

BIDDING DOCUMENT
for
THE PROCUREMENT OF

Implementation of WIFI Network in Manaslu Circuit

National Competitive Bidding (NCB)
Single-Stage: Two-Envelope Bidding Procedure

IFB No: 01-WiFi-Manaslu-2078/79

Contract ID: 01-WiFi-Manaslu-2078/79

Nepal Telecommunications Authority

Issued on: 14-12-2021 21:00

Abbreviations

BD	Bidding Document
BDF	Bidding Forms
BDS	Bid Data Sheet
BOQ	Bill of Quantities
COF	Contract Forms
DP	Development Partners
DoLIDAR	Department of Local Infrastructure Development and Agricultural Roads
ELI	Eligibility
EQC	Evaluation and Qualification Criteria
EXP	Experience
FIN	Financial
GCC	General Conditions of Contract
GoN	Government of Nepal
ICC	International Chamber of Commerce
IFB	Invitation for Bids
ITB	Instructions to Bidders
JV	Joint Venture
LIT	Litigation
NCB	National Competitive Bidding
PAN	Permanent Account Number
PPA	Public Procurement Act
PPMO	Public Procurement Monitoring Office
PPR	Public Procurement Regulations
PL	Profit & Loss
SBD	Standard Bidding Document
SCC	Special Conditions of Contract
TS	Technical Specifications
VAT	Value Added Tax
WRQ	Works Requirements

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Invitation for Bids

Government of Nepal (GoN)

Nepal Telecommunications Authority

Invitation for Bids for the Implementation of WIFI Network in Manaslu Circuit

IFB No: 01-WiFi-Manaslu-2078/79

Contract Identification No: 01-WiFi-Manaslu-2078/79

Date of publication: 14-12-2021 21:00

1. The Government of Nepal [GoN] has allocated funds towards the cost of Implementation of WIFI Network in Manaslu Circuit and intends to apply part of the funds to cover eligible payments under the Contract for Implementation of WIFI Network in Manaslu Circuit (Contract No: 01-WiFi-Manaslu-2078/79). Bidding is open to all eligible bidders as per Section V of Bidding Document
2. Nepal Telecommunications Authority invites electronic bids from eligible bidders for the construction of Implementation of WIFI Network in Manaslu Circuit under National Competitive Bidding – Single Stage Two Envelope Bidding procedures.

Only eligible bidders with the following key qualifications should participate in this bidding:

Minimum Average Annual Construction Turnover of the best 3 years within the last 10 years: NRs 80,000,000.00
Minimum Work experience of similar size and nature: Implementation and operation of at least 50 Km Direct Buried Fiber Network

3. 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 21 of the Bidding Document.
4. Eligible Bidders may obtain further information and inspect the Bidding Documents at the office of Nepal Telecommunications Authority, Kathmandu, Kathmandu, Bagmati Province, Nepal or may visit PPMO e-GP system www.bolpatra.gov.np/egp.
5. If hard-copy is allowed then a complete set of Bidding Documents may be purchased from the office Nepal Telecommunications Authority, Kathmandu, Kathmandu, Bagmati Province, Nepal by eligible Bidders on the submission of a written application, along with the copy of company/firm registration certificate, and upon payment of a non-refundable fee of 10000.0 NRs. till 12-01-2022 12:00 during office hours.

Or

Bidder who chooses to submit their bid electronically may purchase the hard copy of the bidding documents as mentioned above or 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 Project's Rajaswa (revenue) account as specified below

Information to deposit the cost of bidding document in Bank:

Name of the Bank: Nabil Bank Ltd.
Name of the Office: Nepal Telecommunications Authority
Office Code no:
Office Account no: 0106011664201
Rajaswa (revenue) Shirshak no:

6. Pre-bid meeting shall be held at Nepal Telecommunications Authority
Kantipath, Jamal
Kathmandu

Bagmati Province
Nepal at 30-12-2021 14:00 hours.

7. Sealed or electronic bids must be submitted to the office Nepal Telecommunications Authority, Kathmandu, Kathmandu, Bagmati Province, Nepal by hand/courier or through PPMO's e-GP system www.bolpatra.gov.np/egp on or before 14-01-2022 12:00. Bids received after this deadline will be rejected.
8. The bids will be opened in the presence of Bidders' representatives who choose to attend at 14-01-2022 12:30 hours at the office of Nepal Telecommunications Authority
Kantipath, Jamal
Kathmandu
Bagmati Province
Nepal. Bids must be valid for a period of 90 days after 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 NRs. 3000000 which shall be valid for 30 days beyond the validity period of the bid.
9. If the last date of purchasing and /or submission falls on a government holiday, then the next working day shall be considered as the last date. In such case the validity period of the bid security shall remain the same as specified for the original last date of bid submission.

Part I: Bidding Procedures

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Section I: Instructions to Bidders

A. General	
1. Scope of Bid	<p>1.1 In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of Works as specified in Section VI (Works Requirements). The <i>name, identification, and number</i> of Contracts of the National Competitive Bidding (NCB) are provided in the BDS.</p> <p>1.2 Throughout this Bidding Document:</p> <p style="padding-left: 40px;">(a) the term “in writing” means communicated in written form and delivered against receipt;</p> <p style="padding-left: 40px;">(b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and</p> <p style="padding-left: 40px;">(c) “day” means calendar day.</p>
2. Source of Funds	<p>2.1 GoN Funded: In accordance with its annual program and budget, approved by the GoN, the implementing agency indicated in the BDS plans to apply a portion of the allocated budget to eligible payments under the contract(s) for which this Bidding Document is issued.</p> <p style="text-align: center;">Or</p> <p>Public Entities' own Resource Funded: In accordance with its annual program and budget, approved by the public entity, the implementing agency indicated in the BDS plans to apply a portion of the allocated budget to eligible payments under the contract(s) for which this Bidding Document is issued.</p> <p style="text-align: center;">Or</p> <p>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.</p> <p>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/Grant Agreement”), and will be subject in all respects to the terms and conditions of that Loan/Grant Agreement. No party other than the GoN shall derive any rights from the Loan Agreement or have any claim to the funds.</p>
3. Fraud and	3.1 Procuring Entities as well as Bidders, suppliers and contractors and their

Corruption

sub-contractors shall adhere to the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this:;

(a) the Employer 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 Employer 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 Contractor shall permit the GoN/DP to inspect the Contractor's accounts and records relating to the performance of the Contractor 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 Employer the benefit of open competitive bid price,
- (g) Contacting the Employer with an intention to influence the Employer 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,

	<p>(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.</p> <p>(d) if the Successful Bidder fails to sign the Contract.</p> <p>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.</p> <p>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.</p> <p>3.6 Furthermore, Bidders shall be aware of the provisions of GCC (GCC 28.3 and 72.3(j)).</p>
<p>4. Eligible Bidders</p>	<p>4.1 A Bidder may be a natural person, private entity, or government owned entity subject to ITB 4.5 or any combination of them in the form of a Joint Venture (JV) under an existing agreement, or with the intent to constitute a legally-enforceable joint venture. In the case of a JV:</p> <p>(a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. Maximum number of JV shall be as specified in the BDS. and</p> <p>(b) the JV shall nominate a Representative who shall have the authority to conduct all business 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.</p> <p>4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section V (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed sub-contractors or suppliers for any part of the Contract including related services.</p> <p>4.3 A Bidder shall not have a conflict of interest. A Bidder 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 any of, including but not limited to, the following apply:</p> <p>(a) they have controlling shareholders in common; or</p>

- (b) they receive or have received any direct or indirect subsidy from any of them; or
- (c) they have the same legal representative for purposes of this bid; or
- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) a Bidder participates in more than one bid in this bidding process either individually or as a partner in a joint venture. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of ITB 4.3 (a)-(d) above, this does not limit the participation of the same subcontractor in more than one bid; or
- (f) a Bidder or any of its affiliated entity, participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
- (g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer as Engineer for the Contract.

4.4 A firm that is under a declaration of ineligibility by the GoN in accordance with ITB 3, at the date of the deadline for bid submission or thereafter, shall be disqualified. A firm shall not be eligible to participate in any procurement activities under an DP-financed, -administered, or -supported project while under temporary suspension or debarment by DP pursuant to the DP's Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by the DP, or enforced by other DPs pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A bid from a temporary suspended or debarred firm will be rejected.

4.5 Enterprises owned by Government shall be eligible only if they can establish that they are legally and financially autonomous and operate under commercial law, and that they are not a dependent agency of the GoN.

4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer 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, Nepal prohibits any import of goods or Contracting of works or services from that country or any payments to persons or entities in that country. Where Nepal prohibits payments to a particular firm or for particular goods by such an act of compliance, that firm may be

	<p>excluded;</p> <p>(b) DP Funded: as a matter of law or official regulation, Nepal 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;</p> <p>(c) DP Funded: a firm sanctioned or temporarily suspended by the DP in relation to their guidelines or appropriate provisions on preventing and combating fraud and corruption in projects financed by them.</p>
	<p>4.8 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.</p>
<p>5. Eligible Materials, Equipment and Services</p>	<p>5.1 The materials, equipment and services to be supplied under the Contract shall have their origin in any source countries as defined in accordance with Section V (Eligible Countries) and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer’s request, Bidders may be required to provide evidence of the origin of materials, equipment and services.</p> <p>5.2 For purposes of ITB 5.1 above, “origin” means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.</p>
<p>B. Contents of Bidding Documents</p>	
<p>6. Sections of Bidding Document</p>	<p>6.1 The Bidding Document consist of Parts I, II, and III, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.</p> <p>PART I Bidding Procedures</p> <ul style="list-style-type: none"> Section I Instructions to Bidders (ITB) Section II Bid Data Sheet (BDS) Section III Evaluation and Qualification Criteria (EQC) Section IV Bidding Forms (BDF) Section V Eligible Countries <p>PART II Requirements</p> <ul style="list-style-type: none"> Section VI Works Requirements (WRQ) Section VII Bill of Quantities (BOQ) <p>PART III Conditions of Contract and Contract Forms</p> <ul style="list-style-type: none"> Section VIII General Conditions of Contract (GCC) Section IX Special Conditions of Contract (SCC) Section X Contract Forms (COF)

	<p>6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.</p>
	<p>6.3 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.</p>
	<p>6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document and to furnish with its bid all information and documentation as is required by the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.</p>
<p>7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting</p>	<p>7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in BDS or raise any question or curiosity during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received within the period as mentioned in ITB 7.5. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.</p>
	<p>7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself, on its own risk and responsibility, all information that may be necessary for preparing the bid and entering into a Contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.</p>
	<p>7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.</p>
	<p>7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.</p>
	<p>7.5 The Bidder is requested, to submit any questions in writing, to reach the Employer as mentioned in BDS.</p>

	<p>7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.</p>
	<p>7.7 Non attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.</p>
<p>8. Amendment of Bidding Document</p>	<p>8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing agenda.</p>
	<p>8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.</p>
	<p>8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2</p>
<p>C. Preparation of Bids</p>	
<p>9. Cost of Bidding</p>	<p>9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.</p>
<p>10. Language of Bid</p>	<p>10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, 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.</p>
<p>11. Documents Comprising the Bid</p>	<p>11.1 The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Bid containing the documents listed in ITB 11.2 and the other the Price Bid containing the documents listed in ITB 11.3, both envelopes enclosed together in an outer single envelope.</p> <p>11.2 The Technical Bid shall comprise the following:</p> <ul style="list-style-type: none"> (a) Letter of Technical Bid; (b) Bid Security in accordance with ITB 19;

	<p>(c) alternative Technical Bid, at Bidder's option and if permissible, in accordance with ITB 13;</p> <p>(d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;</p> <p>(e) documentary evidence in accordance with ITB 17, establishing the Bidder's qualifications to perform the contract;</p> <p>(f) Technical Proposal in accordance with ITB 16;</p> <p>(g) Bids submitted by a Joint Venture shall include a copy of the Joint Venture Agreement entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all partners and submitted with the Bid, together with a copy of the proposed agreement. The Joint Venture agreement, or letter of intent to enter into a Joint Venture including a draft agreement shall indicate at least the parts of the Works to be executed by the respective partners; and</p> <p>(h) any other required documents, which is not against the provision of Procurement Act/Regulation/Directives and Standard Bidding Document issued by PPMO as specified in the BDS.</p> <p>11.3 The Price Bid shall comprise the following:</p> <p>(a) Letter of Price Bid;</p> <p>(b) completed Bill of Quantities(BoQ), in accordance with ITB 12 and ITB 14, or as stipulated in the BDS;</p> <p>(c) alternative price Bids, at Bidder's option and if permissible, in accordance with ITB 13;</p> <p>(d) Any other document required in the BDS.</p> <p>11.4 The Bidder is solely responsible for the authenticity of the submitted documents.</p>
<p>12. Letter of Bid and Schedules</p>	<p>12.1 The Letters of Technical Bid and Price Bid, Schedules, and all documents listed under ITB 11, shall be prepared using the relevant forms in Section IV (Bidding Forms) and in Section VII (Bill of Quantities). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p>
<p>13. Alternative Bids</p>	<p>13.1 Unless otherwise specified in the BDS, alternative bids shall not be considered.</p> <p>13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS, as will the method of evaluating different times for completion.</p> <p>13.3 When specified in the BDS pursuant to ITB 13.1, and subject to ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the Employer's design as</p>

	<p>described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.</p>
	<p>13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified in the BDS and described in Section VI (Works Requirements). The method for their evaluation will be stipulated in Section III (Evaluation and Qualification Criteria).</p>
<p>14. Bid Prices and Discounts</p>	<p>14.1 The prices and discounts quoted by the Bidder in the Letter of Price Bid and in the Schedules shall conform to the requirements specified below.</p>
	<p>14.2 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section VII (Bill of Quantities). In case of Unit Rate Contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.</p>
	<p>14.3 The price to be quoted in the Letter of Price Bid shall be the total price of the Bid, excluding any discounts offered. Absence of the total price in the Letter of Price Bid or the Bid Price in the Bill of Quantities shall result in rejection of the Bid.</p>
	<p>14.4 The Bidder shall quote any discounts and the methodology for their application in the Letter of Price Bid, in accordance with ITB 12.1.</p>
	<p>14.5 If so indicated in ITB 1.1, bids are invited for individual Contracts or for any combination of Contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the Bids for all Contracts are submitted and opened at the same time.</p>
	<p>14.6 Unless otherwise provided in the BDS and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Table of Adjustment Data in Section IV (Bidding Forms) and the</p>

	Employer may require the Bidder to justify its proposed indices and weightings.
	14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.
15. Currency of Bid and Payment	15.1 The currency of the bid and payment shall be in Nepalese Rupees.
16. Documents Comprising the Technical Proposal	16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
17. Documents Establishing the Qualifications of the Bidder	17.1 To establish its qualifications to perform the Contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section IV (Bidding Forms).
18. Period of Validity of Bids	18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
	18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer 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 19, it shall also be extended 30 days beyond the deadline of the extended validity 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.
19. Bid Security	19.1 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.
	19.2 The bid security shall be, at the Bidder's option, in any of the following forms: (a) an unconditional bank guarantee from Commercial Bank or Financial

	<p>Institution eligible to issue Bank Guarantee as per prevailing Law or;</p> <p>(b) a cash deposit voucher in the Employer's Account as specified in BDS.</p> <p>In the 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 employer. The form must include the complete name of the Bidder. The bid security shall be valid for minimum thirty (30) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.</p>
	<p>19.3 The bid security issued by any foreign Bank outside Nepal must be counter guaranteed by Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law inNepal.</p>
	<p>19.4 Any bid not accompanied by an enforceable and substantially compliant bid security shall be rejected by the Employer 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.</p>
	<p>19.5 The bid security of unsuccessful Bidders shall be returned within three days, once the successful Bidder's furnishing of the required performance security and signing of the Contract Agreement pursuant to ITB 40.1 and 41.1</p>
	<p>19.6 The bid security shall be forfeited if:</p> <p>GoN funded :</p> <p>(a) a Bidder requests for withdrawal or modification of its bid, except as provided in ITB 18.2:</p> <ul style="list-style-type: none"> (i) during the period of bid validity specified by the Bidder on the Letter of Technical Bid and Price 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 Technical Bid and Price Bid, in case of hard copy submission. <p>(b)a Bidder changes the prices or substance of the bid while providing information pursuant to clause 27.1;</p> <p>(c) a Bidder involves in fraud and corruption pursuant to clause 3.1;</p> <p>(d) the successful Bidder fails to:</p> <ul style="list-style-type: none"> (i) furnish a performance security in accordance with ITB 40.1; (ii) sign the Contract in accordance with ITB 41.1; or (iii) accept the correction of arithmetical errors pursuant to clause 33.1 <p>DP funded:</p>

	<p>The bid security shall be forfeited</p> <ul style="list-style-type: none"> (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid, except as provided in ITB 18.2; or (b) if the successful Bidder fails to <ul style="list-style-type: none"> (i) furnish a performance security in accordance with ITB 40.1; or (ii) sign the Contract in accordance with ITB 41.1; (iii) accept arithmetical corrections in accordance with ITB 33.1; <p>19.7 The Bid Security of a Joint Venture shall be in the name of the Joint Venture that submits the bid. If the Joint Venture 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 4.1.</p>
<p>20. Format and Signing of Bid</p>	<p>20.1 The Bidder shall prepare one original set of the Technical Bid and one original of the Price Bid comprising the Bid as described in ITB 11 and clearly mark it “ORIGINAL – TECHNICAL BID” and “ORIGINAL – PRICE BID.” Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked “ALTERNATIVE”. In addition, the Bidder shall submit copies of the bid in the number specified in the BDS, and clearly mark each of them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.</p> <p>In case of e-submission of bid, the Bidder shall submit his bid electronically in PDF or web forms files as specified in ITB Clause 21.1(b).</p> <p>20.2 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 un amended printed literature, shall be signed or initialed by the person signing the bid.</p> <p>20.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.</p>
<p>D. Submission and Opening of Bids</p>	
<p>21. Sealing and Marking of Bids</p>	<p>21.1 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:</p> <ul style="list-style-type: none"> (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 13, 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**” 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	PDF

5.	Business Registration Certificate	Mandatory	PDF
6.	Tax Clearance Certificate/Tax return submission evidence/evidence of time extension	Mandatory for domestic bidders	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 Bids Only	PDF
10.	Qualification Documents	Mandatory	Using profile data(financial details, contract details etc.) and Technical Proposal
11.	Additional documents] specified in ITB 11.2 (h)	If applicable	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 Bill of Quantities (BoQ)	Mandatory	Online Forms
3.	Price Adjustment Table	If applicable	Online Forms
4.	Additional Documents specified in ITB 11.3 (d)	If applicable	PDF

Note:

a) 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 e-mail address of the bidder. System will validate the OTP and allow bidder to submit their bid.
- x. Electronically submitted bids can be modified and/or withdrawn through 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, bidder won't be able to submit another bid response for the same bid.

	<p>xi. The Bidder / Bid shall meet the following requirements and conditions for e-submission of bids;</p> <ul style="list-style-type: none"> 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 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. <p>21.2. The inner and outer envelopes shall:</p> <ul style="list-style-type: none"> (aa) bear the name and address of the Bidder; (bb) be addressed to the Employer as provided in BDS 22.1; (cc) bear the specific identification of this bidding process indicated in BDS 1.1; and <p>21.3 The outer envelope and the inner envelope containing Technical Proposal shall bear a warning not to open before the time and date for the opening of Technical Bid in accordance with ITB 25.1.</p> <p>21.4 The inner envelope containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 25.7</p> <p>21.5 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.</p>
<p>22. Deadline for Submission of Bids</p>	<p>22.1 Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.</p> <p>In case of e-submission, 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 e-submission of bid after the deadline for submission of bid.</p> <p>22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.</p>
<p>23. Late Bids</p>	<p>23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the</p>

	Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
24. Withdrawal, and Modification of Bids	<p>24.1 A Bidder may withdraw, or modify its bid- Technical or Price - 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:</p> <p>(i) Bids submitted in Hard Copy GoN Funded:</p> <p>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 20.2. The corresponding modification of the bid must accompany the respective written notice. All notices must be:</p> <p>(aa) prepared and submitted in accordance with ITB 20 and ITB 21, and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL”, “MODIFICATION;” and</p> <p>(bb) received by the Employer twenty four hour prior to the deadline prescribed for submission of bids, in accordance with ITB 22.</p> <p>DP Funded:</p> <p>A Bidder may withdraw or modify its 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 20.2, (except that withdrawal notices do not require copies). The corresponding modification of the Bid must accompany the respective written notice. All notices must be</p> <p>i) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” and “MODIFICATION;” and</p> <p>ii) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.</p> <p>ii) E-submitted bids.</p> <p>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.</p> <p>24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall not be opened. In case of hard copy submission, the Bid will be returned unopened to the Bidders.</p> <p>24.3 The following provisions apply for withdrawal or modification of the Bids: GoN Funded:</p> <p>(i) In case of bids submitted in hard copy no bid shall be withdrawn or modified in the interval between 24 hours prior to 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.</p>

	<p>(ii) 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 Letter of Technical Bid and Price Bid or any extension thereof.</p> <p>DP Funded:</p> <p>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.</p> <hr/> <p>24.4 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.</p> <p>24.5 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.</p> <hr/> <p>24.6 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.</p>
<p>25. Bid Opening</p>	<p>25.1 The Employer shall open the Technical Bids in public at the address, on the date and time specified in the BDS in the presence of Bidders` designated representatives who choose to attend. The Price Bids will remain unopened and will be held in 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.</p> <hr/> <p>25.2 The Employer shall download the e-submitted Technical Bid. The e-GP system allows the Employer to download the e-submitted technical bid only after bid opening date and time after login simultaneously by at least two members of the Bid Opening Committee.</p> <hr/> <p>25.3 Electronically submitted Technical Bid shall be opened at first in 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.</p> <hr/> <p>25.4 Thereafter, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be Permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding bid. No Technical Bid and/or Price Bid modification shall be permitted</p>

	<p>unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at bid opening. Only the Technical Bid, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Price Bids, both Original and Modification, will remain unopened in accordance with ITB 25.1.</p>
	<p>25.5 All other envelopes holding the Technical Bid shall be opened one at a time, reading out: the name of the Bidder; whether there is a modification; the presence of a bid security and any other details as the Employer may consider appropriate.</p> <p>Only Technical Bids read out and recorded at bid opening shall be considered for evaluation.</p> <p>No bid shall be rejected at opening of Technical Bids except for late bids, in accordance with ITB 23.1.</p>
	<p>25.6 The Employer 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.</p>
	<p>25.7 At the end of the evaluation of the Technical Bids, the Employer will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for 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 Employer. Bidders shall be given at least 7 days notice for the opening of Price Bids.</p>
	<p>25.8 The Employer 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.</p>
	<p>25.9 The Employer 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.</p>
	<p>25.10 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded:</p> <p>(a) the name of the Bidder;</p>

	<p>(b) whether there is a modification;</p> <p>(c) the Bid Prices, including any discounts and alternative offers; and</p> <p>(d) any other details as the Employer may consider appropriate.</p> <p>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.</p>
	<p>25.11 The Employer 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 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.</p>
<p>E. Evaluation and Comparison of Bids</p>	
<p>26. Confidentiality</p>	<p>26.1 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 information on Contract award is communicated to all Bidders.</p> <p>26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.</p> <p>26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it may do so in writing.</p>
<p>27. Clarification of Bids</p>	<p>27.1 To assist in the examination, evaluation, and comparison of the Technical and Price Bids, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the 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 Employer in the evaluation of the Price Bids, in accordance with ITB 33. In case of e-submission of bid, upon notification from the employer, the bidder shall also submit the original of documents comprising the Technical and Price Bid as per ITB 11.2 and ITB 11.3 for verification of submitted documents for acceptance of the e-submitted bid.</p> <p>27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.</p>

<p>28. Deviations, Reservations, and Omissions</p>	<p>28.1 During the evaluation of bids, the following definitions apply:</p> <ul style="list-style-type: none"> (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.
<p>29. Examination of Technical Bid</p>	<p>29.1 The Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB 11.2 have been provided, and to determine the completeness of each document submitted.</p> <p>29.2 The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected.</p> <ul style="list-style-type: none"> (a) Letter of Technical Bid; (b) written confirmation of authorization to commit the Bidder; (c) Bid Security; and (d) Technical Proposal in accordance with ITB 16
<p>30. Determination of Responsiveness of Technical Bid</p>	<p>30.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.2.</p> <p>30.2 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,</p> <ul style="list-style-type: none"> (a) if accepted, would: <ul style="list-style-type: none"> (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer'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. <p>30.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section VI (Works Requirements) have been met without any material deviation, reservation or omission.</p>

	<p>30.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.</p>
	<p>30.5 In case of e-submission bids, the Employer 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 27.1, the bid shall not be considered for further evaluation.</p>
	<p>30.6 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.</p> <p>30.7 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.</p>
<p>31. Nonconformities, Errors, and Omissions</p>	<p>31.1 Provided that a bid is substantially responsive, the Employer may waive any non-conformities in the bid that do not constitute a material deviation, reservation, or omission.</p>
	<p>31.2 Provided that a Technical Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.</p>
	<p>31.3 Provided that a Technical Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the methods indicated in Section III (Evaluation and Qualification Criteria).</p>
	<p>31.4 If the monetary value of such non-conformities is found to be more than fifteen percent of the Bid Price of the bidder pursuant to ITB 31.3, such bid shall be considered nonresponsive and shall not be involved in evaluation.</p>
<p>32 Qualification of the</p>	<p>32.1 The Employer shall determine to its satisfaction during the evaluation of</p>

Bidder	<p>Technical Bids whether Bidders meet the qualifying criteria specified in Section III (Evaluation and Qualification Criteria).</p> <p>32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.</p> <p>32.3 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.</p>
33. Correction of Arithmetical Errors	<p>33.1 During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:</p> <ul style="list-style-type: none"> (a) only for unit price Contracts, 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 Employer 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; (c) If there is a discrepancy between the bid price in the Summary of Bill of Quantities and the bid amount in item (c) of the Letter of Price Bid, the bid price in the Summary of Bill of Quantities will prevail and the bid amount in item (c) of the Letter of Price Bid will be corrected. (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. <p>33.2 If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security shall be forfeited.</p>
34 Subcontractors	<p>34.1 In case of Prequalification, the Bidder's Bid shall name the same subcontractor as submitted in the prequalification application and approved by the Employer.</p> <p>In case of Post-qualification, the Employer may permit subcontracting for certain specialized works as indicated in Section III When subcontracting is permitted by the Employer, the sub-contractor shall meet the qualifications criteria as indicated in section III.</p> <p>Sub-contractors' qualification and experience will not be considered for evaluation of the Bidder. The Bidder on its own (without taking into</p>

	<p>account the qualification and experience of the sub-contractor) should meet the qualification criteria.</p> <p>Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the BDS.</p>
<p>35. Evaluation of Price Bids</p>	<p>35.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.</p> <p>35.2 To evaluate a Price Bid, the Employer shall consider the following:</p> <ul style="list-style-type: none"> (a) the bid price, excluding Value Added Tax , Provisional Sums, and the provision, if any, for contingencies in the Summary Bill of Quantities, for Unit Rate Contracts, or Schedule of Prices for lump sum Contracts, but including Day work items, where priced competitively; (b) price adjustment for correction of arithmetic errors in accordance with ITB 33.1; (c) price adjustment due to discounts offered in accordance with ITB 14.4; (d) adjustment for nonconformities in accordance with ITB 31.3; (e) application of all the evaluation factors indicated in Section III (Evaluation and Qualification Criteria); <p>35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.</p> <p>35.4 If this Bidding Document allows Bidders to quote separate prices for different Contracts, 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).</p> <p>35.5 if the bid for an Unit Rate Contract, which results in the lowest Evaluated Bid Price is seriously unbalanced or front loaded or extremely low in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder as mentioned in BDS to protect the Employer against financial loss in the event of default of the successful Bidder under the Contractor may consider the bid as non-responsive.</p>

	<p>35.6 In case of e-submission bids, the Employer 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 27.1, the bid shall not be considered for further evaluation.</p>
	<p>35.7 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.</p>
36. Comparison of Bids	<p>36.1 The Employer shall compare all substantially responsive bids in accordance with ITB 35.2 to determine the lowest evaluated bid.</p>
37. Employer's Right to Accept Any Bid, and to Reject Any or All Bids	<p>37.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.</p>
F. Award of Contract	
38. Award Criteria	<p>38.1 The Employer shall 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.</p>
39. Letter of Intent to Award the Contract/Notification of Award	<p>39.1 The Employer shall notify the concerned Bidder whose bid has been selected in accordance with ITB 38.1 within seven days of the selection of the bid, in writing that the Employer has intention to accept its bid and the information regarding the name, address and amount of selected bidder shall be given to all other bidders who submitted the bid.</p>
	<p>39.2 If no bidder submits an application pursuant to ITB 42 within a period of seven days of the notice provided under ITB 39.1, the Employer shall, accept the bid selected in accordance with ITB 38.1 and Letter of Acceptance shall be communicated to the selected bidder prior to the expiration of period of Bid validity, to furnish the performance security and sign the contract within fifteen days.</p>
	<p>39.3 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 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</p>

	Nepal.
40. Performance Security and Line of Credit	<p>40.1 Within Fifteen (15) days of the receipt of Letter of Acceptance from the Employer, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, subject to ITB 35.5, 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 X (Contract Forms), or another form acceptable to the Employer. The performance security issued by any foreign Bank outside Nepal must be counter guaranteed by Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal.</p> <p>i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent below the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.</p> <p>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:</p> <p>Performance Security Amount = [(0.85 x Cost Estimate – Bid Price) x 0.5] + 5% of Bid Price.</p> <p>The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.</p> <p>Within Fifteen (15) days of the receipt of Letter of Acceptance from the Employer, the successful Bidder shall furnish the Letter of Commitment for Bank's Undertaking for Line of Credit of the amount as specified in the BDS, using Sample Form for the Line of Credit included in Section X (Contract Forms) at the time of contract agreement.</p>
	<p>40.2 Failure of the successful Bidder to submit the above-mentioned Performance Security and Line of Credit or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily. The process shall be repeated according to ITB 39.</p>
41 Signing of Contract	<p>41.1 The Employer and the successful Bidder shall sign the Contract Agreement within the period as stated ITB 40.1.</p>
	<p>41.2 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 <i>District Coordination</i></p>

	<p>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 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</p>
	<p>41.3 Within thirty (30) days from the date of issuance of notification pursuant to ITB 39.1 unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall promptly respond in writing to any unsuccessful Bidder who, requests for debriefing.</p>
	<p>41.4 If the bidder whose bid has been accepted fails to sign the contract as stated ITB 40.1, the Public Procurement Monitoring Office shall blacklist the bidder on recommendation of the Public Entity.</p>
<p>42. Complaint and Review</p>	<p>42.1 If a Bidder is dissatisfied with the Procurement proceedings or the decision made by the Employer in opening of the price bid or the intention to award the Contract, it may file an application to the Chief of the Public Entity or Public Procurement Monitoring Office or office established as per Clause 145(a) of the Public Procurement Regulation within Seven (7) days of providing the notice under ITB 25.8 and ITB 39.1 by the Public Entity, for review of the proceedings stating the factual and legal grounds.</p>
	<p>42.2 Late application filed after the deadline pursuant to ITB 42.1 shall not be processed.</p>
	<p>42.3 The chief of Public Entity shall, within five (5) days after receiving the application, give its decision with reasons, in writing pursuant to ITB 42.1:</p> <ul style="list-style-type: none"> (a) whether to suspend the procurement proceeding and indicate the procedure to be adopted for further proceedings; or (b) to reject the application. <p>The decision of the chief of Public Entity shall be final for the Bid amount up to the value as stated in 42.4.</p>
	<p>42.4 If the Bidder is not satisfied with the decision of the Public Entity in accordance with ITB 42.3, is not given within five (5) days of receipt of application pursuant to ITB 42.1, 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, equal or more than Rupees Twenty Million (NRs. 20,000,000). The</p>

	<p>application may be sent by hand, by post,by courier, or by electronic media at the risk of the Bidder itself.</p>
	<p>42.5 Late application filed after the deadline pursuant to ITB 42.4 shall not be processed.</p>
	<p>42.6 Within three (3) days of the receipt of application from the Bidder, pursuant to ITB 42.4, the Review Committee shall notify the concerning Public Entity to furnish its procurement proceedings, pursuant to ITB 42.3.</p>
	<p>42.7 Within three (3) days of receipt of the notification pursuant to ITB 42.6, the Public Entity shall furnish the copy of the related documents to the Review Committee.</p>
	<p>42.8 The Review Committee, after inquiring from the Bidder and the Public Entity, if needed, shall give its decision within one (1) month of the receipt of the application filed by the Bidder, pursuant to ITB 42.4.</p>
	<p>42.9 The Bidder, filing application pursuant to ITB 42.4, 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 equivalent to one percent (1%) of its quoted Bid amount with the validity period of at least ninety (90) days from the date of the filing of application pursuant to ITB 42.4.</p>
	<p>42.10 If the claim made by the Bidder pursuant to ITB 42.4 is justified, the Review Committee shall have to return the security deposit to the applicant, pursuant to ITB 42.9, within seven (7) days of such decision made.</p>

SECTION-II
Bid Data Sheet

A. General

ITB 1.1	The number of the Invitation for Bids is : 01-WiFi-Manaslu-2078/79
ITB 1.1	The Employer is : Nepal Telecommunications Authority
ITB 1.1	The number and identification of lots comprising this bidding process is: Implementation of WIFI Network in Manaslu Circuit (01-WiFi-Manaslu-2078/79)
ITB 2.1	The name of the Project is: Implementation of WIFI Network in Manaslu Circuit The Development Partner(DP) is : NA The implementing agency is: NA GoN Funded or DP Funded: NA
ITB 4.1(a)	Maximum number of partner in a joint venture shall be :3

B. Bidding Document

ITB 7.1	For clarification purposes only, the Employer's address is: Attention: Achyuta Mishra Address: Kathmandu Kathmandu Bagmati Province Telephone: 9851137532 Facsimile number: Electronic mail address: anmishra@nta.gov.np
ITB 7.4	A pre bid meeting shall be held. Pre-Bid meeting will take place at the following date, time and place: Date and Time:30-12-2021 14:00 Address :Nepal Telecommunications Authority Kantipath, Jamal Kathmandu Bagmati Province Nepal
ITB 7.4	A site visit shall not be organized by the Employer.
ITB 7.5	Time for request: Requests for clarification should be received by the Employer no later than 10 days prior to the deadline for submission of bids.

C. Preparation of Bids

ITB 10.1	The language of the bid is: English / Nepali	
ITB 11.2 (h)	The Bidder shall submit with its Technical Bid the following additional documents:	
	SL No	Document Name
	1	Manufacture Authorization of Fiber, Router and Switch Experience Certificate

ITB 11.3 (b)	In accordance with ITB 12 and ITB 14, the following schedules shall be submitted with the bid, including the priced Bill of Quantities for Unit Rate Contracts and Schedule of Prices for lump sum contracts:	
	SL No	Document Name
	1	Bill of Quantities
ITB 11.3 (d)	The Bidder shall submit with its Price Bid the following additional documents :	
	SL No	Document Name
	1	Not Applicable
ITB 13.1	Alternative bids shall not be permitted.	
ITB 13.2	Alternative times for completion shall not be permitted. If alternative times for completion are permitted, the evaluation method will be as specified in Section III (Evaluation and Qualification Criteria).	
ITB 13.4	Alternative technical solutions shall not be permitted for the following parts of the Works	
ITB 14.6	The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.	
ITB 18.1	The bid validity period shall be 90 days.	
ITB 19.1	The Bidder shall furnish a bid security, from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law with a minimum of 3000000.00 NPR, which shall be valid for 30 days beyond the validity period of the bid.	
ITB 19.2(b)	Bank Name: Nabil Bank Ltd. Bank Address: Tindhara, Kathmandu Office Name: Nepal Telecommunications Authority Account Number: 1806017500003 Office Code: -----	
ITB 20.1	In addition to the original of the bid, the number of copy/ies is/are:	
	SL No	Document Name
	1	Not Applicable
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall indicate: (a) The name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid such as a Power of Attorney; and (b) In the case of Bids submitted by an existing or intended JV, an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, and (ii) nominating a Representative who shall have the authority to conduct all business 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.	
D. Submission and Opening of Bids		
ITB 21.1	Bidders shall have the option of submitting their bids by electronic only.	
ITB 22.1	For bid submission purposes only, the Employer's address is : Attention : Nepal Telecommunications Authority Address : EGp only The deadline for bid submission is : 14-01-2022 12:00	

ITB 25.1	<p>The Technical Bid opening shall take place at :</p> <p>Address : Nepal Telecommunications Authority Kantipath, Jamal Kathmandu Bagmati Province Nepal</p> <p>Date : 14-01-2022 12:30</p>
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E. Evaluation and Comparison of Bids

ITB 34.1	<p>Sub-contracting for this procurement is: Applicable</p> <p>a) Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: 25 % of the total contract amount</p> <p>b) Sub-contractors' qualification and experience will not be considered for evaluation of the Bidder. The Bidder on its own (without taking into account the qualification and experience of the sub-contractor) should meet the qualification criteria.</p>
ITB 35.5	<p>The amount of the performance security be increased by 8 percent of the quoted bid price.</p>
ITB 40.1	<p>Letter of Commitment for Bank's Undertaking for Line of Credit shall be of NRs.80000000</p> <p>[Note - Construction cash flow requirement for a number of months (to the nearest half-month), determined as the total time needed by the Employer to pay a contractor's invoice, allowing for (a) the actual time consumed for construction, from the beginning of the month invoiced, (b) the time needed by the Project Manager to issue the monthly payment certificate, (c) the time needed by the Employer to pay the amount certified, and (d) a contingency period of one month to allow for unforeseen delays. The total period should not exceed three months for estimated cost (excluding Vat) more than NRs. 250 Millions and for estimated cost (excluding Vat) less than NRs. 250 Millions, the total period should not exceed 5 months. The assessment of the monthly amount should be based on a straight-line projection of the estimated cash flow requirement over the particular contract period, neglecting the effect of any advance payment and retention monies, but including contingency allowances in the estimated contract cost.]</p>

SECTION-III

Evaluation and Qualification Criteria

1. Evaluation

1.1 Adequacy of Technical Proposal

Sl. No.	Criteria Title	Criteria Description
1	Adequacy of Technical Proposal	Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity, to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VI (Works Requirements).

1.2 Multiple Contracts

Sl. No.	Criteria Title	Criteria Description
1	Multiple Contracts	<p>Multiple Contracts, if permitted under ITB 35.4, will be evaluated as follows:</p> <p>Award Criteria for Multiple Contracts [ITB 35.4: Bidders have the option to Bid for any one or more Contracts. Bids will be evaluated taking into account discounts offered, if any, for combined contracts. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined contracts, subject to the selected Bidder(s) meeting the required qualification criteria for combination of multiple contracts as the case may be.</p> <p>Qualification Criteria for Multiple Contracts: The criteria for qualification shall be the sum of the minimum requirements for respective individual contracts as specified under items 2.3.2, 2.3.3, and 2.4.2b.</p> <p>With respect to the Contracts of Similar Size and Nature under item 2.4.2(a). of Section III, the evaluation shall be done as below: N is the minimum number of contracts as per Note (2) of 2.4.2 Specific Construction Experience V is the minimum value of a single contract as per Note (3) of 2.4.2 Specific Construction Experience</p> <p>i. Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the bidder has submitted bids as follows, and N1,N2,N3, etc. shall be different contracts: Contract 1: N1 contracts, each of minimum value V1; Contract 2: N2 contracts, each of minimum value V2; Contract 3: N3 contracts, each of minimum value V3; ----etc. and</p> <p>ii. Total number of contracts is equal or less than $N1 + N2 + N3$ +---but the total value of all such contracts is equal or more than $N1 \times V1 + N2 \times V2 + N3 \times V3$ +---.</p>

1.3 In case other than Multiple Contracts

Sl. No.	Criteria Title	Criteria Description
1	In case other than Multiple Contracts	Bidders have the option to Bid for any one or more Contracts. The contracts will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer, subject to the selected Bidder (s) meeting the required qualification which shall be the sum of the minimum requirements for respective individual contracts as specified under items Required Bid Capacity as per 2.3.3. Under this case, Contract shall be awarded based on Least Cost Combination to the Employer.

1.4 Completion Time

1.5 Alternative Technical Solutions

Sl. No.	Criteria Title	Criteria Description
1	Alternative Technical Solutions	Alternative technical solutions, if permitted under ITB 13.4, will be evaluated as follows: [insert project specific requirements]

1.6 Quantifiable Non-conformities and Omissions

Sl. No.	Criteria Title	Criteria Description
1	Quantifiable Non-conformities and Omissions	Subject to ITB 14.2 and ITB 35.2, the evaluated cost of quantifiable nonconformities including omissions, is determined as follows: Pursuant to ITB 31.3, the cost of all quantifiable nonmaterial nonconformities shall be evaluated, but excluding omission of prices in the Bill of Quantities. The Employer will make its own assessment of the cost of any nonmaterial nonconformities and omissions for the purpose of ensuring fair comparison of bids.

2. Qualification

2.1 Eligibility

Sl. No.	Criteria Title	Criteria Description
1	Nationality	Nationality in accordance with ITB Subclause 4.2. Single entity : must meet requirements. In case of joint ventures, each partner: must meet requirement. all partners: must meet requirement. One partner: Not Applicable. Document required: Letter of Technical Bid Forms ELI –1; ELI –2 with attachments.
2	Conflict of Interest	No conflicts of interest in accordance with ITB Sub- Clause 4.3. For Single Entity : Must meet requirement For joint Venture, All partners combined : existing or intended JV must meet requirement. Each partner : Must meet requirement. One partner : Not applicable. Documents Submission Requirements : Letter of Technical Bid.
3	Government-Owned Enterprise	Bidder required to meet conditions of ITB Sub-Clause 4.5. For Single Entity : Must meet requirement For joint Venture , Each partner: Must meet requirement. All combined partner: existing or intended JV must meet requirement. One partner-> Not Applicable. Documents Submission Requirements : Forms ELI - 1, ELI - 2, with attachments

Sl. No.	Criteria Title	Criteria Description
4	Other Eligibility : Firm Registration Certificate	Firm Registration Certificate For Single Entity : Must meet requirement For joint Venture, Each partner : must meet requirement. For all partner combined and one partner : not applicable. Documents Submission Requirements : Document attachment.
5	Other Eligibility : Business Registration Certificate (Valid Internet Service Provider License)	Business Registration Certificate For Single Entity : Must meet requirement For joint Venture, Each partner : must meet requirement. For all partner combined and one partner : not applicable. Documents Submission Requirements : Document attachment.
6	Other Eligibility : VAT and PAN Registration	VAT and PAN Registration(only for domestic bidders) For Single Entity : Must meet requirement For joint Venture, Each partner : must meet requirement. For all partner combined and one partner : not applicable. Documents Submission Requirements : Document attachment.
7	Other Eligibility : Tax Clearance Certificate/Tax return submission evidence/evidence of time extension for the F/Y 2077/78	Tax Clearance Certificate/Tax return submission evidence/evidence of time extension for the F/Y 2077/78 For Single Entity : Must meet requirement For joint Venture, Each partner: must meet requirement. For all partner combined and one partner : not applicable. Documents Submission Requirements : Document attachment.

2.2 Pending Litigation

Sl. No.	Criteria Title	Criteria Description
1	Pending Litigation and Arbitration	All pending litigation shall be treated as resolved against the Bidder and so shall in total not represent more than 50. percent of the Bidder's net worth. Note: (1) The percentage should normally be within the range of 50% to 100% of the Bidder's net worth. For Single Entity : must meet requirement by itself or as partner to past or existing JV For joint Venture :Each partner must meet requirement by itself or as partner to past or existing JV. All partner combined and one partner -> not applicable. Documents Submission Requirements : Form LIT - 1

2.3 Financial Situation

Sl. No.	Criteria Title	Criteria Description
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Sl. No.	Criteria Title	Criteria Description
1	Historical Financial Performance	<p>Submission of audited balance sheets and income statements, for the last 3 years to demonstrate the current soundness of the Bidder's financial position. As a minimum, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive.</p> <p>Note: (1) The financial information provided by a Bidder should be reviewed in its entirety to allow a truly informed judgment, and the pass-fail decision on the financial position of the Bidder should be given on this basis. Balance sheet of the past three years period which shall be decided according to the nature of the work. For Single Entity : Must meet requirement For joint Venture : Each partner Must meet requirement. All partner combined and one partner -> not applicable. Documents Submission Requirements : Form FIN - 1 with attachments</p>
2	Average Annual Turnover	<p>Minimum average annual turnover of NRs 100,000,000.00 calculated as total certified payments received for construction contracts in progress or completed, within best three years out of last ten years.</p> <p>Only the net amount shall be calculated after deducting the amount for VAT and such amount shall be adjusted wholesale price index of Nepal Rastra Bank.</p> <p>For Single Entity : Must meet requirement For joint Venture : All combined partner Must meet requirements, Each partner Must meet 3 of the requirement, One partner must meet 4 of the requirements. Documents Submission Requirements : Form FIN -2</p> <p>(3) Usually not less than 25 % (4) Usually not less than 40 %</p>
3	Required Bid Capacity	The bidding capacity of the bidder should be equal to or more than the NRs.100,000,000.00

2.4 Experience

Sl. No.	Criteria Title	Criteria Description
1	General Experience	Experience under construction contracts in the role of contractor, subcontractor, or management contractor for at least the last 5 years prior to the applications submission deadline.
2	Contracts of Similar Size and Nature	<p>Participation as Prime contractor, management contractor, or subcontractor, in at least 2 Contracts within the last ten (10) years, each with a value of at least NRs 80,000,000.00 that have been successfully or are substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods, technology or other characteristics as described in Section VI, Works Requirements.</p> <p>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.</p>
3	Construction Experience in Key Activities	<p>For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum construction experience in the following key activities :</p> <p>At least 50 KM Direct Buried Fiber deployment in Nepal. Building and operation of WiFi Network.</p>

2.5 Personnel

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

Sl. No.	Position	Required No	Academic Qualification	Total Work Experience (in years)	Experience in Similar Work(in years)
1	Telecom Engineer	4	B.E in Electronics and Communications	5	3

In case the bidder proposes to consider Personnel that may be spared from committed/ongoing contracts for evaluation, the bidder shall provide details of personnel which will be spared from such committed/ongoing contracts based on the physical progress at the date of bid submission.

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Information Forms included in Section IV (Bidding Forms).

Note:

The managerial and technical competence of a contractor is largely related to the key personnel on site. The extent to which the Bidder should demonstrate having staff with extensive experience should be limited to those requiring critical operational or technical skills. The qualification criteria should therefore refer to a limited number of such key personnel, for instance, the project or contract manager and those superintendents working under the project manager who will be responsible for major components (e.g., superintendents specialized in dredging, piling, tunneling, or earthworks, as required for each particular project).

- (a) a minimum number of years of experience in a similar position; and
- (b) a minimum number of years of experience and/or number of comparable projects carried out in a specified number of preceding years.
- (c) minimum education qualification only in case the position requires. It is appropriate to specify that certain positions are filled by individuals who have held posts of comparable authority for, say, three years with the Bidder, so that key staff in executive site positions have sufficient knowledge of the Bidder's management, policy, procedures, and practices to act with confidence and authority within that framework.

2.6 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter:

Sl. No.	Equipment Type Characteristics	Minimum number required
1	Not Applicable	0

In case the Bidder proposes to consider Equipment that may be spared from committed/ongoing contracts for evaluation, the Bidder shall provide details of Equipment which will be spared from committed / ongoing contracts clearly demonstrating the availability of such equipment with respect to the physical progress of the ongoing contracts on the date of bid submission.

In case of Equipment to be leased/hired the same procedure as mentioned above shall apply.

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV (Bidding Forms)

Note:

An inventory of construction equipment represents a high capital cost overhead to a contractor. Consequently, not all competent potential bidders will maintain an inventory of high-value items that are in suitable condition for major contracts. This is particularly so with management contractors, who undertake construction projects mainly by subcontracting. In most cases Bidders can readily purchase, lease, or hire equipment; thus, it is usually unnecessary for the assessment of a contractor's qualification to depend on the contractor's owning readily available items of equipment. The pass-fail criteria adopted should therefore be limited only to those bulky or specialized items that are critical for the type of project to be implemented, and that may be difficult for the contractor to obtain quickly. Examples may include items such as heavy lift cranes and piling barges, dredgers, tunnel boring machines, asphalt mixing plants, etc. Even in such cases, contractors may not own the specialized items of equipment, and may rely on specialist subcontractors or equipment-hire firms. The availability of such subcontractors and of the specified equipment should be subject to verification prior to contract award. The terms of any lease or hire agreement for equipment should preferably include provision that the equipment will remain on the site (or be vested in the Employer) in the event of default of the Contractor, thereby ensuring more timely continuity of work by a replacement contractor

2.7 Subcontractors

The experience and financial capacity of the sub-contractors shall not be added to those of the Bidder for purposes of qualification of the Bidder. Not Applicable

SECTION-IV

Bidding Forms

Letter of Technical Bid

The Bidder must accomplish the Letter of Bid in its letterhead clearly showing the Bidder's complete name and address.

Date:

Name of the contract:

Invitation for Bid No.:

To:.....

We, 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 8.
- (b) We offer to execute in conformity with the Bidding Documents the following Works:
- (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 18.1 of the BDS]*** 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.
- (d) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries in accordance with ITB 4.2 and meet the requirements of ITB 3.4, & 3.5
- (e) We are not participating, as a Bidder or as a subcontractor, in more than one Bid in this bidding process in accordance with ITB 4.3(e), other than alternative offers submitted in accordance with ITB 13.
- (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 Employer's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (g) We are not a government owned entity/We are a government owned entity but meet the requirements of ITB 4.5;¹
- (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.
- (i) We declare that we are solely responsible for the authenticity of the documents submitted by us. The document and information submitted by us are true and correct. If any document/information given is found to be concealed at a later date, we shall accept any legal actions by the Employer.
- (j) 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.

- (k) If our Bid is accepted, we commit to mobilizing key equipment and personnel in accordance with the requirements set forth in Section III (Evaluation and Qualification Criteria) and our technical proposal, or as otherwise agreed with the Employer.
- (l) We are committed to submit the Letter of Commitment for Bank's Undertaking for Line of Credit ofMillions at the time of contract agreement, if the bid is awarded to us.

Name:

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

Letter of Price Bid

The Bidder must accomplish the Letter of Bid in its letterhead clearly showing the Bidder's complete name and address.

Date:

Name of the contract:

Invitation for Bid No.:

To:.....

We, 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 8;
- (b) We offer to execute in conformity with the Bidding Documents the following Works:
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is: NRs.; or when left blank is the Bid Price indicated in the Bill of Quantities.
- (d) The discounts offered and the methodology for their application are:.....
- (e) Our bid shall be valid for a period of **[insert validity period as specified in ITB 18.1]** 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;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (g) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:¹

Name of Recipient	Address	Reason	Amount
.....
.....

- (h) 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;
- (i) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive; and

¹ If none has been paid or is to be paid, indicate "None".

(j) We declare that we are solely responsible for the authenticity of the documents submitted by us.

(k) 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.

Name:

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

Table of Price Adjustment Data

[To be used if Price Adjustment is applicable as per GCC 53.1]

Code	Index Description	Source of Index*	Base Value and Date	Employer's Proposed Weighting Range (coefficient)	Bidder's Proposed Weighting (coefficient)**
1	2	3	4	5	6
	Non - Adjustable (A)			0.15	0.15
	Labor (b)				
	Materials (c)				
	Equipment usage (d)				
		Total			1.00

*Normally following source of index shall apply. Public Entity shall choose applicable Index for each item.

- (a) Labor: "National Salary and Wage Rate Index" - "Construction Labor" of Nepal Rastra Bank or rate fixed by District Rate Fixation Committee
- (b) Material: "National Wholesale Price Index" - Construction Materials" of Nepal Rastra Bank
- (c) Equipment usage: "National Wholesale Price Index" - Machinery and Equipment" of Nepal Rastra Bank or "Fuel" Price fixed by Nepal Oil Corporation.

** Bidders proposed weightings should be within the range specified by the Employer in column - 5

Table of Price Adjustment Data

[To be used if Price Adjustment is applicable as per GCC 53.6]

Code	Construction Material*	Unit	Base Price (NRs/Unit) (Ex-factory)	Source (Factory)**
1	2	3	4	5

* Major construction materials to be specified by Employer in column - 2.

** Base Price and source normally to be specified by Employer (or alternatively informed to be proposed by bidder) in column 4 and 5.

Note:

The base prices of the construction materials shall be taken as of 30 days before the deadline for submission of the Bid as quoted by the Bidder and verified by the Employer. For the purpose of calculation of price adjustment, the Ex-factory price of the same source shall be taken into consideration.

Bid Security

Bank Guarantee

Bank's Name, and Address of Issuing Branch or Office
(On Letter head of the Commercial bank or any Financial Institution eligible to issue Bank Guarantee as per prevailing Law)

Beneficiary: **name and address of Employer**

Date: Bid Security No.:

We have been informed that. **[insert name of the Bidder]** (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") to you for the execution of **name of Contract** under Invitation for Bids No. ("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..... **name of Bank** hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of **amount in figures** (**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 Technical and Price 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 Technical Bid and Price 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 27.1 of ITB; or
- (d) having been notified of the acceptance of its Bid by the Employer 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 remain in force up to and including the date **number** days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

This Bank guarantee shall not be withdrawn or released merely upon return of the original guarantee by the Bidder unless notified by you for the release of the guarantee.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

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

Note:

The bid security of has been counter guaranteed by the Bank on (Applicable for Bid Security of Foreign Banks).

Technical Proposal Format

Personnel

Equipment

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Others

Personnel

Form PER - 1: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section III (Evaluation and Qualification Criteria). The data on their experience should be supplied using the Form below for each candidate.

No.	Name	Position*	Academic Qualification	Total Work Experience [Years]	Experience in Similar Works [years]
1.					
2.					
3.					
4.					
5.					

* As listed in Section III (Evaluation and Qualification Criteria).

Form PER - 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Fields with asterisk (*) shall be used for evaluation.

Position*		
Personal Information	Name	Date of Birth
	Professional qualifications	
Present employment	Name of employer	
	Address of employer	
	Telephone	Contact (manager/personnel officer)
	Fax	E-mail
	Job title	Years with present employer

Summarize professional experience over the last twenty years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From*	To*	Company, Project, Position and Relevant Technical and Management Experience*

Note:

In case of e-submission the Resume of Proposed Personnel shall be submitted on notification by the Employer as per ITB 27.

Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

(i) For the equipment under Bidder's ownership

No.	Equipment Type and Characteristics	Total Nos. of Equipment under Bidder's Ownership	No. of Equipment engaged/proposed for ongoing/committed contracts	Nos. of Equipment proposed for this contract
1.				
2.				
3.				
4.				
5.				

(ii) For the Equipment to be leased/hired

No.	Equipment Type and Characteristics	Total Nos. of Equipment under the ownership of lease/hire provider	No. of Equipment engaged/committed for other works	Nos. of Equipment proposed to be leased/hired for this contract
1.				
2.				
3.				
4.				
5.				

Type of Equipment*		
Equipment Information	Name of manufacturer	Model and power rating
	Capacity*	Year of manufacture
Current Status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

The following information shall be provided only for equipment not owned by the Bidder.

Owner	Name of owner
-------	---------------

	Address of owner	
	Telephone	Contact name and title
	Fax	email
Agreements	Details of rental / lease / manufacture agreements specific to the project	

The Bidder shall be solely responsible for the data provided. However, this shall not limit the right of Employer to verify the authenticity of submitted information.

Note:

In case of e-submission the "Agreements" shall be submitted on notification by the Employer as per ITB 27.1

Bidder's Information and Qualification Format

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Others

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section III (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI - 1: Bidder's Information Sheet

Bidder's Information	
Bidder's legal name	
In case of JV, legal name of each partner	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Bidder's authorized representative (name, address, telephone numbers, fax numbers, e-mail address)	
Attached are copies of the following original documents.	
<ol style="list-style-type: none">1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.2. Authorization to represent the firm or JV named in above, in accordance with ITB 20.2.3. In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1.4. In case of a government-owned entity, any additional documents not covered under 1 above required to comply with ITB 4.5.	

Form ELI - 2: JV Information Sheet

Each member of a JV must fill in this form

JV / Specialist Subcontractor Information	
Bidder's legal name	
JV Partner's or Subcontractor's legal name	
JV Partner's or Subcontractor's country of constitution	
JV Partner's or Subcontractor's year of constitution	
JV Partner's or Subcontractor's legal address in country of constitution	
JV Partner's or Subcontractor's authorized representative information (name, address, telephone numbers, fax numbers, e-mail address)	
Attached are copies of the following original documents.	
<ol style="list-style-type: none">1. articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.2. Authorization to represent the firm named above, in accordance with ITB 20.2.3. In the case of government-owned entity, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.	

Form LIT - 1: Pending Litigation

Each member of a JV must fill in this form

Pending Litigation			
<input type="checkbox"/> No pending litigation in accordance with Criteria 2.2 of Section III (Evaluation and Qualification Criteria)			
<input type="checkbox"/> Pending litigation in accordance with Criteria 2.2 of Section III (Evaluation and Qualification Criteria)			
Year	Matter in Dispute	Value of Pending Claim in NRS	Value of Pending Claim as a Percentage on Net Worth

Form FIN - 1: Financial Situation

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

Financial Data for Previous 3 Years [in NRS]		
Year 1 :	Year 2 :	Year 3 :

Information from Balance Sheet

Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			

Information from Income Statement

Total Revenues			
Profit Before Tax			
Profit After Tax			

- Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last three or above years, as indicated above, complying with the following conditions.
- All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.
- Historic financial statements must be audited by a certified auditor.
- 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).

Note:

In case of e-submission the attachments should not be uploaded but shall be submitted on notification by the Employer as per ITB 27.1

Form FIN - 2: Average Annual Construction Turnover

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

The information supplied should be the Annual Turnover of the Bidder or each member of a JV 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.

Annual Turnover Data for the Last 10 Years (Construction only)	
Year	Amount Currency

- **Average Annual Construction Turnover
(Best three years within the last 10 years)**

--

Form FIN - 3: Bid Capacity

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

$$\text{Bid Capacity} = [(7 \times A) - B]$$

A = Average Annual Turnover of best three years out of last ten fiscal years.

B = Annual Value of the existing commitments and works (ongoing) to be completed, calculated from **FIN-4**.

SN	Name of Bidder	Pan No.	A, in Million	B, in Million	Bid Capacity, in Million
1					
2					
3					

Total Bid Capacity :

Signature of Bidder

Form FIN-4: Current Contract Commitments / Works in Progress

Bidders and each partner to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Current Contract Commitments (For Calculation of B with reference of FIN-3)									
No.	Name of Contract	Name of the Contractor/s	Employer's Contact Address, Tel, Fax	Contract Share in % (a)	Contract Amount in Millions (b)	Contract Date(yyyy-mm) (c)	Initial or Revised Contract Duration (months) (d)	Value of outstanding works [In Millions,NRS]# (e)	Estimated Time in Month to Complete the outstanding works (f) = (c) + (d) – Date of Invitation of Bid (f)
1									
2									
3									
4									

Signature of Bidder

The Outstanding Works means Contract Price (excluding Vat) minus Work Evaluated by Employer till the reference date. Bidder shall have to submit the relevant documentary evidence to substantiate the facts/figures.

Note 1: “B” shall be calculated as : $B = \sum \left[\frac{(e) \times (a)}{(f)} \right] \times 12$, If (f) is less than 12, then value of (f) shall be taken as 12.

Note 2: If Initial or Revised Contract Date is run out with respect to Date of Invitation of Bid, the Estimated Time in Month to Complete the outstanding works shall be taken equal to 12 months.

Form EXP - 1: General Construction Experience

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

General Construction Experience				
Starting Month Year	Ending Month Year	Year	Contract Identification and Name and Address of Employer Brief Description of the Works Executed by the Bidder	Role of Bidder

Form EXP - 2(a): Specific Construction Experience

Fill up one (1) form per contract.

Contract of Similar Size and Nature			
Contract No..... of.....		Contract Identification	
Award Date		Completion Date	
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total Contract Amount	<input type="checkbox"/> NRS		
If Partner in a JV or subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's Name Address Telephone/Fax Number E-mail			
Description of the similarity in accordance with Criteria 2.4.2 (a) of Section III			
<p>Note : <i>The Employer should insert here contract size, complexity, methods, technology, or other characteristics as described in Section VI (Work Requirements) against which the bidder demonstrates similarity in the box on the right-hand-side.</i></p>			

Form EXP - 2(b): Specific Construction Experience in Key Activities

Fill up one (1) form per contract.

Contract of Similar Size and Nature			
Contract No..... of.....	Contract Identification		
Award Date		Completion Date	
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total Contract Amount	<input type="checkbox"/> NRS		
If Partner in a JV or subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's Name Address Telephone/Fax Number E-mail			
Description of the similarity in accordance with Criteria 2.4.2 (a) of Section III			
Note : <i>The Employer should insert here production rate(s) for the key activity (activities) subject contract against which the bidder demonstrates in the box on the right-hand-side production rates achieved by him on previous contracts.</i>			

Description of the similarity in accordance with Criteria 2.4.2 (a) of Section III

Participation as Prime contractor, management contractor, or subcontractor, in at least . Contracts within the last ten (10) years, each with a value of at least NRs 100,000,000 that have been successfully or are substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods, technology or other characteristics as described in Section VI, Works Requirements. Single entity must meet requirements. In case of joint venture, all partners combined must meet requirements. Document required: Form EXP-2(a)

Form EXP - 2(b): Specific Construction Experience in Key Activities

Fill up one (1) form per contract.

Contract of Similar Size and Nature			
Contract No..... of.....	Contract Identification		
Award Date		Completion Date	
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total Contract Amount	<input type="checkbox"/> NRS		
If Partner in a JV or subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's Name Address Telephone/Fax Number E-mail			
Description of the similarity in accordance with Criteria 2.4.2 (a) of Section III			
Note : <i>The Employer should insert here production rate(s) for the key activity (activities) subject contract against which the bidder demonstrates in the box on the right-hand-side production rates achieved by him on previous contracts.</i>			

Description of the similarity in accordance with Criteria 2.4.2 (b) of Section III

For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum construction experience in the following key activities :

- (1) Direct Buried Fiber Deployment .
- (2) WiFi Network and operation.

Single entity must meet requirements. In case of joint venture, all partners combined must meet requirements. Document required: Form EXP-2(b)

SECTION-V

Eligible Countries

ELIGIBLE COUNTRIES

This section contains the list of eligible countries. Select one option, either GoN Funded or DP Funded.

For GoN funded: [with estimate upto NRs. 1 Billion]

For the purpose of ITB 4.2: Nepal and

For the purpose of Country of Origin ITB 5.1 and GCC 79.2: All Countries

For DP funded: [attach list as per their list of eligible countries]

Part II: Bidding Procedures

Table of Clauses

Scope of Work	
Specifications	
Notes on the Specifications	
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Preamble of Bill of Quantities	
A. General.....	
B. Day work Schedule	
Provisional Sums	
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SECTION-VI

Works Requirements

Terms of Reference

1. Purpose of the Service:

With the introduction of Worldwide Interoperability for Microwave Access (WiMAX) and 4G services, some tourist destinations are connected but the speed of connection and reliability is a major concern. ICT Policy 2015 has envisioned the extension and expansion of ICT infrastructure and services in all major tourists' destinations throughout Nepal. Nepal Telecommunications Authority (NTA) has planned for the wide expansion of internet coverage in these places. NTA has identified some historic, cultural, religious and tourist destinations/places in annual program of fiscal year 2078/79 to provide Wi-Fi services.

All Applicants are advised to study current MIS report of NTA at www.nta.gov.np to explore the present status of Nepalese ICT markets.

2. Breakdown of the Assignment:

The identified places are Manaslu circuit. In order to provide Wireless Fidelity (Wi-Fi) services in these selected places, NTA has planned to select operators through competitive bidding process.

3. Network Roll-out Requirements

The SLO shall build broadband connectivity to all sites in accordance with the following schedules:

Installation of services must commence within nine months of the effective date of the Authorization. The broadband connectivity network must be installed in all stations listed in accordance with the following schedule:

- a) 50% of Work : within 3 months from the date of signing of the contract and
- b) Remaining 50% of work: within 6 months from the date of signing of the contract.
- c) Force Majeure: if an independent technical consultant appointed by the NTA, provides written confirmation to NTA that one or more events of force majeure prevented the installation, activation or operation of some of the broadband connectivity networks required under this TOR, then the obligations shall be modified accordingly; provided, however, that the responsibility of the ISP for the installation, activation and operation of the broadband connectivity network shall remain i NTAct during the tenure of the contract, on improvement of the conditions giving rise to the event of force majeure.

Failure to Meet Roll-out Requirements – Failure to meet the network roll-out requirements may result in the imposition of one or more of the following penalties:

- i) loss of eligibility for the Financial;
- ii) forfeiture of the Performance Security pursuant to GCC 17;
- iii) termination of the contract;
- iv) the imposition of fines for breach of ISP licence conditions pursuant to the Act; and
- v) the forfeiture of all the equipment, land and other assets related to this service.

Force Majeure – The penalties specified above shall not apply if the roll-out delay results solely from an event of *force majeure*.

Rollout Obligation

The SLO shall build broadband connectivity to all sites

4. Minimum Quality Standards

The minimum quality standards shall be as follows:

5.1 Optical Fiber Cable Specifications

Different attributes for the Fiber like mode field diameter, cladding diameter, Core concentricity error, non-circularity, Cut-off wavelength, macro-bending loss, material properties of the Fiber, refractive index profile, chromatic dispersion coefficient attenuation coefficient, polarization mode dispersion, are specified as a minimum essential parameters for Fiber manufacture of a single mode optical Fiber cable in the ITU-T Recommendation G.652, ITU-TL1700 & L. Supplement 22 (Pub. 2016) and Annex 2 Technical Specification of this BID. The successful Applicant shall install minimum of 6 core fiber cable.

5.2 Field Proveness of Fiber and Equipment:

NTA assumes that SLO shall construct OFN (wherever possible) with components and workmanship at international quality as specified in ITU/IEEE and Annex 2 Technical Specifications.

5. Termination Standard

9.1 System structure and functions

SLO shall follow minimum technical specifications specified in Annex 2 for Network.

9.2 In addition to Section X, Annex 2, the SLO shall meet the following standards:

a) Operation and Maintenance

Operation and maintenance of the network shall be controlled and performed by an Operating System. It is required that broadband connectivity access network element is

managed according to Telecommunication Managing Network (TMN) and internationally practiced rules.

b) Services and Penalties

The minimum service quality criteria shall be as follows:

i) Service Availability - The SLO shall ensure that the broadband connectivity network is available 24hrs a day throughout a year to its customers.

ii) Service Obligation - The SLO shall ensure that the services are made available through the installation, activation and operation of broadband connectivity access network lines through shared or dedicated leased optical cable to its customers that shall be retained and continued throughout the period of the authorization validity.

iii) Failure to meet service quality and availability obligations – The failures of the SLO to meet the obligations specified in this section shall result in the imposition of penalties for breach of contract and Authorization conditions and other applicable penalties stipulated in the Act. However, the penalties shall not apply if the failure results solely from an event of force majeure.

6. Mandatory Service:

The SLO shall provide its broadband access connectivity network.

7. Wi-Fi Infrastructure Setup and Operations Guidelines:

- The successful SLO shall build the network within 6 months of successful contract award.
- The SLO shall operate, manage and monitor the Wi-Fi network for 5 years.
- SLO shall lay the appropriate data (Fiber/CAT 6 UTP) power cables to connect the devices either outdoor or indoor. The cables and enclosures can be overhead with proper cable management along with marking and tagging at both end of the cables.
- SLO shall lay underground cables if overhead is not feasible.
- SLO shall propose appropriate location to setup power and network aggregation and distribution points.
- SLO shall post at least one Free Wi-Fi Logo within the Wi-Fi coverage area.
- The SLO shall provide dedicated internet bandwidth in those location with mentioned speed. Bandwidth should be separately assign for per site.
- The SLO shall give x5 time of local and cached bandwidth to the successful authenticated users.

SN	Site-name	Dedicated Bandwidth	Cached and Local Bandwidth

- SLO shall broadcast SSID in dual band with band steering capability and the users shall be provided seamless roaming between all the Access Points without requiring re-login once authenticated. The name of SSID will be provided by NTA.
- The Management of the AP/router/switch shall be done through separate secure private channel
- SLO shall implement One Time Password (OTP) from SMS to authenticate and provide free Wi-Fi access.
- SLO shall provision to provide coupons to those who dose not have mobile, collecting and recording all the required identification document.
- SLO shall implement voucher or coupon based and social login on demand by NTA
- The secure Captive Portal shall provide option to sign up for the service and allow users to register their details with their Mobile number. After successful registration, the username and password shall be sent over by SMS or voucher and coupon based. The user shall be provide default 15 minutes 1Mbps package successful authentication.
- The SLO shall allow User to purchase multiple approved packages via online or should able to purchase diffrent tarrif coupons.
- Each user shall be allowed to use only one simultaneous sesión.
- The Captive portal shall have option to authenticate employee of respective organization using their official credentials
- The Captive portal shall have capability to display government banners, announcement, advertisement, promotions, news and survey forms on demand in text, image and video content.
- The portal shall also have ability to provide additional access or package offer for the users on reading or watching the content or responding to the government survey for example.
- The content in the captive portal shall be targeted and dynamically changed based on AP, Geo Location, SSID, VLAN and device and user types etc.

- The package offered and its attributes, content in Captive portal shall be changed by NTA time to time.
- SLO shall keep all the user's session details such as logs, application usage, device details, proximity, location tracking for forensic and analytics for 3 months, old data shall be archived by NTA to historic analytics.
- The SLO shall broadcast and manage sponsored SSID, Captive Portal Branding, Wi-Fi offloading in different VLAN, Bandwidth Profile and paid models.
- The SLO shall install all required network monitoring tool, MRTG, WLAN controller, Log analyzer and billing software and provide required report to NTA as NTA request.
- The SLO must prepare monthly downtime report of each equipments and sites, Day wise report of maximum and minimum Number of concurrent users and Bandwidth utilization report. Report should be stored at least for a year.
- The SLO shall setup 24x7x365 support center with hotline number to solve user's problem.

8. Regulation of Other Internet Service Providers

The network access to the other internet service providers shall be regulated by NTA to ensure that existing internet service providers do not abuse their possible dominant position. In particular, NTA will regulate other internet service providers to ensure that they do not unfairly discriminate against the SLO and do not grant anti-competitive preferences or cross-subsidise its own internet/data network leasing charge with other infrastructure.

9. Authority to Construct and Use Facilities

Subject to the other terms of the contract and Authorization, the SLO may construct all ICT facilities required to provide the broadband access connectivity services. The SLO may also use the facilities of licensed ISPs/telecommunications service providers or the facilities of any other Persons that are located in Nepal, for the purposes of providing the services. Use of such facilities may be obtained from the other operators or Persons by agreement with them.

The Qualified Applicant must submit the locations of its Access Points/nodes to be established.

Unless otherwise approved by NTA, all ICT facilities and equipment installed by the SLO in its ICT System shall be new when first installed and shall, so far as reasonably practicable, be state of the art technology that complies with internationally recognized standards. Interoperability and upgradability shall be ensured by SLO.

The SLO shall be free to procure the goods, works and services required for its internet/data network services using its own procurement procedures conforming to the existing laws of Nepal.

10. Fees Payable by the SLO

Annual Royalty to be paid to GoN- The SLO shall pay a royalty fee of 4% (four percent) of the SLO's adjusted gross annual revenues in each fiscal year. This Royalty is due 3 (three) months following the end of each fiscal year.

Rural Telecommunications Development Fund ("RTDF") - The SLO shall contribute 2% (two percent) of its adjusted gross annual revenues, to the fund established by the NTA pursuant to subsection 30(4) of the Act. This payment is due 3 (three) months following the end of each fiscal year.

11. Letter of Appreciation

Letter of appreciation will be given to the ISP Licensee if the work is completed prior to the time mentioned in the contract.

12. Schedule

The timetable for the BID process is set out below.

Event	Days Start From	Calendar Date
BID document available for purchase		
Deadline for questions and clarification		
Pre-Application Meeting		
Issue minutes of clarification		
Deadline for submission of Applications and Opening		
Evaluation of the Applications Starts		
Issue of LOI to the Qualified Applicant with lowest Financial Application		
Issue of Letter of acceptance		
Contract Award (Issuance of Authorization)		
Network Roll-out Each Package Completion		
Completion and start of services		

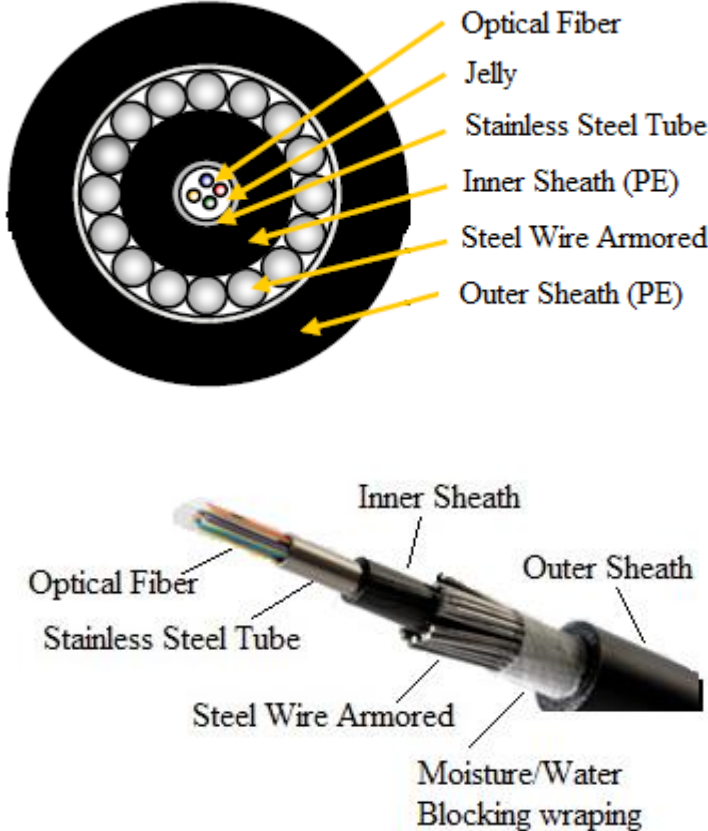
If the scheduled day of an event falls on a legal holiday in Nepal, the day of the event will be the next calendar day following the holiday.

Detail Technical Specifications of Optical Fiber Cable and Accessories

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
1	<p>General This specification deals with 48 core Single Mode Direct Buried Optical Fiber to be used in various areas of Nepal for the purpose of carrying voice/data traffic. The bidders are required to refer to the relevant technical specifications for the items required as per tender.</p> <p>The offered fiber cables shall comply with Rec. ITU-T L.110 and other relevant ITU-T recommendations.</p> <p>The cables shall be used in conjunction with IP Backbone (at the rate of 10 Gbps at present and 40/100 Gbps in the future), SDH Optical line cable and GSM/CDMA/3G/4G Networks.</p>	
2	<p>Scope</p>	
2.1	This specification deals with the constructional requirements, and optical properties of single mode optical fibers and all the associated accessories used in the laying of optical fiber cables.	
2.2	All requirements stated in the general conditions for technical specification are integral part of this specification.	
3	<p>Reference</p>	
3.1	<p>This specification requires reference to the following standard specifications. (Latest issue)</p> <p>(a) General conditions for the Nepal Telecom Authority's specification. (b) Rec. ITU-T L.110 with latest revisions. (c) BS 6234: 1987.</p>	
4	<p>Cable Life The fibre and cable shall be designed for a life expectancy of at least thirty (30) years without serious degradation of the performance or reliability when maintained in accordance with the manufacturer's recommendations and when operated in the environmental condition as stated in: General Conditions of Optical Fiber Cable and Accessories The prospective bidder shall submit all possible details and calculations to justify the</p>	

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
	guaranteed thirty (30) years minimum life expectancy of the offered cables under normal operational conditions for the Nepal Telecom Authority's verifications.	
5	Cable Construction	
5.1	Fiber	
5.1.1	The fibers shall be made from high-grade silica or compound glass. The Bidder shall submit full details of the composition of the fibers and of the manufacturing process.	
5.1.2	The geometric and optical properties of the fiber shall be in accordance with table below.	
	Mode field diameter (μm) at 1310 nm	8.6-9.5 \pm 0.6 (Rec. ITU-T G652D)
	Cladding diameter (μm)	125 \pm 1
	Maximum mode field /core concentricity error (μm)	0.8
	Coating diameter (μm)	245 \pm 10
	Maximum Cladding non-circularity	2%
	Maximum cut-off wavelength (nm)	1260
	Chromatic dispersion co-efficient	$\lambda_{0\text{min}}$ 1300 nm
		$\lambda_{0\text{max}}$ 1324 nm
		$S_{0\text{max}}$ 0.092 ps/nm ² x km
	Maximum attenuation range dB/km at 1310 nm/ 1550 nm	0.38/0.22
Cable Attributes		
	Attenuation coefficient maximum at 1310 nm and 1550 nm	0.4dB/km and 0.35 dB/km
PMD Coefficient	M 20 Cables	
	Q 0.01%	
	Maximum PMD_Q	

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
	0.20 ps/√km	
5.1.3	The loss increase of 100 turns of fiber, loosely wound with a 300 mm radius shall be less than 0.5 dB at wavelengths of 1310/1550 nm.	
5.1.4	The manufacturer shall supply a PMD link design value, PMD _Q , which serves as a statistical upper bound for the PMD coefficient of the concatenated optical fiber cables.	
5.1.5	The offered cables shall be used for NGN based Access Network, IP backbone and SDH systems (operating up to bit rate of 10 Gb/s at present and up to 40 Gbps in the future and DWDM systems supporting up to 100 lambdas.) and GSM/CDMA/3G/4G Networks.	
5.1.6	<i>THE NOMINAL OPERATING WAVELENGTH OF THE SYSTEMS IN THIS PROJECT SHALL BE 1310 NM, (WITHIN THE REGION OF 1280-1330 NM.). THE FIBERS SHALL BE ABLE TO SUPPORT FUTURE SYSTEMS IN THE 1550 NM REGION (THAT IS, DWDM WAVELENGTH REGION). THE BIDDER SHALL SUPPLY FULL DETAILS OF THE FIBER PERFORMANCE AT BOTH WAVELENGTHS.</i>	
5.1.7	Coating	
5.1.7.1	A dual protective Ultra Violet (UV) curable primary coating shall be applied to the fiber. The Bidder may offer alternative materials with details regarding its performance.	
5.1.7.2	Removal of the primary coating for the jointing shall be achieved without the use of chemicals. A simple mechanical operation shall be sufficient to prepare the fiber for jointing.	
5.2	Cable structure	
*5.2.1	The offered ofc cable shall be High Strength Steel Wire armored.	
*5.2.2	The fibers shall be protected in a continuous stainless steel tube instead of plastic tube. The quality of such a stainless steel tube must be SS304 and test certificate of such stainless steel tube must be obtained from Nepal Bureau of Standards and Metrology	
*5.2.3	There shall be two layers of PE sheath ; outer sheath and inner sheath; the outer sheath covers the Steel Wire armor and inner sheath covers the stainless steel tube.	

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant						
*5.3.4	The fiber shall be moisture/water proof. There shall be water proofing layer.							
*5.3.5	<p>The detail structure of the fiber shall be as shown.</p> 							
5.3.6.	The sheath shall be free of pinholes, joints and other defects. It shall be circular in shape. Thermoplastic cylinder may be used as filler for circular core formation.							
5.3.7	<p>Construction and mechanical requirements of the duct cable shall be as per the table below.</p> <table border="1" data-bbox="354 1724 1192 1904"> <tbody> <tr> <td>Maximum weight (kg/km)</td> <td>200</td> </tr> <tr> <td>Allowable Bending radius (mm)</td> <td>20D</td> </tr> <tr> <td>Minimum tensile load (N)</td> <td>3500</td> </tr> </tbody> </table>	Maximum weight (kg/km)	200	Allowable Bending radius (mm)	20D	Minimum tensile load (N)	3500	
Maximum weight (kg/km)	200							
Allowable Bending radius (mm)	20D							
Minimum tensile load (N)	3500							

Clause No.	Particulars of Nepal Telecom's Requirements			Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
	Minimum crush resistance (N/100mm)	5000		
*5.8.3	<p>Identification</p> <p>Following information shall be embossed or printed on the cable sheath at intervals of 1 m throughout the whole length of the cable to enable the identification of cable. The embossed or printed marking shall be distinct to naked eye from a distance of not less than 50 cm.</p> <p>(i) Type and size of cable</p> <p>(ii) Progressive length marking</p> <p>(iii) Year of manufacturing</p> <p>(iv) Manufacturer's name</p> <p>(v) NEPAL TELECOM AUTHORITY</p> <p>(vi) Laser symbol or text identifying the cable as optical fiber cables.</p> <p>(vii) Contract Number</p>			
5.8.4	<p>Sealing and marking ends</p> <p>After testing, the ends of each length of cable shall be enclosed in securely attached, tightly fitting caps having wall thickness and overall length of not less than 2 mm and 50 mm respectively.</p>			
5.8.5	<p>Color Code</p> <p>The color code for the identification of fiber shall be as per standard practice.</p>			
*6	<p>Tests</p> <p>Tests on the finished cables shall be made to prove compliance with all requirements of this specification. The Bidder shall submit full details of quality assurance procedures, which shall ensure that the cable fully comply with the requirements of the specification. The Bidder shall guarantee that the materials used for production of the fibers and coating shall be of the same origin for all cables. Combination of fibers and coating from different suppliers is not acceptable.</p>			
6.1	Tests For Geometrical, Optical & Transmission Characteristics			

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
6.1.1	<p>Geometric tests shall include the following :</p> <ul style="list-style-type: none"> – Mode field diameter. – Cladding diameter – Mode field concentricity – Cladding non-circularity – Primary coating diameter.(Measuring method: Specialized Optical Geometry Equipment) 	
6.1.2	<p>Optical properties test of the fiber shall include the following :</p> <ul style="list-style-type: none"> – Refractive index profile – Maximum theoretical numerical aperture. – Cut off wavelength – Backscattering 	
6.1.3	<p>For each production length, to be delivered in Nepal, the following measurements shall be performed and random sampling shall be provided:</p> <ul style="list-style-type: none"> – Attenuation at 1310 nm and 1550 nm. – Chromatic dispersion at 1310 nm and 1550 nm. 	
6.1.4	The Bidder shall indicate and explain the test method at the time of submission of the bid.	
6.1.5	Independently certified test records of the specified materials, components or assembled cable parameters shall be submitted.	
6.1.6	The detailed test reports for each drum of cable shall be submitted on or before delivery of cables.	
6.2	Mechanical Test	
6.2.1	<p>The following mechanical and physical tests shall be carried out on the cables as per ITU-T L.110</p> <ul style="list-style-type: none"> – Tensile performance – Crush 	

Clause No.	Particulars of Nepal Telecom's Requirements	Bidder shall state as : Fully Compliant / Partially Compliant/Non Compliant
	<ul style="list-style-type: none"> – Impact – Repeated bending – Torsion – Flexibility – Snatch – Kink – Cable bend – Stainless Steel 	
6.2.2	<p>The construction of protective cover of the cable shall be of good engineering practices with respect to:</p> <ul style="list-style-type: none"> – Air tightness – Resistance to water penetration – Flexibility within a temperature range of –5° c to + 50° C – Mechanical stability – Chemical resistance – Small diameter, light weight 	
6.2.3	The Bidder shall indicate and explain the test method at the time of submission of the bid.	
6.2.4	<p>Conditions of measurement and test</p> <p>All the measurements shall be carried out at a temperature of 20 + 5 degree C. Before the measurement is done, the test cable shall be stored at the measuring temperature for a sufficient time to allow the cable to reach this temperature. If measurement is done at different temperature, the result shall be corrected to 20 ° C.</p>	

Technical Specifications

The problems/limitations that the project faced can be enumerated as follows:

i. Tower

The towers shall be four legged and able to support the loading of the antennas as per the site. It shall be operational and able to withstand the wind velocity corresponding to wind 180 Km/Hr of IS: 875 (Part 3) (1987). All the parts are to be hot dip galvanized as per IS: 4759 (1996). Zinc for galvanizing should conform to IS: 13229- 1991 or IS: 209 (1992).

Tower can be setup Ground Based Towers (GBT), Roof Top Towers (RTT) as per the requirement of site. Other Standard of tower should build as per the government standard.

ii. Server

Server AAA billing

Features	Minimum Technical Specification
Form Factor	Rack/Tower
Processor	Xeon Processor, Quad Core
Memory	8 GB
Storage	1TB SSD
Controller	Internal Raid Controller
Power Supply	Redundant Power Supplies
USB Ports	4
Remote Management	Yes
Others	ECC memory, hot-plug hard drives, hot-plug redundant cooling, hot-plug redundant power, tool-less chassis, support for virtualization

NMS Server

Features	Minimum Technical Specification
Form Factor	Rack/Tower
Processor	Xeon Processor, Quad Core
Memory	8 GB
Storage	1TB SSD
Controller	Internal Raid Controller
Power Supply	Redundant Power Supplies
USB Ports	4
Remote Management	Yes
Others	ECC memory, hot-plug hard drives, hot-plug redundant cooling, hot-plug redundant power, tool-less chassis, support for virtualization

NAT log

Features	Minimum Technical Specification
Form Factor	Rack/Tower
Processor	Xeon Processor, Quad Core
Memory	8 GB
Storage	6TB SSD

Controller	Internal Raid controller
Power Supply	Redundant Power Supplies
USB Ports	4
Remote Management	Yes
Others	ECC memory, hot-plug hard drives, hot-plug redundant cooling, hot-plug redundant power, tool-less chassis, support for virtualization

iii. Application

Features	Minimum Technical Specifications
RADIUS Server	PAP or CHAP support
	Supports MySQL or Oracle Database
Authentication	Login through mobile app/ web-based
	Device based auto-login
	MAC Based Auto Login
Authorization	Based on MAC and IP address
	Re-Authorization Functionality
Accounting	On hours, days, data transfer
Bandwidth Management	Tiered Bandwidth Management
	Committed and Burstable Bandwidth

	Individual and Shared Bandwidth Quota
	Bandwidth Scheduling & Fair Usage Policy
	Restrict Users Based on Data and Bandwidth
User Management	Complete User Life Cycle Management
	Account ID based User Credentials
	Demographic Field Option
	Create Activate Suspend Renew Archive Users
	User Management Based Reports
	User My Account
Package Management	Prepaid & Post-paid packages
	Create hourly and Day based plans
	Registration & Renewal packages
	Facility to Carry-Forward Quota
	Facilitates Top-up for prepaid plans
Internet Billing	Time Quota Based Billing
	Peak & Off-peak Billing
	Pulse Based Rating
	Pre-paid and Post-paid Billing
	Customizable Invoice Template

	Tax and Discount Facility
Coupon Management	Branding & Customizable Coupon Templates
	Create Package & Area wise Coupons
	Facilitates Online Coupon Purchase
	Instant coupon generation in printable formats
	System generated username & passwords
	Pin Aging - Coupons with expiry date
Captive Portal Capabilities	Create Customizable Login Pages (HTTP enabled)
	Device Based Login Pages (Mobile/Laptop)
	Create Page for SMS OTP based login
	User Self Registration
	Promotions and Branding options
Administration	Role Based Multiple Level Administration (ACL) For Admin GUI & Console
	Change Password Options
	Syslog Configurations
	Data Backup and Restore
	Network Management Options
	Multi-functionality Dashboard Facility
	Ease of Admin Interface

	Quick Configuration Options
Reporting	Admin GUI Usage Log - Audit Reports
	Syslog Integration
	Reports in CSV/ Printable/ Graphical/ PDF
	Diagnostic and System Health Check Tools
	MIS & BI Reports
Area Management	Create Multiple Area In Network
	Create Single or Multiple Area
	Area Based: Package Vouchers Invoice MIS Reports
	Area Based Payment Tracking
Payment Gateway	Facilitates Online Payment Receivables
	Flexible to Integrate with any Payment Gateway
Third Party Integrations	CRM Integration
	Third Party Access Controller & Authentication System
	Attribute Mapping
Alert Management	Email Based Alerts
	Event based Customizable Email Templates
	Schedule Alerts for Renewal/Package Expiry
SMS Based Alerts	Click-n-Configure SMS Gateway

	Manage, Try and Create Facility
	Facilitates Different Message Templates
	Send Message at Different Events & Register/ Renew/ Login/ Logout
	Offers Complete log of SMS Sent
	SMPP Support
	Alert Users in-case of Login/ Logout/ Package Expiry etc.
Pop-up window for Live Users	Pop-up Live Message for Network or Technical Problems
	Bill Payment and Promotional Message

iv. Switch

Features	Minimum Technical Specifications
Ports	24 RJ-45 Connectors for 10BASE-T/100BASE-TX/1000BASE-T with Minimum 4 SFP Either Combo or separate
	Auto Medium Dependent Interface (MDI) and MDI Crossover (MDI-X)
	Auto Negotiate/Manual Setting
Minimum Switching capacity	32 Gbps, Nonblocking
MAC table size(minimum)	8000
Minimum Number of VLANs	256 active VLANs (4096 range)
Layer 3 options	Static Routing
	CIDR (Classless Interdomain Routing)

	128 Static Routes
	IPv4
	Forwarding in Silicon Wire-speed Forwarding of Layer 3 Traffic
IPv6	Dual IPv6/IPv4 Stack
IPv6 ACL	Drop or Rate Limit IPv6 packets
IPv6 QoS	Prioritize IPv6 packets in hardware
Web User Interface	Built-in Web User Interface for Easy Browser-based Configuration (HTTP/HTTPS)
SNMP	SNMP Versions 1, 2c, and 3 with Support for Traps
Port mirroring	Traffic on a Port Can be Mirrored to Another Port for Analysis with a Network Analyzer
Other management	Traceroute
	Single IP Management
	SSL Security for Web User Interface
	SSH
	RADIUS
	Port Mirroring
	TFTP Upgrade
	Dynamic Host Configuration Protocol (DHCP) Client
	BOOTP
	Simple Network Management Protocol (SNMP)

	Xmodem upgrade
	Cable diagnostics
	Ping
	Syslog
	Telnet client (SSH secure support)
IEEE 802.1X	802.1X – RADIUS authentication; MD5 hash
	Guest VLAN
	Single/multiple host mode
Access Control	<p>ACLs – drop or rate limit based on:</p> <ul style="list-style-type: none"> • Source and Destination MAC-based • Source and Destination IP address • Protocol • Port
	VLAN
	Differentiated Services Code Point (DSCP)/IP Precedence
	TCP/ User Datagram Protocol (UDP) Source and Destination Ports
	802.1p Priority
	Ethernet Type
	Internet Control Message Protocol (ICMP) Packets

	Internet Group Management Protocol (IGMP) Packets
	Up to 1018 Rules
Link Aggregation	Link Aggregation using IEEE 802.3ad LACP
	Up to 8 ports in up to 8 groups
Storm Control	Broadcast and Multicast Storm Protection
DoS Prevention	DoS Attack Prevention
Spanning Tree	IEEE 802.1D Spanning Tree
	IEEE 802.1w Rapid Spanning Tree
	IEEE 802.1s Multiple Spanning Tree, Fast Linkover
IGMP Snooping	IGMP (versions 1 and 2) Snooping Limits Bandwidth-intensive Video Traffic to Only the Requestors
Priority Levels	4 Hardware Queues
Scheduling	Priority Queuing and Weighted Round-robin (WRR)
Class of Service	Port based
	802.1p VLAN Priority based
	IPv4 IP Precedence/ ToS/ DSCP based
	DiffServ
	Classification and Re-marking ACLs
Rate limiting	Ingress Policer
	Egress Rate Control

Operating Temperature	32° to 104°F (0° to 40°C)
Storage Temperature	-4° to 158°F (-20° to 70°C)
Operating Humidity	10% to 90% Relative Humidity, Noncondensing
Storage Humidity	10% to 95% Relative Humidity, Noncondensing
Acoustic Noise	55 dB Max.
Power	100–240V AC, 50–60 Hz; Should be Equipped with Redundant power Supply
Warranty	At least of one year warranty on hardware

v. Router

Features	Minimum Technical Specifications
Minimum Throughput	500 Mbps
Minimum WAN or LAN (10/100/1000Mbps)	4
Minimum DRAM (data plane)	2GB
Minimum DRAM (Control/ Services Plane)	2GB
Minimum Flash Memory	1GB
Power Supply	AC
Redundant Power Supply	Yes

Protocols	IPv4, IPv6, static routes, Routing Information Protocol Versions 1 and 2 (RIP and RIPv2), Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), BGP Router Reflector, Intermediate System-to-Intermediate System (IS-IS), Multicast Internet Group Management Protocol Version 3 (IGMPv3), Protocol Independent Multicast Sparse Mode (PIM SM), PIM Source Specific Multicast (SSM), RSVP, IPSLA, Call Home, EEM, IKE, ACL, EVC, DHCP, FR, DNS, LISP, OTV[6], HSRP, RADIUS, AAA, AVC, Distance Vector Multicast Routing Protocol (DVMRP), IPv4-to-IPv6 Multicast, MPLS, Layer 2 and Layer 3 VPN, IP sec, Layer 2 Tunneling Protocol Version 3 (L2TPv3), Bidirectional Forwarding Detection (BFD), IEEE802.1ag, and IEEE 802.3ah
Encapsulations	Generic routing encapsulation (GRE), Ethernet, 802.1q VLAN, Point-to-Point Protocol (PPP) and PPP over Ethernet (PPPoE)
Traffic Management	QoS, Class-Based Weighted Fair Queuing (CBWFQ), Weighted Random Early Detection (WRED), Hierarchical QoS, Policy-Based Routing (PBR), Performance Routing, and NBAR.
Cryptographic Algorithms	Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes); Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit); Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512
Warranty	At least of one year warranty on hardware

vi. Ethernet Cable

Ethernet cable should be as per ANSI/TIA-568A/ TIA-568A Category 6 specification

vii. Optical Fiber

Fibers inside the cable must not contain any factory splices. Further, fibers of different manufacturers must not be used in the same cable. The fiber coating shall be strippable for splicing and termination.

Features	Minimum Technical Specification
Mode Field Diameter (μm) at 1310 nm	$9\sim 10 \pm 10\%$ (ITU-T rec.G652D)
Cladding Diameter (μm)	125 ± 1
Maximum Core Concentricity Error (μm)	0.6
Coating Diameter (μm)	245 ± 5
Maximum Cladding Non-circularity	1%
Maximum Cut-off Wavelength (nm)	1260
Maximum Chromatic Dispersion at 1310 nm	3.5 ps/nm.km
Maximum attenuation range dB/km at 1310/1550 nm	0.36/0.22
Macro bend Loss	@ 1310 nm (75 \pm 2 mm dia Mandrel), 100 turns; Attenuation Rise \leq 0.05 dB @ 1550 nm (30 \pm 1 mm radius Mandrel), 100 turns; Attenuation Rise \leq 0.05 dB
Zero Dispersion Slope	$\leq 0.092 \text{ ps/nm}^2 \times \text{km Polarization}$
Mode Dispersion Coefficient	$\leq 0.2 \text{ ps/km}^{1/2}$

Standards	ITU-T G.652
Others	The loss increase of 100 turns of fiber, loosely wound with a 37.5 mm radius shall be less than 0.05 dB at wavelengths of 1310 nm.

viii. Rack

Features	Minimum Technical Specification
Power Socket	Inclusive of Power Socket
Fan	Inclusive of Fan
Mount	Standing Rack or Easy Wall Mount Provision
Warranty	One Year on Both Parts and Service

ix. Access Point

Features	Minimum Technical Specification
Standards	IEEE 802.11a/b/g/n/ac/wave-2 Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM
Frequency Bands	2.400 to 2.2484 GHz, 5.725 to 5.850 GHz (Country-specific limits apply, some bands require DFS) (As provisioned by NTA)
MIMO, Streams	2x2:2 MIMO

Channel Width	20MHz, 40MHz, 80MHz
Minimum Transmit Power	2.4GHz : 25dBm 5GHz : 28dBm
Minimum Antenna Gain	2.4GHz : 8dBi 5GHz : 8dBi
Ethernet Ports	Two auto-sensing auto MDIX Gigabit Ethernet (10/100/1000 Mbps) RJ45 Ports
Radio Features	Maximum ratio combining (MRC) Cyclic delay/shift diversity (CDD/CSD) Space-time blocking coding (STBC); Low-density parity check (LDPC) Packet Aggregation: A-MPDU, A-MSDU
Wi-Fi Alliance	Wi-Fi certified a,b,g,n,ac WPA2 – Enterprise, Personal WMM, Passpoint
Environment Rating	IP67
Power Supply	802.3af PoE Injector or PoE switch. 802.3at or PoE+ if using PoE-Out Aux port
Operating Temperature	-30°C to +60°C (-22°F to +140°F)
Operating Humidity	Up to 95% Non-condensing
Management Modes	Standalone with AP GUI (http/https), CLI (Telnet/SSH)
Wireless Security	WPA-TKIP, WPA2-AES, 802.11i WPA-PSK, WPA2-PSK, WPA2-Enterprise 802.1x Authentication with Various EAP Types (EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAPMSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, EAPAKA, EAP-AKA', EAP-FAST

RF Management	AutoRF Automatically Manages Channel and Power
Guest Access Captive Portal	WLAN Controller Portal Integrates with 3rd Party Guest Access Portals Built-in Portal on AP LDAP & RADIUS authentication Walled Garden with DNS Whitelist Wireless as well as Wired Devices Supported
Rate Limiting	Per-client, Per-WLAN Static and Dynamic Rate Limiting
Airtime Mgmt	Airtime Fairness, Band Steering, Band Balancing
AAA Support	RADIUS Authentication, Accounting, Dynamic Authorization (CoA, DM). Server Failover, Load-balancing
QoS	802.11e/WMM QoS. DSCP/ToS Mapping
Ethernet (L2) Services	802.1p/802.q,VLAN per SSID LLDP. IGMP Snooping (v1/v2/v3)
Mesh	WDS Mesh with Single and Multiple Radio Hops
Network Services	NAT, DHCP Server
Warranty	At least of one year in hardware and software

x. Solar PV

Features	Minimum Technical Specification
Cell type	Mono or Poly Crystalline
Performance Guarantee (First Year)	≥ 97% of Standard Test Condition
Performance Guarantee (10 Years)	≥ 90% of Standard Test Condition

Others	The Mounting Structure must be made of Aluminium Light-weight rust-proof sections/ angles/ channels
Warranty	At least of five years of warranty

xi. UPS

Features	Minimum Technical Specification
AC Voltage Output	Pure Sine wave 220VAC
Output Voltage Regulation	220V+/-2%
AC Input Voltage Range	170V ~ 260V
AC Input Frequency Range	50Hz+/- 1Hz
Warranty	At Least of One Year Replacement Warranty

xii. Battery

Features	Minimum Technical Specification
Battery Type	Gel
Battery Voltage	12 Volt Cell
Cycle Life at 25°C	1200 cycles @ 80% and 5000 cycle @ 20% Depth of Discharge (DoD)
Self-discharge	<3% per Month at 25°C
Operating Temperature	-10°C to 45°C with Temperature Coefficient Data

Charging Efficiency	AH Efficiency Above 90%, WH Efficiency: Above 80%
Certification	ISO 9001 and ISO 14001; RETS & PIT Pass Certificates
Warranty	Full 4 Years replacement warranty

xiii. Earthing

- The solar PV system shall be provided with Equipment Earthing and Lighting Protection System (LPS).
- Separate earthing shall be done for both LPS and equipment.
- The earthing plate/ rod/ strip must be of copper type with required backfill compound.
- The resulting earthing resistance must be less than 5 ohm. However, in dry and rocky area up to 10 ohm may be acceptable.

xiv. Accessories

Should be used commonly used standard accessories.

1. INTRODUCTION

A large focus of government has been to implement IT Policy of Nepal and formulate appropriate rules, regulations and policy responses for the development of Information and Communications Technology (ICT) sector in the country as well as harnessing the technologies to meet key development challenges including those relating to governance reform and catalyzing economic growth for poverty reduction.

Nepal is naturally beautiful country with full of various flora and fauna available in mountains, hills, rivers, valleys, forests etc. It is also rich in religious and historic places and cultural bio-diversity. Trekking is the most popular activity in Nepal. The most popular trekking route include Annapurna Circuit trek, Manaslu circuit trek, Annapurna base camp trek and Machhapuchhre base camp trek among others. Besides this, many tourist visit Nepal for religious purpose as well.

In order to provide connectivity for the tourists to their friend and family, rescue operations and to facilitate the tourists, broadband internet connectivity in tourist path and destinations has become the most. The global context and national environment is demanding digital infrastructure as an important tool for development. Being digital country is an important dimension of a prosperous country. ICT infrastructure building as well as implementation is important steps on the way of Nepal's march towards Sustainable Development Goals.

With the introduction of Worldwide Interoperability for Microwave Access (WiMAX) and 4G services, some tourist destinations are connected but the speed of connection and reliability is a major concern. ICT Policy 2015 has envisioned the extension and expansion of ICT infrastructure and services in all major tourists' destinations throughout Nepal. Nepal Telecommunications Authority (NTA) has planned for the wide expansion of internet coverage in these places. NTA has identified some historic, cultural, religious and tourist destinations/places in annual program to provide Wi-Fi services.

The identified trekking route and religious places like Annapurna circuit, Everest base camp, Tumbini square, Janaki temple, Pathivara temple, Halesi Mahadev temple, Baraha chettra, Mukthinath temple, Jame Mosque are under the ongoing project of NTA for the connectivity of Wireless Fidelity (Wi-Fi) services. For the Manaslu trekking route also NTA has planned to provide Wi-Fi services. For the execution of the plan in Manaslu circuit there is requirement of site survey in the Manaslu circuit to identify the requirements of the place.

2. GENERAL

E-Tech Solutions Pvt. Ltd. (herein after called "Consultant") is assigned to carry out Site Survey and Bid Document Preparation for Implementation of Wi-Fi Project in Manaslu Circuit and submit report to Nepal Telecommunications Authority (herein after called "NTA"). Consultant need to survey complete trekking route lying in Manaslu Circuit and find out detail project requirements. Based on requirement definition, the consultant shall carry

out an assessment of latest technology and standards in order to identify the technology best suited for the project. The consultant shall explore various alternatives based on most appropriate technology available. Consultant is required to suggest best solution for Wi-Fi network connectivity. Consultant shall prepare technical design and Bill of Quantities (BOQ). The consultant shall explore and study different marketing strategies and business models to make project sustainable and suitable and recommend appropriate business model. Consultant will provide approximate cost estimation for capital expenditures (CAPEX), operational expenditure (OPEX) and Total cost of Ownership (TCO) of each aspect of the project (proposed Wi-Fi Network). The consultant shall prepare Terms of Reference (TOR) to carry out implementation of Wi-Fi connectivity Manaslu trekking route and its operation Modality.

3. SURVEY DATA

Manaslu trekking trail circuit is all about from Soti Khola to Beshi Sahar. Despite its recent rise in popularity, the Manaslu Trek remains remote and off-the-beaten-path compared to the better-known teahouse treks in Nepal. It is far less crowded than its more well-known peers Everest Base Camp and Annapurna Circuit. The word is getting out about Manaslu, but there are still about 10 times fewer trekkers on the Manaslu trail. Regarding fiber connectivity and providing WI-FI services into those areas, we did a survey under Manaslu Trail at Soti khola, Machhakhola, Jagat, Philim, Deng, Namrung, Lho, Samagaun and Samdo because these are the main destination and places where tourist stop for the lunch, dinner and accommodation.



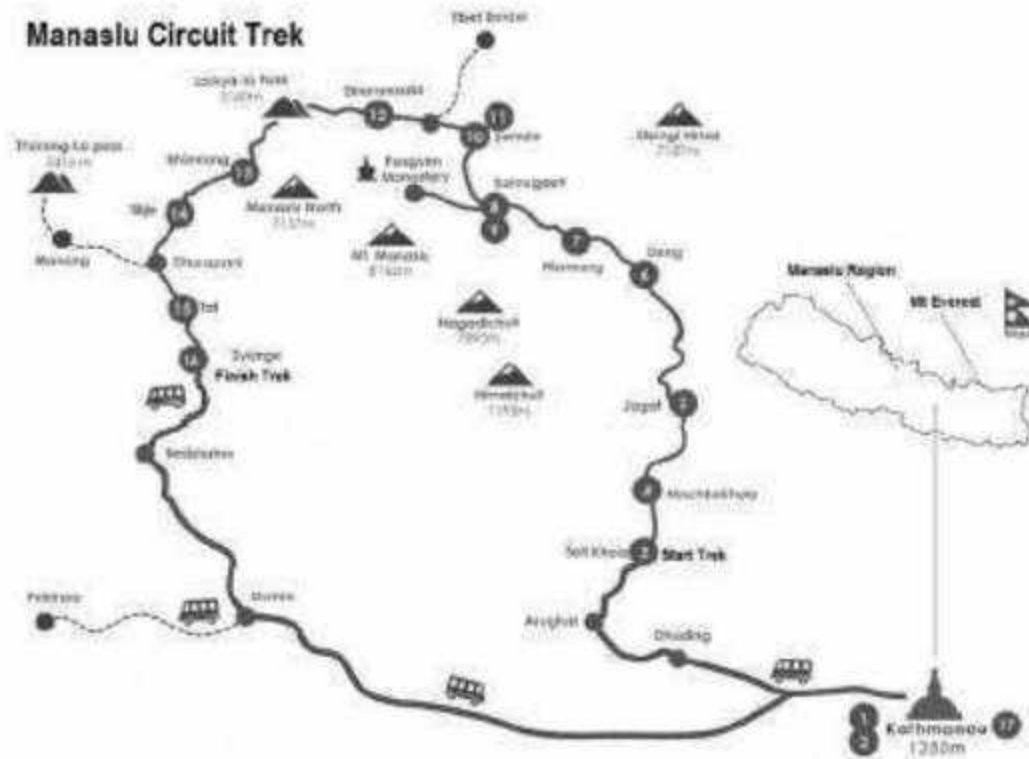


Fig: - Manaslu Circuit Trek

3.1 Main Places of Manaslu Circuit Trek trail

Manaslu trekking trail start from **Soti Khola (Gorkha)** and end at **Dhara Pani (Lamjung)**. However, in Manaslu Trail Treking most of the places lie in Gorkha District but in the end of manaslu trail trek, most of the people like to visit Manang via Larkey La Pass. So, we must include Manang District places in this survey which are also listed in below.

S.No.	Trek Route					
1)	Soti Khola (tea Place Starting point)					
2)	Machha Khola to Jagat Route					
	Machha khola	Tatopani	Dovan	Yaru bagar	Jagat	
3)	Jagat to Phhilim Route					
	Jagat	Salleri	Sirdibas	Ghattekhola	Phhilim	
4)	Philim to Deng Route					
	Philim	chisopani	Eaklebhatti	YakFedi	Pewa	Deng
5)	Deng to Namrung Route					
	Deng	Bihiphedi	Ghap	Lungachuda	Namrung	
6)	Namrung to Lho Route					

	Namrung	Bazgam	Lhee	Shyo	Lho	
7)	Lho					
8)	Syala					
9)	SamaGaun					
10)	Samdo					
11)	Dharmasala					
12)	Bhimthang					
13)	GowaTilje					

3.2 Field Visit Time and Duration

To complete this field survey project we need 12 days starting from sotikhola to Dharapani, We stayed at many places during our research and to collect our data. Places and days we spent during our field visit or survey in Manaslu trek is shown in below table.

S. No.	Day Count	Survey Starting Point	Survey Ending point	Altitude (in meter)
1	Day 1	Kathmandu	Sotikhola	815 m
2	Day 2	Sotikhola	Machha Khola	800 m
3	Day 3	Machha Khola	YaruBagar	1275 m
4	Day 4	YaruBagar	Philim	1570 m
5	Day 5	Philim	Deng	1865 m
6	Day 6	Deng	Namrung	2618 m
7	Day 7	Namrung	Syala	3092 m
8	Day 8	Syala	SamaGaun	3525 m
9	Day 9	SamaGaun	Samdo	3850 m
10	Day 10	Samdo	Bhimthang	3590 m
11	Day 11	Bhimthang	Chame	2650 m
12	Day 12	Chame	Beshisahar	760 m
13	Day 13	Beshisahar	Kathmandu	1340 m

In above table we didn't include all the village or places; we put only those villages or places where tourists stepped for lodging and fooding. Mentioned above villages and places are the main movement area of tourists.

3.3 Methodology and Survey

In Manaslu Trek site survey we used various factor to obtain the information's that are important for the project planning and implementation. Mainly we surveyed below factors that are vital for project planning/implementation.

- 1) Accessibility of road.
- 2) Density of village (hotel and lodges, people, tourist flow).
- 3) Geographical condition.
- 4) Existence of NSP/ISP, Telecoms and other phone service provider.
- 5) Availability of electricity.
- 6) Distance

4. FINDINGS

4.1 Accessibility of road

Government of Nepal is planning to make a road to connect China using Manaslu trail and this project is undergoing and till date they have started the road construction up to Philim however vehicles can travel up to Tatopani only. As per the current progress of road construction, we can assume that within six to seven months roads up to philim will be usable. But still it cannot be calculated that how much time it will take to finish up to Samdo. Road condition summary is shown in below diagram.

S. No.	Name of the Village	Road Accessibility	Remarks
1	Sotikhola	YES	Not Black Toped
2	Machha Khola	YES	Not Black Toped
3	Tatopani	YES	Not Black Toped
4	Dovan	YES	Under Construction
5	YaruBagar	NO	Under Construction
6	Jagat	NO	Under Construction
7	Salleri	NO	Under Construction
8	Philim	NO	Under Construction
9	Deng	NO	
10	Ghap	NO	
11	Namrung	NO	
12	Lho	NO	
13	Syala	NO	
14	SamaGaun	NO	
15	Samdo	NO	
16	Bhimthang	NO	
17	Gowa	YES	No Bridge In-between
18	Tilije	YES	No Bridge In-between

4.2 Distance of the trek

S.No.	Treak Route/Distance						Remarks
1	SotiKhola	Khorlabes	LapuBesi	MachhaKhola			
	14 KM						
2	Machhakhola	TatoPani	Dovan	Yarubagar	Jagat		
	24 KM						
3	Jagat	Salleri	Sirdibas	GhatteKhola	Philim		
	23 KM						
4	Philim	Chisapani	Eaklebhatti	Yakphedi	Pewa	Deng	
	21 KM						
5	Deng	Bhiphedi	Ghap	Lungachuda	Namrung		
	20 KM						
6	Nanrung	Bazgam	Lhee	Shyo	Lho		
	11 KM						

7	Lho	Syala	SamaGaun			
17 KM						
8	SamaGaun	Samdo	Dharmasala			
29 KM						
Total Distance from Soti Khola to Dharmasala:- 159 KM						

Lengths of Fiber require for distributing Wi-Fi services in major tourist stepping villages.

S. No.	Name of the Village	Fiber Length(m)
1	Sotikhola	300
2	Machha Khola	200
3	Tatopani	200
4	YaruBagar	200
3	Jagat	200
4	Salleri	100
5	Philim	300
6	Deng	50
7	Dovan	150
8	Ghap	1000
9	Namrung	150
10	Lho	200
11	Syala	600
12	SamaGaun	600
13	Samdo	150
14	Dharapani	100
15	Bhimthang	300
16	Gowa	100
17	Tilije	300
Total Length of Fiber		5200

In total we need 5200 Meter of fiber to distribute the wife services inside villages.

4.2 Presence of Electricity

As we all know that electricity is the important factor for all human, organization, hotels and lodges. In this Manaslu Trekking route, electricity is available in some parts only. But most of the parts that have electricity are from local hydropower which is made by the KADURI and another one is central hydropower system from government side. Although there is availability of electricity in most of the villages but there is no electrical connectivity between two villages because of the multiple local hydropower although are built by the same organization KADURI. As electricity is one of the major factors for implementation and successful operation of this project. Consultant's findings on availability of electricity are mentioned in below table:-

Column1	Column2	Column3	Column4	Column5	Column6
From	To	Central hydropower	Local Hydropo	SolarPannel	Electricitypole
SotiKhola	MachhaKh	yes	No	No	Yes
Tatopani					
Dovan	Jagat	No	Yes	No	Yes
Jagat	Philim	NO	Yes	No	Yes
Philim	Yeklebhatt	No	Yes	No	Yes
Yakphedi	Deng	No	NO	Yes	No
Ghap	Ghap	No	No		
Namrung		No	Yes	Yes	Yes
Namrung	Bejgam	No	yes	yes	No
Bejgam	Lho	No	Yes	yes	yes
Lho	Syala	No	Yes	yes	yes
Syala	Samagaun	No	Yes	yes	No
samagaun	Samdo	No	yes	yes	No

Fig:-Electricity in the village status

Note:-

To use electricity as power supply for Fiber, we need help from Kaduri organization and some part of the trekking route is still untouched by the electricity pole and we need to install our own pole in some parts of the route.

4.3 Density of village

Population of people in the particular area, flow of tourists, step in for the lodging and fooding was collected during the survey. In most of the trekking trail route hotel and lodges are run by peoples from other area, they build the lodges and restaurant for the business purpose and live in their villages which do not lie in trekking route. But some part of trekking route went through villages. Despite its recent rise in popularity, the Manaslu Trek remains remote and off-the-beaten-path compared to the better-known teahouse treks in Nepal. It is far less crowded than its more well-known peers Everest Base Camp and Annapurna Circuit so annual tourist flow in approx. will be 5000 to 6000.

36	Name of Village	No of lodges	No of houses	No of tourist stay	Total population
37	Soti Khola	6	10 to 12	3000 to 3500	150 to 200
38	MachhaKhola	more then 12	70-80	5000-5500	200-300
39	Tatopani	2lodges		not sure	
30	Dovan	3lodges		8 not sure	25to30
31	Jagat	6	12houses	4000-4500	150-200
32	salleri	4	12 to 15 houses	not sure	35-40
33	Philim	8 lodges	200	5000	600 to 700
34	Deng	3	4 houses	4000	25
35	Ghap	8	10 to 12	1500-2000	60-70
36	Namrung	5	30 to 36	5000-6000	100 to 120
37	Ihee	2	15 to 18	not sure	45 to 50
38	Shyo				
39	Lho	5 lodges	more than 100	2500to 3000	150 to 200
00	Syala	8 to 10 lodges	10 to 12	2000-2500	40 to 50
01	Samagaun	10 to 12 lodge	more then 150	5000-5500	800 to 900
02	Samdo	4	30 to 35	3500-4000	140 to 150
03	Dharmasala	3	0	3500-4000	
04	Bhimthang	7 to 8 lodges		4000-4500	
05	Gowa				
06	Tilje				
07	Total				

4.4 Geographical condition of area

To implement any project on the particular side or area, geographical condition plays the vital role in success and failure of the project. In this site survey methodology used for geographical condition are given below,

- Landslide area
- Possible landslide area
- Number of bridges

Column1	Column2	Column3	Column4	Column5
From village	To Village	Landslide area	Bridges(Hanging, Wooden)	
SotiKhola	MachhaKhola	no	1	
MachhaKhola	Jagat	multiple area3	5 hanging bridge	
Jagat	Philim	2	3hanging bridge	
Philim	Deng	multiple area 3	3 hanging 1wooden bridge	
Deng	Ghap	multiple area	4hanging bridge	
Ghap	Namrung	2	2wooden 2hanging bridge	
Namrung	Lho	No	2wooden 1hanging bridge	
Lho	Syala	1	1 wooden bridge	
Syala	Samagaun	No	2 hanging bridge	
SamaGaun	Samdo	No	1 hanging bridge	
Samdo	DharmaSala	2	1 hanging 1 wooden bridge	
BhimThang	Gowa	no	1 wooden bridge	
Gowa	Tilje			
total			30	

Landslide Area/possible area:-

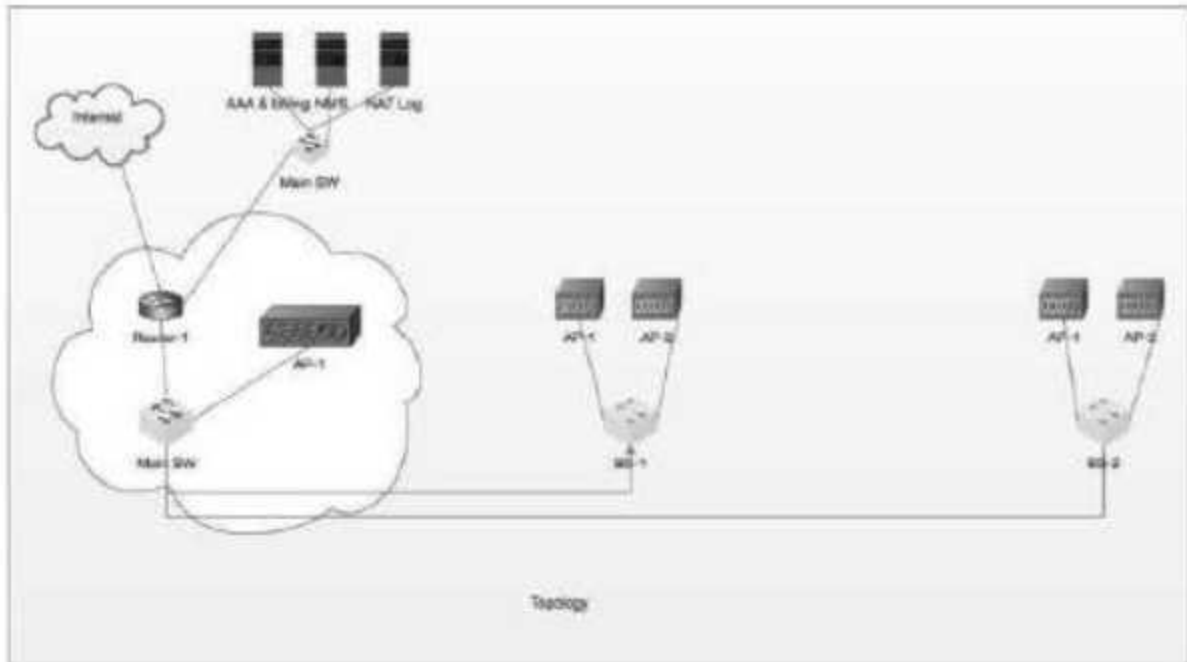
- I) Between Tatopani and Dovan.
- II) Between Dovan and yarubagar.
- III) Between Jagat and Philim.
- IV) Between Eklebhatti and YakPhedi.
- V) Between Deng and Bihiphedi.
- VI) Between Bihiphedi and Ghap (Multiple area).
- VII) Between Lho and Syala
- VIII) Between Samdo and Dharmasala.

5. TECHNICAL DESIGN

Consultant proposes wireless on captive portal technology that provides internet access to subscribers and offers a wide range of telecommunication services and applications.

5.1 System Architecture

The system is designed to cover a wide area which has been broken down into specific segments, connecting all the clients with a main server that has full control of the system. The overall system architecture is composed by different access points connected to each other. This approach allows creating a scalable net which is able to cover a vast area, connecting the main server with all the clients within range of any of the APs deployed.



Proposed architecture is conceptually organized into three levels, which are: The management level (main server), the network connection level (Backbone Net), and the user level.

- Management Level: The top level of the system composed by a server that controls user authentication. This level is based on a web server to interact with the subscribers, a database used to store system information and a control unit that converts management decisions into traffic rules. Besides, the server has a high-speed connection to the internet along with a wireless or an Ethernet connection to link it with the backbone net level.
- Backbone Net level: The purpose of this level is to work as bridge, connections subscribe to the main server. Group of nodes are distributed in wide area and connected to the main server and to other nodes through either lease services from third parties or own services. Connecting media should be optical fiber link. However, alternative technology such as wireless technology could be used as connecting media between two nodes if and only if optical fiber link is not possible to use.
- User level: At the lowest level, we have the actual subscribers. These can connect directly to the wireless infrastructure using their own Wi-Fi enabled computing devices. Such devices can be quite heterogeneous e.g., cell phones, PDAs, laptops etc. The only restrictions are these devices must include both Wi-Fi interface and a web browser.
- The proposed system should interact with clients through Captive Portal technology. When a user first connects to Wi-Fi and opens a web browser, he/she should automatically be redirected to the main page of the portal; this process should be transparent to the user. The server should control user access depending on whether

he/she is a register/valid user or not. Depending on the user's access level, different services should be provided.

- The first time a user access the system he/she should be asked to register himself/herself with the Captive Portal. After a login process, the user can use any of the freely available internet access or can purchases different package of internet. System should allow each client to choose among multiple connection speeds, making the price variance accordingly.
- The overall backbone network has two endpoints (Sotikhola and Tilije). The network should be connected to the server in such a way that one end should be used as Main servicing link whereas other end should be used as Backup servicing link.

Core Elements

- When a user connects to wireless system, he/she usually does not know any connection information or URL. System should automatically re-direct all the unregistered user access to landing page by typing any URL and trying to access internet. The most appropriate solution for this task is to develop a captive portal.
- Enables Authentication, authorization and accounting (AAA) for tracking user activities on an IP-based network and controlling their access to network resources.
- Required logs, Nat log, browsing information and user identification should be managed as per legal provision of government of Nepal.
- Offers prepaid billing and postpaid billing functions with single invoice facility for multiple services.
- Provides operators and service providers to implement bandwidth restriction based on subscribers and data usage in addition to quotas on individual or shared basis as well on services like video.
- Subscriber management system facilitates service providers to manage unlimited number of users in a dynamic network with user addition/updation/deletion management functions, user migration facilities and user authentication process.
- Offers free access for specific web server.

Central Office

Central Office equipment and facilities		
Particulars	Unit	Quantity
Core Router	pcs	1
Application Server	pcs	1
Log Server	pcs	1
NMS Server	pcs	1
Software	pcs	1
42U Server Rack	pcs	1
24 port manageable switch	pcs	1
Optical Fiber Cabinet	pcs	1
Solar panel 320 Wp	pcs	8

Solar mounting set	pcs	1
MPPT Charge Controller, 60Amp	pcs	1
3000 VA Charger/Inverter	pcs	1
100 AH GEL VRLA battery	pcs	8

Sotikhola (28° 08' 07.72" N , 84° 51' 16.11" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	Pcs	4
Solar Mounting Sets	Aluminum mounts	Pcs	1
Solar Charge Controller 20 Amp		Pcs	0
Solar Charge Controller 50 Amp		Pcs	1
Solar Charge Controller 100 Amp		Pcs	0
Switch	8 port, POE, 2 SFP	Pcs	3
AP Outdoor	Omni	Pcs	2
	Sectoral	Pcs	2
Ethernet Cable	Cat-6	meter	20
Ethernet Patch Cable	Cat-6	Pcs	6
Optical Fiber	4 core direct burial	meter	350
Optical Termination Box		Pcs	3
SFP/Media Converter	100/1000 Mbps	Pcs	8
Indoor Rack	6 U or higher	Pcs	1
Battery	100 AH GEL, VRLA	Pcs	4
800 VA Inverter/Charger		Pcs	0
1200 VA Inverter/Charger		Pcs	1
1600 VA Inverter/Charger		Pcs	0
2000 VA Inverter/Charger		Pcs	0
3000 VA Inverter/Charger		Pcs	0
800 VA inverter		Pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	Pcs	6
Battery/UPS Rack		Pcs	1
Galvanized poles 6 meters		Pcs	3
Outdoor Pole box			3
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	350
Conduit pipe	HDDP,	meter	350
Surge Protection Device		pcs	4
Residual Current Device		pcs	3
DC MCB		pcs	4
MCB		pcs	3

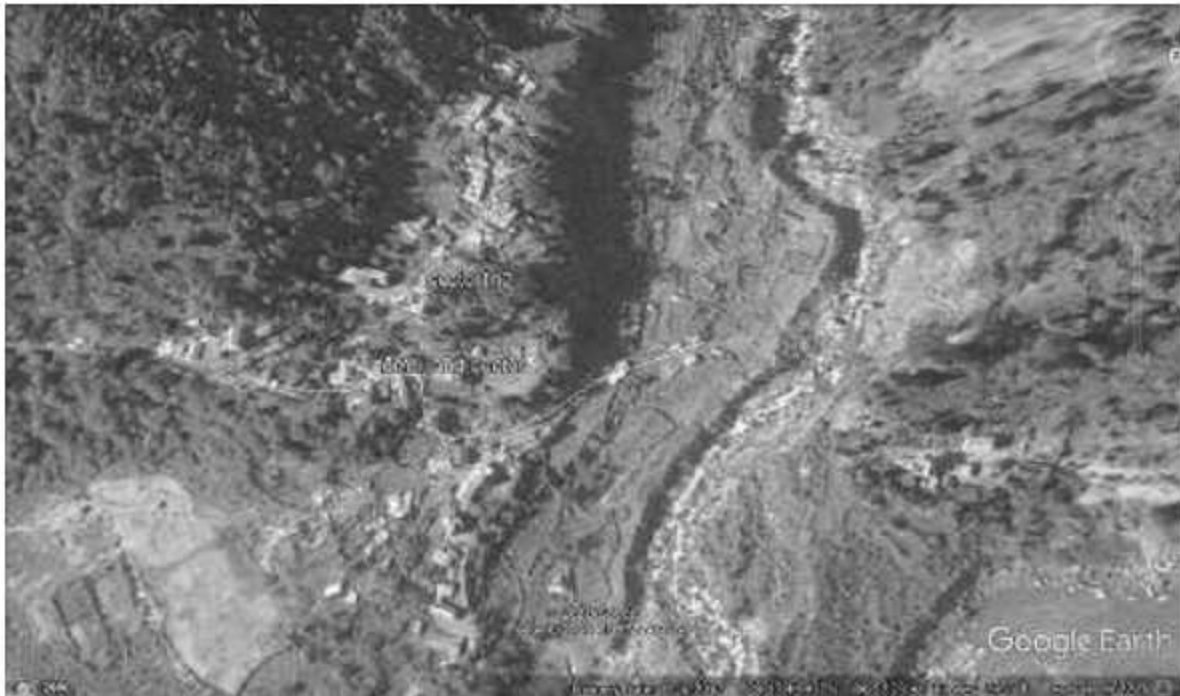
Sotikhola:-



MachhaKhol (28° 13' 41.43" N , 84° 52' 23.41" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	10
Ethernet Patch Cable	Cat-6	pcs	7
Optical Fiber	4 core direct burial	meter	225
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	6
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1

1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Fliexible 2 core 5sq. Mm, copper	meter	225
Conduit pipe	HDDP,	meter	225
Surge Protection Device		pcs	3
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	4

Machhakhola:-



Tatopani (Latitude , Longitude)

Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	1
AP Outdoor	Omni	pcs	1

	Sectoral	pcs	0
Ethernet Cable	Cat-6	meter	5
Ethernet Patch Cable	Cat-6	pcs	2
Optical Fiber	4 core direct burial	meter	10
Optical Termination Box		pcs	1
SFP/Media Converter	100/1000 Mbps	pcs	2
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	2
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	1
Outdoor Pole box		pcs	1
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	0
Conduit pipe	HDDP,	meter	0
Surge Protection Device		pcs	1
Residual Current Device		pcs	1
DC MCB		pcs	2
MCB		pcs	2

Dovan (Latitude , Longitude)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	15
Ethernet Patch Cable	Cat-6	pcs	4
Optical Fiber	4 core direct burial	meter	175
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	4
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	1
1600 VA Inverter/Charger		pcs	0

2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	175
Conduit pipe	HDDP,	meter	175
Surge Protection Device		pcs	3
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	2

Jagat (28° 21' 04.79" N , 84° 53' 43.37" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	4
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	0
Solar Charge Controller 50 Amp		pcs	1
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	3
AP Outdoor	Omni	pcs	3
	Sectoral	pcs	0
Ethernet Cable	Cat-6	meter	20
Ethernet Patch Cable	Cat-6	pcs	5
Optical Fiber	4 core direct burial	meter	250
Optical Termination Box		pcs	3
SFP/Media Converter	100/1000 Mbps	pcs	8
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	4
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	1
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	6
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	3
Outdoor Pole box		pcs	3
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	250
Conduit pipe	HDDP,	meter	250
Surge Protection Device		pcs	3

Residual Current Device		pcs	3
DC MCB		pcs	4
MCB		pcs	4

Jagat



Salleri (Latitude , Longitude)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Charge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	1
Ethernet Cable	Cat-6	meter	10
Ethernet Patch Cable	Cat-6	pcs	4
Optical Fiber	4 core direct burial	meter	110
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	6
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0

1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	110
Conduit pipe	HDDP,	meter	110
Surge Protection Device		pcs	2
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	2

Salleri:-



Philim (28° 23' 39.64" N , 84° 53' 40.22" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	4
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	0
Solar Charge Controller 50 Amp		pcs	1
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	4
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	4

Ethernet Cable	Cat-6	meter	15
Ethernet Patch Cable	Cat-6	pcs	7
Optical Fiber	4 core direct burial	meter	375
Optical Termination Box		pcs	4
SFP/Media Converter	100/1000 Mbps	pcs	10
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	6
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	8
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	4
Outdoor Pole box		pcs	4
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	375
Conduit pipe	HDDP,	meter	375
Surge Protection Device		pcs	5
Residual Current Device		pcs	4
DC MCB		pcs	4
MCB		pcs	4

Philim:-



Deng (28° 28' 45.30" N , 84° 51' 58.48" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Charge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	1
AP Outdoor	Omni	pcs	0
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	5
Ethernet Patch Cable	Cat-6	pcs	4
Optical Fiber	4 core direct burial	meter	10
Optical Termination Box		pcs	1
SFP/Media Converter	100/1000 Mbps	pcs	2
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	1
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	1
Outdoor Pole box		pcs	1
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	0
Conduit pipe	HDDP,	meter	0
Surge Protection Device		pcs	2
Residual Current Device		pcs	1
DC MCB		pcs	2
MCB		pcs	2

Deng:-



Ghap (28° 31' 51.81" N , 84° 49' 29.83" E)

Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	3
AP Outdoor	Omni	pcs	3
	Sectoral	pcs	3
Ethernet Cable	Cat-6	meter	25
Ethernet Patch Cable	Cat-6	pcs	8
Optical Fiber	4 core direct burial	meter	1100
Optical Termination Box		pcs	3
SFP/Media Converter	100/1000 Mbps	pcs	8
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	4
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	6
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	3
Outdoor Pole box		pcs	3

Electrical cable	Multicore Flexible 2 core 6sq. Mm, copper	meter	1100
Conduit pipe	HDDP,	meter	1100
Surge Protection Device		pcs	6
Residual Current Device		pcs	3
DC MCB		pcs	2
MCB		pcs	2

Ghap:-



Ghap 1:-



Namrung (28° 32' 41.10" N , 84° 46' 06.82" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	3
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	3
Ethernet Cable	Cat-6	meter	25
Ethernet Patch Cable	Cat-6	pcs	8
Optical Fiber	4 core direct burial	meter	160
Optical Termination Box		pcs	3
SFP/Media Converter	100/1000 Mbps	pcs	8
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	4
800 VA Inverter/Charger		pcs	0

1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	6
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	3
Outdoor Pole box		pcs	3
Electrical cable	Multicore Flexible 2 core 6sq. Mm, copper	meter	160
Conduit pipe	HDDP,	meter	160
Surge Protection Device		pcs	4
Residual Current Device		pcs	3
DC MCB		pcs	2
MCB		pcs	2

Namrung:-



Lhee (28° 32' 41.10" N , 84° 46' 06.82" E)

Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	0
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	10
Ethernet Patch Cable	Cat-6	pcs	4
Optical Fiber	4 core direct burial	meter	320
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	4
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	320
Conduit pipe	HDDP,	meter	320
Surge Protection Device		pcs	2
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	2

Lhe:-



Lho (28° 34' 41.59" N , 84° 42' 01.16" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	10
Ethernet Patch Cable	Cat-6	pcs	4
Optical Fiber	4 core direct burial	meter	220
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	4
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1

Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	220
Conduit pipe	HDDP,	meter	220
Surge Protection Device		pcs	2
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	2

Lho:-



Syala (28° 34' 27.60" N , 84° 40' 21.71" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	4
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	0
Solar Charge Controller 50 Amp		pcs	1
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	4
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	5
Ethernet Cable	Cat-6	meter	15

Ethernet Patch Cable	Cat-6	pcs	7
Optical Fiber	4 core direct burial	meter	660
Optical Termination Box		pcs	4
SFP/Media Converter	100/1000 Mbps	pcs	10
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	6
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	≤ 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	8
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	4
Outdoor Pole box		pcs	4
Electrical cable	Multicore Flexible 2 core 6sq. Mm, copper	meter	660
Conduit pipe	HDDP,	meter	660
Surge Protection Device		pcs	6
Residual Current Device		pcs	4
DC MCB		pcs	4
MCB		pcs	2

Syala:-



SamaGaun (28° 35' 06.90" N , 84° 38' 30.09" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	4
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	0
Solar Charge Controller 50 Amp		pcs	1
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	4
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	5
Ethernet Cable	Cat-6	meter	15
Ethernet Patch Cable	Cat-6	pcs	7
Optical Fiber	4 core direct burial	meter	700
Optical Termination Box		pcs	4
SFP/Media Converter	100/1000 Mbps	pcs	10
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	6
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0

Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	8
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	4
Outdoor Pole box		pcs	4
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	700
Conduit pipe	HDDP,	meter	700
Surge Protection Device		pcs	6
Residual Current Device		pcs	4
DC MCB		pcs	4
MCB		pcs	2

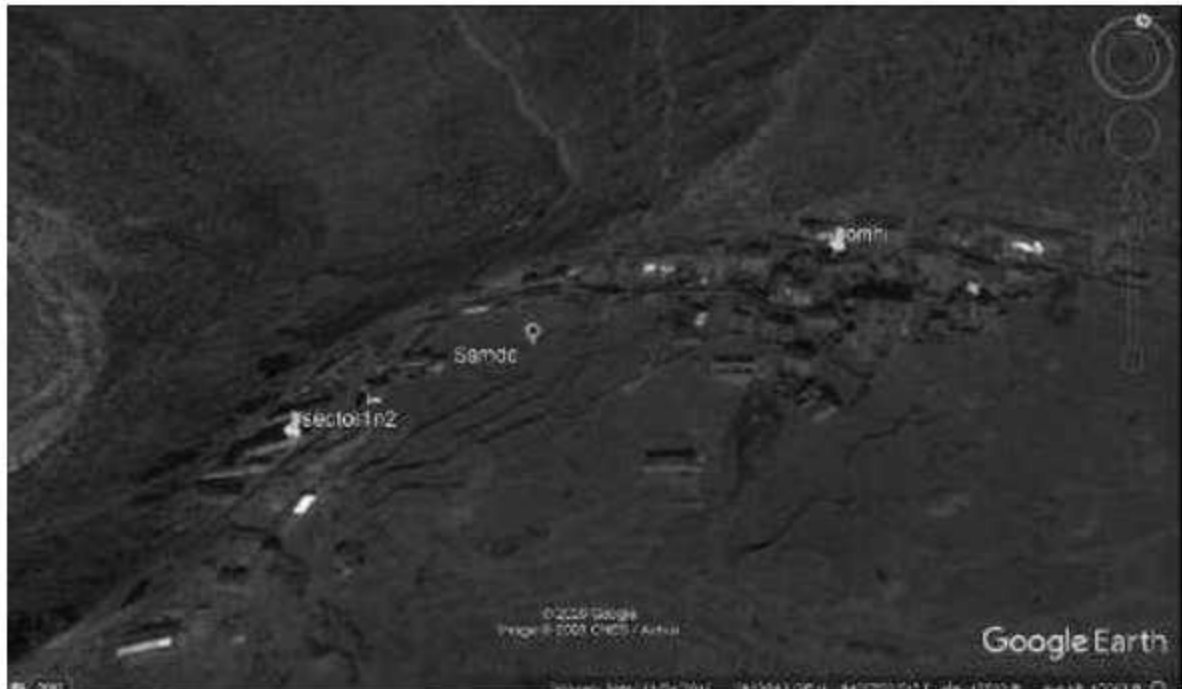
Samagaun:-



Samdo (28° 39' 03.58" N , 84° 32' 52.51" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Chaerge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	2
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	2
Ethernet Cable	Cat-6	meter	10
Ethernet Patch Cable	Cat-6	pcs	4

Optical Fiber	4 core direct burial	meter	210
Optical Termination Box		pcs	2
SFP/Media Converter	100/1000 Mbps	pcs	4
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	4
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	2
Outdoor Pole box		pcs	2
Electrical cable	Multicore Flexible 2 core 6sq. Mm, copper	meter	210
Conduit pipe	HDDP,	meter	210
Surge Protection Device		pcs	3
Residual Current Device		pcs	2
DC MCB		pcs	2
MCB		pcs	2

Samdo:-



Dharmasala (28° 39' 35.39" N , 84° 34' 58.62" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	1
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Charge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	1
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	0
Ethernet Cable	Cat-6	meter	5
Ethernet Patch Cable	Cat-6	pcs	3
Optical Fiber	4 core direct burial	meter	10
Optical Termination Box		pcs	1
SFP/Media Converter	100/1000 Mbps	pcs	2
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	2
800 VA Inverter/Charger		pcs	1
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	0
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1
Optical Fiber Patch Cord	(2m) LC/SC	pcs	2
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	1
Outdoor Pole box		pcs	1
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	0
Conduit pipe	HDDP,	meter	0
Surge Protection Device		pcs	1
Residual Current Device		pcs	1
DC MCB		pcs	1
MCB		pcs	2

Dharmasala:-



Bhimthang (28° 37' 56.49" N , 84° 28' 14.80" E)			
Particulars	Description	Unit	Quantity
Solar Pannel	320 Wp	pcs	2
Solar Mounting Sets	Aluminum mounts	pcs	1
Solar Charge Controller 20 Amp		pcs	1
Solar Charge Controller 50 Amp		pcs	0
Solar Charge Controller 100 Amp		pcs	0
Switch	8 port, POE, 2 SFP	pcs	3
AP Outdoor	Omni	pcs	1
	Sectoral	pcs	5
Ethernet Cable	Cat-6	meter	25
Ethernet Patch Cable	Cat-6	pcs	8
Optical Fiber	4 core direct burial	meter	315
Optical Termination Box		pcs	3
SFP/Media Converter	100/1000 Mbps	pcs	8
Indoor Rack	6 U or higher	pcs	1
Battery	100 AH GEL, VRLA	pcs	4
800 VA Inverter/Charger		pcs	0
1200 VA Inverter/Charger		pcs	0
1600 VA Inverter/Charger		pcs	1
2000 VA Inverter/Charger		pcs	0
3000 VA Inverter/Charger		pcs	0
800 VA Inverter		pcs	0
Earthing	<= 10 Ohm	Set	1

Optical Fiber Patch Cord	(2m) LC/SC	pcs	6
Battery/UPS Rack		pcs	1
Galvanized poles 6 meters		pcs	3
Outdoor Pole box		pcs	3
Electrical cable	Multicore Fliexible 2 core 6sq. Mm, copper	meter	315
Conduit pipe	HDDP,	meter	315
Surge Protection Device		pcs	6
Residual Current Device		pcs	3
DC MCB		pcs	2
MCB		pcs	2

BhimThang:-



DRAFT OF PROPOSED AUTHORIZATION

1. Name of the Selected Licensed (ISP) Operator (SLO):

2. Address:

3. Type of service to be provided:

Building broadband network and provide internet access connectivity services in Religious and Tourism Places of Nepal and stations/sites covered/stated by TOR.

4. Area of operation of the service:

As listed in the TOR included in this RFP/Authorization.

5. Authorization No:

6. Validity Period of the Authorization:-

The initial term of the Authorization will be for 6 (Six) months, commencing from the effective date of the authorization. This Authorization shall be continued as a part of the existing license of the SLOs. The Authorization shall be an integral part of the existing license of the SLO and shall be valid throughout validity period of the existing license of the SLO.

7. Information and Services

a. Accounting:

The provision of Accounting shall be governed by the provision of existing license of SLO

b. Other Records and Provision of Information to the NTA:

The provision of Other Records and Provision of Information to the NTA shall be governed by the provision of existing license of SLO

c. National Emergencies:

The provision of National Emergency shall be governed by the provision of existing license of SLO.

d. Compliance with Law:

The SLO shall be required to comply with all the prevailing laws of Nepal applicable to its Telephone Services business at all times, including the Act, the Rules, all regulations, by-laws, orders, directives and guidelines issued under the Act (including any other instruments which may be made by the NTA) and the payment of all applicable taxes and dues.

e. Force Majeure Events:

The SLO shall be excused from performance of the service obligations set out in this Authorization to the extent and for the period of time that such performance is prevented or materially affected by a Force Majeure event.

8. Service Obligations and Roll-out Schedule:

Design, Survey, Installation commission and Operation and Maintenance of Broadband Connectivity Network according to this RFP and provide broadband connectivity Services in stations/sites covered by TOR. The Selected Licensed (ISP) Operator shall be required to install, activate and operate Broadband connectivity network in the stations/sites in TOR included in this contract/Authorization.

Installation of services must commence within 1 month of the effective date of the Authorization. The broadband connectivity network must be installed in the stations/sites of each district listed in TOR included in this RFP, in accordance with the following schedule:

- a. 50% of all the stations/sites of assigned districts listed in TOR of this RFP under each package to this Authorization within 9 months from the effective date of the Authorization, as certified by an independent technical consultant appointed by NTA; and
- b. 100% of all of the stations/sites of assigned districts listed in TOR under the assigned package included in this RFP within 12 months from the date of signing of the contract and will be certified by an independent technical consultant appointed by the NTA,
- c. Because of the difficult terrain, it is possible that a potential Applicant may not consider it cost effective to use particular technology to some of the concerned stations/sites at that point of time. SLO may be given the option of completing such portion of the Project at a predefined later point of time with payment of financial Financial for such section/s also delayed till such date. Along such section/s of the stations/sites, Licensee(s) shall be obliged to take the responsibility of offering service through other available means, for which SLO shall have entered into understanding, evidenced through appropriate MoU(s). However, a maximum of 20% of the station/sites entrusted to any one Licensee may be authorized to be operated in the manner described above.
- d. If the independent technical consultant appointed by NTA, provides written confirmation to NTA that one or more events of force majeure prevented the installation, activation or operation of some of the broadband connectivity networks required under this clause, then the obligations under this clause shall be modified accordingly; provided, however, that the responsibility of the operator for the installation, activation and operation of the broadband connectivity lines shall remain i NTAct during the tenure of the Authorization, on improvement of the conditions giving rise to the event of force majeure.

9. Failure to Meet Roll-out Requirements

Failure to meet the broadband connectivity network roll-out requirements may result in the imposition of one or more of the following penalties:

- (a) loss of eligibility for the Financial;
- (b) forfeiture of the Performance Security;
- (c) termination of the Authorization;
- (d) the imposition of fines for breach of licence conditions pursuant to the Act; and
- (e) the forfeiture of all the equipment, land and other assets related to this service.

10. Exclusivity:

The authorization will be granted on a non-exclusive basis. However, this Authorization shall not affect the provisions of the existing license of the SLO.

11. Scope of Service:

Optional Services: –The Authorization will provide the SLO to provide the following services in the stations/sites of the 3 Districts of Province 1 listed in TOR included in this RFP, even during the roll out period.

- a) The Authorisation to build, operate and maintain broadband connectivity network service includes the Authorisation to construct and to use any required facilities for the provision of such services at the SLO's own cost, and under its own responsibility.
- b) The SLO is entitled to provide more than 512 Kbps broadband connectivity to its customers
- c) Notwithstanding this section above, the SLO may provide more bandwidth and other services under their license boundary than that mentioned in the Authorization without any Financial at any time.

12. Rate Regulation:

The tariff rates charged by the SLO to its customers for use of the broadband connectivity or lease connectivity service will be subject to regulation by the NTA in accordance with subsection 13(i) of the Act except the two years period of free service obligation. But Tariff should not greater than average tariff available in Kathmandu Valley. New Tarriff guidelines for RTDF subsidised broadband connectivity services shall be developed and provided by NTA. A clear and concise description of all rates must be prominently made known to its customers.

13. Interconnection:

- a) Interconnection between the SLO's network and other licensed telecommunications/ISP networks in Nepal, is governed in general terms by section 31 of the Act, the Guidelines for Interconnection prescribed by NTA and its successors,

- b) The SLO's network must be technically compatible with other operator's network so as to provide seamless interconnection. For interconnection purposes, technical compatibility includes, but is not limited to, compatible numbering, signalling, routing and synchronization.
- c) The SLO must provide a description of the planned network, including a description of the technology to be employed and the roll-out/service coverage plans for the (to be inserted)..... months of operation. The SLO should specify applicable technical standards, proposed interconnection points and network capacity.

14. Authority to Construct and Use Facilities:

- a) Subject to the other terms of the Authorization, the SLO may construct all ICT facilities required to provide the broadband connectivity service. The SLO may also use the facilities of licensed internet service providers or telecommunications service providers or the facilities of any other Persons that are located in Nepal, for the purposes of providing the authorized internet/data services. Use of such facilities may be obtained from the other operators or Persons by agreement with them.
- b) The SLO may adopt wireless routers/switches, access points, wireless backhaul system, Point to Multipoint, Microwave Links, any other transmission links, ADSL, FTTH, WDM fiber/copper cable approach for building the broadband connectivity network as appropriate depending on the topography considering cost and feasibility of such construction as well.
- c) Unless otherwise approved by NTA, all broadband connectivity facilities and equipment installed by the SLO in its ICT System shall be new when first installed and shall be, so far as reasonably practicable, state of the art technology that complies with internationally recognized standards.
- d) The SLO shall be free to procure the goods, works and services required for its Internet/Data Services network using its own procurement procedures.

15. Access to Public and Private Lands:

The SLO shall have rights of access to public and private lands, and the rights of inspection and entry set out in Sections 36 to 38 of the Act.

16. Co-operation among Licensees:

The SLO shall communicate and co-operate with other licensees with a view to provide compatible and consistent types and quality of service to ICT users across Nepal.

Seal of the Office

Issuing Official's

Signature :

Name :

Designation :

SECTION-VII
Bill of Quantities

Preamble of Bill of Quantities

A. General

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.
3. For any item for which measurement is based on records made before or during construction the records shall be prepared and agreed between the Engineer and the Contractor. Should the Contractor carry out such work without the prior agreement of the Engineer, the Engineer may request the Contractor to carry out investigations to confirm the extent of the work and the quantity of work certified for payment shall be solely at the Engineer's discretion. The cost of any such investigation shall be borne by the Contractor.
4. The rates and prices bid in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
5. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
6. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
7. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities. The Specification Clause references where given in the item description of the Bills of Quantities are for the convenience of bidders and generally refer to the principal relevant- specification clause but do not necessarily represent the whole of the specification requirements for the work required within the item. The presence of a Specification clause reference shall not in any way reduce the Bidders obligation to complete work in accordance with all the requirements of the Specification.
8. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Project Manager in accordance with the Conditions of Contract.
9. The method of measurement of completed work for payment shall be in accordance with the Specifications.
10. The abbreviations and symbols used in this Bill of Quantities are:

[Insert as applicable]

B. Day work Schedule

a) General

1. Work shall not be executed on a day work basis except by written order of the Project Manager. Bidders shall enter basic rates for day work items in the Schedules. These rates shall apply to any quantity of day work ordered by the Project Manager. Nominal quantities have been indicated against each item of day work, and the extended total for day work shall, be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for day work shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

b) Day work Labor

1. In calculating payments due to the Contractor for the execution of day works, the hours for labor will be reckoned from the time of arrival of the labor at the job site to execute the particular item of day work to the time of departure from the job site, but excluding meal breaks and rest periods. Only the time of classes of labor directly doing work ordered by the Project Manager and are competent to perform such work will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
2. The Contractor shall be entitled to payment in respect of the total time that labor is employed on day work, calculated at the basis rates entered by it in the " SCHEDULE OF DAY WORK RATES: 1. LABOR". The rates for labor shall be deemed to cover all costs to the Contractor including (but not limited to) i) the amount of wages paid to such labor, transportation time, overtime, subsistence allowances, ii) any sums paid to or on behalf of such labor for social benefits in accordance with Nepal law, iii) Contractor's profit, overheads, superintendence, liabilities and insurance and iv) charges incidental to the foregoing.

c) Day work Equipment

1. The Contractor shall be entitled to payments in respect of Constructional Plant already on site and employed on day work at the basis rental rates entered by him in the "SCHEDULE OF DAY WORK RATES:2 EQUIPMENT ". The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricant, and other consumables and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants also shall be included in the rate of the equipment and no separately payment shall be made for it.
2. In calculating the payment due to the Contractor for Constructional Plant employed on day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Project Manager, the travelling time from the part of the Site where the Construction Plant was located when ordered by the Project Manager to be employed on day work and the time for return journey there to shall be included for payment.

d) Day work Materials

1. The Contractor shall be entitled to payment in respect of materials used for day work (except for materials for which the cost is included in the percentage addition to labor costs as detailed heretofore), at the rates entered by him in the "SCHEDULE OF DAY WORK RATES: 3 MATERIALS" and shall be deemed to include overhead charges and profit as follows;
 - (i) the rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc. and shall provide for delivery to store for stockpiling at the Site.
 - (ii) the cost of hauling materials for use on work ordered to be carried out as day work, from the store or stockpile on the Site to the place where it is to be used also shall be include in the same rate.

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 SCC should state the manner in which they will be used, and under whose authority (usually the Project Manager's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Employer to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

Bill of Quantities

1 Provisional Sum						
Procurement Item Details						
SL. No	Item Description	Unit	Quantity	Unit Rate(NPR)	Amount(NPR)	
1	n/A	N/A	1.0	0.0	0.00	
2 Radio television communication telecommunication and related equipment and apparatus						
2.1 Telecommunications equipment and supplies						
2.1.1 Telecommunications cable and equipment						
Procurement Item Details						
SL. No	Item Description	Unit	Quantity	Bidder's Rate (NPR)	Bidder's Rate (in words)	Total Amount (NPR)
1	Pole 6 Meters	Pcs	42.0			
2	POE Switch 8 Port 2SFP	PCs	42.0			
3	Omni Wireless Access Point Outdoor	Pcs	20.0			
4	Sectoral Wireless Access Point, Outdoor	Pcs	40.0			
5	Gigabit Ethernet Surge Protector for AP	Pcs	59.0			
6	Ethernet Cable	meter	240.0			
7	Ethernet Patch Cable	Pcs	92.0			
8	Optical Termination Box	Pcs	42.0			
9	SFP/Media Converter	Pcs	104.0			
10	Indoor Rack	Pcs	17.0			
11	Solar Panel 320 Wp	Set	43.0			
12	Solar mounting Set	Pcs	17.0			
13	Solar Charge Controller 20 Amp	Pcs	12.0			
14	Solar Charge Controller 50 Amp	Pcs	5.0			

Procurement Item Details

SL. No	Item Description	Unit	Quantity	Bidder's Rate (NPR)	Bidder's Rate (in words)	Total Amount (NPR)
15	Outdoor Pole equipment box	Pcs	42.0			
16	2 Core Electrical Cable, 6 sq.mm, Copper	meter	5170.0			
17	Conduit HDPE Pipe	meter	5170.0			
18	Residual Current Device	Pcs	42.0			
19	DC MCB	Pcs	43.0			
20	AC MCB	Pcs	41.0			
21	Battery 100 AH, GEL VLRA	Pcs	56.0			
22	800 VA Inverter/Charger	Pcs	7.0			
23	1200 VA Inverter/Charger	Pcs	3.0			
24	1600 VA Inverter/Charger	Pcs	6.0			
25	800 VA Inverter	Pcs	1.0			
26	Earthing	set	17.0			
27	Optical Fiber Patch Cord	Pcs	86.0			
28	Battery/UPS Rack	Pcs	17.0			
29	Ap Installation and commissioning Services with Accessories	site	1.0			
30	Miscellaneous	Site	1.0			
31	Central Office Core Router	Pcs	1.0			
32	Application Server	Pcs	1.0			
33	Log Server	Pcs	1.0			
34	NMS Server	Pcs	1.0			
35	Software	Pcs	1.0			

Procurement Item Details						
SL. No	Item Description	Unit	Quantity	Bidder's Rate (NPR)	Bidder's Rate (in words)	Total Amount (NPR)
36	42U Server Rack	Pcs	1.0			
37	24 Port Manageable switch	Pcs	1.0			
38	Optical Fiber Cabinet	Pcs	1.0			
39	Solar Panel 320 Wp	Pcs	8.0			
40	Solar Mounting Set	Pcs	1.0			
41	MPPT Charge Controller, 60 Amp	Pcs	1.0			
42	3000VA Charger/Inverter	Pcs	1.0			
43	100 AH GEL VLRA Battery	Pcs	8.0			
44	Fiber Network: 4 Core direct burial cable for distribution supply and installation	Km	5.2			
45	12 core direct burial cable for backbone supply and installation	Km	185.0			
46	Closure Supply and Installation	Pcs	30.0			
47	Warning Tape above direct burial Cable	Km	200.0			
48	Operational Expenditure: Maintenance of WiFi Network Site equipment and Facilities for one year	Site	17.0			
49	Maintenance of central office equipment and Facilities for one year	Site	1.0			
50	Maintenance of Fiber Network equipment and facilities for one year	set	1.0			
51	Broadband Bandwidth Charges for one Year	Site	1.0			
Total of Procurement Items						
Total Item Price						
VAT						
Grand Total						

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SECTION-VIII

General Conditions of Contract

General Conditions of Contract

A. General

1. Definitions

1.1 Boldface type is used to identify defined terms.

(a) The **Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

(b) The **Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.

(c) The Adjudicator is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.2 hereunder.

(d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.

(e) **Compensation Events** are those defined in GCC 50 hereunder.

(f) The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC 68.1.

(g) The **Contract** is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC 2.3 below.

(h) The **Contractor** is the party whose Bid to carry out the Works has been accepted by the Employer.

(i) The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.

(j) The **Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.

(k) **Days** are calendar days; months are calendar-months.

(l) **Dayworks** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

(m) A **Defect** is any part of the Works not completed in accordance with the Contract.

(n) The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.

(o) The **Defects Liability Period** is the period calculated from the Completion Date where the Contractor remains responsible for remedying defects.

(p) **Drawings** include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

(q) The **Employer** is the party who employs the Contractor to carry out the Works, as **specified in the SCC**.

(r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

(s) **Force Majeure** means an exceptional event or circumstance: which is

beyond a Party's control; which such Party could not reasonably have provided against before entering into the Contract; which, having arisen, such Party could not reasonably have avoided or overcome; and, which is not substantially attributable to the other Party.

(t) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

(u) **In writing** or **written** means hand written, type written, printed or electronically made, and resulting in permanent record.

(v) The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

(w) **Letter of Acceptance** means the formal acceptance by the Employer of the Bid and denotes the formation of the contract at the date of acceptance.

(x) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.

(y) **Party** means the Employer or the Contractor, as the context requires.

(z) **SCC** means Special Conditions of Contract

(aa) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

(bb) The **Project Manager** is the person **named in the SCC** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

(cc) **Retention Money** means the aggregate of all monies retained by the Employer pursuant to GCC 54.1.

(dd) **Schedules** means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Bids, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

(ee) The **Site** is the area defined as such in the SCC

(ff) **Site Investigation Reports** are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

(gg) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

(hh) The **Start Date** is given in the **SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

(ii) A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.

(jj) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

	<p>(kk) A Variation is an instruction given by the Project Manager which varies the Works</p> <p>(ll) The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the SCC.</p>
<p>2. Interpretation</p>	<p>2.1 In interpreting these GCC, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.</p> <p>2.2 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).</p> <p>2.3 The documents forming the Contract shall be interpreted in the following order of priority:</p> <ul style="list-style-type: none"> (a) Contract Agreement, (b) Letter of Acceptance, (c) Letters of Technical Bid and Price Bid, (d) Special Conditions of Contract, (e) General Conditions of Contract, (f) Specifications, (g) Drawings, (h) Bill of Quantities (or Schedules of Prices for lump sum contracts), and (i) Any other document listed in the SCC as forming part of the Contract.
<p>3. Language and Law</p>	<p>3.1 The language of the Contract and the law governing the Contract are stated in the SCC.</p> <p>1.2. Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer's country when</p> <ul style="list-style-type: none"> (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, the Borrower's Country prohibits any import of goods from, or any payments to, a particular country, person, or entity. Where the borrower's country prohibits payments to a particular firm or for particular goods by such an act of compliance, that firm may be excluded.
<p>4. Contract Agreement</p>	<p>4.1 The Parties shall enter into a Contract Agreement within 15 days after the Contractor receives the Letter of Acceptance, unless the Special Conditions establish otherwise. The Contract Agreement shall be based</p>

	upon the attached Contract forms in Section X.
5. Assignment	<p>5.1 Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party</p> <p>(a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party; and</p> <p>(b) may, as security in favor of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.</p>
6. Care and Supply of Documents	<p>6.1 The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, one copy of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.</p>
	<p>6.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.</p>
	<p>6.3 The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.</p>
	<p>6.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.</p>
7. Confidential Details	<p>7.1 The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor's compliance with the Contract and allow its proper implementation.</p>
	<p>7.2 Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.</p>
	<p>7.3 Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this Clause.</p>

8. Compliance with Laws	8.1 The Contractor shall, in performing the Contract, comply with applicable Laws.
9. Joint and Several Liability	9.1 If the Contractor is a joint venture of two or more entities , all such entities shall be jointly and severally liable to the Employer for the fulfillment of the provisions of the Contract, and shall designate one of such persons to act as a leader with authority to bind the joint venture. 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. The composition or the constitution of the joint venture shall not be altered without the prior consent of the Employer.
10. Project Manager's Decisions	10.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer.
11. Delegation	11.1 The Project Manager may delegate any of his duties and responsibilities to other people after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
12. Communications	12.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
13. Subcontracting	<p>13.1 For GoN Funded:</p> <p>A list of approved Subcontractors including its value/works is included as Article 2 (k) of contract Agreement. Approval by the Employer for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties, or responsibilities under the contract.</p> <p>For DP Funded :</p> <p>The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor’s obligations. Bidders may propose subcontracting up to the percentage of total value of contracts as specified in the SCC. The Sub contractor shall meet the qualification requirement as specified in SCC.</p>
14. Other Contractors	14.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the SCC . The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification
15 Personnel and Equipment	<p>15.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid to carry out the Works, or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.</p> <p>15.2 If the Project Manager asks the Contractor to remove a person who is a</p>

	<p>member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.</p> <p>15.3 If the Employer, Project Manager, or Contractor determines, that any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or other prohibited practices during the execution of the Works, then that employee shall be removed in accordance with Clause 15.2 above.</p>
16. Employer's and Contractor's Risk	16.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
17. Employer's Risks	<p>17.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:</p> <p>(a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to</p> <p>(i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or</p> <p>(ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.</p> <p>(b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.</p> <p>17.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to</p> <p>(a) a Defect which existed on the Completion Date,</p> <p>(b) an event occurring before the Completion Date, which was not itself an Employer's risk, or</p> <p>(c) the activities of the Contractor on the Site after the Completion Date.</p>
18. Contractor's Risks	18.1 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risks are Contractor's risks.
19. Insurance	<p>19.1 The Contractor shall provide insurance in the joint names of the Employer and the Contractor from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the SCC for the following events which are due to the Contractor's risks:</p> <p>(a) loss of or damage to the Works, Plant, and Materials;</p> <p>(b) loss of or damage to Equipment;</p> <p>(c) loss of or damage to property (except the Works, Plant, Materials,</p>

	<p>and Equipment) in connection with the Contract; and</p> <p>(d) Personal injury or death.</p> <p>19.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the proportions of Nepalese Rupees required to rectify the loss or damage incurred.</p> <p>19.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.</p> <p>19.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.</p> <p>19.5 Both parties shall comply with any conditions of the insurance policies.</p>
20. Site Investigation Reports	20.1 The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC , supplemented by any information available to the Contractor.
21. Contractor to Construct the Works	21.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
22. The Works to Be Completed within intended Completion Date	22.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them within the intended Completion Date.
23. Design by contractor and Approval by the Project Manager	<p>23.1 The contractor shall be responsible for the design of permanent works as specified in SCC.</p> <p>23.2 Contractor shall be responsible for design of the Temporary Works. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.</p> <p>23.3 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before their use.</p> <p>23.4 The Project Manager's approval shall not alter the Contractor's responsibility for design of temporary works.</p>
24. Safety, Security and Protection of the Environment	<p>24.1 The Contractor shall, throughout the execution, and completion of the works and remedying of any defects therein:</p> <p>a. Have full regard for the safety of all persons entitled to be upon the site and keep the site (so as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons.</p>

	<ul style="list-style-type: none"> b. Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when necessary or required by the Project Manager or by any duly constituted authority, for the protection of the Works of for the safety and convenience of the public or others. c. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. d. Ensure that any cut or fill slopes are planted in grass or other plant cover as soon as possible to protect them from erosion. e. Any spoil or material removed from drains shall be disposed of to designated stable tipping areas as directed by the Project Manager. f. Shall not use fuel wood as a means of heating during the processing or preparation of any materials forming part of the works. g. The Project Manager shall have the power to disallow any working practice or activity of the Contractor or direct that such practices or activities be modified should the Project Manager consider, on the advice of the relevant Government Departments, that the practices or activities will be harmful to wildlife. h. Provide on the Site such lifesaving apparatus as may be appropriate and an adequate and easily accessible first aid outfit or such outfits as may be required by any government ordinance, factory act, etc., subsequently published and amended from time to time.
25. Discoveries	25.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
26. Possession of the Site	26.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the SCC , the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
27. Access to the Site	27.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
28. Instructions, Inspections and Audits	<p>28.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.</p> <p>28.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and sub consultants to keep accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.</p> <p>28.3 The Contractor shall permit the GoN/DP and/or persons appointed by the GoN/DP to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the</p>

	<p>Contract, and to have such accounts and records audited by auditors appointed by the GoN/DP if required by the GoN/DP. The Contractor's attention is drawn to Sub-Clause 73.2 which provides, inter alia, that acts intended to materially impede the exercise of the GoN's/DP's inspection and audit rights provided for under this Sub-Clause constitute a obstructive practice subject to contract termination.</p>
29. Dispute Settlement	<p>29.1 The Employer and the Contractor shall attempt to settle amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the Contract.</p> <p>29.2 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.</p>
30. Procedures for Disputes	<p>30.1 In case of arbitration, the arbitration shall be conducted in accordance with the arbitration procedures published by the Nepal Council of Arbitration (NEPCA) at the place given in the SCC.</p>
B. Staff and Labor	
31. Forced Labor	<p>31.1 The Contractor shall not employ forced labor, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty. This covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor–contracting arrangements.</p>
32. Child Labor	<p>32.1 The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where national laws have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.</p>
33. Non-discrimination and Equal Opportunity	<p>34.1 The Contractor shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where national law provides for non-discrimination in employment, the Contractor shall comply with national law. When national laws are silent on nondiscrimination in employment, the Contractor shall meet this Sub clause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination.</p>
B. Time Control	
34. Program	<p>34.1 Within the time stated in the SCC, after the date of the Letter of</p>

	<p>Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.</p> <p>34.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.</p> <p>34.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall Provide an updated Activity Schedule within 15 days of being instructed to by the Project Manager.</p> <p>34.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.</p>
<p>35. Extension of the Intended Completion Date</p>	<p>35.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.</p> <p>35.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information at least 21 days prior to the intended completion date. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.</p>
<p>36. Acceleration</p>	<p>36.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.</p> <p>36.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.</p>
<p>37. Delays Ordered by the Project Manager</p>	<p>37.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.</p>

38. Management Meetings	<p>38.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.</p> <p>38.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.</p>
39. Early Warning	<p>39.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.</p> <p>39.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.</p>
C. Quality Control	
40. Identifying Defects	40.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
41. Tests	41.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.
42. Correction of Defects	<p>42.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.</p> <p>42.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.</p>
43. Uncorrected Defects	43.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.
D. Cost Control	
44. Contract Price	44.1 In the case of a Unit Rate contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill

	<p>of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.</p> <p>44.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.</p>
<p>45. Changes in the Contract Price</p>	<p>45.1 In the case of an Unit Rate contract:</p> <p>(a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 2 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.</p> <p>(b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 10 percent, except with the prior approval of the Employer.</p> <p>(c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.</p> <p>45.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.</p>
<p>46. Variations</p>	<p>46.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.</p> <p>46.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.</p> <p>46.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.</p> <p>46.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.</p> <p>46.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.</p> <p>46.6 In the case of an Unit Rate contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated</p>

	<p>in GCC 45.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.</p>
<p>47. Cash Flow Forecasts</p>	<p>47.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.</p>
<p>48. Payment Certificates</p>	<p>48.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.</p> <p>48.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor within 30 days of submission by contractor.</p> <p>48.3 The value of work executed shall be determined by the Project Manager.</p> <p>48.4 The value of work executed shall comprise:</p> <ul style="list-style-type: none"> (a) In the case of an Unit Rate contract, the value of the quantities of work in the Bill of Quantities that have been completed; or (b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule. <p>48.5 The value of work executed shall include the valuation of Variations and Compensation Events.</p> <p>48.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.</p>
<p>49. Payments</p>	<p>49.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest as indicated in the SCC on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made.</p> <p>49.2 If an amount certified is increased in a later certificate or as a result of an award by an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.</p> <p>49.3 Items of the Works for which no rate or price has been entered in BOQ shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.</p>

50. Compensation Events

50.1 The following shall be Compensation Events:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC 26.1.
- (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.

50.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

50.3 As soon as information demonstrating effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

50.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

51. Tax	51.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC 53.
52. Currency	52.1 The currency of Contracts shall be Nepalese Rupees.
53. Price Adjustment	<p>53.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the SCC. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due.</p> <p>53.2 Adjustment Formulae¹: The formulae will be of the following general type:</p> $pn = A + b \frac{Ln}{Lo} + c \frac{Mn}{Mo} + d \frac{En}{Eo} + etc.$ <p>Where:</p> <p><i>pn</i> is a price adjustment factor to be applied to the amount for the payment of the work carried out in the subject month, determined in accordance with Clause 49;</p> <p>A is a constant, specified in the Bidding Forms- Table of Price Adjustment data, representing the nonadjustable portion in contractual payments;²b, c, d, etc., coefficients representing the estimated proportion of each cost element (labor, materials, equipment usage, etc.) in the Works or sections thereof, net of Provisional Sums, as specified in the SCC;</p> <p><i>Ln, Mn, En, etc.</i>, are the current cost indices or reference prices of the cost elements for month “n,” determined pursuant to Sub-Clause 53.4, applicable to each cost element; and</p> <p><i>Lo, Mo, Eo, etc.</i>, are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 53.4</p>
	53.3 Sources of Indices and Weightings: The sources of indices shall be those listed in the Bidding Forms- Table of Price Adjustment data, as approved by the Project Manager and stated in SCC. Indices shall be appropriate for their purpose and shall relate to the Contractor’s proposed source of supply of inputs on the basis of which his Contract shall have been computed. As the proposed basis for price adjustment, the Contractor shall have submitted with his bid the tabulation of Weightings and Source of Indices in the Bidding Forms, which shall be

¹ For complex Works involving several types of construction work with different inputs, a family of Formulae will be necessary. The various items of Day work may also require different formulae, depending on the nature and source of the inputs

² Insert a figure for factor A only where there is a part of the Contractors’ expenditures which will not be subject to fluctuation in cost or to compensate for the unreliability of some indices. A should normally be 0.15. The sum of A, b, c, d, etc., should be one.

	<p>subject to approval by the Project Manager.</p> <p>53.4 Base, Current and Provisional Indices: The base cost indices or prices shall be those prevailing on the day 30 days prior to the latest date for submission of bids. Current indices or prices shall be those prevailing on the day 30 days prior to the last day of the period to which a particular Interim Payment Certificate is related. If at any time the current indices are not available, provisional indices as determined by the Project Manager will be used, subject to subsequent correction of the amounts paid to the Contractor when the current indices become available.</p> <p>53.5 Weightings: The weightings for each of the factors of cost given in the Bidding Forms shall be adjusted if, in the opinion of the Project Manager, they have been rendered unreasonable, unbalanced or inapplicable as a result of varied or additional work already executed or instructed under Clause 46 or for any other reason.</p>
	<p>53.6 Where, price adjustment provision is not applicable pursuant to Sub-clause 53.1 then the Contract is subject to price adjustment only for construction material in accordance with this clause. If the prices of the construction materials stated in the contract is increased or decreased in an unexpected manner in excess of ten (10%) percent in comparison to the base price construction material stated in Section –IV, Bidding Forms-Table of Price Adjustment Data, then the price adjustment for the increase or decrease of price of the construction material beyond 10% shall be made by applying the following formulas:</p> <p>For unexpected increase in price</p> $P = [R_1 - (R_0 \times 1.10)] \times Q$ <p>For unexpected decrease in price P</p> $= [R_1 - (R_0 \times 0.90)] \times Q$ <p>Where:</p> <p>“P” is price adjustment amount</p> <p>“R₁” is the present price of the construction material (Source of indices shall be those listed in the Bidding forms)</p> <p>“R₀” is the base price of the construction material</p> <p>“Q” is quantity of the construction material consumed in construction during the period of price adjustment consideration If the Base price and source is to be proposed by the Bidder as per the provision made in Section –IV, Bidding Forms-Table of Price Adjustment Data then the Base price and source filled by Bidder for the construction material stated in the Bidding Form shall be subject to the approval of the Project manager and shall be as stated in SCC..</p> <p>53.7 The Price Adjustment amount shall be limited to a maximum of the initial Contract Amount as specified in the SCC.</p> <p>53.8 The Price Adjustment provision shall not be applicable for delayed period if the contract is not completed in time due to the delay caused</p>

	by the contractor or the contract is a Lump sum Contract
54. Retention	<p>54.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.</p> <p>54.2 Upon the issue of a Defects Liability Certificate by the Project Manager, in accordance with GCC 70.1, half the total amount retained shall be repaid to the Contractor and half when the Contractor has submitted the evidence of submission of tax return to the concerned Internal Revenue Office. On completion of the whole works, the Contractor may substitute retention money with an “on demand” bank guarantee.</p>
55. Liquidated Damages	<p>55.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s liabilities.</p> <p>55.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC.49</p>
56. Bonus	<p>56.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the SCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.</p>
57. Advance Payment	<p>57.1 The Employer shall make advance payment to the Contractor of the amounts stated in the SCC in two equal installments by the date stated in the SCC, against provision by the Contractor of an unconditional bank guarantee from Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal. in a form acceptable to the Employer in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.</p> <p>57.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.</p> <p>57.3 The advance payment shall be repaid by deducting proportionate</p>

	<p>amounts, as stated in SCC, from payments otherwise due Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.</p>
58. Securities	<p>58.1 The Performance Security, including any additional security required as per ITB 35.5 and ITB 40.1, shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the SCC, by a Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal acceptable to the Employer, and denominated in Nepalese Rupees. The Performance Security shall be valid until a date 30 days from the date of issue of the Defect Liability Certificate in the case of a bank guarantee.</p> <p>Any additional performance security required as per ITB 35.5 shall be valid until a date 30 days from the date of issue of the certificate of Completion in the case of a bank guarantee.</p> <p>Any additional performance security required as per ITB 40.1 shall be valid until a date 30 days from the date of issue of the certificate of DLP in the case of a bank guarantee.</p> <p>58.2 The performance security issued by any foreign Bank outside Nepal must be counter guaranteed by Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal.</p>
59. Day works	<p>59.1 If applicable, the Day works rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.</p> <p>59.2 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.</p> <p>59.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.</p>
60. Cost of Repairs	<p>60.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.</p>
F. Force Majeure	
61. Definition of Force Majeure	<p>61.1 In this Clause, "Force Majeure" means an exceptional event or circumstance,</p> <ul style="list-style-type: none"> (a) which is beyond a Party's control; (b) which such Party could not reasonably have provided against before entering into the Contract;

	<p>(c) which, having arisen, such Party could not reasonably have avoided or overcome; and</p> <p>(d) which is not substantially attributable to the other Party.</p>
	<p>61.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:</p> <p>(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;</p> <p>(b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war;</p> <p>(c) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel;</p> <p>(d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity; and</p> <p>(e) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.</p>
62. Notice of Force Majeure	<p>62.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.</p> <p>62.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.</p> <p>62.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.</p>
63. Duty to Minimize Delay	<p>63.1 Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.</p> <p>63.2 A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.</p>
	<p>64.1 If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure of which notice has been given</p>

<p>64. Consequences of Force Majeure</p>	<p>under GCC 62, and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to GCC 30 to</p> <ul style="list-style-type: none"> (a) an extension of time for any such delay, if completion is or will be delayed, under GCC35 ; and (b) if the event or circumstance is of the kind described in subparagraphs (a) to (d) of GCC 61.2 and, in the case of subparagraphs (b) to (d), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in GCC 19. <p>64.2 After receiving this notice, the Project Manager shall proceed in accordance with GCC 10 to agree or determine these matters.</p>
<p>65. Force Majeure Affecting Subcontractor</p>	<p>65.1 If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's nonperformance or entitle him to relief under this Clause.</p>
<p>66. Optional Termination, Payment and Release</p>	<p>66.1 If the execution of substantially all the Works in progress is prevented for a continuous period of 90 days by reason of Force Majeure of which notice has been given under GCC 62, or for multiple periods which total more than 150 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with GCC 72.5.</p> <p>66.2 Upon such termination, the Project Manager shall determine the value of the work done and issue a Payment Certificate, which shall include</p> <ul style="list-style-type: none"> (a) the amounts payable for any work carried out for which a price is stated in the Contract; (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal; (c) other Costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works; (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the

	<p>Contractor's works in his country (or to any other destination at no greater cost); and</p> <p>(e) the Cost of repatriation of the Contractor's staff and labor employed wholly in connection with the Works at the date of termination.</p>
67. Release from Performance	<p>67.1 Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises, which makes it impossible or unlawful for either or both Parties to fulfill its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance,</p> <p>(a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract; and</p> <p>(b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under GCC 66 if the Contract had been terminated under GCC 66.</p>
G. Finishing the Contract	
68. Completion	<p>68.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the work is completed.</p> <p>68.2 In addition to the other provisions, before acceptance of the completed works, Employer shall verify and assure that such works are within the set objective, quality and appropriate to operate and use.</p>
69. Taking Over	<p>69.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.</p>
70. Final Account	<p>70.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 60 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.</p>
71. Operating and Maintenance Manuals	<p>71.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.</p> <p>71.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC 71.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the</p>

	amount stated in the SCC from payments due to the Contractor.
72. Termination	<p>72.1 The Employer may terminate the Contract at any time if the contractor;</p> <ul style="list-style-type: none"> a. does not commence the work as per the Contract, b. abandons the work without completing, c. fails to achieve progress as per the Contract. <p>72.2 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.</p> <p>72.3 Fundamental breaches of Contract shall include, but shall not be limited to, the following :</p> <ul style="list-style-type: none"> (a) The Contractor uses the advance payment for matters other than the contractual obligations, (b) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager; (c) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days; (d) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation. (e) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 90 days of the date of the Project Manager's certificate; (f) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager; (g) the Project Manager gives two consecutive Notices to update the Program and accelerate the works to ensure compliance with GCC Sub clause 22.1 and the Contractor fails to update the Program and demonstrate acceleration of the works within a reasonable period of time determined by the Project Manager; (h) the Contractor does not maintain a Security, which is required; (i) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the SCC; and (j) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC 73.1. <p>72.4 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC 72.3 above, the Project Manager shall decide whether the breach is fundamental or not.</p> <p>72.5 Notwithstanding the above, the Employer may terminate the Contract for convenience.</p> <p>72.6 If the Contract is terminated, the Contractor shall stop work</p>

	<p>immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.</p>
<p>73. Fraud and Corruption</p>	<p>73.1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 15 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site.</p> <p>73.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with GCC Clause 15.</p> <p>For the purposes of this GCC 73;</p> <ul style="list-style-type: none"> (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"⁵ 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"⁶ 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"⁷ 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 <ul style="list-style-type: none"> (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 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's/DP's inspection and audit rights provided for under GCC28.3.
<p>74. Black Listing</p>	<p>74.1 Without prejudice to any other rights of the Employer under this Contract, GoN, Public Procurement Monitoring Office (PPMO), on the recommendation of procuring entity, may blacklist a Bidder 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:</p> <ul style="list-style-type: none"> (a) if it is established that the Contractor has committed substantial defect in 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

	<p>contract.</p> <p>(b) If convicted from a court of law in a criminal offense liable to be disqualified for taking part in procurement contract,</p> <p>(c) If it is established that the Contractor has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.</p>
75. Payment upon Termination	<p>75.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.</p> <p>75.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.</p> <p>75.3 If the Contract is terminated because of fundamental breach of Contract or for any other fault by the Contractor, the performance security shall be forfeited by the Employer.</p> <p>In such case, amount to complete the remaining works as per the Contract shall be recovered from the Contractor as Government dues.</p>
76. Property	<p>76.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.</p>
77. Release from Performance	<p>77.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.</p>
78. Suspension of DP Loan/Credit/Grant	<p>78.1 In the event that the DP suspends the loan/ credit/grant to the Employer from which part of the payments to the Contractor are being made:</p> <p>a. the Employer is obligated to notify the Contractor of such suspension within 7 days of having received the DP's suspension notice; and</p> <p>b. if the Contractor has not received sums due him within the 30 days for payment provided for in GCC 49.1, the Contractor may immediately issue a 15-day termination notice.</p>
79. Eligibility	<p>79.1 The Contractor shall have the nationality of an eligible country as specified in Section V of the bidding document. The Contractor shall be deemed to have the nationality of a country if the Contractor is a citizen or is constituted, or incorporated, and operates in conformity with the</p>

	<p>provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.</p>
	<p>79.2 The materials, equipment, and services to be supplied under the Contract shall have their origin in eligible source countries as specified in Section V of the bidding document and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, the Contractor may be required to provide evidence of the origin of materials, equipment, and services.</p>
	<p>79.3 For purposes of GCC 79.2, "origin" means the place where the materials and equipment are mined, grown, produced, or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.</p>
80. Project Manager's Duties and Authorities	<p>80.1 The Project Manager's duties and authorities are restricted to the extent as stated in the SCC.</p>
81. Quarries and Spoil Dumps	<p>81.1 Any quarry operated as part of this Contract shall be maintained and left in a stable condition without steep slopes and be either refilled or drained and be landscaped by appropriate planting. Rock or gravel taken from a river shall be removed over some distance so as to limit the depth of material removed at any one location, not disrupt the river flow or damage or undermine the river banks. The Contractor shall not deposit excavated material on land in Government or private ownership except as directed by the Project Manager in writing or by permission in writing of the authority responsible for such land in Government ownership, or of the owner or responsible representative of the owner of such land in private ownership, and only then in those places and under such conditions as the authority, owner or responsible representative may prescribe.</p>
82. Local Taxation	<p>82.1 The prices bid by the Contractor shall include all taxes that may be levied in accordance to the laws and regulations in being in Nepal on the date 30 days prior to the closing date for submissions of Bids on the Contractor's equipment, plant and materials acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Nepal on profits made by him in respect of the Contract.</p>
83. Value Added Tax	<p>83.1 The Contract is not exempted from value added tax. An amount specified in the schedule of taxes shall be paid by the Contractor in the concerned VAT office within time frame specified in VAT regulation.</p>
84. Income Taxes on Staff	<p>84.1 The Contractor's staff, personnel and labor will be liable to pay personal income taxes in Nepal in respect of their salaries and wages, as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions</p>

	<p>as may be imposed on him by such laws and regulations.</p> <p>84.2 The issue of the Final Account Certificate pursuant to clause GCC 70 shall be made only upon submittal by the Contractor of a certificate of income tax clearance from the Government of Nepal.</p>
85. Duties, Taxes and Royalties	<p>85.1 Any element of royalty, duty or tax in the price of any goods including fuel oil, and lubricating oil, cement, timber, iron and iron goods locally procured by the Contractor for the works shall be included in the Contract rates and prices and no reimbursement or payment in that respect shall be made to the Contractor.</p> <p>85.2 The Contractor shall familiarize himself with GON the rules and regulations with regard to customs, duties, taxes, clearing of goods and equipment, immigration and the like, and it will be necessary for him to follow the required procedures regardless of the assistance as may be provided by the Employer wherever possible.</p> <p>85.3 The Contractor shall pay and shall not be entitled to the reimbursement of cost of extracting construction materials such as sand, stone/boulder, gravel, etc. from the river beds or quarries. Such prices will be levied by the local District Development Committee (DDC) as may be in force at the time. The Contractor, sub-contractor(s) employed directly by him and for whom he is responsible, will not be exempted from payment of royalties, taxes or other kinds of surcharges on these construction materials so extracted and paid for to the DDC.</p>
86. Member of Government, etc, not Personally Liable	<p>86.1 No member or officer of GoN or the Employer or the Project Manager or any of their respective employees shall be in any way personally bound or liable for the act or obligations of the Employer under the Contract or answerable for any default or omission in the observance or performance of any of act, matter or thing which are herein contained.</p>
87. Approval of Use of Explosives	<p>87.1 No explosives of any kind shall be used by the Contractor without the prior consent of the Employer in writing and the Contractor shall provide, store and handle these and all other items of every kind whatsoever required for blasting operations, all at his own expense in a manner approved in writing by the Employer.</p>
88 Compliance with Regulations for Explosives	<p>88.1 The Contractor shall comply with all relevant ordinances, instructions and regulations which the Government, or other person or persons having due authority, may issue from time to time regarding the handling, transportation, storage and use of explosives.</p>
89. Permission for Blasting	<p>89.1 The Contractor shall at all times maintain full liaison with and inform well in advance, and obtain such permission as is required from all Government authorities, public bodies and private parties whatsoever concerned or affected, or likely to be concerned or affected by blasting operation.</p>
90. Records of Explosives	<p>90.1 Before the beginning of the Defects Liability Period, the Contractor shall account to the satisfaction of the Project Manager for all explosives brought on to the Site during the execution of the Contract and the Contractor shall remove all unused explosives from the Site on</p>

	completion of works when ordered by the Project Manager.
91. Traffic Diversion	<p>91.1 The Contractor shall include the necessary safety procedures regarding and pedestrian traffic diversion that is needed in execution of the works. The Contractor shall include in his costing of works, any temporary works or diversion that are needed during the construction period. All traffic diversion should be designed for the safety of both the motoring public and the men at work. It shall ensure the uninterrupted flow of traffic and minimum inconvenience to the public during the period concerned. As such, adequate warning signs, flagmen and other relevant safety precautionary measures shall be provided to warn motorists and pedestrians well ahead of the intended diversion as directed by the Project Manager. All traffic devices used shall be designed in accordance with the instruction of Project Manager.</p>

SECTION-IX

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.

A. General	
GCC 1.1 (q)	The Employer is Nepal Telecommunications Authority Nepal Telecommunications Authority, Kathmandu, Kathmandu, Bagmati Province, Nepal
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be 6 Month Sectional completion is not applicable
GCC 1.1 (bb) & 10.1	The Project Manager is Deputy Director, Infrastructure Section. The Project Manager and Engineer are synonyms.
GCC 1.1 (ee)	The Site is located at Manaslu and is defined in drawings No. 1
GCC 1.1 (hh)	The Start Date shall be 01-02-2022
GCC 1.1 (ll)	The Works consist of As per TOR
GCC 2.2	Sectional Completions are: AS per TOR
GCC 2.3 (i)	The following documents also form part of the Contract: TOR, Authorization Letter
GCC 3.1	The language of the contract is ENGLISH/NEPALI The law that applies to the Contract is the law of NEPAL
GCC 11.1	The Project Manager may delegate any of his duties and responsibilities
GCC 13.1	Maximum percentage of subcontracting permitted is: 25 % of the total contract amount Nature of Works that can be sub contracted: Not Applicable Qualification Criteria: The proposed sub-contractor shall meet the following requirements: 1) Completion of 80% of the quantity of the work being sub contracted 2) Average Annual Construction Turnover for the work being sub contracted should be at least $1.5 * V/T$ where V is the proposed value of sub contract and T is time in year. For contract duration of up to 1 year, T shall be "1". Financial Resources: The sub contract must demonstrate that it has the financial resources to meet its current contract commitment plus three months' requirements for the sub contracted work.

GCC 14.1	Schedule of other contractors: As per TOR
GCC 19.1	<p>The minimum insurance amounts and deductibles shall be:</p> <ol style="list-style-type: none"> 1. The minimum cover for loss of or damage to the Works, Plant and Materials is: [insert percent] of the Contract Amount. 2. The maximum deductible for insurance of the Works and of Plant and Materials is: [insert amount] 3. The minimum cover for loss or damage to Equipment is : [insert amount] 4. The maximum deductible for insurance of Equipment is: [insert amount] 5. The minimum for insurance of other property is: [insert amount] with unlimited number of occurrences 6. The maximum deductible for insurance of other property is: [insert amount] 7. The minimum cover for personal injury or death insurance <ol style="list-style-type: none"> i. for the Contractor's employees is that specified in the Labor act of Nepal and ii. for other people is :[insert amount] with an unlimited number of occurrences
GCC 20.1	Site Investigation Reports are: As Per TOR
GCC 23.1	The following shall be designed by the Contractor: Defined at Time of Contract
GCC 26.1	The Site Possession Date(s) shall be: As per TOR
GCC 30.1	The place of arbitration shall be: Nepal
B. Time Control	
GCC 34.1	The Contractor shall submit for approval a Program for the Works within 30days from the date of the Letter of Acceptance.
GCC 34.3	<p>The period between Program updates is 30 days</p> <p>The amount to be withheld for late submission of an updated Program is N/A NPR</p>
C. Quality Control	
GCC 42.1	The Defects Liability Period is 1 Yr

D. Cost Control

GCC 49.1	Prevailing Interest Rate 8 %		
GCC 53.1	The Contract is not subject to price adjustment.		
GCC 53.6	Base Price of Construction Materials applicable for price adjustment shall be as per the Table of Adjustment Data submitted by Bidder together with the Letter of Price Bid which is approved by the Project manager.		
GCC 53.7	The Price Adjustment amount shall be limited to a maximum 25 % of the initial Contract Amount		
GCC 54.1	The proportion of payments retained is: 5 %		
GCC 55.1	The liquidated damages for the whole of the Works are 0.05 % of the final Contract Price per day. The maximum amount of liquidated damages for the whole of the Works is 10 % of the final Contract Price.		
GCC 56.1	The Bonus for the whole of the Works is 0.00 % per day. The maximum amount of Bonus for the whole of the Works is 0 % of the final Contract Price.		
GCC 57.1	The Advance Payments shall be 20.00 % and shall be paid in two equal installments to the Contractor.		
	Installment	Percentage	Requirement
	As per Procurement Bylaw 2073 of NTA	20.0	Site Inspection Report
GCC 57.3	Deductions from Payment Certificates will commence in the first certificate in which the value of works executed exceeds 30% of the Contract Price. Deduction will be at the rate of 40% of the respective Monthly Interim Payment Certificate until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the end of 80% of the approved contract period.		
GCC 58.1	The Performance Security amount is NRs 5		

E. Finishing the Contract

GCC 71.1	The date by which operating and maintenance manuals are required is 0		
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GCC 71.2	The date by which 'as built' drawings are required is 0 The amount to be withheld for failing to produce "as built" drawings and/or Operating and maintenance manuals is 0
GCC 72.3 (i)	The maximum number of days is 200 days
GCC 80	The Project Manager has to obtain the specific approval of the Employer for taking any of the following actions : a.Approving subcontracting of any part of the works under General Conditions of Contract Clause 13; b.Certifying additional costs determined under General Conditions of Contract Clause 50; c.Determining start date under General Conditions of Contract Clause 1; d.Determining the extension of the intended Completion Date under General Conditions of Contract Clause 35; e.Issuing a Variation under General Conditions of Contract Clause 1 and 46, except in an emergency situation, as reasonably determined by the Project Manager; emergency situation may be defined as the situation when protective measures must be taken for the safety of life or of the works or of adjoining property. f.Adjustment of rates under General Conditions of Contract Clause 45;

SECTION-X

Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Section X: Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Letter of Intent

[on letterhead paper of the Employer]

Date:

To: **Name and address of the Contractor**.....

Subject: **Issuance of letter of intent to award the contract**.....

This is to notify you that, it is our intention to award the contract **[insert date]**for execution of the ... **[insert name of the contract and identification number, as given in the Contract Data/SCC]** to you as your bid price **[insert amount in figures and words in Nepalese Rupees]** as corrected and modified in accordance with the Instructions to Bidders is hereby selected as substantially responsive lowest evaluated bid.

Authorized Signature:

Name:

Title:

CC:

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

[Notes on Letter of Intent

The issuance of Letter of Intent is the information of the selection of the bid of the successful bidder by the Employer and for providing information to other unsuccessful bidders who participated in the bid as regards to the outcome of the procurement process. This standard form of Letter of Intent to Award should be filled in and sent to the successful Bidder only after evaluation and selection of substantially responsive lowest evaluated bid.]

Letter of Acceptance

[on letterhead paper of the Employer]

Date:

To: **Name and address of the Contractor**.....

Subject: **Notification of Award**

This is to notify that your Bid dated **date** for execution of the..... **name of the contract and identification number, as given in the Contract Data/SCC** for the Contract price of Nepalese Rupees [**insert amount in figures and words in Nepalese Rupees**], as corrected in accordance with the Instructions to Bidders is hereby accepted in accordance with the Instruction to Bidders.

You are hereby instructed to contact this office to sign the formal contract agreement within 15 days with Performance Security of **NRs.** in accordance with the Conditions of Contract, using for that purpose the Performance security Form included in Section X (Contract Forms) of this Bidding Document.

Authorized Signature:

Name and Title of Signatory:

Contract Agreement

THIS AGREEMENT made thedayof.....between..... name of the Employer(*hereinafter “the Employer”*), of the one part, andname of the Contractor(*hereinafter “the Contractor”*), of the other part:

WHEREAS the Employer desires that the Works known as name of the Contractshould be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects in the sum of NRs**[insert amount of contract price in words and figures including taxes]**(hereinafter “the Contract Price”).

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (a) the Letter of Acceptance;
 - (b) the Letters of Technical and Price Bid;
 - (c) the Addenda Nos **Insert addenda numbers if any**
 - (d) the Special Conditions of Contract;
 - (e) the List of Eligible Countries that was specified in Section V of the bidding document,
 - (f) the General Conditions of Contract;
 - (g) the Specification;
 - (h) the Drawings;
 - (i) Bill of Quantities (or Schedules of Prices for lump sum contracts), and
 - (j) Table of Price Adjustment Data
 - (k) List of Approved Subcontractors [*For GoN funded project*]
 - (l) **[Specify if there are any other document]**
3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works 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
for and on behalf the Contractor in the presence of

Witness, Name Signature, Address, Date

Signed by
for and on behalf of the Employer in the presence of

Witness, Name, Signature, Address, Date

List of Approved Subcontractors

In accordance with GCC Sub-Clause 13.1, The following Subcontractors are approved for carrying out the work as specified below.

Name of Subcontractors	Description of Works	Value/Percentage of subcontract

Letter of Commitment for Bank's Undertaking for Line of Credit

***Bank's Name, and Address of Issuing Branch or Office
(On Letter head of the Commercial bank or any Financial Institution eligible to issue Bank Guarantee as per prevailing Law)***

Date:

Contract No:

Name of Contract :

To:

[Name and address of the Employer]

CREDIT COMMITMENT No: *[insert number]*

We are pleased to know that *[name of Contractor]* (hereinafter called "the Contractor") has been awarded the Contract for the execution of the Works of ***[description of works]*** for above contract.

Furthermore, we understand that, according to your conditions, the Contractor's Financial Capacity i.e. Liquid Asset must be substantiated by a Letter of Commitment of Bank's Undertaking for Line of Credit.

At the request of, and arrangement with, the Contractor, we *[name and address of the Bank]* do hereby agree and undertake that *[name and address of the Contractor]* will be provided by us with a revolving line of credit, for execution of the Works viz. *[insert name of the works]*, for an amount not less than NRs*[in figure]* (*in words*) for the sole purpose of the execution of the above Contract. This Revolving Line of Credit will be maintained by us until ***[Insert "Initial Contract Period"]*** months by the Procuring Entity.

This committed line of credit shall not be terminated or cancelled without the prior written approval of Employer.

In witness whereof, authorised representative of the Bank has hereunto signed and sealed this Letter of Commitment.

Signature

Signature

Name :

Name :

Designation:

Designation:

Performance Security

(On letterhead paper of the Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal.)

..... **Bank's Name, and Address of Issuing Branch or Office**

Beneficiary: Name and Address of Employer

Date:

Performance Guarantee No.:.....

We have been informed that **[insert name of the Contractor]** (hereinafter called "the Contractor") has been notified by you to sign the Contract No. **[insert reference number of the Contract]** for the execution of **[insert name of contract and brief description of Works]** (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we... **[insert name of the Bank]** hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of **[insert name of the currency and amount in figures*]** (..... **insert amount in words**) such sum being payable in Nepalese Rupees, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the.....Day of **, and any demand for payment under it must be received by us at this office on or before that date.

.....
Seal of Bank and Signature(s)

Note:

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

* The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract in Nepalese Rupees.

** Insert the date thirty days after the date specified for the Defect Liability Period. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee".

Advance Payment Security

(On letterhead paper of the Commercial Bank or Financial Institution eligible to issue Bank Guarantee as per prevailing Law in Nepal.)

..... **Bank's Name, and Address of Issuing Branch or Office**.....

Beneficiary: **Name and address of employer**

Date :

Advance Payment Guarantee No.....

We have been informed thathas entered into Contract No. **Name and Address of Employer**.....**name of the Contractor**.....(hereinafter called "the Contractor")..reference number of the Contract.....dated with you, for the execution of ...contract and brief description of Works (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum..... name of the currency and amount in figures*...(.... **amount in words**) is to be made against an advance payment guarantee.

At the request of the Contractor, we..... **name of the Bank** hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of.....name of the currency and amount in figures*.....(**amount in words**) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the day of **, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

.....
Seal of Bank and Signature(s)

Note:

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

*The Guarantor shall insert an amount representing the amount of the advance payment in Nepalese Rupees of the advance payment as specified in the Contract.

** Insert the date Thirty days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee".