparency.

Pursuant to Sub-Clause 33.3 of the Instructions to Bidders, the cost of all quantifiable nonmaterial nonconformities or omissions from the contractual and commercial conditions shall be evaluated. The Procuring Entity will make its own



assessment of the cost of any nonmaterial nonconformities and omissions for the purpose of ensuring fair comparison of Bids.

1.3.2 Adjustment for Deviations from the Terms of Payment

The Procuring Entity must state here whether deviations from the terms of payment as specified in Special Conditions of Contract, Sub-Clause 15.1, are permitted or not. If permitted, the Procuring Entity shall evaluate deviations from the terms of payment in the following manner. The Procuring Entity shall first evaluate the Bids based on the terms of payment specified in the Special Conditions of Contract, Clause 15.1. The Procuring Entity shall then add an adjustment to the Bid Price to take into account the differences in cash flows. The adjustment shall be calculated as the discounted cash flow of the incremental payments of the alternative compared with those of the terms of payment specified by the Procuring Entity.

Deviations from the Terms of Payment as specified in SCC 15.1 are not permitted.

1.3.3 Adjustment for Deviations in the Delivery and Completion Schedule

Bidders are required to base their prices on the Delivery and Completion Schedule specified in Section V. Schedule of Requirements. The Procuring Entity must state here whether deviations from the specified Delivery and Completion Schedule are permitted or not. If permitted, the Procuring Entity shall evaluate deliveries by adding the corresponding price adjustment in accordance with the procedure outlined below.

Deviations from the Delivery and Completion Schedule specified in Section V (Schedule of Requirements) are not permitted.

1.3.4 Operating and Maintenance Costs: Not Applicable
 1.3.5 Spare Parts and after Sales Service Facilities: Not Applicable
 1.3.6 Performance and Productivity of the Goods: Not Applicable

1.3.7 Specific additional Criteria

Other specific additional criteria to be considered in the evaluation, and the evaluation method shall be detailed in BDS sub clause 39.3(e)

1.4 Multiple Contracts

Not Applicable



Qualification Criteria

2.1 Eligibility

Criteria		Documents			
Requirement	Single Entity	Jo All Partners Combined	int Venture Each Partner	One Partner	Submission Requirements

2.1.1 Conflict of Interest

No conflicts	of	interest	in	Must meet	Must meet	Must meet	Not	Letter of
accordance with	ITB	4.3.		requirement	requirement	requirement	applicable	Technical Bid

2.1.2 Government/DP Eligibility

Not having been declared ineligible	Must meet	Must meet	Must meet	Not	Letter of
by government /DP, as described in	requirement	requirement	requirement	applicable	Technical Bid
ITB Sub-Clause 4.4.					

2.1.3 Government-Owned Entity

Bidder required to meet conditions of ITB 4.5.	_		Must meet requirement	Not applicable	Letter of Technical Bid;
	•	•	•		Forms ELI – 1 and ELI – 2

2.1.4 UN Eligibility

Not having been excluded by an act	Must meet	Must meet	Must meet	Not	Technical Bid
of compliance with a United Nations	requirement	requirement	requirement	applicable	Submission
Security Council resolution in					Sheet
accordance with ITB 4.7.					

2.1.5 Nationality

Nationality in accordance with ITB	Must meet	Must meet	Must meet	Not	Letter of
4.8.	requirement	requirement	requirement	applicable	Technical Bid;
		_			Forms ELI – 1
					and ELI – 2
					with
					attachments

2.1.6 Other Eligibility

Firm Registration Certificate	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Document attachment
Business Registration Certificate	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Document attachment
VAT and PAN Registration certificate (only for domestic bidders)	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Document attachment
Tax Clearance Certificate/Tax return submission evidence/ evidence of time extension for the F/Y 2080/81 . (<i>Only for domestic bidders</i>)	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Document attachment



2.1 Eligibility

Criteria	(Documents			
Requirement	Single Entity	All Partners Combined	int Venture Each Partner	One Partner	Submission Requirements

2.2 Pending Litigation

Criteria		Compliance Requirements				
	Cinala	J	oint Venture		Submission	
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Requirements	
All pending litigation, arbitration or other material events impacting the net worth and/or liquidity of the bidder, if any, shall be treated as resolved against the Bidder and so shall in total not represent more than 50 (Fifty) percent of the Bidder's net worth calculated as the difference between total assets and total liabilities.		Not applicable	Must meet requirement	Not applicable	Form LIT-1	



2.3 Financial Situation

2.3.1 Historical Financial Performance

Criteria		Documents			
	Cinalo	Joint Venture			Submission
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	D .
Submission of audited balance sheets and income statements for the last three years to demonstrate the current soundness of the Bidder's financial position. As a minimum, the Bidder's net worth for the last year calculated as the difference between total assets and total liabilities should be positive.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	From FIN-1
2.3.2 Average Annual Turn	over				
Minimum average annual turnover of <i>USD 1.15 million</i> calculated as total payments received by the Bidder for supply contracts completed or under execution over the last three years.	Must meet requirement	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement	From FIN-2

Note: Only the net amount shall be calculated after deducting the amount for VAT and such amount shall be adjusted to present value by applying wholesale price index of Nepal Rastra Bank.

2.3.4 Financial Resources

The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets unencumbered real assets, and other financial resources, (other than any contractual advance payments) to meet the	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement	From FIN-3
advance payments) to meet the cash-flow requirement of <i>USD</i>				
0.95 million				

Note Liquid Assets mean cash and cash equivalents, short-term financial instruments, short-term available-for-sale-securities, marketable securities, trade receivables, short-term financing receivables and other assets that can be converted into cash within ONE YEAR



2.4 Experience

Criteria	(Compliance Requirements				
Requirement	Single	All Partners	Each	One	Submission	
	Entity	Combined	Partner	Partner	Requirements	

2.4.1 General Experience

Experience under suppl in the role of prime supp		Not applicable	Must meet requirement	Not applicable	Form EXP-1
entity or JV me subcontractor for at lea	ast the last				
three years prior to the a submission deadline	applications				

2.4.2 Specific Experience

r · · · · · · · · · · · · · · · · · · ·	Must meet requirement	Must meet requirement	Not applicable	Not applicable	Form EXP-2
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Note: Only the net amount shall be calculated after deducting the amount for VAT and such amount shall be adjusted to present value by applying wholesale price index of Nepal Rastra Bank.

The similarity means 0.2 S class smart solid state CTVT three phase energy meters with SIM/e-SIM Communication Module and has been integrated to AMI System.

The bidder shall submit (i) Contract Agreement/Purchase Order and (ii) Completion Certificate issued by the Purchaser indicating the list of goods/equipment supplied, completion date and contract amount.



2.4.3 Technical Experience

Criteria	Compliance Requirements				Documents
	Joint Venture			Submission	
Requirement	Entity	Single Entity All Partners Combined		One Partner	Requirements
The Bidder shall demonstrate that the goods offered have: (i) been in production for at least three years or if the offered model is a new the manufacturer must have experience in producing the similar model for a mínimum of three years;	Must meet requirement	Must meet requirement	Not applicable	Not applicable	Form EXP-3
 (ii) been sold a minimum of 8000 units of similar type and specification over the last three years having mínimum 50% outside the home country; and (iii) been in operation for a minimum of one year. 					

Note: The similarity shall mean the 0.2 S class smart solid state CTVT three phase energy meters with SIM/e-SIM Communication Module.

The Bidder shall furnish a list of users who have purchased the same/similar goods/equipment during the period stated, number of goods/equipment sold to them and the contract amount. To validate the same, the bidder shall submit (i) Contract Agreement/Purchase Order and (ii) Performance Certificate issued by the Purchaser indicating completion date, supplied quantity and have been in satisfactory operation for minimum of one year.

2.4.4 Production Capacity

The Bidder or manufacturer shall	Must meet	Must meet	Not	Not	Form EXP-4
demonstrate that it can supply the	requirement	requirement	applicable	applicable	
type, size, and quantity of the goods					
as required by Purchaser in					
accordance with the Delivery and					
Completion Schedule in Section V					
(Schedule of Supply).					

Note: The bidder/manufacturer shall provide the evidence of production capacity to substantiate the claim.



Section IV. Bidding Forms

Table of Forms

Bid Submission Form

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Bidder's Proposed Specification Form

Bidder's Proposed Delivery Date

Price Schedule For Goods

Bid Security

Manufacturer's Authorization Letter



Letter of Technical Bid

(The Bidder shall accomplish the Letter of Technical Bid in its Letter Head Clearly showing the Bidders Complete name and address.)

	Date:
	Contract No.:
	Invitation for Bid No.:
Го:	

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 9.
- (b) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in the Section V (Schedule of Requirements), the following Goods and Related Services: [insert a brief description of the goods and related services]
- (c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of *[insert validity period as specified in ITB 20.1 of the BDS]* days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (d) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries in accordance with ITB 4.8 and meet the requirements of ITB 3.4 & 3.5
- (e) We are not participating, as a Bidder or as a subcontractor/supplier, in more than one Bid in this bidding process in accordance with ITB 4.3(e), other than alternative Bids in accordance with ITB 14.
- (f) Our firm, its affiliates, or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by DP, under the Purchaser's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.
- (a) We are not a government owned entity/We are a government owned entity but meet the requirements of ITB 4.5;²
- (h) We declare that we, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3 and we have not been punished for an offense relating to the concerned profession or business.

² Slect one of the options



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Nan	ne of Recipient	Address	Reason	Amount
(If you				
(11 11011	e has been paid of is	s to be paid, indicate "no	one.)	
by us. The document/s	e documents and in	responsible for the auth information submitted to s found to be concealed	by us are true and o	correct. If any
other docu	-	or its representative to it he bid submission and	-	
Name				
Name	of			
Signed	01			
	ed to sign the Bid for	r and on behalf of		
Dury aumorize	za to sign the Bia for	and on benam of		



Letter of Price Bid

(The Bidder shall accomplish the Letter of Price Bid in its Letter Head Clearly showing the Bidders Complete name and address.)

	Deter
	Date: Name of the contract:
	Invitation for Bid No.:
	invitation for Big No
To:	
We	e, the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 9.
(b)	We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in the Section V (Schedule of Requirements), the following Goods and Related Services: [insert a brief description of the goods and related services]
(c)	The total price of our Bid, excluding any discounts offered in item (d) below, is:
	[Incase of only one lot/package, insert the total Bid Price in words and figures].
	[Incase of multiple lots/packages, insert the total price of each lot/package]
(d)	The discounts offered and the methodology for their application are:
	The discounts offered are: [specify in detail each discount offered]

(e) Our bid shall be valid for a period of [*insert validity period as specified in ITB 20.1*] days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

The exact method of calculations to determine the net price after application of discounts is shown below: [specify in detail the method that shall be used to apply the discounts].

- (f) If our bid is accepted, we commit to obtain performance security in accordance with the Bidding Document.
- (g) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (h) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.



- (i) We agree to permit the Employer/DP or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by the Employer.
- (j) We confirm and stand by our commitments and other declarations made in connection with the submission of our Letter of Technical Bid.

Name:
In the capacity of
Signed
Duly authorized to sign the Bid for and on behalf of
Date



ELI-1: Bidder's Information Form

[The Bidder shall fill in this Form. No alterations to its format shall be permitted and no substitutions shall be accepted.]

1.	Bidder's Legal Name:	[insert full name]
2.	In case of JV, legal name of the representative member and of each member:	[insert full name of each member in the JV and specify the representative member]
3	Bidder's Country of Registration:	[insert country of registration]
4.	Bidder's Year of Registration:	[insert year of incorporation]
5.	Bidder's Legal Address in Country of Registration	[insert street/number/town or city/country]
6.	Bidder's trading address:	[insert street/number/town or city/country]
7.	Bidder's Telephone/Fax numbers:	[insert telephone/fax numbers, including country and city codes]
8.	Bidder's Email Address:	[insert email address]
9.	Bidder's Authorized Representative Information	on:
	Name:	[insert full name]
	Address:	[insert street/number/town or city/country]
	Telephone/Fax numbers:	[insert telephone/fax numbers, including country and city codes]
	Email Address:	[insert email address]

Attached are copies of the following documents:

- 1. In case of a single entity, articles of incorporation or constitution and company incorporation/registration of the legal entity named above, in accordance with ITB 4.2 and ITB 4.8
- 2. Authorization to represent the firm or Joint Venture named above, in accordance with ITB 22.2
- 3. In case of a Joint Venture, a letter of intent to form a Joint Venture or Joint Venture agreement, in accordance with ITB 4.2
- 4.In case of a government-owned enterprise, any additional documents not covered under 1 above required to comply with ITB 4.5



ELI-2: Joint Venture Information Form

Each member of the Joint Venture must fill out this form separately to provide information relating to each JV member.

1.	Bidder's legal name:	[insert full name]
2.	Joint Venture Partner's legal name:	[insert full name of Joint Venture Partner]
3.	Joint Venture Partner's Country of Registration:	[insert country of registration]
4.	Joint Venture Partner's Legal Address in Country of Registration:	[insert street/number/town or city/country]
5.	Joint Venture Partner's Trading address	[insert street/number/town or city/country]
6.	Joint Venture Partner's Year of Registration:	[insert year of registration]
7.	Joint Venture Partner's Telephone/Fax numbers:	[insert telephone/fax numbers, including country and city codes]
8.	Joint Venture Partner's Email Address:	[insert email address]
9.	Joint Venture Partner's Authorized Represe	entative Information:
	Name:	[insert full name]
	Address:	[insert street/number/town or city/country]
	Telephone/Fax numbers:	[insert telephone/fax numbers, including country and city codes]
	Email Address:	[insert email address]

^{1.} Articles of incorporation or constitution and company incorporation/registration of the legal entity named above, in accordance with ITB ITB 4.2 and ITB 4.8



 $^{2.\} Authorization$ to represent the firm named above, in accordance with ITB 22.2

^{3.} In the case of a government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5

Form LIT 1: Pending Litigation Form

Each Bidder or member of a JV must fill in this form.

Choose one of the following:

- No pending litigation, arbitration or any other material events impacting the net worth and/or liquidity of the bidder.
- Below is a description of all pending litigation, arbitration involving the Bidder or any other material events impacting the net worth and/or liquidity of the bidder (or each Joint Venture partner if Bidder is a Joint Venture).

Year	Matter in Dispute	Value of Pending Claim in NRs	Value of Pending Claim as a Percentage of Net Worth
[insert year]	• Contract Identification: [indicate complete Contract name, number, and any other identification]	[insert amount]	[insert amount]
	• Name of Purchaser: [insert full name]		
	• Address of Purchaser: [insert street/city/country]		
	• Matter in dispute: [indicate main issues in dispute]		
	• Party who initiated the dispute: [indicate "Purchaser" or "Supplier"]		
	• Status of dispute: [indicate if it is being treated by under Arbitration or being dealt with by the Judiciary]		



Form FIN-1: Financial Situation Form

Each Bidder must fill out this form.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: [Insert Name of Joint Venture Partner]

Financial Data for Previous Years (in NRs)		
Year 1:	Year 2:	Year:

Information from Balance Sheet

Total Assets (TA)		
Total Liabilities (TL)		
Net Worth = TA-TL		
Current Assets (CA)		
Current Liabilities (CL)		
Working Capital = CA-CL		

Information from Income Statement

Total Revenues		
Profits Before Taxes		
Profits After Taxes		

- Attached are copies of financial statements (balance sheets including all related notes, and income statements) for number of years, as indicated above, complying with the following conditions:
 - All such documents reflect the standalone financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries, or affiliates.
 - Historic financial statements must be audited by a certified accountant.
 - Historic financial statements must be complete, including all notes to the financial statements.
 - Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).



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Form FIN-2: Average Annual Turnover Form

Each Bidder must fill out this form.

The information supplied should be the Annual Turnover of the Bidder or each partner of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed to NRs at the end of the period reported.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: [Insert Name of Joint Venture Partner]

Annual Turnover Data for the Last Years					
Year	Amount (in NRs)				
Average Annual Turnover					



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Form FIN-3: Financial Resources Form

Specify proposed sources of financing, such as liquid assets³, unencumbered real assets, and other financial means (other than any contractual advance payments) available to meet the total cash flow requirements of the subject contract.

	Financial Resources								
No.	Source of financing	Amount (in NRS)							
1									
2									
3									
4									

³ Liquid assets mean cash and cash equivalents, short-term financial instruments, short-term available-for-sale-securities, marketable securities, trade receivables, short-term financing receivables, and other assets that can be converted into cash within one (1) year.



Form EXP-1: General Experience

[The following table shall be filled in for the Bidder and for each member of a JV. Each contract shall be supported by Signed Contract Agreement or any other relevant evidence.]

[Identify contracts that demonstrate continuous supply over the past [number] years. List contracts chronologically, according to their commencement (starting) dates.]

Ending		
Year	Contract Identification	Role of Bidder
[indicate year]	 Contract name: [insert full name] Brief description of the supply performed by the Bidder: [describe supply performed briefly] Amount of contract: [insert amount] Name of Purchaser: [indicate full name] Address: [indicate street/number/town or city/country] 	[insert ''Prime Supplier" (Single entity or JV member) or ''Subcontractor"]
	-	 Brief description of the supply performed by the Bidder: [describe supply performed briefly] Amount of contract: [insert amount] Name of Purchaser: [indicate full name] Address: [indicate street/number/town or



Form EXP-2: Specific Experience Form

[The following table shall be filled in for contracts performed by the Bidder and by each member of a JV. Each contract shall be supported by Signed Contract Agreement or any other relevant evidence.]

Contract of Similar Nature					
Item		Informati	on		
Contract Identification	[insert contract name and reference identification number, if applicable]				
Award date	[insert day, n	onth, year, e.g	., 10 January 2022]		
Completion date	[insert day, n	onth, year, e.g	., 12 July 2022]		
Role in Contract	Prime	supplier			
[check the appropriate box]	Single entity	JV Member	Sub contractor		
Total Contract amount	[insert tot amount]	al contract	[Insert Currency]		
Description of the contract performed by the Bidder	y [Insert brief description of contract to justify similarity]				
If partner in a JV or subcontractor, specify participation of total Contract amount	[Insert percent of total] [Insert Amount				
Purchaser's Name:		[Insert full n	ame]		
Purchaser's Address:	[indicate street / number / town or city / country]				
Purchaser's Telephone/fax number:	[insert telephone/fax numbers, including country and city area codes]				
Purchaser's E-mail:	[insert	E-mail addres	s, if available]		

The Bidder shall complete this form for each contract completed.



Form EXP - 3: Technical Experience

Fill out one (1) form per contract. Each contract shall be supported by a Signed Contract Agreement or any other relevant evidence.

Technical Experience						
Name of Product						
Manufacturer:		Address and Nationality:				
(i) Product has been in production for at least	Description of Goo	ods	Year of P	roduction	Number of units produced	
years.	[insert description of God	ods]	[insert	years]	[insert number]	
(ii) Product (or equipment) has been sold a minimum	Description of Goods		Year of Production		Number of units that has been sold	
of units of similar type and specification over the last three (3)	[insert description of Goods]		[insert	years]	[insert number]	
years.						
(iii) Product has been in operation for a minimum	Description of Goods		Number of units that has been sold and years		Details of purchasers	
of years.	[insert description of God	ods]	[insert number]	[insert year]	[insert name, adress (street/ number/town or city/ country), telephone/fax numbers with country and city code, email adresses if available]	



Form EXP - 4: Production Capacity

Fill out one (1) form per product and manufacturer.

	Production Capacity						
Name of Product							
Manufacturer:		Address and Nationality:					
Production facility 1 (include location):	[Insert description of goods and production capacity]						
Production facility 2 (include location):	[Insert description of goods and production capacity]						
Production facility 3 (include location):	[Insert description of g	oods and production capacity]					



Form Spec-1: Bidder's proposed Specification Form

(The bidder shall fill this form to provide the information on technical specifications and standards of offered goods. Bidder's Proposed Technical Specifications and Standards in column 4 shall comply with the Purchaser Requirement (Specifications and standards) specified by the Purchaser in the Schedule of Requirements.)

Item No.	Name of Goods or Related Service	Country of Origin and Brand	Bidder's Proposed TS and Standards	Reference page/no. / Catalogue page/no.	Status of compliance ⁴
1	2	3	4	5	6
[insert item No.]	[insert name]	[insert country of Origin and Brand name]	[insert TS and Standards]	[insert reference page or no. / catalogue page or no. if any]]	[insert status]

⁴ The bidder shall state as Fully compliance or Partially compliance or Compliance



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Form Del-1: Bidder's proposed Delivery Date

(The bidder shall fill this form to provide the information on delivery date of offered goods. Bidder's offered delivery date in column 4 shall comply with the Purchaser Requirement (Delivery and Completion Schedule) specified by the Purchaser in the Schedule of Requirements.)

Line Item No	Description of Goods	Quantity	Physical unit	Final Destination as specified in BDS	Bidder's offered Delivery date [to be provided by the bidder]
1	2	3	4	5	6
[insert item No]	[insert description of Goods]	[insert quantity of item to be supplied]	[insert physical unit for the quantity]	[insert place of delivery]	[insert the number of days following the date of effectiveness the Contract]
			· · · · · · · · · · · · · · · · · · ·		

Note: The date of effectiveness of contract shall be as of signing the contract



Price Schedule Forms



Price Schedule: Goods Manufactured in Nepal

[ITB 15.7 (a), Goods manufactured in Nepal]

Date:	
ICB No:	

1	2	3	4	5	6	7	8	9	10
Item No	Description of Goods	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price EXW	Total EXW price per line item (Col. 4×5) 15.7(a)(i)	Price per line item for inland transportation and other services required to convey the Goods to their final destination ITB 15.7(a)(iii)	Cost of local labor, raw materials, and components from with origin in Nepal % of Col. 5	Sales and other taxes payable per line item if Contract is awarded (in accordance with ITB 15.7(a)(ii)	Total Price per line item (Col. 6+7) 15.7(a)(iv)
		[insert quoted Delivery Date]		[insert EXW unit price]	[insert total EXW price per line item]	[insert the corresponding price per line item]	[Insert cost of local labor, raw material, and components from within the Purchase's country as a % of the EXW price per line item]	[insert sales and other taxes payable per line item if Contract is awarded]	[insert total price per item]
1	Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meters with Pilfer Proof Meter Box as per Technical Specifications and Scope of Works	As per SoR	5000 nos						
Name o	Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [Insert Date]						Total Bid Price		

Note: Column 5 and 6: Currencies in accordance with ITB 16

Column 7 and 9: In Nepali Currency



Price Schedule: Goods Manufactured Outside Nepal, to be Imported

[ITB 15.7(b), goods to be imported]

Date:	
ICB No:	

1	2	3	4	5	6	7	8	9
Item No	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP- (Central Store, Hetauda as specified in BDS) accordance with ITB 15.7(b)(i)	CIP Price per line item (Col. 5x6) 15.7(b)(i)	Price per line item for inland transportation and other services required in Nepal to convey the Goods to their final destination specified in BDS 15.7(b)(ii)	Total Price per Line item (Col. 7+8) 15.7(b)(iv)
		[insert country of origin of the Good]	[insert quoted Delivery Date]		[insert unit price CIP per unit]	[insert total CIP price per line item]	[insert the corresponding price per line item]	[insert total price of the line item]
1	Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meters with Pilfer Proof Meter Box as per Technical Specifications and Scope of Works		As per SoR	5000 nos			Not Applicable	
Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [Insert Date]							Total Bid Price	

Note: Column 6 and 7: Currencies in accordance with ITB 16

Column 8: In Nepali Currency



Price Schedule: Goods Manufactured Outside Nepal, already imported

[ITB 15.7 (c), Goods already imported]

ICB No:											
1	2	3	4	5	6	7	8	9	10	11	12
Item No	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price including Custom Duties and Import Taxes paid, in accordance with ITB 15.7(c)(i)	Custom Duties and Import Taxes paid per unit in accordance with ITB 15.7(c)(ii), [to be supported by documents]	Unit Price net of custom duties and import taxes, in accordance with ITB 15.7(c) (iii) (Col. 6 minus Col.7)	Price per line- item net of Custom Duties and Import Taxes paid, in accordance with ITB 15.7 (c)(iii) (Col. 5x8)	Price per line item for inland transportation and other services required in Nepal to convey the goods to their final destination, as specified in BDS in accordance with ITB 15.7 (c)(v)	Sales and other taxes paid or payable per item if Contract is awarded (in accordance with ITB 15.7 (c) (iv)	Total Price per line item (Col. 9+10) ITB 15.7 (c)(vi)
		[insert country of origin of the Good]	[insert quoted Delivery Date]		[insert unit price per unit]	[insert custom duties and taxes paid per unit]	[insert unit price net of custom duties and import taxes]	[insert price per line-item net of custom duties and import taxes]	[insert price per line item for inland transportation and other services required in Nepal]	[insert sales and other taxes payable per item if Contract is awarded]	[insert total price per line item]
1	Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meters with Pilfer Proof Meter Box as per Technical Specifications and Scope of Works		As per SoR	5000 nos							
Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]								Total Bid Price			

Note:

Column 6,7, 8 and 9: Currencies in accordance with ITB 16

Column 10 and 11: In Nepali Currency



Price and Completion Schedule: Related Services

					Date: ICB No:		
1	2	3	4	5	6	7	
Service No.	Description of Services (excludes inland transportation and other services required in Nepal to convey the goods to their final destination)	Country of Origin	Delivery Date at place of Final destination	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6 or estimate)	
[insert number of the Service]	[insert name of Services]		at place of final	[insert number of units to be supplied and name of the physical unit]		[insert total priceand currency per item]	
Name of Bi	dder [insert complete name of Bidder] Signature of	Total Bid Price					

Notes: Column 6 and 7: Currencies in accordance with ITB Clause 16

Prices are to be quoted inclusive of all custom duties, sales, and other similar taxes applicable in Nepal and payable on the Related Services, if the Contract is awarded to the Bidder.



Bid Security

Bank Guarantee Bank's Name, and Address of Issuing Branch or Office (On Letter head of the Bank)

[This is the format for the Bid Security to be issued on the letterhead by a Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law of Nepal]

[insert Bank's Name, and Address of Issuing Branch or Office]

Date: [insert date]

Beneficiary: [insert Name and Address of Purchaser]

BID GUARANTEE No.: [insert number]

We have been informed that *[insert name of the Bidder]* (hereinafter called "the Bidder") intends to submit its bid to you (hereinafter called "the Bid") for the execution of *[insert name of contract]* under Invitation for Bids No. *[insert IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we *[insert name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount in figures, (insert amount in words)]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn or modifies its Bid:
 - i) during the period of bid validity specified by the Bidder on the Letter of Bid, in case of electronic submission
 - (ii) from the period twenty-four hours prior to bid submission deadline up to the period of bid validity specified by the Bidder on the Letter of Bid, in case of hard copy submission; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) changes the prices or substance of the bid while providing information pursuant to clause 29.1 of ITB; or
- (d) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the performance security, in accordance with the ITB.
- (e) is involved in fraud and corruption in accordance with the ITB.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the



instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful Bidder; or (ii) thirty (30) days after the expiration of the Bidder's bid which comes to be *[insert the date]*.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758⁵.

... Bank's seal and authorized signature(s) ...

[Note: All italicized text is for use in preparing this form and shall be deleted from the final product.]

⁵ As the case may be, ICC Publication No. 758 (or subsequent ICC Publications) may be used. In such cases, modify the Publication number.



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Manufacturer's Authorization Letter

[This letter of authorisation should be on the letterhead of the manufacturer and should be signed by the person with the proper authority to sign documents that are binding on the manufacturer]

Date: [insert date of Bid Submission]

IFB No.: [insert number]

To: [insert complete name and address of Purchaser]

WHEREAS [insert complete name of Manufacturer or Manufacturer's authorized agent] who are official manufacturers of [insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] exclusively to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us [insert name and/or brief description of the goods] and to subsequently sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Name: [insert complete name of person signing the Authorization]

In the capacity of: [insert legal capacity of person signing the Authorization]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the Authorization for and on behalf of: *[insert complete name of Manufacture]*

Date: [insert date of signing]



Section V. Schedule of Requirements



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A. List of Goods and Related Services

Item No.	Description of Goods	Quantity	Physical Unit
Smart Three Phase Energy Meter as per Technical S Works		l Specification	ns and Scope of
1	0.2S Class Smart Solid State CTVT Three Phase Energy	5000	nos
	Total	5000	nos



B. Delivery and Completion Schedule

Delivery shall take place in compliance with the dates, duration, and locations indicated below:

Item No.	Description of Goods	Quantity	Physical unit	Final Destination	Delivery Date (as per Incoterms)
	Smart Three Phase Ene	rgy Meter as	s per Techni	cal Specifications	
1	Supply and Delivery of 0.2S Class Smart Solid State CTVT Three Phase Energy Meters with Pilfer Proof Meter Box as per Technical Specifications and Scope of Works	5000	nos	Central Store, Hetauda	Two Lots as mentioned clause II
	Total	3000	nos		

Note:

- i. The date of effectiveness of the contract shall be the date 30 days after issue of Letter of Acceptance.
- ii. The delivery time is to be treated as the essence of the contract. The goods shall be delivered in two lots. The first lot shall be delivered within 180 days of effectiveness of contract. The second lot shall be delivered within 270 days of effectiveness of contract. However, the Purchaser at its discretion may request the Supplier to manufacture and supply the goods earlier than the aforementioned schedule.



For the provision of Delivery Schedule, following definitions shall be applicable:

1. Delivery

The Supplier shall deliver the Goods to the Purchaser's Delivery Site (place of destination) as specified above or nominated by the Purchaser prior to shipment. The Goods shall remain at the risk of the Supplier until delivery is completed. Delivery is defined as the Goods placed on the warehouse platform, dock, or ground at Delivery Site (place of destination) after off-loading of the Goods by the Supplier and all relevant shipping documents have been furnished to the Purchaser. The supplier shall be responsible for unloading goods. The purchaser shall provide the Good Receipt Certificate after delivery of the goods at the designated place. However, this certification of receipt shall not prejudice the Purchaser's remedies stated in other sections and clauses for shipment received, which contain damaged materials or missing materials. With the Goods Receipt Note, the Supplier shall apply for the payment as per SCC.

2. Goods Acceptance Certificate

After carrying out physical verification at NEA Store and/or post-dispatch tests in the presence of authorized representative of the Supplier and the Purchaser, if the goods are found in compliance with the technical specification of the Contract to the inspector's satisfaction, integration works as defined in Scope of works, the acceptance certificate shall be issued. The physical verification and/or post-dispatch tests shall be conducted for a minimum of two percent of the delivered goods. With the Goods Acceptance Certificate, the Supplier shall apply for the payment as per SCC.

3. Final Acceptance Certificate

Application for the Final Acceptance Certificate may be made to the Purchaser at the end of the Period of Warranty of the Goods or any portion thereof, provided that the Supplier has fulfilled his obligations under the Contract. Provided it has become necessary for the Supplier to replace or renew any portion of the Goods, the obligations of the Contract for that portion shall continue for the period mentioned above. The right of the Supplier to apply for a Final Acceptance Certificate in respect of the Goods, or portion thereof, other than the portions of the Goods replaced or renewed shall not be affected by that fact, and after the Supplier has ceased to be under any obligation under the Contract in respect of the portions satisfactorily supplied the Supplier may apply for a Final Acceptance Certificate in respect thereof.



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c. **Technical Specifications**



C1. Technical Specifications for 0.2S Class Smart Solid State Energy Meter

1. Scope

- 1.1. This specification covers design, engineering, manufacture, assembly, testing, supply, and delivery at designated store of CT and VT operated, AC static watthour meter with provision for bi-directional communication facility using plug-in-type modular 4G/5G Modem fallback to 2G Modem with SIM & e-SIM with 5 dBi antenna with 1.5 m coaxial cable. The meter shall be 3-phase 4-wire, 0.2S accuracy class for measurement of active, reactive (lead and Lag) and apparent power and energy as per power tariff requirement of AC balanced and unbalanced load at nominal frequency in the range of 47.5 Hz to 52.5 Hz using Digital Technology. Meter shall be manufactured using latest and 'State of Art' technology and methods prevalent in electronic industry. The meter shall be suitable for integrating with existing Advance Metering Infrastructure (AMI), Head End System (HES) and Meter Data Management System (MDMS) of Nepal Electricity Authority (NEA). To ensure that the measurement of meter is accurate, there shall have a separate Micro Controller Unit (MCU) in Communication Module (CM) which is responsible for the communication part, and the upgrading of communication software of module shall not affect the meter's accurate measurement.
- 1.2. It is not the intent to specify completely herein all the details of the design and construction of meter, hardware, software, communication, and design of the system. However, the meter shall conform in all respects to high standards of engineering, design and workmanship and shall be capable of performing commercial operation continuously in a manner acceptable to NEA, who will interpret the meanings of drawings & specification and shall have the right to reject any work or material which in its judgment is not in accordance therewith. The offered meter shall be complete with all components, accessories necessary for their effective and trouble-free operation of the system for the purpose mentioned above. Such components shall be deemed to be within the scope of supplier supply irrespective of whether those are specifically brought out in this specification and/or the commercial order or not.
- 1.3. The supplier shall supply, test and commission the number of meters as defined in Price Schedule and shall integrate them to the System of NEA as required by the Purchaser. All the cost to be incurred to integrate the meters shall be borne by the supplier. The Purchaser shall verify the acquired data in the BCS and AMI system.
- 1.4. The Meters shall respond to various direct SMS commands from authorized Mobile Dialing Numbers (MDN) to enable read & write functions for various essential parameters and settings related to Consumer, Communication, Energy and Billing, Meter health etc; in absence of 4G/5G network.

2. Applicable Standards

2.1. Unless specified elsewhere in this specification, the performance & testing of the meters shall conform to the following standards or equivalent international standards, to be read with up to date and latest amendments/revisions thereof as on 90 days prior to floating of tender.

a.	IEC 62053-22:2020	Electricity metering equipment -Particular requirements - Part 22: Static meters for AC Active Energy (classes 0.1S, 0.2S and 0.5S)
b. IEC 62056		Electricity metering – Data exchange for meter reading, tariff and load control – Part 21, 42, 46, 47, 53, 61 and 62



c.	IEC 62058-11	Electricity metering equipment (a.c.) - Acceptance inspect - Part 11: General acceptance inspection methods	
d.	IEC 60529	Degree of protection provided by enclosures (IP Code)	
e.	ISO 2859	Sampling Procedures	

2.2. Accuracy shall be guaranteed for at least 10 years and there shall be no drift of accuracy, which means that the initial accuracy is sustained over the entire life of the meter and there shall be no need for adjustment of the accuracy after installation.

3. Climatic Conditions

3.1. The meters to be supplied against this specification shall be suitable for satisfactory continuous operation under the following tropical conditions. Meters shall be capable of maintaining required accuracy under hot, tropical, and dusty climatic conditions:

a.	Location	at various locations in the country
b.	Maximum ambient temperature	55°C
c.	Minimum ambient temperature	-10°C
d.	Maximum relative humidity	100% (non-condensing)
e.	Minimum relative humidity	10%
f.	Average rainfall per annum	2,000 mm
g.	Maximum height above the sea level	2,000 m
h.	Maximum wind pressure / wind speed	200 kg/m2 / 50 m/sec
i.	Average number of thunderstorms	59
j.	Average number of rainy days per annum	150

4. Rating and Type of Service

4.1. The meters shall be outdoor type connected with the secondary side of current and voltage transformers.

Type of Installation	Outdoor, encased with pilfer proof box of IP54 class	
CT secondary	1(6) A	
VT accordance	$110/\sqrt{3} \text{ V} \sim 400/\sqrt{3} \text{ V}$ (Phase to Neutral)	
VT secondary	The voltage range shall be $+15$ to -40% of the rated voltage.	
Power Factor Range	Zero Lag – Unity – Zero Lead	
Power Consumption	As per the relevant IEC Standards	
Frequency Range	50 Hz ± 5%	
Earthing System	Solidly Grounded	
Ingress Protection	Meter of IP 54 class	

4.2. The starting current for the meter shall be 0.1% of I_b. The meter shall not register with no-load. It shall also meet the requirements of withstanding short time over current for 1.0 second up to 20 times I_b. The meter shall be suitable for balanced as well as unbalanced



loads at all power factors. Unbalance in load shall not affect the accuracy of meter.

5. General & Constructional Requirements

- 5.1. The meter shall be housed in a safe high grade Thermo engineering plastic/ polycarbonate Lexan 943A casing and shall be dust/moisture proof conforming to IP 54. The meter cover shall be made up of molded flame retardant polycarbonate Lexan 943A, which is tough, resilient and can be fixed up with the help of screws. Provision shall be made for sealing the cover also.
- 5.2. The meter shall have Polycarbonate Lexan 943A opaque base and cover of Poly-carbonate Lexan 943A material. The thickness of material for meter cover and base shall be 2 mm (minimum).
- 5.3. The terminal block shall be made of polycarbonate (Lexan 943A) and shall house solid silver coated copper terminals with 4 fixing screws per terminal. The terminals shall be liberally designed to permit high overload withstand capability. The engineering plastic used for terminal block and cover shall withstand the heat deflection test as per ISO 75 and Glow wire test as per IEC:62053-22.
 - The terminal block shall have cover which shall be separately sealable at two places and housed at the bottom of the meter and once sealed shall prevent unauthorized tampering.
- 5.4. The terminals in the terminal block shall be of adequate length to have proper grip of conductor with the help of four screws.
- 5.5. Dust proof window of any transparent material (Toughened glass or poly carbonate), which shall not fade in prolonged use, shall be provided to permit clear view of the register. The fixing arrangement shall be such that the window glass cannot be removed without breaking the seals.
- 5.6. The extended terminal cover shall be transparent.
- 5.7. Meter shall be designed in such a fashion that it shall be installed in a separate box (surface type) which may be fixed on the electric pole/wall in outdoor condition.
- 5.8. All the insulating materials used in the construction of the meter shall be of non-hygroscopic, non-ageing and of tested quality.
- 5.9. The entire design and construction shall be capable of withstanding the severest stress likely to occur in actual service. The soldering shall be perfect without dry solders.
- 5.10. All parts that are likely to develop corrosion under normal working condition shall be effectively protected against corrosion by suitable method to achieve durable results.
- 5.11. The meters shall be designed with application of specific integrated circuits. The electronic components shall be mounted on the printed circuit board using latest Surface Mount Technology (SMT).
- 5.12. The meter shall have a suitable test output device for testing meter. Preferably the blinking LED or other similar device like blinking LCD shall be provided. The test output device shall have constant pulse rate i.e., Pulse/kWh and its value (meter constant) shall be indelibly printed on the name plate.
- 5.13. The meter shall have a high-resolution of at least 4-inch multicolor push button backlit display. The display shall present phasor diagrams (RYB clockwise), power, energy, voltage, current.
- 5.14. Meter accuracy shall not be affected if permanent magnet of 0.5 Tesla is applied on all sides of meter.



- 5.15. The meter shall also be capable to withstand and shall not get damaged if phase to phase voltage is applied between phases & neutral for five minutes.
- 5.16. Non specified display parameter in the meter shall be blocked and it shall not be accessible for reprogramming at site.
- 5.17. The complete metering system shall not be affected by external electromagnetic interference such as electrical discharge of cables and Capacitors, harmonics, electrostatic discharges, external magnetic fields, and DC current in AC supply, etc. The meter shall withstand any type of High Voltage and High-Frequency surges which are similar to the surges produced by induction coil type instruments without affecting the accuracy of the meter. The manufacturer shall have type test certificates for the same.
- 5.18. The meter shall have a facility for data retrieval locally through an optical port, Ethernet, RS485/RS232 and shall also support MBus Protocol.
- 5.19. The meter shall have a Plug-in type (Modular Type) communication module slot /interface. It must be compatible to plug-in 4G/5G Module fallback to 2G Modem while it is required. The supplier shall provide all required software, API, dll and updated firmware, etc., to install and use such module.
- 5.20. The meter shall provide Communication Status on LCD.

5.21. Sealing

The meter shall be totally sealed and tamper proof with no possibility of any adjustment at site.

Proper sealing arrangement shall be provided on the meter to make it tamper proof and to avoid mishandling by un-authorized person. At least two (2) seals on the body, two (2) seals on the terminals block and one seal each on maximum demand resetting device and communication ports shall be provided. Meter base and cover shall be tightened from rear side with at least two nos. so that meter body could not be opened at site in any case and two nos. firms' stickers seals bearing serial no., which shall not be repeated shall be provided between meter base and cover.

6. Connection Diagram and Terminal Marking

6.1. The connection diagram of the metering module shall be clearly shown inside portion of the terminal cover and shall be of permanent nature. The meter terminals shall also be marked, and this marking shall appear in the above diagram. In case any special precautions need to be taken at the time of testing the meter the same may be indicated along with the circuit diagram.

7. Marking of Meter

- 7.1. The marking on every meter shall be in accordance with IEC 62053. The basic marking on the meter name plate shall be as follows:
 - a. Manufacturer's name and trademark.
 - b. Type designation.
 - c. Number of phases and wires
 - d. Serial number
 - e. Month and Year of Manufacture
 - f. Reference voltage / PT ratio
 - g. Frequency
 - h. Rated secondary current of CT 1(6) A



- i. Principal unit(s) of measurement
- j. Meter Constant (impulse/kWh)
- k. Class index of meter
- 1. Text "SUPPLIED BY NEPAL ELECTRICITY AUTHORITY"
- m. Contract No:
- n. Guarantee period

8. Time and Date

- 8.1. The real time quartz clock shall be used in the meter for maintaining time and calendar. The time accuracy shall be as per provision of relevant IEC Standard. Facility for adjustment of real time shall be provided through Laptop with proper security.
- 8.2. The drift of the clock shall be < 0.5s per day. For keeping the date and time data securely, the meter shall be equipped with a super-capacitor with back-up power for more than 24 hours and a replaceable battery with back-up power with lifetime of at least 15 years.

9. MD Registration, Demand Resetting and Energy Measurement

- 9.1. The meter shall continuously monitor & calculate the average demand in kVA during the Integration period and maximum out of these shall be stored along with date & Time in the meter's memory. The integration period shall be programmable for 5/10/15/30/60 minutes on real time basis on block/sliding window principle that shall also be programmable.
- 9.2. The meter shall also display peak M.D. reset count. The M.D. resetting shall be possible in automatic way on a predetermined date and time of the month.
- 9.3. The Meter shall be 4 quadrants and it shall have the ability of measuring & recording Import/Export active & reactive energy separately for each quadrant.
- 9.4. The meter shall measure import/export energy as well as absolute value of active energy and it shall be possible to activate this capability.
- 9.5. The meter shall be capable of measuring fundamental energy as well as total energy.

10. TOD Compatibility

10.1. There shall be provision for at least 8 (Eight) different Time of Day (TOD) register at least in 6 channels for maximum demand kVA, kWh, kVARh, kVAh for both forward and reverse direction of power flow. The number and timings of these TOD time Zones shall be programmable from base computer as per the requirements of purchaser.

11. Self-Diagnostic Features

- 11.1. The meter shall be capable of performing complete self-diagnostic check at regular interval to monitor the circuits for any malfunctioning to ensure integrity of data memory location all the time. The meter shall also keep log in its memory for unsatisfactory functioning or nonfunctioning of Real Time Clock battery, also it shall be recorded and indicated in reading file at base computer software.
- 11.2. All display segments: "LCD Test" display shall be provided for this purpose.

12. Display of Measured Values

12.1. The corresponding non-volatile memory shall have a minimum retention time of 10 years. In the case of multiple values presented by a single display it shall be possible to display the content of all relevant memories. When displaying the memory, the identification of each



parameter applied shall be possible. The principal unit for the measured values shall be the kilowatt hour (kWh) for active energy, kVARh for reactive energy and kVAh for apparent energy.

- 12.2. The display shall be minimum full 8 excluding decimal or more digit type display of liquid crystal display (LCD). The display shall be digital type with non-destructive read out. The meter shall have non-volatile memory (NVM) so that the registered parameters will not be affected by loss of power. The LCD display shall show the legend of the quantity. The size of digit shall be minimum 9x5 mm. The adequate back up arrangement for storing of energy registered at the time of power interruption shall be provided. The meter shall have alternate display modes for showing required information. Default mode shall be auto scroll type. The number of parameters and the scrolling period shall be field programmable. In alternate mode, required parameters shall be displayed and shall be possible to view the parameters using push button.
- 12.3. There shall be arrangement for displaying of consumer ID, consumer no., name, and address for which record number field shall be at least of 8 digits.
- 12.4. The meter shall be capable of recording and displaying automatically at least the following:

Display Parameters (Auto Display)

The following parameters shall be displayed continuously in cyclic order on the meter face to enable NEA to know the parameter at any instant. The time for display shall be programmable and shall not drift throughout the life cycle of meter.

- a. Active and Reactive Power, kW and kVAR (forward and reverse)
- b. Cumulative Active Energy, kWh (forward and reverse)
- c. TOD Active Energy, kWh (forward and reverse)
- d. Instantaneous Power Factor
- e. Line Frequency
- f. Instantaneous phase currents
- g. Instantaneous phase voltage
- h. Real time and date

Display Parameters (Push Button)

- a. Active and Reactive Power, kW and kVAR (forward and reverse)
- b. Cumulative Active Energy, kWh (forward and reverse)
- c. Cumulative Reactive Energy, kVARh (forward and reverse)
- d. Cumulative Apparent Energy, kVAh (forward and reverse)
- e. TOD Active Energy, kWh (forward and reverse)
- f. TOD Reactive Energy, kVARh (forward and reverse)
- g. TOD Apparent Energy kVAh (forward and reverse)
- h. Maximum Demand kVA since reset (forward and reverse with occurrence date and time)
- i. MD Reset Count
- j. Last month MD (between reset)
- k. Date of last month MD reset
- 1. Cumulative MD
- m. Instantaneous Power Factor
- n. Line Frequency



- o. Instantaneous phase currents
- p. Instantaneous phase voltage
- q. Real time and date
- r. Self-diagnostic (LCD) segment check and Battery check
- s. CT and PT Ratio
- t. Program Change Count
- u. Date of the Last Program Change
- v. Meter Status (Forward/Export)
- w. Network Signal Strength with data network type as supported by communication module
- x. Error Code (as mentioned in Table 1 below)

Table 1 (Mandatory in case of 2G/4G/5G Communication Module):

No.	Error Mean	Error Display
1	All Good	Err 00
2	Meter NIC Communication Failure	Err 01
3	Modem Initialization Failure	Err 02
4	SIM Not-detected	Err 03
5	SIM Invalid	Err 04
6	No GSM Network Coverage	Err 05
7	GSM Network Registration Failure	Err 06
8	GSM Registration Denied	Err 07
9	No APN Configured	Err 08
10	GSM Connection Not-established	Err 09
11	HES IP/Port Not-configured	Err 10
12	HES Port Not-open	Err 11
13	Any Key Mismatch b/w meter and NIC	Err 12

(h) Note: The meter display **shall** return to default display mode if the 'Push Button' is not operated for more than 15 seconds.

Display Parameters (Power-Off Mode)

In case of power failure, the meter shall display parameters with push button as below:

- a. Date and Time
- b. Meter Serial Number
- c. Consumer ID
- d. Approved Demand
- e. Instantaneous Voltage
- f. Instantaneous Current
- g. Power Factor
- h. Current Month Active Energy Import (+A)
- i. Current Month Active Energy Export (-A)
- j. Previous [1] month Active Energy Import (+A)
- k. Previous [1] month Active Energy Export (-A)



- 1. Current Month Active Energy (|+A|-|-A|) Net Total
- m. Apparent MD (+) & Occurring time Current Month
- n. Apparent MD (-) & Occurring time Current Month

Generic Profile Parameters;

The meter shall record and automatically PUSH all related parameters under various Generic Profiles as follows as (which can be changed or updated after contract signing as required by the purchaser) per defined time interval to AMI(HES/MDMS) System;

- Load Profile 1 (OBIS Code: 01.00.99.01.00.255)
- Load Profile 2 Instantaneous (OBIS Code: 01.00:99.128.00.255)
- Load Profile 7 Harmonics (OBIS Code: 01.00:99.136.00.255)
- Load Profile 9 (OBIS Code: 01.00:99.02.00.255)
- Monthly Billing Profile (OBIS Code: 00.00:98.01.00.255)

Details Parameters List under Load Profile 1 (OBIS Code: 01.00.99.01.00.255);

- 1. Clock
- 2. Profile Status 1
- 3. Active Energy Import
- 4. Active Energy Import Rate1
- 5. Active Energy Import Rate2
- 6. Active Energy Import Rate3
- 7. Active Energy Import Rate4
- 8. Active Energy Export
- 9. Active Energy Export Rate1
- 10. Active Energy Export Rate2
- 11. Active Energy Export Rate3
- 12. Active Energy Export Rate4
- 13. Active Energy Import Phase A
- 14. Active Energy Export Phase A
- 15. Active Energy Import Phase B
- 16. Active Energy Export Phase B
- 17. Active Energy Import Phase C
- 18. Active Energy Export Phase C
- 19. Reactive Energy Import
- 20. Reactive Energy Export
- 21. Voltage-Phase A
- 22. Voltage-Phase B
- 23. Voltage-Phase C24. Current-Phase A
- 25. Current-Phase B
- 26. Current-Phase C
- 27. Apparent Energy Import
- 28. Apparent Energy Export
- 29. Apparent MD (-) & occurring time Current Month

<u>Details Parameters List under Load Profile 2 - Instantaneous Parameters (OBIS Code: 01.00:99.128.00.255);</u>

- 1. Clock
- 2. Profile Status 2 (Load profile with period 2)
- 3. Meter Number



- 4. Voltage-Phase A
- 5. Voltage-Phase B
- 6. Voltage-Phase C
- 7. Current-Phase A
- 8. Current-Phase B
- 9. Current-Phase C
- 10. Active Power Import
- 11. Active Power Export
- 12. Reactive Power Import
- 13. Reactive Power Export
- 14. Power Factor
- 15. Power Factor-Phase A
- 16. Power Factor-Phase B
- 17. Power Factor-Phase C
- 18. Active Energy Import
- 19. Active Energy Export
- 20. Reactive Energy Import
- 21. Phase Angle U1-I1
- 22. Phase Angle U2-I2
- 23. Phase Angle U3-I3
- 24. Frequency
- 25. Power OFF Duration in min
- 26. Relay Status (On/Off)
- 27. Meter Mode (Post/Prepaid)

<u>Details Parameters List under Load Profile 7 - Harmonics Parameters (OBIS Code: 01.00:99.136.00.255);</u>

- 1. Clock
- 2. Profile Status 7
- 3. Current Average value of THD of voltage L1
- 4. Current Average value of THD of voltage L2
- 5. Current Average value of THD of voltage L3
- 6. Current Average value of THD of current L1
- 7. Current Average value of THD of current L2
- 8. Current Average value of THD of current L3

Details Parameters List under Load Profile 9 (OBIS Code: 01.00:99.02.00.255);

- 1. Clock
- 2. Profile Status 9 (Load profile with period 9)
- 3. Active Energy Import
- 4. Active Energy Export
- 5. Reactive Energy Import
- 6. Reactive Energy Export
- 7. Apparent Energy Import
- 8. Apparent Energy Export
- 9. Apparent MD (+) & occurring time Current month
- 10. Apparent MD (-) & occurring time Current month

<u>Details Parameters List under Monthly Billing Profile (OBIS Code: 00.00:98.01.00.255);</u>

- 1. Clock
- 2. Active Energy Import
- 3. Active Energy Import Rate1



- 4. Active Energy Import Rate2
- 5. Active Energy Import Rate3
- 6. Active Energy Import Rate4
- 7. Active Energy Export
- 8. Active Energy Export Rate1
- 9. Active Energy Export Rate2
- 10. Active Energy Export Rate3
- 11. Active Energy Export Rate4
- 12. Active Energy Import Phase A
- 13. Active Energy Export Phase A
- 14. Active Energy Import Phase B
- 15. Active Energy Export Phase B
- 16. Active Energy Import Phase C
- 17. Active Energy Export Phase C
- 18. Reactive Energy Import
- 19. Reactive Energy Import Rate1
- 20. Reactive Energy Import Rate2
- 21. Reactive Energy Import Rate3
- 22. Reactive Energy Import Rate4
- 23. Reactive Energy Export
- 24. Reactive Energy Export Rate1
- 25. Reactive Energy Export Rate2
- 26. Reactive Energy Export Rate3
- 27. Reactive Energy Export Rate4
- 28. Reactive Energy Import Phase A
- 29. Reactive Energy Export Phase A
- 30. Reactive Energy Import Phase B
- 31. Reactive Energy Export Phase B
- 32. Reactive Energy Import Phase C
- 33. Reactive Energy Export Phase C
- 34. Active energy (|+A|-|-A|) Net Total
- 35. Active energy (|+A|-|-A|) Net Rate1
- 36. Active energy (|+A|-|-A|) Net Rate2 37. Active energy (|+A|-|-A|) Net Rate3
- 38. Active energy (|+A|-|-A|) Net Rate4
- 39. Active Max Demand Import
- 40. Active Max Demand Import Date
- 41. Active Max Demand Export
- 42. Active Max Demand Export Date

<u>Details Parameters List under PUSH EVENTS</u> (as supported by Communication Module);

Standard Event				
Push OBIS: Class 7;0-0:99.98.0.255;Attribute:02				
Name Event Code		Event Description		
Standard Event	6	RTC Error		
Standard Event 18 Firmware Activated Standard Event 19 Firmware Update Failure		Firmware Activated		
		Firmware Update Failure		
Standard Event	30	Parameter Program		
Standard Event	40	TOU Parameter modified		
Standard Event	nt 131 Monthly Billing Date and Time Changed			
Standard Event 216 Low Battery Voltage of Internal Battery		Low Battery Voltage of Internal Battery		



Standard Event	243	Prepaid and Post-paid Mode Switch	
Tamper Event			
Push OBIS: Class 7;0		55; Attribute: 02	
Name	Event Code	Evant Description	
Tamper Event	40	Terminal Cover Open	
Tamper Event	41	Terminal Cover Close	
Tamper Event	42	Magnetic Influence Detection start	
Tamper Event	43	Magnetic Influence Detection end	
Tamper Event	44	Meter Cover Open	
Tamper Event	45	Meter Cover Close	
Relay Control Event			
Push OBIS: Class 7;0	-0:99.98.2.2	55; Attribute:02	
Name	Event	T	
Name	Code	Event Description	
Relay Control Event	62	Remote disconnection from HES	
Relay Control Event	63	Remote connection from HES	
		Local disconnection (once disconnection	
Relay Control Event	64	through power or current, need push every	
,		phase Current & Voltage and import/export	
Relay Control Event	active energy)) Event 67 Approved Load Limit (KVA) Changed		
Relay Control Event	68	Approved Load Limit (KVA) Changed Local reconnection restored	
Relay Control Event	73	Disconnect / Reconnect failure	
Relay Control Event	76	Disconnection cause of tamper issue	
Relay Collifor Event	Relay Function Enabled (means change in		
Relay Control Event	110	mode 4 or 6)	
Relay Control Event	111	Relay Function Disabled (means change into mode 0)	
Relay Control Event	112	Threshold % of Load Limit Changed	
Relay Control Event	255	Relay disconnect (any reason of relay disconnection)	
Power Quality Event		,	
Push OBIS: Class 7;0		55; Attribute:02	
Name	Event	Event Description	
	Code	-	
Power Quality Event	19	Reversed Polarity Totally Start	
Power Quality Event	20	Reversed Polarity Totally End	
Power Quality Event	73	Reverse Phase Sequence of Voltage Start	
Power Quality Event	74	Reverse Phase Sequence of Voltage End	
Power Quality Event	156	Overload Start	
Power Quality Event	157	Overload End	
Push ORIS: Class 7:0		55. A ttributo.02	
Push OBIS: Class 7;0-0:99.98.5.255;Attribute:02			
Name	Event Code	Event Description	
Communication Event	156	Signal Quality Low	



13. Memory

- 13.1. The data stored in the registers shall not be lost in the event of power failure and the meter shall have non-volatile memory (NVM), which does not even need battery back-up. Each meter shall have a non-volatile memory and the data stored on the NVM shall be retained up to ten (10) years without power.
- 13.2. Following monthly data shall be stored for 18 months in the non-erasable memory along with the name of the month and shall be accessible for reading through Laptop.
 - a. Active energy import, kWh
 - b. Active energy export, kWh
 - c. Maximum Demand, kVA in both direction
 - d. Average power factor or kVARh
 - e. Average frequency for each successive 15-minute block
 - f. Reactive Energy Import
 - g. Reactive Energy Export
 - h. Tampering Data

14. Billing History and Load Survey

14.1. The meter shall have sufficient non-volatile memory for recording history of following billing parameters and load survey:

14.1.1. Monthly records for billing

Following monthly data shall be stored for at least 18 months (FIFO) with date and time of Reset in the non-erasable memory along with the name of the month and shall be accessible for reading through Laptop.

- i. Cumulative active energy, kWh forward direction
- ii. Phase-wise Cumulative active energy, kWh forward direction
- iii. TOD Active energy, kWh forward direction
- iv. Cumulative active energy, kWh reverse direction
- v. Phase-wise Cumulative active energy, kWh reverse direction
- vi. TOD Active energy, kWh reverse direction
- vii. Maximum demand
- viii. Consumer Number
- ix. CT and PT Ratio
- x. Meter Serial Number
- xi. Tampering Data

14.1.2. Load survey parameters

Storage in non-volatile memory for more than 1000 days with 30 minutes time integration period of the following parameters – kWH / kW, kVAh / kVA, Phase wise currents (magnitude and angle), Phase Voltages (magnitude and angle), Average Current, Average Voltage, Power Factor, current and voltage harmonics, –shall be provided in 512 channels on non-time based basis. Statistical recording shall include minimum, maximum, average, changeover interval, and end-of-interval calculations. Whenever meter is taken out and brought to laboratory the L/S data shall be retained for the period of actual use of meter. This load survey data can be retrieved as and when desired and load profiles shall be viewed graphically / analytically with the help



of meter application software. The meter application software shall be capable of exporting / transmitting these data for analysis to other user software in spreadsheet format. The time required for downloading this data shall be as minimum as possible.

15. Tamper and Fraud Detection/Evidence

- 15.1. The meter shall detect and correctly register energy both in forward & reverse direction under following tamper conditions and as per the IEC or other applicable international standards:
 - a. The meter accuracy shall not be affected by change of phase sequence. It shall maintain the desired accuracy in case of reversal of phase sequence.
 - b. The meter shall continue to work even without neutral.
 - c. The meter shall work in absence of any two phases i.e., it shall work on any one phase wire and neutral, to record relevant energy. It shall also work with two phases in case of missing neutral.
 - d. The meter shall keep registering correct energy when all the CT polarities are reversed.
 - e. The meter shall not get damaged or rendered non-functional even if any phase and neutral are interchanged.
 - f. The meter accuracy shall not be affected by AC/DC magnetic field up to 0.2 Tesla on all the sides of meter i.e., front, sides, top and bottom of the meter. Moreover, meter accuracy shall not be affected if permanent magnet of 0.5 Tesla is applied for 15 minutes.

15.2. Tamper Events

The meter shall have features to detect the occurrence and restoration of the following abnormal events:

a. Missing Potential and Potential Imbalance

The meter shall be capable of detecting and recording occurrence and restoration with date and time the cases of potential failure and low potential, which could happen due to disconnection of potential leads (one or two). The log report shall contain the date, time, TOD energy, Consumer Number, and the Meter Serial Number. The threshold time for the recording of such events shall be programmable and at least 300 sec.

b. Current Unbalance/Current Short

The meter shall be capable of detecting and recording occurrence and restoration with date and time of current unbalance (30% or more for 15 minutes) or current short (70% or more). Higher of the 3 phase currents shall be considered as reference for this purpose.

c. Current Reversal

The meter shall be capable of detecting and recording occurrence and restoration with date and time of reversal of current with phase identification.

d. Power ON/OFF

The meter shall be capable to record power ON/OFF events in the meter memory. All potential failure shall record as power off event.

e. Current Circuit Short

The meter shall be capable of detecting and recording occurrences and restoration of shorting of any one or two phases of current.



The meter shall keep records of at least 500 such tamper events (Occurrence + Restoration). For above abnormal conditions the recording or events shall be on FIFO basis. It shall be possible to retrieve the abnormal event data along with all related snap shots data through the meter optical port with the help of Laptop and downloaded the same to the base computer. All the information shall be made available in simple and easy to understand format.

16. Data Communication Capability

- 16.1. The meter shall be provided with plug-in type 4G/5G with fallback to 2G module for communication of the measured/collected data as per the guideline document for DLMS/COSEM energy meters.
- 16.2. The meter shall have an infrared optical interface module to enable the use of a USB-compatible optical probe in compliance with IEC 62056-21. The optical port shall allow bi-directional communication with a Laptop for rapid, error-free electronic data transfer using the DLMS/COSEM protocol as well as IEC 62056-21. The optical port shall be used to configure the meter, read all the register values, and load profile data.
- 16.3. The meter shall also support RS485 and Ethernet.
- 16.4. **IEC 61850 Ethernet Communications**: The meter shall incorporate IEC 61850 MMS and GOOSE with as many as 24 GOOSE subscriptions and 6 simultaneous MMS sessions.
- 16.5. The metering system shall be compatible with suitable Base Computer software.
- 16.6. All meters of the same model shall be totally identical in all respects except for their unique identification codes. They shall also be totally sealed and tamper proof, with no possibility of any adjustment at site, except for clock correction.
- 16.7. The meter shall have plug-in type 4G/5G module with fallback to 2G to support cellular network. The supplier shall submit supporting/proof document / letter that their proposed Communication Module (CM) has 4G/5G modem with communication chip from the listed manufacturers.
- 16.8. The meter shall have provision to push real time outage alert & configured tamper alerts to AMI (HES & MDM) Software System.
- 16.9. There shall be provision to establish communication between meters and AMI (HES & MDM) Software System of NEA in intelligent way to enable maximum success rate. The meter shall send only missed or leftover data incase communication breaks /fails in between data transfer process. This feature is must and required by NEA for future integration of these meters with AMI (HES & MDM) Software System of NEA.
- 16.10. There shall be provision to set the meter into online mode for viewing real time data in HES Server in interval of 15/30/60 minutes. In case of non-communication or communication fail after online mode is enabled, meter shall store at least 100 intervals of instantaneous data & push the same once communication is restored.
- 16.11. The meter shall have provision for remote configuration of parameters like APN name, destination IP, Interval time for instantaneous data, complete data. Virtually every required configuration shall be done remotely.
- 16.12. There shall be magnetic device at optical port to hold up one end of communication cable (used to download the data to Laptop Computer).

17. Software

17.1. The purchaser shall have the right to use the software/BCS/Apps as required for the operation of the meter. The supplier shall not charge extra costs for the use of the software/BCS/Apps.



All the meters should be integrated to the system without any additional cost to purchaser.

- 17.2. The following software shall be supplied by the meter manufacturer without any extra cost:
 - a. Software/BCS/Apps for reading, downloading, and programming the meter.
 - b. Base Computer software for accepting data from Laptop and downloading instructions from Base Computer to AMI System.
 - c. Base Computer shall have facility to program the display and/or other required parameters in the meter.
 - d. The meters shall be capable to communicate directly to Laptop Computer.
 - e. The base computer software shall be executable on Microsoft Windows Operating system.
 - f. For efficient and speedy recovery of data downloaded through Laptop PC on base computer, licensed copies of base computer software shall have to be supplied. This software will be used at numbers of places up to Branch level. As many copies of base computer software as required up to Branch level shall be provided free of cost. If there is common software for downloading of data to be given out to branch offices and the operation of software is restricted through security code, a code generating software shall be provided by the manufacturer. The code so generated will be distributed from central level to the branch offices as per requirements.
 - g. The base computer software shall be Microsoft Window OS based & user friendly. The data transfer shall be highly reliable and fraud proof (No editing shall be possible on base computer by any means).
 - h. The supplier shall provide all required Software, APIs, Dlls, Protocols and updated firmware, software documentations etc., to integrate these meters with AMI/ MDM Software System of NEA for Automatic Meter Reading in future whenever is required without any extra cost to NEA. Any change or upgradation of software or BCS in future, required for any reason, must be done by the supplier at their own cost & resources. The communication software and meter software are separated to ensure that the measurement of meter won't change after carrying out the error inspection and meter tests, moreover the communication software of meter can be upgraded on request, which will not affect the meter's accurate measurement. There shall be a separate MCU in CM (Communication Module) that is responsible for communication part.

i. Security Features

- i. Communication session count shall be available through display and with Laptop.
- ii. The meter shall log the date and time of at least last five program changes in a billing period.
- iii. The meter shall have programmable facility to restrict the access to the information recorded at different security level such as communication read, communication write etc.
- j. The Supplier or Manufacturer shall provide all required softwares for generating a report in concise and desired format so that these can be used for billing, meter data management, outage management etc.
- k. Cybersecurity: The meter shall allow different levels of passwords to provide controlled access. The communications ports of the meter shall allow three permission levels that provide controlled read and write access. In addition, the meter shall allow enabling and disabling of each communications port, integrity of the firmware files during upgrades and reject the files if there is a mismatch.



18. Additional Features

18.1. External Power Supply

Meter shall be provided with super capacitor and battery. The rated shelf life of battery shall be of 15 years. Super capacitor will provide carry over power to the meter and the modem for all normal power outages at least for 24 hours. Battery will work when super capacitor is discharged or when programmed meter is stored for extended period without electric supply. No auxiliary supply shall be required for the meter.

Additionally, the meter shall have a port provision for a separate external maintenance free battery with suitable Push Button arrangement for activation of display and data download purpose in case of power failure.

- 18.2. **Recovery of Data:** The meter shall have provision to communicate with the PC even in event of failure of display. In event of failure of component affecting more than just LCD function, manufacturer shall extract the stored data at no cost to the purchaser during the warranty period. All the cost (including transportation to and fro) involved in the process shall be borne by the supplier. Similarly, the memory of the meter shall be suitably protected and secured against unexpected fault conditions.
- 18.3. **Connection Check:** The meter shall have capability to check the correctness of connections at site.
- 18.4. **Missing Voltage Indication:** There shall be visual display of the missing voltage on the face of the meter.

18.5. Remote Configuration

The meter shall support remote firmware upgrades as well as remote configuration (OTA) in secure manner.

18.6. The Meter shall have a provision to provide programmable trip command to external MCCB/Breaker.

19. Guarantee/Warranty

19.1. The Meter shall be guaranteed for the period of ten years from the date of acceptance of meter. Meters found defective/ functioning abnormally within the above guarantee period shall be replaced / repaired by the supplier free of cost within two month of receipt of intimation. If the defective meters are not replaced/repaired within the specified period above, the NEA shall recover an amount of double the meter price from any of the bills of the supplier. Any issues/bug or any updates in HES/BCS, integration with MDMS software, firmware or any other hardware as per requirement during warranty period shall be provided by supplier without any extra cost to NEA. Failure to provide the service or denial of the request as above may even lead to blacklisting, as decided by NEA and such decision shall be final.

20. Tests and Inspection

20.1. Type Tests

The Manufacturer shall have carried out the Type Test as per the relevant standard on the similar meter within the last 5 years from the bid submission date in any of the following internationally recognized independent meter test laboratory:

- a. B.V. KEMA (KEMA) or National Metrological Laboratory in Netherlands accredited to Western European Legal Metrology Corporation.
- b. CESI (Centro Electrotecnico Sperimentale Italiano S.P.A) or National Metrological Laboratory in Italy, accredited to Western European Legal Metrology Corporation.



- ESEF (Ensemble Des Stations D' Essais a' Grande Puissance Francaises) or National Metrological Laboratory in France, accredited to Western European Legal Metrology Corporation.
- d. National Metrological Laboratory in Japan, accredited to National Laboratory Accreditation System in Japan.
- e. Falcon, UK or National Meteorological Laboratory in UK, accredited to Western European Legal Metrology Corporation.
- f. PTB, Germany
- g. PTP, Austria
- h. Ofgem (formerly known as Offer), Ireland
- i. Powertech Labs Inc., Canada and
- j. Test lab recognized and approved by ANSI (American National Standards Institute)

In case, the type test has been carried out in other labs, a fresh type test shall be carried out in any of the above-mentioned labs, in the presence of representatives from NEA before the mass production. If the test is not satisfactory, the Manufacturer shall manufacture all new items and perform the type test as mentioned above. All the costs for type tests including but not limited to airfare, daily/travel allowances as per NEA rules, insurances, Visa Fees, living expenses, etc. incurred by the two representatives of NEA during their visit to the laboratory to witness the type tests shall be borne by the Supplier. After the successful type test only, the manufacturing process will be continued.

20.2. **Pre-Dispatch Inspection**

All the routine/acceptance tests as per applicable standards shall be carried out at the premises of manufacturer unless otherwise specially agreed upon by the manufacturer and purchaser at the time of purchases. The manufacturer shall offer to the inspector representing the purchaser all the reasonable facilities, free of charge, for inspection and testing, to satisfy him that the material is being supplied in accordance with this specification. The Company's representative/Engineer attending the above testing will carry out testing as per relevant standards & this specification and issue test certificate approval to the manufacturer and give clearance for dispatch. Testing procedure shall be followed as mentioned herewith.

All the tests required in this document as well as in applicable standards shall be carried out during factory inspection. At least 2% of total quantity purchased shall be covered in smart meter accuracy test. At least 2% of the smart energy meters selected for accuracy test shall be conducted for Tamper condition test as per 15.1 and 15.2. At least one of the meters shall be used for components make verification and one meter function test shall be checked during inspection. Any kind of testing failure during inspection shall be subjected to reject the whole manufactured quantity of meters for delivery and shall be penalized.

20.3. Tests after receipt at stores (Random Sample Testing)

After receipt of meters at the Stores, the purchaser may carry out required tests in the supplied meters in NEA laboratory or any independent testing laboratory. If the meters failed to meet the specifications, the lot will be rejected.

21. Packing

21.1. Each meter shall be individually packed using blister wrapping to prevent damage during transport and handling. A minimum of four meters shall be packed in cardboard boxes and the boxes shall indicate the Type, Rating, and Serial No. of the item. All packing material shall be of bio-degradable type. The Supplier shall take particular care to provide packaging that will securely restrain movement of meters within the individual packages



by the use of shock absorbent, materials such as thermocol. Group packaging shall be sturdy, weather-resistant, and be capable of continuing NEA use after initial delivery. The packaging of each meter shall contain moisture absorbent.

22. User's Manual

22.1. The Supplier shall furnish the operation and maintenance manual of the Meter offered and the required software for the smooth functioning of the meter.



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Annexure C1.1: Component Specifications of Energy Meter

- 1. The meters shall be designed and manufactured using SMT (Surface Mount Technology) components, except for power supply components, LED / LCD, etc. which are PTH type.
- 2. All the material and electronic power components used in the manufacture of the meter shall be of the highest quality and reputed makes to ensure higher reliability, longer life, and sustained accuracy.

S. No.	Components Function / Feature	Requirement	Make / Origin
1	Current Element	E-beam /spot-welded shunts shall be provided in the phase element and C.T. in the neutral. Alternatively, both the current elements (phase & neutral) shall have Shunts with proper isolation.	Any make or Origin conforming to IEC
2	/computing chips in the meter shall be with the Surface mount type along with the ASICs.		Analog Devices, AMS, Cyrus Logic, Atmel, ST, National Semiconductors, NEC, NXP, Texas Instruments, Phillips, Teridian, SAMES, Hitrendtech, Simens, Infineon, Toshiba, Renases, Renergy, Hitachi, Intel, Maxim or equivalent*
3	Memory chips	The memory computing chips shall not be affected by external parameters like sparking, high voltage spikes, or electrostatic discharges.	Atmel, National Semiconductors, Microchip, Texas Instruments, Phillips, Hitachi, Teridian, ST, Spanson (Fujitsu), Ramtron, Macronix, Onsemi, Hitachi, Renesas, ROHM, Siemens or equivalent*
4	Display modules	The display modules shall be well protected from external UV radiations. The display shall be clearly visible over an angle of at least a cone of 70 degrees. The construction of the modules shall be such that the displayed quantity shall not be disturbed with the life of the display. The display shall be TN-type industrial grade with an extended temperature range.	Haijing, Holtek, Bonafied Technologies, Advantek, Truly Semiconductor, Hitachi, SONY, Displaytech, E-smart, Jebon, L&G, Union Display, Tianma, AV Display or equivalent*
5	Communication modules	Communication modules shall be compatible with all the communication ports.	National Semiconductors, Hitachi, Texas Instruments, Philips, HP, Agilent, Everlight, Fairchild, Fibocom, Osram, Avago-Tech, Liteon, Renesas, ST, Silicon Labs, VertexCom, Mitsubishi, ROHM or equivalent*
6	Optical port	Optical port of the meter data to meter reading instrument. The mechanical construction of the port shall be such to facilitate the data transfer easily.	National Semiconductors, Hitachi, Texas Instruments, Siemens, Agilent, Philips, HP, Everlight, Fibocom, Fairchild, OSRAM, Avago-Tech, Liteon or equivalent*



7	Power Supply	The power supply shall be with the capabilities as per the relevant standards. The power supply unit of the meter shall not be affected in case the maximum voltage of the system appears to the terminals due to faults or due to wrong connections.	As specified.
8	Electronic Components	The active & passive components shall be of the surface mount type & are to be handled & soldered by the state of art assembly processes.	Philips, Toshiba, Fairchild, Murata, Rohm, Siemens. National Semiconductors, ATMEL, Texas Instruments, Hitachi. Ligitec, OKI, EPCOS, Panasonic, Analog Devices, ST, Maxim, Honeywell, Epson, Kemet, Alps, TDK, Sanyo, Samsung, Diotech, Kemet, Yageo, Everlight or equivalent*
9	Mechanical parts	The internal electrical components shall be of electrolytic copper & shall be protected from corrosion, rust, etc. The other mechanical components shall be protected from rust, corrosion, etc. by suitable plating/painting methods.	As Standard.
10	Battery	For RTC Lithium / Lithium-ion For other Lithium / Lithium-ion with guaranteed life of 15 years	Renata, Panasonic, Varta, Tedrium, Sanyo, National, Teridian Duracell, Maxell, Elegance, Mitsubishi, Voltec, Tekcell, SONY, CASIO or equivalent*
11	RTC / Micro Controller	The accuracy of RTC shall be as per relevant IEC standards	Philips, Dallas, Atmel, Motorola, NEC, Renesas, Hitachi, Xicor, Texas Instruments, NEC, OKI, ST, Mitsubishi, Renergy, or equivalent*
12	Communication chip in 4G/5G Module	The meter shall have a plug-in type 4G/5G module with a fallback to 2G to support the cellular network.	Qualcomm, Samsung, Motorolla, Sony Ericsson, Gemalto, Telit, Cinterion, Sierra or equivalent*



Annexure C1.2: Guaranteed Technical Particulars (GTP) of Smart Solid State Energy Meter

The Suppliers/Manufacturers are required to furnish the following information in the Data Sheet. Separate sheets can be used if additional space is required. The information furnished shall be supported by the catalog and test reports. The information not supported by the catalogs, test reports, etc. shall be deemed to have been "Not provided". The suppliers/manufacturers are also required to underline the information asked for in the catalog and /or test reports. Any deviation from NEA's requirements shall be mentioned giving the reasons thereof.

S. No.	Particulars	Requirement as per Specification of NEA	As offered by the Supplier
1.	Name of manufacturer and Country of Origin		
2.	Type and Model No. of Meter		
3.	Accuracy Class	0.2S	
4.	Standard Applicable		
5.	Climate Conditions as per specifications	Yes	
6.	Rating and Type of Service as per specifications	Yes	
7.	Ingress Protection Class of Meter	IP54	
8.	General and Constructional Requirements as per specifications	Yes	
9.	Connection Diagram & Terminal Marking as per specifications	Yes	
10.	Marking of Meter as per specifications	Yes	
11.	Real-Time Clock as per specifications	Yes	
12.	M.D. Registration and Demand Resetting as per specifications	Yes	
13.	T.O.D. Compatibility as per specifications	Yes	
14.	Self-Diagnostic Features as per specifications	Yes	
15.	Display of Measured Values as per specifications	Yes	
16.	Type of Display	LCD	
17.	Retention Time of Non-Volatile Memory	Min. 10 years	
18.	Digit of Display of LCD	At least 8 in full except decimal	
19.	Arrangement for Display of consumer ID, Consumer no, Name and Address	Yes	
20.	Display of Parameter		
	a. Auto Display of Parameter as per specifications	Yes	



S. No.	Particulars	Requirement as per Specification of NEA	As offered by the Supplier
	b. Display of Parameter as per specifications using Push Button	Yes	
	c. The Time for Display Programmable	Yes	
	d. Drift in Time for Display throughout the life cycle of meter	No	
21.	Does Meter displays time and date as per Nepali Bikram Sambat (B.S.) Calendar?	Yes	
22.	Memory Size		
23.	Monthly data stored for 18 months in the non-erasable memory along with the name of the month accessible for reading through Laptop as per specifications	Yes	
24.	Billing History and Load Survey as per specifications	Yes	
25.	Tamper and Fraud Detection/Evidence	Yes	
26.	Number of Tamper Events		
27.	Does Meter support Communication Protocol-DLMS and M Bus ?	Yes	
28.	Does meter have Local Interface- RS 232/485, Optical and ethernet?	Yes	
29.	All the Software Specified in Scope of works and Specification are Provided/enhancement at no Cost to Purchaser?	Yes	
30.	Whether the Meters are Capable to Communicate Directly to Laptop Computer and Mobile Apks ?	Yes	
31.	Whether the Base Computer Software is Executable on Microsoft Windows Operating system?	Yes	
32.	The Code Generating Software for Downloading of Data from Meter provided?	Yes	
33.	Supplier shall provide FDM mobile apks and meter downloading apks at no cost to purchaser?	Yes	
34.	Whether the Base Computer Software is Window based & User Friendly?	Yes	
35.	The Software, APIs, Dlls, Protocols and updated firmware, Software documentation, etc., to integrate these meters with AMI/ (MDS & MDM)/FDM/ CRMS Billing Software System?	Yes	
36.	Security Features as Specified in specifications Incorporated?	Yes	
37.	Software for Generating a Report in Concise and Desired Format for Billing, Meter Data Management, Outage	Yes	



S. No.	Particulars	Requirement as per Specification of NEA	As offered by the Supplier
	Management, etc. Provided?		
38.	Is the meter provided with a Plug-in type Modular Slot /interface to connect 4G/5G Module Communication Modem to support data communication features as Specified??	Yes	
39.	Is the meter Provided with Super Capacitor and External Battery Slot?	Yes	
40.	The Rated Shelf Life of Battery	Min. 15 years	
41.	Whether Super Capacitor will provide Carry Over Power to the Meter and the Modem for All Normal Power Outages at least for 24 hours?	Yes	
42.	Whether the Supplier agrees to Recover the Meter data in the Conditions Specified in Specification?	Yes	
43.	Whether the Meter has the Capability to Check the Correctness of Connections at Site as Specified?	Yes	
44.	Missing Voltage Indication as Specified?	Yes	
45.	Whether Supplier Agrees on the Guarantee Clause as Specified?	Yes	
46.	Type Test Report on similar meter Carried Out Within 5 Years from the Date of Opening of Tender from The Testing Laboratories Specified in Clause submitted?	Yes	
47.	Does meter support physical SIM and eSIM both?	Yes	
48.	Whether Supplier Agrees on Warranty and FMS as Specified?	Yes	
49.	Detail plan of integration in AMI System, technical data sheets of offered Meter, BCS, Apps etc Submitted?	Yes	



Annexure C1.3: Material and Electronic Power Components used in the Meter

S. No.	Components Function / Feature	Requirement (Make / Origin)	Offered by the Supplier
1	Current Element	Any make or Origin conforming to IEC	
2	Measurement/computing chips	Analog Devices, AMS, Cyrus Logic, Atmel, ST, National Semiconductors, NEC, NXP, Texas Instruments, Phillips, Teridian, SAMES, Hitrendtech, Simens, Infineon, Toshiba, Renases, Renergy, Hitachi, Intel, Maxim or equivalent*	
3	Memory chips	Atmel, National Semiconductors, Microchip, Texas Instruments, Phillips, Hitachi, Teridian, ST, Spanson (Fujitsu), Ramtron, Macronix, Onsemi, Hitachi, Renesas, ROHM, Siemens or equivalent*	
4	Display modules	Haijing, Holtek, Bonafied Technologies, Advantek, Truly Semiconductor, Hitachi, SONY, Displaytech, E-smart, Jebon, L&G, Union Display, Tianma, AV Display or equivalent*	
5	Communication modules	National Semiconductors, Hitachi, Texas Instruments, Philips, HP, Agilent, Everlight, Fairchild, Fibocom, Osram, Avago-Tech, Liteon, Renesas, ST, Silicon Labs, VertexCom, Mitsubishi, ROHM or equivalent*	
6	Optical port	National Semiconductors, Hitachi, Texas Instruments, Siemens, Agilent, Philips, Hp, Everlight, Fibocom, Fairchild, OSRAM, Avago- Tech, Liteon or equivalent*	
7	Power Supply	As specified.	
8	Electronic Components	Philips, Toshiba, Fairchild, Murata, Rohm, Siemens. National Semiconductors, ATMEL, Texas Instruments, Hitachi. Ligitec, OKI, EPCOS, Panasonic, Analog Devices, ST, Maxim, Honeywell, Epson, Kemet, Alps, TDK, Sanyo, Samsung, Diotech, Kemet, Yageo, Everlight or equivalent*	
9	Mechanical Parts	As Standard.	
10	Battery	Renata, Panasonic, Varta, Tedrium, Sanyo, National, Teridian Duracell, Maxell, Elegance, Mitsubishi, Voltec, Tekcell, SONY, CASIO or equivalent*	
11	RTC / Micro Controller	Philips, Dallas, Atmel, Motorola, NEC, Renesas, Hitachi, Xicor, Texas Instruments, NEC, OKI, ST, Mitsubishi, Renergy, or equivalent*	
12	Communication chip in 4G/5G Module	Qualcomm, Samsung, Motorolla, Sony Ericsson, Gemalto, Telit, Cinterion, Sierra or equivalent*	



C2. Technical Specifications for Pilfer Proof Meter Box suitable for Smart Solid State Energy Meter

1. Scope

1.1 This specification covers the manufacture and supply of Pilfer Proof Meter Box (PPMB) suitable to house the Meter. The Meter Box shall be a pole/wall-mounted type with the ability to offer protection of electrical equipment against harsh weather. The box shall be anti-corrosive, dustproof, shock, vermin &waterproof, pilfer proof, fireproof, and UV stabilized. The enclosures shall not deform or melt when exposed to fire.

2. Technical Requirement

- 2.1 The Meter Box i.e. base and cover shall be made of hot press/injection molded, unbreakable, high-grade fire retardant Acrylonitrile Butadiene Styrene/Polycarbonate, with minimum thickness 2.0 mm having good dielectric and mechanical strength. The material must be such that the Meter Box shall not change in color, shape, size, dimensions when subjected to Ageing Test. The Meter Box shall have a top tapered surface and round corners to prevent any waterlogging on the top of the meter cover. The overall dimensions of the enclosure shall be suitable for housing a smart solid-state meter as offered by the supplier and there shall be a clearance of a minimum of 10 mm from the top & both sides of the meter. Bottom side clearance shall be a minimum of 70 mm from the lower edge of the terminal block of the meter. Clearance from the front side and back side of the meter shall be a minimum of 10 mm and 10 mm respectively. A meter Box with higher dimensions may be considered if found suitable.
- 2.2 The Meter Box shall be capable of withstanding the mechanical, electrical, and thermal stresses well as the effects of humidity that are likely to be encountered in service. At the same time, the box shall ensure the desired degree of safety. The material used shall be adequately stabilized against the detrimental effect of light and weather. The surface appearance of the molded parts must be smooth, non-porous, and homogeneous, free of ripples, defects, and marks. No fillers of fibers shall be visible at any place.
- 2.3 The box shall comply in all respect with the requirement of the latest amendments of IEC/ASTM.
- 2.4 The applicable degree of protection shall be IP 54 or better.

3. Construction

- 3.1 The enclosure shall be single-piece molded with hot process compression molding or injection molding.
- 3.2 **Dimension**: To be specified by the supplier.
- 3.3 **Hinges**: A minimum of 2 nos. brass/stainless steel hinges on the left side of the door and 1 no. brass/stainless steel hinge/stainless steel U type latch with locking arrangement on the right side of the door shall be provided inside the enclosure. The hinges of the door shall be concealed and they shall be fixed to the flanges provided on the body and cover of the enclosure in such a manner that the door opens by a minimum of 120 degrees. Push-fit type meter box arrangement shall be preferred.
- 3.4 A suitable grove with a locking arrangement shall be provided for the opening of the enclosure door. The same shall not be applicable in the case of a meter box offered with a push-fit type arrangement.
- 3.5 **Fixing arrangement**: The meter box shall have 4 nos. of mounting brackets/holes made out of the same material as the meter box with provision for 6 mm dia hole for mounting the



- box on the wall or pole with suitable clamps and screws. The meter box shall have provision to fix it on the pole/wall with the meter in assembled condition. Any other suitable arrangement for fixing the box may be accepted after verification.
- 3.6 **Sealing arrangement**: The Box shall have provision for a minimum of two numbers of sealing arrangements.
- 3.7 **Cable arrangement**: Suitable size of holes at the middle bottom shall be provided in the box for wire entry and the hole shall be covered with suitable material to ensure IP 54 Ingress Protection.
- 3.8 **Base and Cover details**: The thickness of the meter box shall not be less than 2.0 mm on all sides including the door. The meter box shall have a 4 mm thickness of the tongue and groove area. The meter box cover shall be made overlapping type having collars on all four (4) sides and shall be provided with Neoprene rubber gasket of minimum 2.5 mm dia to completely fit in the grooves of the base. The base of the meter box must have a groove to hold the gasket and the overlap of the top cover with the base shall be sufficient. The tongue of the base shall ensure proper sealing arrangement against ingress of rainwater and dust inside the box.
- 3.9 The Enclosures shall generally comply with the provision of IEC 695. The enclosures shall be suitable for outdoor application. The enclosure shall be with good workmanship.
- 3.10 Soft neoprene/nitrile rubber gaskets shall be provided all around wherever required for protection against entry of dust and water. The enclosure shall comply with the IP 54 degree of protection.
- 3.11 The Enclosures shall be of transparent polycarbonate.
- 3.12 **Marking/Embossing**: The following information shall be clearly & indelibly embossed/laser printed on the cover and base of the Meter Box. The top & bottom corner of Meter Box Sl. No. shall be the same for the particular Meter Box.
 - a. Logo of Manufacturer
 - b. Sign of Danger

4. Quality Control

4.1 Type test reports from an independent ISO/IEC 17025 certified laboratory accredited by International Accreditation Corporation (ILAC) of International Accreditation Forum (IAF) as per applicable standard shall be submitted. The type test reports shall not be more than 5 (five) years old. Acceptance tests including Ingress Protection as per applicable standards are to be carried out by the supplier in presence of NEA's representative. Material of meter enclosure shall be tested for Heat Deflection Temperature, Exposure to Flame (Self-extinguishing), and Resistance to Heat & Fire (Glow wire) as per specification and Reference Standard.

5. General Construction Requirement

- 5.1 **Viewing Window**: A viewing window made up of scratch and break resistant, UV resistant, transparent Polycarbonate material shall be provided on the door for reading the meter without inconvenience. The minimum thickness of the viewing window shall be 2.0 mm (flashing with top). The viewing window shall be provided with a fixed rain hood. The window shall be securely fixed with a meter enclosure from inside. A suitable neoprene gasket shall be provided so that there shall not be any ingress of moisture through this window into the enclosure.
 - No viewing window is required for a transparent polycarbonate meter box.
- 5.2 One push button is to be provided on the front side of the top cover of the meter box for



- taking meter readings during power-off conditions without opening the meter box cover.
- 5.3 The box shall have a provision in its viewing window so that the meter shall be connected through an optical port for downloading the data without opening the meter box cover.

6. Guarantee

- 6.1 The Pilfer Proof Meter Box shall be guaranteed against any manufacturing defects arising out of faulty design or bad workmanship or component failure for ten years from the date of acceptance.
- 6.2 The meter box found defective within the above guarantee period shall be replaced by the supplier free of cost within one month of the receipt of intimation of failure/defect. The defective meter box is to be replaced by a new one with a new sl. nos. as allotted NEA.

7. Replacement of defective Meter Box

7.1 The Meter Box declared defective by the NEA shall be replaced by the supplier up to the satisfaction of the NEA at the cost of the supplier. Failure to do so within the time limit prescribed shall lead to the imposition of a penalty of twice the cost of the meter box. The same may lead to black listing even, as decided by NEA. In this connection, the decision of NEA shall be final.

8. Testing

- 8.1 **Type Test**: The supplier shall furnish a type test report of the offered/sample meter box from an independent ISO/IEC 17025 accredited by International Accreditation Corporation (ILAC) of International Accreditation Forum (IAF) as per IEC Standards during bid submission. The Type test report shall not be more than 5 (five) years old.
 - In case a supplier is unable to submit the report of meter box at the time of bid submission then the same has to be carried out during production at any independent laboratory accredited by the International Accreditation Corporation (ILAC) of International Accreditation Forum (IAF) in respect of one-meter box as per the specified size, selected from any one of the offered lots during supply at their own cost during the manufacturing for verification of material and quality of the box. If the type test results are not found satisfactory, the offered lot of the meter box will be rejected.
- 8.2 **Acceptance Test**: The acceptance test including the Ingress Protection test as per applicable standards as stipulated in this specification and applicable standards shall be carried out at the time of inspection of the offered material. Material of meter enclosure shall be tested for Heat Deflection Temperature, Exposure to Flame (Self-extinguishing), and Resistance to Heat & Fire (Glow wire) as per specification and Reference Standard.
- 8.3 **Routine Test**: The routine tests as stipulated in the relevant standards shall be carried out and routine test certificates/reports shall be submitted to NEA while offering inspection & testing of the meter with meter box.

Notes:

- a. Where facilities do not exist at supplier's works for carrying out one or more of the Acceptance Tests, such tests may be carried out at an independent laboratory accredited by the International Accreditation Corporation (ILAC) of International Accreditation Forum (IAF).
- b. The sampling plan for carrying out the acceptance tests shall be as per ISO.

Annexure C2.1: Guaranteed Technical Particulars of Pilfer Proof Meter Box



S. No.	Particulars	Requirement as per Specification of NEA	As offered by the Supplier
1.	The material used for molded meter box	Engineering Plastic (Acrylonitrile Butadiene Styrene)/Polycarbonate	
2.	Grade of Material	Fire Retardant, Self-Extinguishing	
3.	Properties of material for meter box		
	a. Heat Deflection Temperature (Min. 140°C @ 1.8 MPa) (Ref. Std. IEC/ASTM)	100°C (Minimum for Engg. Plastic) / 140°C (Minimum for Polycarbonate)	
	b. Exposure to flame (Ref. Std. ASTM)	Self-extinguishing	
	c. Melting Point (Ref. Std. ASTM)	180°C (Minimum for Engg. Plastic) / 210°C (Minimum for Polycarbonate)	
	d. Resistance to heat & fire	Glow wire test at 650°C	
	e. Mechanical Property		
	i. Tensile Strength (MPa)	To be specified by the supplier	
	ii. Flexural Strength (MPa)	- Do -	
	iii. Modulus of Elasticity (MPa)	- Do -	
4.	Constructional features of the box		
	a. Clear inside dimensions of Meter Box		
	i. Height	To be specified by the supplier	
	ii. Width	- Do -	
	iii. Depth	- Do -	
	iv. Rust & Vermin proofing	Neoprene Rubber Gasket NRG	
	b. Minimum clearance from the meter on all 4 sides	Clearance from all sides of the meter shall be 10±2 mm except the bottom side which shall be 70±5 mm from the lower edge of the terminal block.	
	c. Minimum clearance from the meter on front	10±2 mm	
	d. Minimum clearance from back of meter	10±2 mm	
	e. Viewing Window:		
	i. Material of transparent cover	Glass/Polycarbonate with Rubber Gasket	
	ii.		
	iii. Size of opening (Min.)	Not applicable for transparent polycarbonate box	
	iv. Thickness of moulded sheet	2.0 mm (Minimum)	
	v. Fixing method	Fixed from inside with rubber gasket	
	f. Sealing Arrangement	Holes for wire seal (One No.)	
	g. Color of Meter Box (base &cover)	Grey / Off-White / Ivory / Transparent	
	h. Box mounting arrangement		



S. No.	Particulars	Requirement as per Specification of NEA	As offered by the Supplier
	i. No. of holes for fixing of a meter box	4 Nos. Holes	
	ii. Dimension of holes	6 mm	
	i. Hinges/push to fit type	Concealed hinges / 4 nos. push to fit type arrangement	
	j. Incoming Cable holes	Appropriate dia. holes at the middle bottom covered with Neoprene Rubber Gasket (NRG) / Gland	
	k. Whether the cover is an overlapping type having collars on all four sides	Yes	
	1. Whether the cover/base provided with semicircular/circular neoprene rubber gasket of 2.5 mm dia (Min) to completely fit in the groove of the base	Yes	
	m. Whether the meter box having push button to access to the meter for taking reading during power off condition without opening of meter box cover	To be provided	
	n. Weight of complete box in Kg with +/- tolerance	To be specified by the supplier	
5.	Type test report as per Technical Specification	To be submitted by the supplier	
6.	Degree of Protection	IP 54	
7.	Any other information		



C3. Head End System (HES), Base Computer Software (BCS) and Integration with existing NEA Meter Data Management System (MDMS) Software Works

- 1. The supplier is fully responsible to design, develop and implement fully web-based Head End System (HES) as per hierarchy of NEA (Management & Power Grid) with NEA data models (generic profile parameters) as mentioned in bid document and integrate the same to existing Core Billing & Revenue Management System (CRMS) software and future Revenue Management System software of NEA on their own resources and without any extra cost to NEA.
- 2. The smart energy meter shall push data to HES Software System Server installed at Data Centre (DC) over 4G/5G network directly. The HES System Software must be deployed at Data Center (DC) to support data acquisition from all Smart Energy Meter simultaneously. The Smart Energy Meter shall have in-built intelligence and high-speed data transfer rate or a kind of store-forward facility by which data from the meter is read at regular intervals. These data shall be converted into XML CDF after processing for integrating with Data Analysis & Reporting, Billing and Payment Collection and other related System. The overall system must be IPv4, IPv6 and IPv4v6 compatible.
- 3. The software shall have multi-level authentication (2 factors/OTP based) mechanism for login and multi-level approval mechanism based on hierarchy of NEA for various functions like approved demand change, parameter writing, programmable trip command for connection & disconnection, event & tamper clear etc. where user initiates request, and supervisor or manager needs to approve the request for execution of requested command to program/write in smart meter.
- 4. The software shall be fully integrated with existing Core Billing & Revenue Management System (CRMS) software running in various branch offices (distribution centers) and future Revenue Management System software of NEA for automatic monthly consumption bill generation and sending to consumers via email and SMS.
- 5. Meter location (longitude & latitude) shall be plotted in GIS map.
- 6. The software shall have common dashboard with reports (as per hierarchy of NEA) to show following details:
 - Number of Total Meters Configured
 - Number of Total Communicating Meters
 - Number of Non-Communicating Meters
 - Number of Replacement
 - Number of New Smart Meter Installed
 - Number of Total Not-Configured Meters
 - Total Not-Configured Meter without Consumer Master Data
 - Total Number of Un-Subscribed Meters
 - Total Number of Not-Programmed Meters
 - Number of Total Consumption Bill (via Email & SMS)
 - Number of Tamper Events Occurred
- 7. The software/BCS/Apps shall have provision for downloading meter data and billing data from any meter and then upload to HES with detail report.
- 8. The HES shall support automatic meter registration mode and read network topology.
- 9. The HES shall monitor meter's status, such as meter online/offline status, signal strength, etc.
- 10. The supplier shall design, develop and provide Base Computer Software (BCS) to program or read/write operation of various parameters/settings related to meter, consumer, generic profiles, monthly billing profile, local & remote communication, trip command for connection & disconnection, push action for parameters, active & passive tariffs, prepayment mode/postpaid



- mode operation, firmware upgrade, events & status words as well as various configuration/parameters settings related demand, instantaneous, power quality, generic profile, billing profile, events, display objects etc. the BCS shall work only after registration with valid registration code. It shall provide read only operation for operator role and read & write operation for administrator role after authentication. The BCS must have system log interface to show complete log and executed commands with respective DLMS data content.
- 11. The supplier shall provide Facility Management Service (FMS) including all platform/software/Apps during implementation and commissioning of smart meters including warranty period. Any issues/bug or any updates in HES/BCS/Apps, integration with MDMS software, firmware or any other hardware as per requirement during warranty period shall be provided by supplier without any extra cost to NEA.



Annex C: Non-compliance Schedule

On this schedule the **Supplier** shall provide a list of non-compliances with this specification, documenting the effects that such non-compliance is likely to have on the equipment's life and operating characteristics. Each non-compliance shall be referred to the relevant specification clause.

S. No.	Clause No.	Details of non-compliance with justifications



Annex D: Type Test Certificates Schedule

On this schedule a list of the test certificates included with the bid shall be provided.

S. No.	Particular of Test	Type Test Certificate	Year of Test



Annex E: Warranty Certificate

·			
Warranty for Nepal Electricity Authority			
Tender No:			
(Manufacturer) shall make goods by repair or, at our option by replacement, defects which under proper use and in accordance with any instructions issued by us, as appeared in the contract of our supply or manufacture within a period of not more than One Hundred Twenty (120) months after the issuance of Goods Acceptance Certificate provided that:			
1. All the Goods supplied is handled, installed and commissioned in a manner as agreed by the Manufacturer and the Nepal Electricity Authority and at the designed normal operating conditions at all times for which it was intended.			
2. We are notified of the alleged defect first coming to the purchaser's notice and within the warranty period.			
3. Defective Goods is/are returned to our local agent in Nepal free of charge if we so require and we shall return new or repaired Goods free of charge to the original contract delivery point unless otherwise arranged.			
4. Goods found defective within the warranty period shall be replaced/repaired within two month of receipt of intimation. If the defective meters are not replaced/repaired within the specified period above, Nepal Electricity Authority shall recover an amount of Goods price from any of the bills/retention money of the Manufacturer/Supplier.			
5. We shall provide any issues/bug or any updates in HES/BCS, integration with MDMS software, firmware or any other hardware as per requirement during warranty period without any extra cost to NEA.			
6. We acknowledge that failure to provide the service or denial of the request as above may even lead to blacklisting us, as decided by NEA.			
7. Any unauthorized handling repairs or alteration to the Goods shall invalidate this warranty.			
If it is found that the Goods has been mishandled, neglected and/or modified in any way during the storage period, the warranty will become null and void.			
Yours sincerely			
(Manufacturer)			
(Seal and Signature)			

Section VI. General Conditions of Contract



The GCC contain standard provisions that have been designed to remain unchanged and **to be used without modifying their text**. The GCC clearly identify the provisions that may normally need to be specified for a particular bidding process and require that such specification be introduced **through the SCC**.

The GCC are a Contract document and, therefore, are a part of the Contract.



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Section VI. General Conditions of Contract

1. Definitions

- 1.1. The following words and expressions shall have the meanings hereby assigned to them:
 - a) "Contract" means the Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
 - b) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.
 - c) "Contract Price" means the price payable to the Supplier as specified in the Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
 - d) "Day" means calendar day.
 - e) "Delivery" means the transfer of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract.
 - f) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
 - g) "GCC" means the General Conditions of Contract.
 - h) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
 - i) "Purchaser's Country" is the country specified in the Special Conditions of Contract (SCC).
 - j) "Purchaser" means the entity purchasing the Goods and Related Services, as specified in the SCC.
 - k) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Supplier under the Contract.
 - 1) "SCC" means the Special Conditions of Contract.
 - m) "Subcontractor" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
 - n) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is



- named as such in the Agreement and includes the legal successors or permitted assigns of the Supplier.
- o) "GoN" means the Government of Nepal.
- p) "The Site," where applicable, means the place named in the SCC.
- 2. Contract Documents
- 3. Fraud and Corruption
- 2.1 Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.
- 3.1 If the Purchaser determines that the Supplier has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, in competing for or in executing the Contract, then the Purchaser may, after giving 14 days notice to the Supplier, terminate the Supplier's employment under the Contract and the provisions of GCC Clause 34.1 shall apply.

For the purposes of this Sub-Clause:

- (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.
- (ii) "fraudulent practice" 6 is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation.
- (iii) "collusive practice" 7 is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party.
- (iv) "coercive practice" 8 is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a GoN/DP investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (bb) acts intended to materially impede the exercise of the GoN/DP's inspection and audit rights provided for under ITB Clause 3.5 and GCC Clause 25.

a "party" refers to a participant in the procurement process or contract execution.



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a "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

⁷ "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

- 3.2 Without prejudice to any other rights of the Purchaser under this Contract, on the recommendation of the Purchaser, Public Procurement Monitoring Office may **blacklist** a Bidder/Supplier for its conduct for a period of one (1) to three (3) years on the following grounds and seriousness of the act committed by the bidder:
 - a) if it is established that the Supplier committed acts specified in ITB 3.2,
 - b) if it is established later that the Bidder has committed a substantial defect in the implementation of the contract or has not substantially fulfilled its obligations under the contract or the completed work is not of the specified quality as per the contract.

3.3 Incase of DP funded bid, DP:

- (a) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation.
- (b) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a Bank-financed contract; and
- (c) will have the right to require that Suppliers to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

4. Interpretation

4.1 If the context requires it, singular means plural and vice versa.

4.2 Incoterms

- 4.1. The meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.
- 4.2. EXW, CIF, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce at the date of the Invitation for Bids or as specified in the SCC.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications,



negotiations, and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5 Language

- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language **specified in the SCC**. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the SCC, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.1 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

6 Joint Venture, Consortium or Association

- 6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. A bidder can submit only one bid either as a partner of the joint venture or individually. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.
- 6.2 The contractor shall not handover the responsibility of the contract to any one member or some members of Joint Venture or any other parties, not involved in the contract.

7 Notices

7.1 Any Notice given by one party to the other pursuant to the Contract shall be in writing to the address **specified in the SCC**.



- The term "in writing" means communicated in written form with proof of receipt.
- 7.2 A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.
- 8 Governing Law
- 8.1 The Contract shall be governed by and interpreted in accordance with the laws of Nepal.
- 9 Settlement of Disputes
- 9.1 The Purchaser and the Supplier shall make every effort to settle amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 9.2 Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be referred to Arbitration within 30 days after the expiration of amicable settlement period as specified in SCC.
- 10 Scope of Supply
- 10.1 Subject to the SCC, the Goods and Related Services to be supplied shall be as specified in Section V, Schedule of Requirements.
- 10.2 Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.
- 11 Delivery
- 11.1 Subject to GCC Sub-Clause 32.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in Section V, Schedule of Requirements. The details of documents to be furnished by the Supplier are **specified in the SCC**.
- 12 Supplier's Responsibilities
- 12.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 10, and the Delivery and Completion Schedule, as per GCC Clause 11.
- 13 Purchaser's Responsibilities
- 13.1 Whenever the supply of Goods and Related Services requires that the Supplier obtain permits, approvals, and import and other licenses from public authorities in Nepal, the Purchaser shall, if so, required by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner.
- 13.2 The Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with GCC Sub-Clause 13.1.
- **14 Contract Price**
- 14.1 The Contract Price shall be as specified in the Agreement subject to any additions and adjustments thereto, or deductions there from, as may be made pursuant to the Contract.



14.2 Prices charged by the Supplier for the Goods delivered and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC.

15 Terms of Payment

- 15.1 The Contract Price shall be paid as specified in SCC.
- 15.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 11.1 and upon fulfillment of all the obligations stipulated in the Contract.
- 15.3 Unless otherwise specified in the SCC, the Purchaser shall retain from each payment due to the Contractor the proportion stated in the SCC. Half of the total amount retained shall be repaid to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations and half when the supplier has submitted the evidence of submission of tax return to the concerned Internal Revenue Office.
- 15.4 Payments shall be made promptly by the Purchaser, no later than thirty (30) days after submission of an invoice or request for payment by the Supplier, and the Purchaser has accepted it.
- 15.5 The currency or currencies in which payments shall be made to the Supplier under this Contract shall be as specified in the SCC.
- 15.6 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the GCC 15.4, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the SCC, for the period of delay until due payment has been made.

16 Taxes and Duties

- 16.1 For goods supplied from outside Nepal, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside Nepal. However, Tax deduction at source shall be applied as per taxation laws of Nepal.
- 16.2 For goods supplied from within Nepal, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser. Tax deduction at source shall be applied as per taxation law of Nepal.
- 16.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in Nepal, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

17 Performance Security

17.1 The Supplier shall, within fifteen (15) days of receipt of notification of the Contract award, provide a Performance



- Security for the due performance of the Contract in the amounts and currencies specified in the SCC.
- 17.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 17.3 The Performance Security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Purchaser and shall be in one of the forms stipulated by the Purchaser in the SCC, or in another form acceptable to the Purchaser.
- 17.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations.

18 Copyright

18.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

19 Confidential Information

- 19.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall Subcontractor from such an undertaking confidentiality similar to that imposed on the Supplier under GCC Clause 19.
- 19.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the Contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.
- 19.3 The obligation of a party under GCC Sub-Clauses 19.1 and 19.2 above, however, shall not apply to information that:
 - a) the Purchaser or Supplier need to share with the Donor for Donor funded project or other institutions participating in the financing of the Contract.



- b) now or hereafter enters the public domain through no fault of that party.
- c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
- d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 19.4 The above provisions of GCC Clause 19 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.
- 19.5 The provisions of GCC Clause 19 shall survive completion or termination, for whatever reason, of the Contract.

20 Subcontracting

- 20.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Subcontracting shall in no event relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.
- 20.2 Subcontracts shall comply with the provisions of GCC Clauses

21 Specifications and Standards

- 21.1 Technical Specifications and Drawings
 - (b) The Supplier shall ensure that the Goods and Related Services comply with the technical specifications and other provisions of the Contract.
 - (c) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
 - (d) The Goods and Related Services supplied under this Contract shall conform to the standards mentioned in Section V, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.
- 21.2 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Section V, Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 32.

22 Packing and Documents

22.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without



limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.

22.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.

23 Insurance

23.1 Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured, in a freely convertible currency from an eligible country, against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the SCC.

24 Transportation

24.1 Obligations for transportation of the Goods shall be in accordance with the Incoterms specified in Sections V, Schedule of Requirements.

25 Inspections and Tests

- 25.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in Sections V, Schedule of Requirements.
- 25.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the final destination of the Goods, or in another place in Nepal as specified in the SCC. Subject to GCC Sub-Clause 25.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
- 25.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 25.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 25.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 25.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes, and



- standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
- 25.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 25.7 The Purchaser may reject any Goods or any part thereof that fails to pass any test and/or inspection or does not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 25.4.
- 25.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 25.6, shall release the Supplier from any warranties or other obligations under the Contract.

26 Liquidated Damages

26.1 Except as provided under GCC Clause 31, if the Supplier fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the Contract Price for each day of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the SCC. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 34.

27 Warranty

- 27.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 27.2 Subject to GCC Sub-Clause 21.1, the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in Nepal.
- 27.3 Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC.



- 27.4 The Purchaser shall give Notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunities for the Supplier to inspect such defects.
- 27.5 Upon receipt of this Notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 27.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the SCC, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

28 Patent Indemnity

- 28.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 28.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:
 - (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
 - (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 28.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 28.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's, name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 28.3 If the Supplier fails to notify the Purchaser within thirty (30) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.



- 28.4 The Purchaser shall, at the Supplier's request, provide all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.
- 28.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

29 Limitation of Liability

- 29.1 Except in cases of gross negligence or willful misconduct:
 - (a) neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Supplier to indemnify the Purchaser with respect to patent infringement.

30 Change in Laws and Regulations

Unless otherwise specified in the Contract, if after the date of 30.1 the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Nepal where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 14.

31 Force Majeure

31.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to



- perform its obligations under the Contract is the result of an event of Force Majeure.
- 31.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 31.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier 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.

32 Change Orders and Contract Amendments

- 32.1 The Purchaser may at any time order the Supplier through Notice in accordance GCC Clause 7, to make changes within the general scope of the Contract in any one or more of the following:
 - (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser.
 - (b) the method of shipment or packing.
 - (c) the place of delivery; and
 - (d) the Related Services to be provided by the Supplier.
- 32.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.
- 32.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33 Extensions of Time

33.1 If at any time during performance of the Contract, the Supplier or its Subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 11, the Supplier shall promptly, and at least twenty-one (21) days before the expiry of procurement contract, notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation



- and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.
- 33.2 Except in case of Force Majeure, as provided under GCC Clause 31, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

34 Termination

34.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by Notice of default sent to the Supplier, may terminate the Contract in whole or in part:
 - (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 33.
 - (ii) if the Supplier fails to perform any other obligation under the Contract.
 - (iii) The supplier uses the advance payment for matters other than the contarctual obligations.
 - (iv) The purchaser may terminate the contract at any time in the following condition.
 - (a) does not commence the work as per the contract,
 - (b) abandons the contract with out completing,
 - (c) fails to achieve progress as per the contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 34.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to pay to the Purchaser for any whole costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.
- (c) if the Supplier, in the judgment of the Purchaser has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, as defined in GCC Clause 3, in competing for or in executing the Contract.

34.2 Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving Notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such an event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or



remedy that has accrued or will accrue thereafter to the Purchaser.

- 34.3 Termination for Convenience
 - (a) The Purchaser, by written Notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The Notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
 - (b) The Goods that are complete and ready for shipment within seven (7) days after the Supplier's receipt of the Notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - a) To have any portion completed and delivered at the Contract terms and prices; and/or
 - b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

- 35 Assignment
- 35.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.



Section VII. Special Conditions of Contract

The Special Conditions of Contract (SCC) contain provisions that the GCC require be specified for a particular bidding process. The Purchaser should include at the time of issuing the Bidding Document, all information or specifications that the GCC indicate shall be provided in the SCC. No SCC Clause should be left blank.

To facilitate the preparation of the SCC, its clauses are numbered with same numbers as the corresponding GCC clauses. This Guide helps the Purchaser to input all information required. It includes a SCC format that summarizes all information to be provided.

The SCC are a Contract document and, therefore, are a part of the Contract.



Section VII. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(i) The Purchaser's country is *Nepal*

GCC 1.1(j) The Purchaser is: Smart Metering and Automation Departmenet,

DCSD, Nepal Electricity Authority (NEA)

GCC 1.1 (p) The Site is: Central Store, Hetauda of NEA

GCC 4.2 (b) The version of Incoterms shall be: 2020

GCC 5.1 The language shall be English

GCC 7.1 For notices, the Purchaser's address shall be:

Attention: The Director, Smart Metering &

Automation Department

Name of the Purchaser: Smart Metering and Automation

Department, DCSD, Nepal Electricity

Authority

Address: Durbar Marg, Kathmandu

Country: Nepal

Telephone: + 977 (01) 4153198 Email: smsg@nea.org.np

For notices, the Suppliers's address shall be: [insert full name and address of Suppliers including telephone number, and electronic mail address (if applicable)]

Name of the Supplier:

Address: Country:

Telephone number:

E-mail Address:

GCC 9.2 In case of arbitration, the arbitration shall be conducted in accordance

with the arbitration procedures in accordance with law of Nepal at

Kathmandu.

GCC 10.1 The Scope of Supply shall be defined in: Section V, Schedule of

Requirements.

GCC 11.1 Details of shipping and documents to be furnished by the Supplier

shall be:

For Goods supplied from abroad as per Incoterms CIP:

Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by telex or fax the full details of the shipment, including Contract number, description of Goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall send the



following documents to the Purchaser, with a copy to the Insurance Company:

- a) Original and one copy of the Supplier's invoice showing the description of the Goods, quantity, unit price, total amount, and the claim amount as per the payment terms.
- b) Original and one copy of the negotiable, clean, on-board bill of lading or Airway Bill or Railway Receipt, or Truck Receipt marked "FREIGHT PREPAID".
- c) Packing list identifying the contents of each package.
- d) Certificate of Origin.
- e) Insurance Certificate.
- f) Manufacturers or Supplier's Warranty Certificate.
- g) Dispatch Clearances and Factory Acceptance Test (FAT) Reports issued by the nominated inspectors or agency.

The Purchaser shall receive the above documents at least one week before the arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

For Goods from within the Purchaser's country as per Incoterm EXW:

Upon delivery of the Goods to the Transporter, the Supplier shall notify the Purchaser and send the following documents to the Purchaser:

- a) Original and one copy of the Supplier's invoice showing the description of the Goods, quantity, unit price, total amount, and the claim amount as per the payment terms.
- b) Original and one copy of the Railway Receipt, or Truck Receipt marked "FREIGHT PREPAID".
- c) Packing list indentifying the contents of each package.
- d) Certificate of origin
- e) Insurance Certificate.
- f) Manufacturers or Supplier's Warranty Certificate.
- g) Dispatch Clearances and Factory Acceptance Test (FAT) Reports issued by the nominated inspectors or agency.

The Purchaser shall receive the above documents before the arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

GCC 14.2

The prices charged for the Goods delivered and the Related Services to be performed shall be fixed for the duration of the contract.

GCC 15.1

The terms of payment to be made to the Supplier under the contract shall be as follows:



- 1. The payment shall be made:
 - (a) through an irrevocable confirmed letter of credit opened in favour of the Supplier and/or
 - (b) through the accounts division/unit of the Purchaser as per Clause of Payment under Local Currency protion
- 2. Payments shall be made in the following manner:
- Advance Payment: Ten (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract, and upon submission of claim and a bank guarantee for equivalent amount valid until the the contract execution period plus thirty days in the form provided in the bidding documents or another form acceptable to the Purchaser in two stages.

Five (5) percent of which shall be paid after the submission of the bank guarantee and next five (5) percent will be paid after submission the drawings, technical datasheet, catalog of the goods to be supplied as per technical specifications and Proforma Invoice (PI).

If the supplier fails to claim the advance payment amount within 30 days of signing of contract, the 10% of contract value will be paid after all the goods are delivered to and accepted by the Purchaser.

- ii) On Delivery: Sixty (60) percent of the Contract Price of the Goods delivered shall be paid upon submission of following documents:
 - a) Original and one copy of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount and the claim amount as per the payment terms.
 - b) Original and one copy of the negotiable, clean, on-board Bill of Lading or Airway Bill or Railway Receipt, or Truck Receipt marked "FREIGHT PREPAID".
 - c) Packing list identifying the contents of each package.
 - d) Certificate of origin.
 - e) Insurance certificate.
 - f) Manufacturers or Supplier's warranty certificate.
 - g) Dispatch Clearances and Factory Acceptance Test (FAT) reports issued by the nominated inspectors or agency.
 - h) Receipt of Goods by the designated NEA's store
- iii) On Acceptance: Twenty-five (25) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the pre dispatch inspection test report and acceptance certificate issued by the Purchaser as mention in Delivery and Completion Schedule.

After carrying out physical verification at NEA Store and/or post-dispatch tests as per technical specification, successful



integration of Smart Meter System with AMI/MDMS/CRMS Billing system as defined in scope of works, the acceptance certificate shall be issued.

- iv) Five (5) percent will be withheld as retention which will be paid after the warranty period after issue of Final Acceptance Cetificate as mentioned in Delivery and Completion Schedule.
- The **Tax Deduction at Source (TDS)** shall be applicable on payments as per prevailing rules in Nepal.
- vi) Applicable taxes on total invoice amount shall be deducted during the payment of 70%.

Payment of the local currency portion shall be made in NPR within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.

GCC 15.3 The proportion of payments retained is: 5 (five)) percent

GCC 15.5 The currencies for payments shall be in the quoted currency/ies of the contract

GCC 15.6 The interest rate that shall be applied for payment delay is 0%The Supplier shall provide a Performance Security as follows:

of the bid price.

- I. If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent
- For the bid price of the bidder selected for acceptance is II. more than 15 (fifteen) percent below the cost estimate, the performance security amount shall be determined as follows:

Performance Security Amount = [(0.85 x Cost Estimate – Bid Price) x 0.5] +5% of Bid Price.

The Bid Price and Cost Estimate shall be exclusive of Value Added

The Performance Security shall be valid for the period of *contract* execution and warranty period plus thiry days.

The performance security shall be forfeited in case the Supplier fails to complete the contractual obligation and rectify the defects within warranty period.



GCC 17.1

The types of acceptable Performance Securities are A bank GCC 17.3 guarantee issued by Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law located in Nepal or commercial bank located abroad, acceptable to the Purchaser, in the format included in Section VIII, Contract Forms. Performance Security issued by foreign Bank must be counter – guaranteed by Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal. **GCC 22.2** The packaging, marking, and documentation within and outside the packages shall be as per Schedule of Requirements GCC 23.1 The insurance coverage shall be in accordance with: The Supplier must insure the Goods in an amount equal to 110 percent of the CIP or EXW price of the Goods from "Warehouse" to "Warehouse" on "All Risks" basis, including War Risks, Arson and Strikes in the quoted currency/ies Tests and Inspections specified in Section V, Schedule of GCC 25.2 Requirements, shall be carried out at the following times or milestones, and places: **Goods:** As mentioned in Schedule of Requirements **Type of Test:** As per the Specification **Time:** Before Shipment or delivery of Goods **Place:** Third Party Laboratory/ Manufacturer's Laboratory **GCC 26.1** The applicable rate of liquidated damages shall be 0.05 percent of the Contract Price per day GCC 26.1 The maximum amount of liquidated damages shall be: ten (10) percent of the Contract Price. The contract shall be terminated, if liquidated damages exceed 10 percent of the Contract Price and blacklisting process shall be initiated for the Supplier's failure to complete the contractual obligations. GCC 27.3 The period of validity of the Warranty shall be as specified in Section V, Schedule of Requirements. For the purposes of the Warranty, the place of final destination shall be: Central Store, Hetauda of NEA as mentioned in Schedule of Requirements GCC 27.5 & 27.6 The Supplier shall correct any defects covered by the Warranty



of such defects.

within 60 days of being notified by the Purchaser of the occurrence

Section VIII. Contract Forms

Table of Forms

Letter of Intent

Letter of Acceptance

Agreement Form

Performance Security

Advance Payment Security



Letter of Intent

[on letterhead paper of the Purchaser]

	date
Notes on Letter of Inter)t
by the Purchaser and for put the bid as regards to the out	ent is the information of the selection of the bid of the successful bidde oviding information to other unsuccessful bidders who participated in come of the procurement process. This standard form of Letter of Intendent sent to the successful Bidder only after evaluation and selection of vest evaluated bid.
To: name and ac	dress of the Supplier
.name of the contract and iden price amount in fig	s our intention to award the contract. for execution of the
	Authorized Signature:
	Name:
	Title:



[Insert name and address of all other Bidders, who submitted the bid]

Letter of Acceptance [on letterhead paper of the Purchaser]

date
To: name and address of the Supplier
Subject: . <u>Notification of Award</u>
This is to notify that your Bid dated date for execution of the
You are hereby instructed to contract this office to sign the formal contract agreement within 15 days. As per the Conditions of Contract, you are also required to submit Performance Security, as specified in SCC, consisting of a Bank Guarantee in the format included in Section VIII (Contract Forms) of the Bidding Document.
The amout of performance security shall be NRs[Insert amount] and validity period of performance security shall be[insert validity period].
The Purchaser shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract within specified period.
Authorized Signature:
Name and Title of Signatory:



Agreement Form

THIS AGREEMENT made on the [insert number] day of [insert month], [insert year], between [insert complete name of Purchaser] of [insert complete address of Purchaser] (hereinafter "the Purchaser"), of the one part, and [insert complete name of Supplier] of [insert complete address of Supplier] (hereinafter "the Supplier"), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and Related Services, viz., [insert brief description of the Goods and Related Services] and has accepted a Bid by the Supplier for the supply of those Goods and Related Services in the sum of NRs [insert amount of contract price in words and figures including taxes] (hereinafter "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Purchaser's Notification to the Supplier of Award of Contract.
 - (b) the Bid Submission Form and the Price Schedules submitted by the Supplier.
 - (c) the Special Conditions of Contract.
 - (d) the General Conditions of Contract.
 - (e) the Schedule of Requirements; and
 - (f) [indicate any other documents required as appropriate]

This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

- 3. In consideration of the payments to be made by the Purchaser to the Supplier as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of "Nepal" on the day, month, and year indicated above.

Signed by [insert authorized signature for the Purchaser] (for the Purchaser)

Signed by [insert authorized signature for the Supplier] (for the Supplier)



Performance Security

[insert complete name and number of Contract]

To: [insert complete name of Purchaser]

WHEREAS [insert complete name of Supplier] (hereinafter "the Supplier") has received the notification of award for the execution of [insert identification number and name of contract] (hereinafter "the Contract").

AND WHEREAS it has been stipulated by you in the aforementioned Contract that the Supplier shall furnish you with a security [*insert type of security*] issued by a reputable guarantor for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS the undersigned [insert complete name of Guarantor], legally domiciled in [insert complete address of Guarantor], (hereinafter the "Guarantor"), have agreed to give the Supplier a security:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [insert currency and amount of guarantee in words and figures] and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract, without cavil or argument, any sum or sums within the limits of [insert currency and amount of guarantee in words and figures] as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This security is valid until the [insert day, month, year].

Name: [insert complete name of person signing the Security]

In the capacity of: [insert legal capacity of person signing the Security]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the security for and on behalf of: [insert seal and complete name of Guarantor]

Date: [insert date of signing]



Advance Payment Security

[insert complete name and number of Contract]

To: [insert complete name of Purchaser]

In accordance with the payment provision included in the Contract, in relation to advance payments, [insert complete name of Supplier] (hereinafter called "the Supplier") shall deposit with the Purchaser a security consisting of [indicate type of security], to guarantee its proper and faithful performance of the obligations imposed by said Clause of the Contract, in the amount of [insert currency and amount of guarantee in words and figures].

We, the undersigned [insert complete name of Guarantor], legally domiciled in [insert full address of Guarantor] (hereinafter "the Guarantor"), as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Purchaser on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding [insert currency and amount of guarantee in words and figures].

This security shall remain valid and in full effect from the date of the advance payment being received by the Supplier under the Contract until [(insert day, month, year) Contract completion date may be a basis for this date].

Name: [insert complete name of person signing the Security]

In the capacity of: [insert legal capacity of person signing the Security]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the security for and on behalf of: [insert seal and complete name of Guarantor]

Date: [insert date of signing]



SECTION-VI

Bill of Quantities

Notes for Unit Rate Contracts:

Objectives

The objectives of the Bill of Quantities are

- (a) to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- (b) when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

Content

The Bill of Quantities should be divided generally into the following sections:

- (a) Preamble;
- (b) Work Items (grouped into parts);
- (c) Day works Schedule;
- d) Provisional Sums; and
- (d) Summary.

Preamble

The Preamble should indicate the inclusiveness of the unit prices, and should state the methods of measurement which have been adopted in the preparation of the Bill of Quantities and which are to be used for the measurement of any part of the works.

Work Items

The items in the Bill of Quantities should be grouped into sections to distinguish between those parts of the Works which by nature, location, access, timing, or any other special characteristics may give rise to different methods of construction, or phasing of the Works, or considerations of cost. General items common to all parts of the works may be grouped as a separate section in the Bill of Quantities. Day work Schedule

A Day work Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Employer of the realism of rates quoted by the Bidders, the Day work Schedule should normally comprise the following:

- (a) A list of the various classes of labor, materials, and Constructional Plant for which basic day work rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a day work basis.
- (b) Nominal quantities for each item of Day work, to be priced by each Bidder at Day work rates as bid. The rate to be entered by the Bidder against each basic Day work item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the Contract Data should state the manner in which they will be used, and under whose authority (usually the Project Manager's).

Summary

The Summary should contain a tabulation of the separate parts of the Bill of Quantities carried forward, with provisional sums for Day work, for physical (quantity) contingencies, and for price contingencies (upward price adjustment) where applicable.

These Notes for Preparing Specifications are intended only as information for the Employer or the person drafting the Bidding documents. They should not be included in the final documents.

Bill of Quantities

Total of Procument Items	
Total Item Price	
VAT	
Grand Total	