

BIDDING DOCUMENT

Procuring Agency BHUTAN BROADCASTING SERVICES CORPORATION

TENDER No.: BBSC/TECH-Trans(Infrastructure)/2016

DATE:

Scope of Work: Supply, Installation, Testing & Commissioning of BBSC transmission infrastructure (Construction of Prefabricated shelter, Tower and Power system)

1

Table of Contents

Section I. Instructions to Bidders (ITB)	2
Format and Signing of Bid	
Section II. Bidding Data Sheet	15
Section III. Eligible Countries	19
Section IV. Forms of Bid, Qualification Information, Letter of Acceptance, Contract	and
Integrity Pact	20
1. Contractor's Bid	20
Qualification information and evaluation table	21
Bank Certificates	23
Letter of Acceptance	24
Contract Agreement	25
Integrity Pact	28
Section V. General Conditions of Contract (GCC)	31
Notes on General Conditions of Contract	
Table of Clauses	31
A. General	33
13.1 From the Start Date until the Defects Liability Certificate has been issued,	
personal injury, death, and loss of or damage to property (including, without lin	
Works, Plant, Materials and Equipment) which are not Employer's risks are	
risks.	47
Section VI. Special Conditions of Contract	
Section VII Specifications and Performance Requirements	
Section VIII. Drawings	
Section IX. Bill of Quantities	
Section X. Security Forms	
Form of Bid Security (Bank Guarantee)	
Performance Demand Bank Guarantee	
Bank Guarantee for Advance Payment	
Invitation for Bids	
Notes on the Invitation for Bids (IFB)	58

Section I. Instructions to Bidders (ITB)6 Table of Clauses

		_
A (General	
	1. Scope of Bid	
	2. Fraud and Corruption	
	3. Eligible Bidders	
	4. Qualifications of the Bidder	
	5. One Bid per Bidder	
	6. Cost of Bidding	
	7. Site Visit	
В.	Bidding Documents	
	8. Content of Bidding Documents	
	Clarification of Bidding Documents	
	10. Amendment of Bidding Documents	
C.	Preparation of Bids	
	11. Language of Bid	
	12. Documents Comprising the Bid	
	13. Bid Prices	
	14. Currencies of Bid and Payment	
	15. Bid Validity	
	16. Bid Security	
	17. Alternative Proposals by Bidders	
	18. Format and Signing of Bid	
D.	Submission of Bids	
	19. Sealing and Marking of Bids	9
	20. Deadline for Submission of Bids	
	21. Late Bids	9
	22. Withdrawal, Substitution and Modification of Bids	
E.	Bid Opening and Evaluation	
	23. Bid Opening	
	24. Confidentiality	
	25. Clarification of Bids	
	26. Examination of Bids and Determination of Responsiveness	
	27. Correction of Errors	
	28. Currency for Bid Evaluation	
	29. Evaluation and Comparison of Bids	
	30. Preference for Domestic Bidders	12
F.	Award of Contract	
	31. Award Criteria	
	32. Employer's Right to Accept any Bid and to Reject any or all Bids	
	33. Notification of Award and Signing of Contract	
	34. Performance Security	
	35. Advance Payment and Security	
	36. Adjudicator	14

Instructions to Bidders (ITB)

A. General

1. Scope of Bid and Source of Funds

- 1.1 The Employer as defined in Section II, Bidding Data Sheet (BDS), invites Bids for the construction of Works, as described in the BDS and Section VI, Special Conditions of Contract (SCC). The name and identification number of the Contract is provided in the BDS and the SCC.
- 1.2 The successful Bidder will be expected to complete the Works by the Intended Completion Date specified in the Special Conditions of Contract.
- 1.3 The Employer as defined in section II, Bidding Data Sheet (BDS) has received a budget from RGoB towards the cost of the Project defined in the BDS and intends to apply a part of the funds to cover eligible payments under the contract for this works.

2. Fraud and Corruption

- 2.1 It is RGoB's policy to require that Employers, Bidders, Contractors, Contractors and their Subcontractors observe the highest standards of ethics during the procurement and execution of contracts. In pursuance of this policy, the RGoB:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (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" is any intentional 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;
 - "collusive practice" 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" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede any 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 inspection and audit rights of the Employer or any organization or person appointed by the Employer and/or any relevant RGoB agency provided for under ITB Sub-Clause 3.1 (d) below.
 - (b) 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 in competing for the contract in question.
 - (c) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing contract;
 - (d) will have the right to require that a provision be included in Bidding Documents and in contracts, requiring Bidders, Contractors, Contractors and their Subcontractors to permit the Employer, any organization or person appointed by the Employer and/or any relevant RGoB agency to inspect their accounts and records and other documents relating to the Bid submission and contract performance and to have them audited by auditors appointed by the Employer:
 - (e) requires that Bidders, as a condition of admission to eligibility, execute and attach to their bids an Integrity Pact Statement in the form provided in Section IV, Bidding Forms. Failure to provide a duly executed Integrity Pact Statement shall result in disqualification of the

Bid; and

- (f) will report any case of corrupt, fraudulent, collusive, coercive or obstructive practice to the relevant RGoB agencies, including but not limited to the Anti-Corruption Commission (ACC) of Bhutan, for necessary action in accordance with the statutes and provisions of the relevant agency.
- 2.2 Furthermore, Bidders shall be aware of the provision stated in GCC Sub-Clause 59.1

3. Eligible Bidders

- 3.1 A Bidder, and all parties constituting the Bidder, shall have the nationality as specified in the Section II Bid Data Sheet & subject to the provisions of Section III, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered 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 subcontractors or contractors for any part of the Contract including related services.
- 3.2 A Bidder shall not have a conflict of interest. All Bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - (a) they have at least one controlling partner in common; or
 - (b) they receive or have received any direct or indirect subsidy from either party; or
 - (c) they have the same authorized 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 information about or influence on 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. Participation by a Bidder in more than one Bid shall result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one Bid: or
 - (f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Works that are the subject of the Bid or in any other way provided consulting services in any aspect of the preparatory stages leading up to the issue of these Bidding Documents; or
 - (g) a Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Employer as Project Manager for the Contract implementation; or
 - (h) a Bidder or any of its affiliates employs or otherwise engages a close relative of a civil servant who either is employed by the Employer or has an authority over the bidder or its affiliates or over the bid. For the purposes of this Sub-Clause a close relative is defined as immediate family which includes father, mother, brother, sister, spouse and own children...
- 3.3 A Bidder that is determined to be ineligible pursuant to any of the provisions of this Bidding Document shall not be eligible to be awarded a Contract.
- 3.4 Government-owned enterprises in Bhutan shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not a dependent agency of the Employer.
- 3.5 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer as the Employer shall reasonably request.
- 3.6 A firm shall be excluded if:
 - (a) as a matter of law or official regulation, Bhutan prohibits commercial relations with the country in which the firm is constituted, incorporated or registered; or
 - (b) 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, Bhutan prohibits any import of goods or contracting of Works or services from that country in which the firm is constituted, incorporated or registered or any payments to persons or entities in that country.
- 3.7 A Bidder shall also be excluded if:
 - (a) he is insolvent or is in receivership or is a bankrupt or is in the process of being wound up, or has entered into an arrangement with his creditors; or
 - (b) his affairs are being administered by a court, judicial officer or appointed liquidator; or
 - (c) he has suspended business or is in any analogous situation arising from similar procedures

- under the laws and regulations of his country of establishment; or
- (d) he has been found guilty of professional misconduct by a recognized tribunal or professional body; or
- (e) he has not fulfilled his obligations with regard to the payment of taxes, social security or other payments due in accordance with the laws of the country in which he is established or of the Kingdom of Bhutan; or
- (f) he is or has been guilty of serious misrepresentation in supplying information required for any prior registration with the Employer or the Construction Development Board of Bhutan; or
- (g) he has been convicted of fraud and/or corruption by a competent authority; or
- (h) he has not fulfilled his contractual obligations with the Employer in the past; or
- (j) he has been debarred from participation in public procurement by any competent authority as per law.

4. Qualifications of the Bidder

- 4.1 All Bidders shall provide in Section IV, Forms of Bid, Qualification Information, Letter of Acceptance, Contract and Integrity Pact, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 4.2 In the event that pre-qualification of potential Bidders has been undertaken, only Bids from prequalified Bidders shall be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original pre-qualification applications or, alternatively, confirm in their Bids that the originally submitted pre-qualification information remains essentially correct as at the date of Bid submission. The update or confirmation should be provided in Section IV.
- 4.3 If the Employer has not undertaken pre-qualification of potential Bidders, all Bidders shall include the following information and documents with their Bids in Section IV, unless otherwise stated in the BDS:
 - (a) Legal status: copies of original documents defining the constitution or legal status, place
 of registration, and principal place of business of the Bidder; written power of attorney of
 the signatory of the Bid to commit the Bidder;
 - (b) General work experience: annual turnover for each of the last three (3) calendar years for construction works;
 - (c) **Similar work experience:** experience in works of a similar nature and size for each of the last five (5) calendar years, and details of work under way or contractually committed; and clients who may be contacted for further information on those contracts;
 - (d) **Equipment:** list of construction equipment owned by the Contractor and those proposed to be hired to be used for implementation of the Contract:
 - (e) Manpower: qualifications and experience of key site management and technical personnel proposed for this Contract. A person having a valid contract license cannot be an employee of any bidder
 - (f) **Performance of previous work:** performance score card issued by the Procuring Agencies for works done in the last five (5) calendar years;
 - (g) Financial capacity: evidence of adequacy of working capital for this Contract (access to line(s) of credit);
 - (h) **References:** authority to seek references from the Bidder's bankers;
 - Litigation: information regarding any litigation, current or during the last five (5) years, in which the Bidder was/is involved, the parties concerned, and the disputed amounts; and awards. A consistent history of litigation or arbitration awards against the Applicant or any partner of a JV/C/A may result in disqualification;
 - (j) Subcontracting: proposals for subcontracting components of the Works amounting to more than twenty percent (20%) of the Contract Price. The ceiling for subcontractors' participation is stated in the BDS.
- 4.4 Bids submitted by a Joint Venture, Consortium or Association (JV/C/A) of two or more firms as partners shall comply with the following requirements, unless otherwise stated in the BDS:
 - (a) the Bid shall include all the information listed in ITB Sub-Clause 4.3 above for each JV/C/A partner;
 - (b) the Bid shall be signed so as to be legally binding on all partners;
 - (c) all partners shall be jointly and severally liable for the execution of the Contract in

- accordance with the Contract terms;
- (d) one of the partners shall be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of any and all partners of the JV/C/A;
- (e) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge; and
- (f) a copy of the JV/C/A Agreement entered into by the partners shall be submitted with the Bid; or a Letter of Intent to execute a JV/C/A 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.
- 4.5 To qualify for award of the Contract, Bidders shall be evaluated against the following technical qualifying criteria and scores awarded accordingly:
 - (a) Similar works experience: aggregate size of similar works (maximum three) or size of the largest similar work in the last five (5) calendar years;
 - (b) Access to adequate equipments: list of construction equipment owned by the Contractor and those proposed to be hired to be used for implementation of the Contract against the prescribed list specified in the BDS:
 - (c) Availability of skilled manpower: availability of skilled and experienced manpower required for the timely and quality execution of the work against the list of manpower with the desired qualification and experience specified in the BDS in the BDS:
 - (d) Average performance score from the previous works carried out in the last five (5) calendar years;
 - (e) Bid capacity of the contractor against the quoted bid calculated using the following formula: Bid Capacity = 2 * A* N B

Where A= Average turnover of the Contractor over the last 3 calendar years

N= Estimated duration of the Project to be tendered

B= Portion of other ongoing Works to be completed in the period that overlaps with the current project's duration (that is N and

(f)Access to or Availability of Credit Facilities: The amount of line of Credit is specified in BDS

- 4.6 In the case of joint ventures, the individual credentials of the joint venture partners need to be averaged using their stake in the JV for the purpose of evaluation under the parameters of Similar work experience, performance score from previous work, Bid Capacity and Credit line available. For the parameters of equipment, manpower, Status, Employment of VTI/skilled local labourer and Internship to VTI, the resources or information committed / provided by the JV as a single entity will be considered for award of points.
- 4.7 Domestic bidders and joint ventures, consortia or associations of domestic bidders who may be eligible for a margin of preference in Bid evaluation shall supply all information to satisfy the criteria for eligibility as described in ITB Clause 3 of these Instructions to Bidders.
- 4.8 Financial bids of only those Bidders who meet the minimum technical score specified in the BDS will be considered for award of the work.

5. One Bid per Bidder

5.1 Each Bidder shall submit only one Bid, either individually or as a partner in a JV/C/A. A Bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) shall cause all the proposals with the Bidder's participation to be disqualified.

6. Cost of Bidding

6.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer shall in no case be responsible or liable for those costs.

7. Site Visit

7.1 The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain 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.

B. Biding Documents

8. Content of Bidding Documents

8.1 The set of Bidding Documents comprises the documents listed in the table below and addenda issued in accordance with ITB Clause 10:

Section I: Instructions to Bidders
Section II: Bidding Data Sheet
Eligible Countries

Section IV: Forms of Bid, Qualification Information and Evaluation

Table, Letter of Acceptance, and Contract

Section V: General Conditions of Contract Section VI: Special Conditions of Contract

Section VII: Specifications and Performance Requirements

Section VIII: Drawings

Section IX: Bill of Quantities- This (or the Activity Schedule in the case of lump sum

Contracts) comprises a paper hard copy and an electronic copy on CD-ROM.

Section X: Forms of Securities and Invitation for Bids

9. Clarification of Bidding Documents

- 9.1 A prospective Bidder requiring any clarification of the Bidding Documents may notify the Employer in writing, including by cable, facsimile, telex or electronic mail, at the Employer's address indicated in the BDS. The Employer shall respond to any request for clarification received earlier than fifteen (15) days prior to the deadline for submission of bids. Copies of the Employer's response shall be forwarded to all Employers of the Bidding Documents, including a description of the inquiry, but without identifying its source. Should the clarification result in changes to the essential elements of the Bidding Documents, the Employer shall amend the Bidding Documents, following the procedure in ITB Clause 10 and ITB Sub-Clause 20.2.
 - 9.2 The bidder or his official representative is invited to attend a pre-bid meeting, which will take place at the place and time stated in BDS.
 - 9.3 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
 - 9.4 The bidder is requested to submit any questions in writing or by facsimile or email to reach the Employer not later than one week before the meeting.
 - 9.5 Minutes of the meeting, including the text of the questions raised (without identifying the source of inquiry) and the responses given will be transmitted without delay to all Employers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 9.1 which 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 Clause 10 and not through the minutes of the pre-bid meeting.
 - 9.6 Non-attendance of the pre-bid meeting will not be a cause for disqualification of a bidder.

10. Amendment of Bidding Documents

- 10.1 Before the deadline for submission of Bids, the Employer may modify the Bidding Documents by issuing addenda.
- 10.2 Any addendum thus issued shall be part of the Bidding Documents, shall be binding on all Bidders and shall be communicated in writing, including by cable, facsimile, telex or electronic mail, to all Employers of the Bidding Documents. Prospective Bidders shall acknowledge receipt of each addendum in writing, including by electronic mail, to the Employer.
- 10.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer shall extend, as necessary, the deadline for submission of Bids, in accordance with ITB Sub-Clause 20.2 below.

C. Preparation of Bids

11. Language of Bid

11.1 All documents relating to the Bid shall be in the language specified in the BDS.

12. Documents Comprising the Bid

- 12.1 The Bid submitted by the Bidder shall comprise the following:
 - (a) The Bid form (in the format indicated in Section IV Forms of Bid, Qualification

- Information, Letter of Acceptance, Contract and Integrity Pact);
- (b) Bid Security in accordance with Clause 16;
- (c) Priced Bill of Quantities this must be submitted in paper form, signed by the duly authorized signatory of the Bidder, and also in electronic form on CD-ROM, if required by the Employer;
- (d) Qualification Information Form and Documents;
- (e) Alternative offers where invited:

and any other materials required to be completed and submitted by Bidders, as specified in the BDS.

13. Bid Prices

- 13.1 The Contract shall be for the whole Works, as described in ITB Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.
- 13.2 The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the Bidder shall not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- 13.3 The Bidder shall quote its final all-inclusive net price, including all incidental costs, for carrying out the Contract. 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, prices and total Bid price submitted by the Bidder.
- 13.4 The rates and prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract if provided for in the BDS and the SCC and the provisions of GCC Clause 47 of the General Conditions of Contract. The Bidder shall submit with the Bid all the information required under the SCC and GCC Clause 47 of the General Conditions of Contract.

14. Currencies of Bid and Payment

- 14.1 The unit rates and prices shall be quoted by the Bidder entirely in Ngultrum (Nu). Foreign currency requirements shall be indicated as a percentage of the Bid price (excluding provisional sums) and shall be payable at the option of the Bidder in up to three foreign currencies.
- 14.2 The rates of exchange to be used by the Bidder in arriving at the local currency equivalent and the percentage(s) mentioned in ITB Sub-Clause 14.1 above shall be the selling rates for similar transactions established by the authority specified in the BDS prevailing on the date 30 days prior to the latest deadline for submission of Bids. These exchange rates shall apply for all payments so that no exchange risk shall be borne by the Bidder. If the Bidder uses other rates of exchange, the provisions of ITB Clause 28.1 shall apply. In any case, payments shall be computed using the rates quoted in the Bid.
- 14.3 Bidders shall indicate details of their expected foreign currency requirements in the Bid.
- 14.4 Bidders may be required by the Employer to clarify their foreign currency requirements and to substantiate that the amounts included in the rates and prices, if required in the BDS, are reasonable and responsive to ITB Sub-Clause 14.1.
- 14.5 In case of International Procurement from countries other than India, the procuring agency may invite bids in convertible currencies. The bids shall however, be evaluated in accordance with Sub-Clause 14.2 above, but the payment shall be made in the currency of bid.

15. Bid Validity

- 15.1 Bids shall remain valid for the period specified in the BDS.
- 15.2 In exceptional circumstances, the Employer may request that the Bidders extend the period of validity for a specified additional period. The request and the Bidders' responses shall be made in writing or by electronic mail. The Bid Security required pursuant to ITB Clause 16 shall be extended to 30 days after the deadline of the extended Bid validity period. A Bidder may refuse the request without forfeiting the Bid Security. The refusal to extend the bid by the bidder will make the bid invalid and shall not be further considered for evaluation and award, A Bidder agreeing to the request shall not be required or permitted to modify its Bid, except as provided for in ITB Clause 16.
- 15.3 In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), if the period of Bid validity is extended beyond 60 days, the amounts payable in local and foreign currency to the Bidder selected for award shall be adjusted as specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking the above correction

into consideration.

16. Bid Security

- 16.1 The Bidder shall furnish, as part of the Bid, a Bid Security as specified in the BDS.
- 16.2 The Bid Security shall be in fixed amount as specified in BDS and denominated in Ngultrum (Nu) or the currency of the Bid or in another freely convertible currency, and shall:
 - (a) at the Bidder's option, be in any of the following forms:
 - (i) a demand unconditional bank guarantee; or
 - (ii) a account payee demand draft; or
 - (iii) a account payee cash warrant.
 - (b) be issued by a financial institution in Bhutan acceptable to the Employer & selected by the Bidder.
 - (c) in the case of a bank guarantee, be substantially in accordance with the form of Bid Security included in Section X, Security Forms, or other form approved by the Employer prior to Bid submission:
 - (d) be payable promptly upon written demand by the Employer in case the conditions listed in ITB Sub-Clause 16.5 are invoked;
 - (e) be submitted in its original form; copies shall not be accepted;
 - (f) remain valid for a period of 30 days beyond the validity period of the Bids, as extended, if applicable, in accordance with ITB Sub-Clause 15.2.
- 16.3 Any Bid not accompanied by a responsive Bid Security shall be Rejected by the Employer as non-responsive.
- 16.4 The Bid Securities of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder furnishing the Performance Security and in any event not later than 30 days after the expiration of the validity of the unsuccessful Bidder's Bid.
- 16.5 The Bid Security may be forfeited
 - (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Bid Submission Sheet, except as provided for in ITB Sub-Clause 15.2; or
 - (b) if the Bidder that submitted the lowest evaluated Bid does not accept the correction of the Bid price pursuant to Clause 27; or
 - (c) if the successful Bidder fails within the specified time limit to
 - (i) sign the Contract; or
 - (ii) furnish the required Performance Security
- 16.6 The Bid Security of a JV/C/A must be in the name of the JV/C/A that submits the Bid. If the JV/C/A 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.

17. Alternative Proposals by Bidders

- 17.1 Alternatives shall not be considered, unless specifically allowed in the BDS. If so allowed, ITB Sub-Clauses 17.1 and 17.2 shall govern, and the BDS shall specify which of the following options shall be allowed:
 - (a) Option One. A Bidder may submit alternative Bids with the base Bid and the Employer shall only consider the alternative Bids offered by the Bidder whose Bid for the base case was determined to be the lowest-evaluated Bid, or
 - (b) Option Two. A Bidder may submit an alternative Bid with or without a Bid for the base case. All Bids received for the base case, as well as alternative Bids meeting the Technical Specifications and Performance Requirements pursuant to Section VII, shall be evaluated on their own merits.
- 17.2 Alternative Bids shall provide all information necessary for a complete evaluation of the alternative by the Employer, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details.

18. Format and Signing of Bid

18.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB Clause 12, bound with the volume containing the Form of Bid, and clearly marked "ORIGINAL." In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS, and clearly marked as "COPIES." In the event of any discrepancy between the original and any copies, or between the original paper form of the Bill of Quantities (or Activity Schedule in the case of lump sum Contracts) and the electronic version on CD-ROM, the original shall prevail.

- 18.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to ITB Sub-Clause 4.3 (a). Unsigned Form of Bid & BOQ shall make the bid non-responsive. All pages of the Bid where entries or amendments have been made shall be initialed by the person or persons signing the Bid.
- 18.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.
- 18.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

19. Sealing and Marking of Bids

- 19.1 Bidders may always submit their Bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the procedures specified in the BDS. The Bidder shall seal the original and all copies of the Bid, including alternative Bids if permitted in accordance with ITB Clause 17, in separate inner envelopes contained within one outer envelope. All envelopes shall be sealed with adhesive or other sealant to prevent reopening.
- 19.2 The inner envelopes shall
 - (a) be signed across their seals by the person authorized to sign the Bid on behalf of the Bidder; and
 - (b) be marked "ORIGINAL", "ALTERNATIVE" (if any) and "COPIES";
- 19.3 The outer envelope shall:
 - (a) be sealed with adhesive or other sealant to prevent reopening,
 - (b) be marked "Confidential";
 - (c) be addressed to the Employer at the address provided in the BDS;
 - (d) bear the name and identification number of the Contract as defined in the BDS and SCC;and
 - (e) provide a warning not to open before the specified time and date for Bid opening as defined in the BDS.
- 19.4 In addition to the identification required in ITB Sub-Clause 19.2, the inner envelopes shall indicate the name and address of the Bidder to enable the Bid to be returned unopened in case it is declared late pursuant to ITB Clause 21.
- 19.5 If the outer envelope is not sealed and marked as above, the Employer shall assume no responsibility for the misplacement or premature opening of the Bid.

20. Deadline for Submission of Bids

- 20.1 Bids shall be delivered to the Employer at the address specified above no later than the time and date specified in the BDS.
- 20.2 The Employer may extend the deadline for submission of Bids by issuing an amendment in accordance with ITB Clause 10, in which case all rights and obligations of the Employer and the Bidders previously subject to the original deadline shall then be subject to the new deadline.

21. Late Bids

- 21.1 Any Bid received by the Employer after the deadline prescribed in ITB Clause 20 shall be returned unopened to the Bidder.
- 22. Withdrawal, Substitution and Modification of Bids
- 22.1 Bidders may withdraw, substitute or modify their Bids by giving notice in writing before the deadline prescribed in ITB Clause 20.
- 22.2 Each Bidder's withdrawal, substitution or modification notice shall be prepared, sealed, marked and delivered in accordance with ITB Clauses 18 and 19, with the outer and inner envelopes additionally marked "WITHDRAWAL", "SUBSTITUTION" or "MODIFICATION" as appropriate.
- 22.3 No Bid may be substituted or modified after the deadline for submission of Bids.
- 22.4 Withdrawal of a Bid between the deadline for submission of Bids and the expiration of

the period of Bid validity specified in the BDS or as extended pursuant to ITB Sub-Clause 15.2 may result in the forfeiture of the Bid Security pursuant to ITB Clause 16. If the lowest or the lowest evaluated bidder withdraws his bid between the periods specified pursuant to clause 22.4, the bid security of the bidder shall be forfeited and in addition the bidder shall pay to the Employer the positive difference of sum, if any with the next lowest Bidder within 14 days of his withdrawal. If the bidder fails to pay the difference within the said date, the bidder shall be debarred by a Competent Authority as per law.

22.5 Bidders may only offer discounts to, or otherwise modify the prices of their Bids, by submitting Bid modifications in accordance with this clause or included in the initial Bid submission.

E. Bid Opening and Evaluation 23. Bid Opening

- 23.1 The Employer shall open the Bids, including modifications made pursuant to ITB Clause 22, in the presence of the Bidders' representatives who choose to attend at the time and in the place specified in the BDS. Any specific opening procedures required if electronic bidding is permitted in accordance with ITB Sub-Clause 20.1 shall be as specified in the BDS.
- 23.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to ITB Clause 22 shall not be opened.
- 23.3 The Original & Copies will be opened at the bid opening. The Bidders' names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, Bid withdrawals, substitutions or modifications, the presence or absence of Bid Security (and any other details the Employer may consider appropriate) responses to any Bidding Documents addenda; fulfillment of any such other specific formal requirements as are prescribed in the Bidding Documents; and such other details as the Employer may consider appropriate, shall be announced by the Employer at the opening. This information also shall be written on a notice board for the public to copy. Any Bid price, discount or alternative Bid price not announced and recorded shall not be taken into account in Bid evaluation.

The bid form including appendices to bid form, bill of quantities, price schedules, bid securities, any discounts offered, and any other important documents shall be initialed by all members of the Bid Opening Committee. All corrections/overwriting will be noted and recorded on each page of the Bill of Quantities. The bid evaluation will be done using the Copies while the Original will be kept in safe custody. If there are any discrepancies between the Original & Copies, the Original shall prevail.

No Bid shall be rejected at Bid opening except for late Bids pursuant to ITB Clause 21. Substitution Bids and modifications submitted pursuant to ITB Clause 22 that are not opened and read out at Bid opening shall not be considered for further evaluation regardless of the circumstances. Late, withdrawn and substituted Bids shall be returned unopened to Bidders.

- 23.4 The Employer shall prepare Minutes of the Bid opening, including the information disclosed to those present in accordance with ITB Sub-Clause 23.3. The Minutes shall include, as a minimum:
 - (a) the Contract title and reference number;
 - (b) the Bid number;
 - (c) the Bid deadline date and time;
 - (d) the date, time and place of Bid opening:
 - (e) Bid prices, per lot if applicable, offered by the Bidders, including any discounts and alternative offers;
 - (f) the presence or absence of Bid security and, if present, its amount and validity;
 - (g) name and nationality of each Bidder, and whether there is a withdrawal, substitution or modification;
 - (h) the names of attendees at the Bid opening, and of the Bidders they represent (if any);
 - (i) details of any complaints or other comments made by attendees/representatives attending the Bid opening, including the names and signatures of the attendees/representatives

making the complaint(s) and/or comment(s); and

(i) the names, designations and signatures of the members of the Bid Opening Committee.

The Bidders' representatives and attendees who are present shall be requested to sign the record. The omission of a Bidder's or other attendee's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

24. Confidentiality

24.1 Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the award to the successful Bidder has been announced pursuant to ITB Sub-Clause 33.4. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid. Notwithstanding the above, 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 should do so in writing, including by electronic mail.

25. Clarification of Bids

25.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at the Employer's discretion, ask any Bidder for clarification of the Bidder's Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing, including by electronic mail, but no change in the price or substance of the Bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with ITB Clause 27.

26. Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of Bids, the Employer shall determine whether each Bid (a) meets the eligibility criteria defined in ITB Clause 3; (b) has been properly signed; (c) is accompanied by the Bid Security; and (d) is substantially responsive to the requirements of the Bidding Documents.
- 26.2 A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 26.3 If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

27. Correction of Errors

- 27.1 Bids determined to be substantially responsive shall be checked by the Employer for any arithmetic errors. Errors shall be corrected by the Employer as follows:
 - (a) where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern; and
 - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted shall govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted shall govern, and the unit rate shall be corrected.
- 27.2 The corrections will be notified in writing to the individual bidder with a request for written acceptance of the corrections within the specified period as made in the notification. The amount stated in the Bid shall be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the Bid shall be rejected, and the Bid Security may be forfeited in accordance with ITB Sub-Clause 16.5 (b).

28. Currency for Bid Evaluation

28.1 Bids shall be evaluated as quoted in Ngultrum (NU) in accordance with ITB Sub-Clause 14.1,

unless a Bidder has used different exchange rates than those prescribed in ITB Sub-Clause 14.2, in which case the Bid shall be first converted into the amounts payable in different currencies using the rates quoted in the Bid and then reconverted to Ngultrum (NU) using the exchange rates prescribed in ITB Sub-Clause 14.2.

29. Evaluation and Comparison of Bids

- 29.1 The Employer shall evaluate and compare only the Bids determined to be substantially responsive in accordance with ITB Clause 26.
- 29.2 In evaluating the Bids, the Employer shall determine for each Bid the evaluated Bid price by adjusting the Bid price as follows:
 - (a) making any correction for errors pursuant to ITB Clause 27;
 - excluding provisional sums and the provision (unless no rates have been asked from the bidders), if any, for contingencies in the Bill of Quantities, but including Day work, where priced competitively;
 - (c) making an appropriate adjustment for any other acceptable variations, deviations or alternative offers submitted in accordance with ITB Clause 17; and
 - (d) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with ITB Sub-Clause 22.5.
- 29.3 The bids shall be evaluated by applying the evaluation criteria, sub criteria and points system specified in the BDS. Each responsive bid will be given a technical score. Financial bids of only those bidders who score the minimum technical score specified in the BDS will be considered to for the 2nd stage of bid evaluation to obtain an overall price preference -financial score. Work will be awarded to the Bidder obtaining the highest overall price preference financial score which will be obtained using the following formula as specified in BDS.
- 29.4 The Employer reserves the right to accept or reject any variation, deviation or alternative offer. Variations, deviations and alternative offers and other factors which are in excess of the requirements of the Bidding Documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 29.5 The estimated effect of any price adjustment conditions under GCC Clause 47, during the period of implementation of the Contract, shall not be taken into account in Bid evaluation.
- 29.6 If the Bid which results in the lowest evaluated Bid price is abnormally low, seriously unbalanced and/or front loaded in the opinion of the Employer, the Employer shall require the Bidder to produce written explanations of, justifications and detailed price analyses 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. Such explanations, justifications and analyses may also include, but are not limited to, details of the technical solutions chosen, exceptionally favorable conditions available to the Bidder for the execution of the Contract, and the originality of the Works proposed by the Bidder. After objective evaluation of the explanations, justifications and price analyses, taking into consideration the schedule of estimated Contract payments, if the Procuring Agency decides to accept the abnormally low, seriously unbalanced and/ or front loaded price, the bidder shall be required to provide additional differential security equivalent to the difference between the estimated amount and the quoted price in addition to the performance security.

30. Preference for Domestic Bidders

- 30.1 As indicated in the BDS, domestic contractors may receive a margin of preference in Bid evaluation, for which this clause shall apply.
- 30.2 A domestic Bidder shall provide all evidence necessary to prove that it meets the following criteria to be eligible for a margin of preference in the comparison of its Bid with those of Bidders who do not qualify for the preference. A domestic Bidder shall:
 - be registered within Bhutan, constituted under and governed by the civil, commercial or public law of Bhutan, and have its statutory office, central administration or principal place of business there;
 - (b) have majority ownership by nationals of Bhutan;
 - (c) not subcontract more than twenty percent (20) percent of the Contract Price, excluding provisional sums, to foreign contractors, contractors and/or consultants.
- 30.3 Joint Ventures, Consortia and Associations of domestic firms may be eligible for the margin

of preference provided that:

- (a) the individual partners satisfy the criteria of eligibility of ITB Sub-Clauses 30.2 (a) and (b);
- (b) the JV/C/A is registered in Bhutan;
- (c) the JV/C/A does not subcontract more than ten percent (10%) of the Contract Price, excluding provisional sums, to foreign firms; and
- (d) the JV/C/A satisfies any other criteria specified for the purpose of domestic preference eligibility, as specified in the BDS.
- 30.4 The procedure used to apply the margin of preference shall be as stipulated in the BDS.

F. Award of Contract

31. Award Criteria

31.1 Subject to ITB Clause 32, the Employer shall award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding Documents and who has scored the highest in the price preference – financial score of 100, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of ITB Clause 3, and (b) qualified in accordance with the provisions of ITB Clause 4.

32. Employer's Right to Accept any Bid and to Reject any or all Bids

32.1 Notwithstanding ITB Clause 31, the Employer reserves the right to accept or reject any Bid, and to cancel the bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

33. Notification of Award and Signing of Contract

- 33.1 The Bidder who's Bid has been accepted shall be notified in writing of the award by the Employer prior to expiration of the Bid validity period. This notification letter (hereinafter and in the General Conditions of Contract called the "Letter of Acceptance") shall state the sum that the Employer shall pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 33.2 The Letter of Acceptance shall constitute the formation of the Contract, subject to the Bidder furnishing the Performance Security in accordance with ITB Clause 34 and signing the Contract in accordance with ITB Sub-Clause 33.3. It shall be accompanied by two originals of the Contract in the form provided for in Section IV Forms of Bid, Qualification Information, Letter of Acceptance, and Contract.
- 33.3 The Contract shall incorporate all agreements between the Employer and the successful Bidder. It shall be signed by the Employer and sent to the successful Bidder with the Letter of Acceptance. Within 15 days of receipt, the successful Bidder shall sign the Contract and deliver it to the Employer.
- 33.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer shall notify all other Bidders of the results of the bidding and shall publish a notification of award on the Employer's website. The notifications to all other Bidders as well as the notification posted on the Employer's website shall include the following information:
 - (i) the Bid and lot numbers
 - (ii) name of the winning Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded; and
 - (iii) the date of the award decision.

34. Performance Security

- 34.1 Within fifteen (15) working days after receipt of the Letter of Acceptance the successful Bidder shall deliver to the Employer a Performance Security in the amount stipulated in the GCC and in the form stipulated in the BDS, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the GCC.
- 34.2 If the Performance Security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued, at the Bidder's option, by a financial institution located in Bhutan.
- 34.3 Failure of the successful Bidder to comply with the requirements of ITB Sub-Clauses 33.3 and 34.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security. If the lowest evaluated bidder fails to produce the performance guarantee & sign the

- contract then apart from forfeiture of Bid Security, the bidder will also be required to bear the positive difference in contract amount between his bid and the bidder to whom the work has been awarded.
- 34.4 Upon the successful Bidder's signing of the Contract and furnishing of the Performance Security pursuant to ITB Sub-Clause 34.1, the Employer shall promptly notify the name of the winning Bidder to each unsuccessful Bidder in accordance with ITB Sub-Clause 33.4 and shall discharge the Bid Securities of the unsuccessful Bidders pursuant to ITB Sub-Clause 16.4.

35. Advance Payment and Security

35.1 The Employer shall provide an Advance Payment on the Contract Price as stipulated in the GCC, subject to a maximum amount, as stated in the BDS. The advance payment shall be guaranteed by a Security in the form provided for in Section X, Security Forms.

36. Adjudicator

36.1 The Employer may propose the person named in the BDS to be appointed as Adjudicator under the Contract. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If, in the Letter of Acceptance, the Employer has not agreed on the bidder's nomination of the Adjudicator, the Adjudicator may be appointed by mutual consent.

Section II. Bidding Data Sheet

A. General	ding Data Sneet
ITB 1.1	The Employer is Bhutan Broadcasting Service Corporation, BBSC, P.o. Box 101, Chubachu, Thimphu Bhutan Tender No: BBSC/TECH-Trans(Equipment)/2016 The Scope of work: "Supply, Installation, Testing & Commissioning of BBSC transmission infrastructure (Construction of Prefabricated shelter, Tower and Power system)"
ITB 1.2	The Intended Completion Date is [insert date or implementation period in days]
ITB 4.3	The information required from Bidders in ITB Sub-Clause 4.3 is modified as follows: 1. Valid Trade license from concern authority 2. Manufacturer authorization certificates for OEM and dealership certificates for authorized dealer 3. Tax Clearance Certificates
ITB 4.3 (j)	The ceiling for sub contractor's participation and conditions are (sub-contract not allowed)
ITB 4.4	The qualification data required from Bidders in ITB Sub-Clause 4.4 is modified as follows: (joint venture or consortium bid will be not allowed)
ITB 4.5	 The qualification criteria in ITB Sub-Clause 4.5 are modified as follows: Works and supply of goods shall be contracted as one contract with the selected bidder. Any local or third country works and /or supply of goods shall also be included in this tendering whether in the main contract agreement or in the sub-supplies or subcontracts with the principle contractor/contractors being responsible towards the Employer. No partial bids shall be accepted. The Invitation for bids is open to all the telecommunication equipment manufacturer and contractor who met the qualification criteria specified in the invitation for bid clause 8 (bidder eligibility criteria). A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest in this bidding process if they: a. Have spouse or dependants of a BBSC employee participate in said project work. b. receive or have received any direct or indirect subsidy from any of them or c. have a relationship with each other directly or through common third parties, that puts them in position to have access to information about or influence on the Bid of another bidder, or influence the decisions of the Employer regarding this bidding process; or d. Submit more than one bid in this bidding process e. Participate as a consultant to other bidders in the preparation of the design or technical specifications of goods and related services that are subject to the Bid. Bidders shall not be eligible to bid if they are under a declaration for corrupt and fraudulent practices, as per ITB clause 2 in this Document.

ITB 4.5 (b)	The essential equipm			ailable for th	ne Contra	act by the successful
	Bidder shall be : [insert as appropriate] Equipment Number required		ired	Maximu	ım Marks	
			TOTAL		100	
ITB 4.5 (c)	The skilled and exp	perie	•	er required	ı	timely and quality
(6)	execution of the wor	rk to	be made avail	able for the		
	Bidder shall be: [inse					,
	Tier Tier I	Pos	ition	Qualificat	ion	Score
	Tier II					
	Tier III			1		
ITB 4.5(f)	The Credit Line amo	ount	is Nu			[Insert the amount
.,	for three months project cash flows-Months of project cash flow are calculated					
	by dividing the project cost by the project duration. This gives the cash flow per month. The ideal credit line amount of credit available is 3 months or more]					
ITB 4.6	Subcontractors' experience and resources [insert "shall" or " shall not"] be taken into account "sub contract will be not allowed"					
B. Bidding Docume	ents					
ITB 9.1	The Employer's address for clarification is: Procurement officer, AFD, BBSC					
ITB 9.2	Pre-bid Meeting shall be held only "if it is necessary and accordingly date will and time will be announced". [insert date& time if applicable] At the address given below[insert address] "					
C. Preparation of B						
ITD 11 4	The language of the	hid :-	. English			
ITB 11.1	The language of the	DIU IS	s. English			
ITB 12.1	Any additional mater are [insert list, if none			completed a	and subm	nitted by the Bidders
ITB 13.4	The Contract [specify "is not"] subject to price adjustment in accordance with GCC Clause 47.					
ITB 14.2	The authority for esta Authority of Bhutan.		_	_		
ITB 14.4	Bidders [insert "are"]	requ	ired substantia	te the rates	and pric	es.
ITB 15.1	The Bid shall be va stipulated in ITB Clau			om the dea	dline for	submission of Bids
ITB 16.1 & 16.2	The Bid Security an Works; the figure mu (IFB)]					

ITB 17.1	Alternative Bids ["shall not be"] considered.
	[If alternatives shall be considered insert "the Employer shall only consider (insert "option one is 17.1a or option two is 17.1b methods")].
ITB 18.1	Submission of bid.
115 1011	one original Bid, technical and financial bid should be separate
	2. For the copy: Bidders are required to submit all the necessary forms
	and documents accept bid documents.
D. Submission of E	Bids
ITB 19.1	Bidders may submit their Bids electronically: [insert "No";
	1. Bidder should submit technical and financial bid separately (two
ITD 40.0 (-)	envelope system)
ITB 19.3 (c)	The Employer's address for the purpose of Bid submission is :
	Manager Administration & Finance Department
	Bhutan Broadcasting Service Corporation
	Chubachu, P.o.Box: 101
	Thimphu Bhutan
ITB 19.3 (d)	The name and Identification number of the contract as given in ITB 1.1 above in
	this sheet.
ITB 19.3 (e)	The warning shall read "DO NOT OPEN BEFORE 3:00PM
ITB 20.1	The deadline for submission of Bids shall be 2:00PM on July 6, 2016
E. Bid Opening and	Evaluation
ITB 23.1	The Bid opening shall take place on the same day as the closing day of the bid
	submission at: [BBSC conference hall, Chubachu, Thimphu Bhutan]
	Date: July 6, 2016; Time: 3:00PM
ITB 29	Bid will be evaluated package wise. Detail evaluation will be done as described in
ITB 30.1	section IV, clause no 2 (qualification information and evaluation table) Margin of domestic preference of five percent (5%) shall apply
11 5 30.1	Margin of domestic preference of five percent (5%) shall apply
ITB 30.3 (d)	Other criteria to be used for the purpose of assessing domestic preference
	eligibility are:
ITD 20.4	[insert details of additional criteria; if none, state "none"]
ITB 30.4	The procedure used to apply the margin of preference shall be: In the case of procurements in which any Bids are received from foreign (i.e. non-
	Bhutanese) Bidders:
	(i) if two or more Bids are evaluated as equivalent in accordance with the
	evaluation methods and factors laid down in the Bidding Documents, and
	(ii) one or more of the Bids is from a domestic Bidder, as defined in ITB Sub-
	Clause 30.2, and
	(iii) the total price of the domestic Bid does not exceed by more than five percent
	(5%) the total price of the lowest priced foreign Bid evaluated as equivalent,
F. Award of Contra	then the Contract shall be awarded to the domestic Bid.
ITB 34.1	The Performance Security shall be provided in any one of the following forms:
	(a) Demand guarantee in the form provided for in Section X, Security Forms, or(b) Banker's certified cheque/cash warrant, or
	(c) Demand draft.
ITB 35.1	The Advance Payment shall be limited to ten percent (10%) of the Contract Price.
	The same of a grant of an analysis and the following the f

ITB 36.1

The Adjudicator proposed by the Employer is [insert "shall" or "shall not" apply; if applicable, insert name and address].

The hourly fee for this proposed Adjudicator shall be [insert amount and currency]. The biographical data of the proposed Adjudicator is as follows:

[provide relevant information, such as education, experience, age, nationality and present position; attach additional pages as necessary].

The Appointing Authority is [insert complete legal name and address]

If the Bidder objects to the Adjudicator proposed by the Employer in the Bidding Documents, it should so state in its Bid, and present an alternative candidate, together with the candidate's daily fees and biographical data, in accordance with ITB Clause 36.

[Replace this clause with the following if the above cannot be applied otherwise delete it]:

Disputes arising from the implementation of the provisions of the Contract shall be settled first by negotiations between the Contractor and the Employer in order to arrive at an amicable settlement. If negotiations fail between the parties, the dispute shall be referred to the CDB and finally resolved by Arbitration in accordance with rules and procedures of CDB enforced at the time of submission through its National Arbitration Committee. Either party can take the case to the court in Bhutan if the Arbitration award is not acceptable to them. If the case is taken to the court, all the decisions made by the Arbitration committee will be null & void.

Section III. Eligible Countries

Eligibility for the Provision of Goods, Works and Services in RGoB-financed Procurement

- 1. The RGoB permits firms and individuals from all countries to offer goods, works and services for RGoB-financed projects. As an exception, firms of a Country, goods manufactured in a Country or services provided from or by a Country may be excluded if:
 - 1.1 As a matter of law or official regulation, the RGoB prohibits commercial relations with that Country, or
 - 1.2 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 RGoB prohibits any import of goods from that Country or any payments to persons or entities in that Country.
- 2. For the information of Bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:
 - (a) With reference to Paragraph 1.1 above:
 - [insert list of countries prohibited under the law or official regulations of Bhutan]
 - (b) With reference to Paragraph 1.2 above:
 - [insert list of countries which are barred under UN Security Council Chapter VII]

Section IV

Forms of Bid, Qualification Information, Letter of Acceptance, Contract and Integrity Pact

1.	Contractor's Bid				
			Da	te:	
Bhutan P.o.box	anager stration and Finance Department n Broadcasting Service Corporation x 101, Chubachu nu Bhutan Tender No: BBSC/TEC	CH-Trans (Equ	ipment)/:	2016	
we offe	examined the all the Bidding Documents or to execute the [Supply, Installation, installation]	Testing & Co	<u>mmissi</u>	oning of BBSC	•
syster	m) in accordance with the Conditions of C	Contract accom	panying	this Bid for the Cor	ntract Price
unders We he Biddino We, ind	id and your written acceptance of it shatand that you are not bound to accept the ereby confirm that this Bid complies with a Documents and specified in the Bidding cluding any subcontractors or contractors a countries in accordance with ITB Sub-Cla	lowest or any leading the Bid valid Data Sheet.	Bid you re	eceive. Bid Security requi	ired by the
We hav Our firr Contra accord	ve no conflict of interest in accordance with m, its affiliates or subsidiaries—including ct—has not been declared ineligible ur ance with ITB Sub-Clause 3.3. issions or gratuities, if any, paid or to be	h ITB Sub-Clau any subcontra nder the laws	ctors or o or offici	al regulations of	Bhutan, in
contrac	ct execution if we are awarded the contrac	t, are listed bel	ow:	-	
_	Name and address of agent	Amount Currency	and	Purpose Commission gratuity	of or
_	(if none, state "none")."				
the EM my bid month Our du Authori (Affix L Name	e if I withdraw my bid after opening for ID/Bid Security and also I shall be bound with that of the next lowest evaluated, will authorize the client to debar my filly executed Integrity Pact Statement is attrized Signature: Legal Stamp) and Title of Signatory: of Bidder:	ind to pay the d bidder and f rm for a perio ached herewith	e cost dif ailure or d of 2 ye n as Appe	fference (positiven n my part to do s ears. endix A.	e) between so within a

2. Qualification Information and Evaluation Table

- 2.1 The parameter for the evaluation of bidder response is segregated into different bid areas and will be carried out in discreet manner covering two major components, the non-scoring parameters and scoring (Technical Performance and Financial). Those bid fail to comply any one of non scoring parameters may be rejected.
 - a. Stage-1 Evaluation of non scoring parameters, but result in direct rejection of bids: The Employer's evaluation of a Bid will take into account, in addition to the bid price and technical specifications the following factors, in the manner and to the extent indicated in this clause:

i. Work Schedule:

The Goods covered by this Bidding are required to be delivered and, installed in accordance with the **General Conditions of Contract (CC)** and completed within the work schedule specified in Section-II, Instruction to Bidders clause 1.2 to 1.5. Bidders are required to base their prices on the specified work schedule. No credit will be given to earlier completion. The Bid, offering work schedule beyond that specified, may be rejected.

ii. Deviations from Bidding Documents

The cost of all quantifiable deviations and omissions from the specification, terms and conditions specified in Bidding Documents shall be evaluated. The Employer will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids. Bids must contain all the information requested in the Tender Documents. Failure to comply with this requirement may cause the bid to be rejected.

iii. Performance and Productivity of the Goods:

Bidders shall state the guaranteed performance or efficiency in response to the Technical Specifications. Goods offered shall have a minimum performance specified in the Technical Specifications to be considered responsive. Bids must contain all the performance and efficiency information required in the Tender Documents. Bids offering Goods with a performance or efficiency less than the minimum specified or not providing the required performance and efficiency information may be rejected.

Note: Those eligible bidders who fulfill the criteria specified in clause 32.3 a (i, ii, iii), will be qualified for further evaluation (stage-2 evaluation. Those bidders who fail in evaluation stage-1 will not consider for stage-2 evaluation.

b. Stage-2 Evaluation of scoring parameters

- i. (Technical Bid): The evaluation criteria set for said work is subjected to with wide range of scoring parameters such as company expertise, human resource, financial capability, maintenance, warranty, etc. The following are the major components for the overall technical evaluation procedure:
- i.1 Meeting the specified technical specifications of the products proposed by the Client and compliance statement
- i.2 Company profile of the bidding firm.
- i.3 Technical manpower of the firm trained experienced and qualified personnel for the performance and completion of all the Contractual Obligations, arising out of this document
- i.4 OEM authorization letter/certificates by the manufacturer of the products proposed.
- i.5 Technical evaluation will consist 70% of the total score.
- i.6 Detail evaluation criteria is indicated below:

TECHNICAL EVALUAITON TABLE

SL	Criteria	Score (100)	Evaluated score		
1	Experience for executing same work				
	1-3(works)	5			
	3-5(works)	7			
	5 and above	10			
	Certificates for same work (more than two certificates has to be submitted)	8			
	Total	30			
2	License				
	Manufacturer dealership license	10			
	Supply dealership license	6			
	Trade License	4			
	Total	20			
4	Company's Financial stability				
	Turnover Nu: 20-3 0 M (year)	10			
	Turnover 10-20M (year)	6			
	Turnover less than 10M	4			
	Total	20			
5	Technical specifications (Bidder must submit of BOQ)	catalogue of e	very single equipment in		
	Equipment Specifications with detail supporting document of equipment (brochure/ catalogue)	20			
	Equipment Specifications without detail catalogue	10			
	Total	30			
	Grand Total	100			

- a. A bidder needs to obtain a score of at least 60 points out of 100 on these parameters in order to qualify for the financial evaluation.
- b. Those bids which doesn't meet this minimum score will not be considered for further evaluation
- 2.2 The Employer reserves the right to accept or reject any variation, deviation or alternative offer. Variations, deviations and alternative offers and other factors which are in excess of the requirements of the Bidding Documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 2.3 If the Bid which results in the lowest evaluated Bid price is abnormally low, seriously unbalanced and/or front loaded in the opinion of the Employer, the Employer shall require the Bidder to produce written explanations of, justifications and detailed price analyses for any or all items of the Bill of Quantities.

[The **Bank/Bidder** shall fill in this Bank Certificate form in accordance with the instructions indicated in brackets.]

(Bank Letter Head)

BANK CERTIFICATE

valued Clients and Maintaining ac	Promoter of M/sis one of ou count withBranch Office their dealing with bank has been satisfactory as or
purpose of participating in bidding for tender Equipment). The Client can be consider	of M/s
Signature	
Name () of authorized representative(s) of bank
Address of the Bank	

Attachment: Contract

Letter of Acceptance Letterhead paper of the Employer]
Date:
ō:
<i>M</i> /s
Bhutan.
This is to notify you that your Bid datedfor the Supply, Installation, Testing & Commissioning of BBSC transmission infrastructure (Construction of Prefabricated shelter, Tower and Power system for the Contract Price of the equivalent of Nu:
(Ngultrum) as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency, Bhutan Broadcasting Service Corporation (BBSC)
The Contract in duplicate is attached hereto. You are hereby instructed to:
a) confirm your acceptance of this Letter of Acceptance by signing and dating both copies of it, and returning one copy to us no later than 7 working days from the date hereof;
b) proceed with the execution of the said Works in accordance with the Contract;
c) sign and date both copies of the attached Contract and return one copy to us within 7 working days of the date hereof; and
d) forward the Performance Security pursuant to ITB Sub-Clause 34.1, i.e., within 7 days after receipt of this Letter of Acceptance, and pursuant to GCC Sub-Clause 51.1
Authorized Signature:
Name and Title of Signatory:
Name of Agency:

sum

Co	ntra	act	fο	rm

BBSC/TECH-Trans (Equipment)/2016/				Date .			
Contract Agreement							
THIS CONTRACT made the	day	of	2016,	between	Managei		
Administration & Finance Department,	Thimphu of	Bhutan	Broadcasting	Service	Corporation		
(hereinafter "the Employer") of the one par	rt and		(1)	Name of co	ontractor) o		

is desirous that certain goods be provided by the Contractor, viz., (Brief Description of Goods, as identified in the Bid Form and Price Schedule) (*hereinafter "the Goods") and has accepted a Bid by

of

provision

(hereinafter "the Contractor") of the other part. WHEREAS the Employer

those

Goods

) only (hereinafter "the Contract Price").

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

the

- 1. The Contract shall consist of this Contract Form: and the following documents, and the exhibits, drawings, specifications and other documents referred to therein (hereinafter the "Contract documents"), all of which by this reference are incorporated herein and made part hereof:
- a. Notification of Award:

Contractor

the

(Ngultrum

b. Price Schedules and Specifications;

for

- c. Special Conditions of Contract;
- d. General Conditions of Contract; and
- e. The Bid Document
 - This Contract sets forth the entire contract and agreement between the parties pertaining to the supply of the Goods described herein and supersedes any and other earlier verbal or written agreements pertaining to the supply of the Goods. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
- 2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to provide the Goods and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor, in consideration of the provision of the Goods 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.
- 4. Any notice under this Contract shall be in the form of letter, telex, cable or facsimile. Notices to either party shall be given at such address or addresses as such party shall specify from time to time by written notice to the other. In the absence of such notice to the contrary, notice to the

PAYMENT TERMS AND CONDITIONS

The payments to the Contractor for the performance of the Contract will be made by the Employer in the currency identified in the Contract as per the methods, terms and conditions specified herein.

- Advance Payment: Ten percent (10%) of the Contract price shall be paid within 30 days of submission of (i) Advance Payment Guarantee for equivalent amount favoring Employer, (ii) Performance Security. The value of the Bank Guarantee towards advance payment shall be proportionately reduced against supplies made.
- 2. For Supply of Goods:

CIF price of Goods identified in the Notification of Award/Letter of Award will be paid as under:

i. Progressive Payment

Seventy percent (70%) of the CIF price component (excluding spares) for all the equipment and materials shall be within 30 days on submission of documents as specified below:

- a. Application for payment
- b. Supplier's invoice (one original + 3 copies) showing Goods' description, quantity shipped, unit price, total amount, amount payable on dispatch.
- c. Original and two (2) copies of the negotiable, clean onboard Bill of Lading marked freight prepaid and two (2) copies of non-negotiable Bill of Lading.
- d. Three (3) copies of packing list identifying contents of each package
- e. Insurance certificate in 2 copies
- f. Manufacturer's/Suppliers' Guarantee Certificate of quality.
- Material Inspection & Clearance Certificate (MICC) for dispatch issued by the Employer's Representative and the Supplier's factory inspection report (2 copies); and
- h. Certificate of origin (3 copies)
- ii. **Final Payments:** The balance twenty percent (20%) of the CIF price for materials as identified in price schedule enclosed with the Notification of Award/Letter of Award shall be paid within 30 days of Final Acceptance Test, as per the Contract and on submission of claim by the Contractor and verification by the Employer in accordance with clause no 6 of the payment terms and condition.

3. For Services

Expatriate supervision & local service charges i.e. inland transportation of materials to the site, insurance, erection, construction, foundation, labor charges testing & commissioning charges shall be paid as follows:

- i. Seventy percent (70%) of the charges shall be paid on prorate basis after installation at Site and on certification by the Employer's Representatives.
- ii. Twenty percent (20%) of the charges shall be paid within 30 days of site acceptance tests along with the corresponding final payment for supply portion mentioned at clause 2, i above. Verification shall be made in accordance with clause no 7 of the payment terms and condition

4. Mode of Payment

- a. Payment to the Foreign Contractor shall be made by the Employer by TT transfers. Therefore, all invoices including documentary evidence/ documents shall be addressed and submitted to the Employer.
- b. Payment to the local contractor shall be made by the Employer by check in favor of address prescribed by the supplier.
- **5.** Payment shall be made promptly by the Employer, but in no case later than thirty (30) days after submission of an invoice or claim by the Supplier.
- **6.** The currency or currencies in which payment is made to the Contractor under this contract will be made in the currency or currencies specified in the bid form.
- **7.** A verification certificate in accordance with above clause 2,i (a,b,c,d,e,f,g,h) must be issued before any final payments in accordance with above clause ii can be made.
- 8. Payment terms and conditions will remain same for local as well as foreign supplier.
- **9.** Any foreign contractor does not agree upon the specified payment terms and conditions, their bid will be rejected and consider as non-responsive.

[Employer's address and electronic transmission address]

Manager Administration and Finance Department Bhutan Broadcasting Service Corporation Thimphu Bhutan Tel: 323071

Fax: 323073		
A notice shall be effective when d	elivered or on the notice's effective date, wh	nichever is later.
IN WITNESS WHEREOF, the par with their respective laws the day	ties hereto have caused this Contract to be and year first above written.	e executed in accordance
Signature of Employer		
		Signature of Contracto
Signed, sealed and delivered by to (For the Employer) in the presence	he said e of	
	Signed, sealed and delivered by the said _ (For the Contractor) in the presence of	

INTEGRITY PACT Form

PRE-CONTRACT INTEGRITY PACT

1. General

Whereas	the								re	presenting	the	Bhutan
Broadcast	ing S	Servic	e Corp	oration,	the	Royal	Government	of Bhutan,	here	inafter refe	erred to	o as the
"Employer	,"	on	one	part,	and						repre	esenting
M/s							, hereinafter	referred to	as t	he "bidder	on th	ne other
part herby execute this agreement as follows.												

This agreement should be a part of the tender document, which shall be signed when the work(s) is awarded. Signing authorities will be the head of the client (agency) and the authorized representative of the bidder. If the winning bidder fails to sign the agreement, the work shall be cancelled.

2 Objectives:

Whereas, the Employer and the Bidder agree to enter into this agreement, hereinafter referred to as IP, to avoid all forms of corruption or deceptive practice by following a system that is fair, transparent and free from any influence/unprejudiced dealings in the **bidding process** and **contract administration**, with a view to:

- 2.1 Enabling the Employer to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works or goods or services; and
- 2.2 Enabling bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices.

3. Scope:

The validity of this IP shall cover the bidding process and contract administration period.

4. Commitments of the Employer:

The Employer Commits itself to the following:-

- 4.1 The Employer hereby undertakes that no officials of the Employer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process and contract administration.
- 4.2 The Employer further confirms that its officials shall not favor any prospective bidder in any form that could afford an undue advantage to that particular bidder in the bidding process and contract administration and will treat all Bidders alike.
- 4.3 Officials of the Employer, who may have observed or noticed or have reasonable suspicion shall report to the head of the employing agency or an appropriate government office any violation or attempted violation of clauses 4.1 and 4.2.

4.4 Following report on violation of clauses 4.1 and 4.2 by official (s), through any source, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings shall be initiated by the Employer and such a person shall be debarred from further dealings related to the bidding process and contract administration.

5. Commitments of Bidders

The Bidder commits himself/herself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of the bidding process and contract administration in order to secure the contract or in furtherance to secure it and in particular commits himself/herself to the following:-

- 5.1 The Bidder shall not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer, connected directly or indirectly with the bidding process and contract administration, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding process and contract administration.
- 5.2 The Bidder shall not collude with other parties interested in the contract to manipulate in whatsoever form or manner, the bidding process and contract administration.
- 5.3 If the bidder(s) have observed or noticed or have reasonable suspicion that the provisions of the IP have been violated by the procuring agency or other bidders, the bidder shall report such violations to the head of the procuring agency.

6. Sanctions for Violation:

The breach of any of the aforesaid provisions shall result in administrative charges or penal actions as per the relevant rules and laws.

- 6.1 The breach of the IP or commission of any offence (forgery, providing false information, misrepresentation, providing false/fake documents, bid rigging, bid steering or coercion) by the Bidder, or any one employed by him, or acting on his/her behalf (whether with or without the knowledge of the Bidder), shall be dealt with as per the terms and conditions of the contract and other provisions of the relevant laws, including De-barment Rules.
- 6.2 The breach of the IP or commission of any offence by the officials of the procuring agency shall be dealt with as per the rules and laws of the land in vogue.

7. Monitoring and Administration:

- 7.1 The respective procuring agency shall be responsible for administration and monitoring of the IP as per the relevant laws.
- 7.2 The bidder shall have the right to appeal as per the arbitration mechanism contained in the relevant rules.

We, hereby declare that we have read and understood the clauses of this agreement and shall abide by it.

The parties hereby sign this Integrity Pact at BBSC, Thimphu on ______

	Affix Legal Stamp		Affix Legal Stamp			
Emplo ID:	oyer	Bidder/Re ID:	Bidder/Representative ID:			
Witne	ss:	Witness:				
Name ID:):	Name: ID:				

Section V General Conditions of Contract (GCC)

Table of Clauses

A. General

	1.	Definitions	33
	2.	Interpretation	344
	3.	Language and Law	34
	4.	Project Manager's Decisions	34
	5.	Delegation	34
	6.	Communications	34
	7.	Subcontracting	
	8.	Setting Out	34
	9.	Other Contractors	35
	10.	Personnel	35
	11.	Employer's and Contractor's Risks	35
	12.	Employer's Risks	
	13.	Contractor's Risks	
	14.	Insurance	36
	15.	Queries about the Special Conditions of Contract	36
	16.	Contractor to Construct the Works	
	17.	The Works to Be Completed by the Intended Completion Date	
	18.	Approval by the Project Manager	
	19.	Safety	
	20.	Discoveries	
	21.	Possession of the Site	37
	22.	Access to the Site	37
	23.	Instructions, Inspections and Audits	37
	24.	Disputes	
	25.	Procedure for Disputes	
	26.	Replacement of Adjudicator	
B.	Time Con	trol	
	27.	Program	38
	28.	Extension of the Intended Completion Date	38
	29.	Acceleration	38
	30.	Delays Ordered by the Project Manager	39
	31.	Management Meetings	39
	32.	Early Warning	39
C.	Quality Co	ontrol	39
	33.	Identifying Defects	39
	34.	Tests	39
	35.	Correction of Defects	39
	36.	Uncorrected Defects	40
D.	Cost Cont	rol	40
	37.	Bill of Quantities	40
	38.	Changes in the Quantities	40
	39.	Variations	
	40.	Payments for Variations	41
	41.	Cash Flow Forecasts	
	42.	Payment Certificates	
	43.	Payments	
	44.	Compensation Events for allowing time extension	
	45.	Tax	
	46.	Currencies	43

47.	Price Adjustment	43
48.	Retention	43
49.	Liquidated Damages	43
50.	Advance Payment	43
51.	Securities	44
52.	Dayworks	44
53.	Cost of Repairs	45
E. Completion	n of the Contract	45
54.	Completion	45
55.	Taking Over	45
56.	Final Account	
57.	Operating and Maintenance Manuals	45
58.	Termination	
59.	Corrupt or Fraudulent Practices	46
60.	Payment upon Termination	
61.	Property	
62.	Release from Performance	47

General Conditions of Contract

A. General

1. Definitions

- 1.1 Boldface type is used to identify defined terms.
 - (a) 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 Clauses 25 and 26 hereunder.
 - (b) **Bill of Quantities** summary of the units and unit prices of the items proposed under the contract.
 - (c) Compensation Events are those defined in GCC Clause 44 hereunder.
 - (d) The **Completion Date** is the date of completion of the Works as certified by the Employer, in accordance with GCC Sub-Clause 55.1.
 - (e) The **Contract** is a formal agreement in writing entered into between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
 - (f) The **Contractor** is an individual or legal entity entering into a contract after its Bid to carry out the Works has been accepted by the Employer.
 - (g) The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.
 - (h) The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
 - (i) Days are calendar days; months are calendar months.
 - (j) **Day works** 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.
 - (k) A **Defect** is any part of the Works not completed in accordance with the Contract.
 - (I) The **Defects Liability Certificate** is the certificate issued by the Employer upon correction of defects by the Contractor.
 - (m) The **Defects Liability Period** is the period named in SCC Sub-Clause 35.1 and calculated from the Completion Date.
 - (n) **Drawings** include calculations and other information provided or approved by the Employer for the execution of the Contract.
 - (o) The **Employer** is the Government Agency which enters into a Contract with a Contractor to carry out the Works, as specified in the SCC. The terms "Procuring Agency", "Employer", or "Employer" is synonymous.
 - (p) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
 - (q) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.
 - (r) 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 Employer by issuing an extension of time or an acceleration order.
 - (s) In writing is in any written form, including electronic mail.
 - (t) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
 - (u) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical or biological function.
 - (v) 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 Employer) who is responsible for supervising the execution of the Works and administering the Contract.
 - (w) **SCC** is the Special Conditions of Contract.
 - (x) **Secured Advance:** Secured advance can be given for non-perishable materials only. Materials such as cement/bamboo cannot be eligible for the secured advance. No secured advance shall be given on account of plants & machineries.
 - (y) The **Site** is the area defined as such in the SCC.
 - (z) 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.

- (aa) **Specifications** mean the Specifications of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (bb) 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.
- (cc 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.
- (dd) **Temporary Works** are works designed, constructed, installed and removed by the Contractor that are needed for construction or installation of the Works.
- (ee) A Variation is an instruction given by the Project Manager which varies the Works.
- (ff) The **Works** are what the Contract requires the Contractor to construct, install and turn over to the Employer, as defined in the SCC.

2.Interpretation

- 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.
- 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).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Contract,
 - (2) Letter of Acceptance,
 - (3) Contractor's Bid,
 - (4) Special Conditions of Contract,
 - (5) General Conditions of Contract,
 - (6) Specifications,
 - (7) Bill of Quantities, and
 - (8) any other document listed in the SCC as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are stated in the SCC.

4. Project Manager's Decisions

4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Employer and the Contractor in the role representing the Employer..

5. Delegation

5.1 The Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission. A notice shall be effective only when it is delivered.

7. Subcontracting

7.1 The Contractor may subcontract with the approval of the Employer provided such provisions exist in contract document, but shall not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

8. Setting Out

8.1 The Contractor shall be responsible for setting out the Works and for ensuring the correctness of the positions, levels, dimensions and alignment of the Works. At any time during the execution of the Works, he shall correct any error at his own expense when required to do so by the Employer. Boreholes, exploratory excavations or soil testing may be done if instructed

by the Employer. In case, cost of boreholes or exploratory excavations or soil testing is not included in the Contract Price, the cost shall be borne by the Employer. The contractor shall provide all facilities like labour and instruments, and shall co-operate with the Engineer-in-Charge to check all alignments, grades, levels and dimensions. Such checking shall not relieve the contractor of his own responsibility of maintaining the accuracy of the work.

9. Other Contractors

9.1 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.

10. Personnel

10.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the SCC, to carry out the functions stated in the Schedule or other personnel approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Schedule. If the Contractor fails to deploy the personnel as committed in the Bid document, the employer shall stop the work if the quality of work is going to suffer or otherwise deduct the salaries of such personnel at a rate stipulated in the Special Condition of Contract per month per personnel for every month of absence of such personnel from the site. Such deductions shall continue till such time that the Contractor deploys the key personnel acceptable to the employer. If the Contractor fails to deploy such key personnel within one to four months, the deductions shall be discontinued and the contractor's failure to deploy such personnel shall be treated as a fundamental breach of contract.

This shall also apply to the commitment of employment to Vocational Training Institute Graduates (VTI)/skilled local labourers and commitment to provide internship to VTI graduates. However in this case Contract may not be terminated but wage rates as mentioned in the SCC shall be deducted for the duration of the contract.

Similarly, if the committed equipments are not available at site, the hiring charges of such equipments shall be deducted at a rate stipulated in the SCC per month for every month of absence for a period of one to four months after which the deductions shall be discontinued and the contractor's failure to produce such equipments at site shall be treated as a fundamental breach of contract..

- 10.2 The Contractor shall pay rates of wages and observe conditions of labour which are not lower than the general level of wages and conditions in Bhutan. The Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's personnel. The Contractor shall comply with all relevant labour laws applicable to the Contractor's personnel, including their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor is required, to the extent practicable and reasonable, to employ national staff and labour with appropriate qualifications and experience.
- 10.3 The Contractor shall not engage child labour and shall conform to the labour laws/acts, rules and regulations of Bhutan in the execution of Contract work. A child who has not attained the age of 18 years shall not be employed in any work as a labourer. During the continuance of the Contract the Contractor and his Subcontractors shall abide at all times with the labour laws/acts, rules and regulations, including child labour, related enactment and rules made there under.

11. Employer's and Contractor's Risks

11.1 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.

12. Employer's Risks

- 12.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer's risks:
 - (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:

- (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
- (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.
- (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 Bhutan.

13. Contractor's Risks

13.1 From the Start 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.

14. Insurance

- 14.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover 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:
 - (a) loss of or damage to the Works, Plant and Materials to be built into the works.
- 14.2 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 types and proportions of currencies required to rectify the loss or damage incurred.
- 14.3 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 from the Contractor to the Employer.
- 14.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
- 14.5 Both parties shall comply with any conditions of the insurance policies.

15. Queries about the Special Conditions of Contract

15.1 The Project Manager shall clarify queries on the SCC.

16. Contractor to Construct the Works

16.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

17. The Works to Be Completed by the Intended Completion Date

17.1 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 by the Intended Completion Date.

18. Approval by the Project Manager

- 18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them if they comply with the Specifications and Drawings.
- 18.2 The Contractor shall be responsible for design of Temporary Works.
- 18.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4 The Contractor shall obtain approval of third parties to design the Temporary Works, where required.
- 18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works are subject to prior approval by the Project Manager before use.

19. Safety

- 19.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 19.2 The Contractor shall assume full responsibility and comply with all applicable safety regulations for the adequacy and safety of site operations and methods of construction and he shall adopt measures to prevent injuries to persons or damage to properties or utilities. He shall hold the Employer harmless from any liability for loss or damage resulting from his failures to take the

necessary precautions. He shall avoid undue interference with private business, public travel, or with the work of other contractors. He shall take steps to protect the environment and to minimize noise, pollution or other undesirable effects resulting from his method of operation.

20. Discoveries

- 20.1 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 Employer's instructions for dealing with them.
- 20.2 All materials obtained during excavation from the site and that have not been accounted for in the bid shall be the property of the Employer and the contractor shall take care of useful materials obtained during the execution of the Works and stack at place designated by the Employer. An arrangement shall be made between the Contractor and the Employer for the use and disposal of such materials according to the laws of the kingdom of Bhutan.

21. Possession of the Site

21.1 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.

22. Access to the Site

22.1 The Contractor shall allow the Project Manager and any person authorized by the Employer 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.

23. Instructions, Inspections and Audits

- 23.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 23.2 The Contractor shall give notice to the Project Manager whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Project Manager shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that he does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Project Manager, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.
- 23.3 The Contractor shall permit the Employer and/or persons appointed by the Employer to inspect the Site and/or the accounts and records of the Contractor and its Subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Employer if so required by the Employer. The Contractor's attention is drawn to GCC Sub-Clause 59.1 [Corrupt or Fraudulent Practices] which provides, inter alia, that acts intended materially to impede the exercise of the Employer's inspection and audit rights provided for under GCC Sub-Clause 23.3 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to ITB Sub-Clause 2.1 (c) of the Instructions to Bidders within the Bidding Documents that preceded the placement of the Contract of which these GCC form a part).

24. Disputes

24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator or Arbitrator within 14 days of the notification of the Project Manager's decision.

25. Procedure for Disputes

- 25.1 The Adjudicator shall give a decision in writing within 30 days of receipt of a notification of a dispute.
- 25.2 The Adjudicator shall be paid by the hour at the rate specified in the BDS and the SCC, together with reimbursable expenses of the types specified in the SCC, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 30 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 30 days, the Adjudicator's decision shall be final and binding.

25.3 The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and in the place specified in the SCC.

26. Replacement of Adjudicator

26.1 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

B. Time Control

27. Program

- 27.1 Within the time stated in the SCC, after the date of the Letter of 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.
- 27.2 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.
- 27.3 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.
- 27.4 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 Employer again at any time. A revised Program shall show the effect of Variations.
- 27.5 An on-time completion out of a total of thirty (30) % scoring shall be done by the Program Manager. The contractor shall be penalized under this component if he fails to deliver the project as per the initial time-lines committed in the Program.
 - The site engineer shall penalize the contractor to an extent of 30%. The quantum of penalty could vary as following:
 - (i) 10% for a minor default
 - (if the final completion of the project is delayed by 10 15% as compared to original project duration)
 - (ii) 20% for a medium default (if the final completion of the project is delayed by 15 25% as compared to original project duration)
- 30% for a major default

(if the final completion of the project is delayed by 25% or more as compared to original project duration.

28. Extension of the Intended Completion Date

- 28.1 The Project Manager shall extend the Intended Completion Date if 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.
- 28.2 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 Variation and submitting full supporting information. 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.

29. Acceleration

- 29.1 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.
- 29.2 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.

30. Delays Ordered by the Project Manager

30.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

- 31.1 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.
- 31.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting. 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.

32. Early Warning

- 32.1 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.
- 32.2 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.
- 32.3 If the Contractor considers himself to be entitled to any extension of Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 32.4 If the Contractor fails to give notice of a claim within such period of 30 days, the Employer shall be discharged from all liability in connection with the claim.

C. Quality Control

33. Identifying Defects

33.1 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 to ensure the quality of works executed. 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. The Project Manager at the end of the Contract shall issue a Performance score on Quality out of a total of 70 points based on the guidelines issued by the Standard and Quality Control Authority (SQCA)

34. Tests

34.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specifications 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.

35. Correction of Defects

- 35.1 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.
- 35.2 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.

36. Uncorrected Defects

36.1 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 to the Employer. At the option of the Employer, payment of

such costs may be made in whole or in part by the Employer deducting and keeping for itself appropriate amounts from the Retention Money and/or claiming against any bank guarantee provided by the Contractor pursuant to GCC Sub-Clause 48.3.

D. Cost Control

37. Bill of Quantities

- 37.1 The Bill of Quantities shall contain items for the construction, installation, testing and commissioning work to be done by the Contractor.
- 37.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

38. Changes in the Quantities

- 38.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than twenty percent (20%), provided the cost of variation beyond twenty percent (20%) limit exceeds one percent (1%) of the Initial Contract Value the Employer shall adjust the quoted rate up or down to allow for the change. Only when both conditions are met then the quoted rate shall be changed.
 - (a) If the quantity of work executed exceeds the quantity of the item in BOQ beyond the higher specified limit the Employer shall fix the market rate (which may be lower or higher than the quoted rate) to be applied for the additional quantity of the work executed.
 - (b) If the quantity of work executed is less than the quantity of the item in BOQ lesser than the lower specified limit, the Employer shall fix the market rate based on the submission of the contractor (which may be lower/higher than the quoted rate) to be applied for whole of the quantity of the work so executed.
- 38.2 The rates shall not be adjusted from changes in quantities if thereby the Initial Contract Price is exceeded by more than five percent (5%), except with the prior approval of the Employer in consultation with the Tender Committee.
- 38.3 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.

39. Variations

- 39.1 The Project Manager shall order any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary. Each variation may include, but is not limited to, any of the following:
 - (a) increase or decrease in the quantity of any work included in the Contract,
 - (b) omission or insertion of any item of work,
 - (c) change in the character or quality or kind of any such work,
 - (d) change in the levels, lines, position and dimensions of any part of the works,
 - (e) additional work of any kind, or
 - (f) change in any specified sequence or timing of construction activities.
- 39.2 The Project Manager shall make any such variation by issuing written instructions to the Contractor and ensure that such variations are duly noted in the Site Order Register. A variation made shall not, in any way, vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with GCC Clause 40.
- 39.3 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Project Manager stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence of the progress of the Works. Upon receiving this notice, the Project Manager shall cancel, confirm or vary the instruction.
- 39.4 All Variations shall be included in updated Programs produced by the Contractor.

40. Payments for Variations

- 40.1 The Contractor shall provide the Project Manager analysed rate for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the analysed rates, which shall be given within seven days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 40.2 If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of Project Manager, the quantity of work above the limit stated in GCC Sub-Clause 38.1 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.
- 40.3 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.
- 40.4 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.
- 40.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

41. Cash Flow Forecasts

41.1 When the Program is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

42. Payment Certificates

- 42.1 The Contractor shall submit to the Project Manager monthly statements of the value of the work executed, based on the Contractor's records, less the cumulative amount certified previously.
- 42.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 42.3 The value of work executed shall be determined by the Project Manager.
- 42.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed and measurement thereof shall be carried out jointly by the Project Manager, or his Representative, and the Contractor. The Project Manager, or his Representative, shall record the value of the work executed in a measurement book for the purposes of verifying the Contractor's monthly statements. The measurement book shall be signed by the Project Manager or his Representative, and countersigned by the Contractor.
- 42.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 42.6 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.

43. Payments

- 43.1 Payments shall be adjusted for deductions for advance payments, taxes, retention money and any other dues. The Employer shall pay the Contractor within 30 working days from the date of receipt of correct and verified bills/invoices in complete form by the Finance Section.
- 43.2 If the Employer makes a late payment, the Contractor shall be paid interest 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 at the rate of ten percent (10 %) per annum.
- 43.3 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall not be paid interest upon the delayed payment as set out in this clause.
- 43.4 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 43.5 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

44. Compensation Events for allowing time extension

44.1 The following shall be Compensation Events allowing for time extension:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 21.1.
- (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 if provided in SCC.
- (f) 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.
- (g) Other contractors, public authorities, utilities or the Employer do not work within the dates and other constraints stated in the Contract, and they cause delay.
- (h) Other Compensation Events described in the SCC or determined
 - by the Employer and force majeure. "Force Majeure" means an exceptional event or circumstance:
 - (i) which is beyond a Party's control,
 - (ii) which such Party could not reasonably have provided against before entering into the Contract.
 - (iii) which, having arisen, such Party could not reasonably have avoided or overcome, and
 - (iv) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (i) to (iv) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- (iv) 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
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

However, force majeure shall not include the following:

- i. rainfall
- ii. snowfall
- iii. strikes in other countries
- iv. non-availability of laborer and materials such as timbers, boulders, sand, and other materials
- v. difficulty and risky terrain and remoteness of site
- 44.2 If a Compensation Event would prevent the work being completed before the Intended Completion Date, the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Intended Completion Date shall be extended.
- 44.3 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning.

45. Tax

45.1 The prices bid by the contractor shall include all duties, taxes and levies that may be levied in accordance with the laws and regulations in being as of the date 30 days prior to the closing date for submission of bids.

46. Currencies

46.1 Where payments are made in currencies other than Ngultrum (NU), the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

47. Price Adjustment

47.1 If during the contract, there is an increase or decrease in the cost of materials as reflected by the Material Index Numbers published by the National Statistical Bureau (NSB), a corresponding increase or decrease in the payment to the contractor or recoverable from the Contractor shall be effected on the basis of the following formulae, such calculation being done for every successive period of 3 months after the 12th month of the Contract duration:

Adjustment for variation of material prices:

V = Wx0.80x0.75 x (M-M0)/M0

where:

- V = amount of variation for materials payable to/recoverable from the contractor for the period under review;
- W = value of the work done during the period under review minus (amount of secured advance recovered in the same period + value of works executed under variations for which the variations are paid in the new rate):
- M0 = Material Index for the month in which the tender was submitted;
- M = the average value of the above Index Number for the 3 months period under review;
- 47.2 For the applications of the above formulae, the appropriate Index Numbers published by the National Statistical Bureau shall be adopted.
- 47.3 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.
- 47.4 Price Adjustment shall apply only for work carried out within the stipulated time or extensions granted by the Procuring Agency and shall not apply to work carried out beyond the stipulated time for reasons attributable to the Contractor.

48. Retention

- 48.1 The Employer shall retain ten percent (10%) from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works as retention money.
- 48.2 On completion of the whole of the works, half the total amount retained shall be repaid to the Contractor and half when defects liability period has passed and the Engineer has certified that all defects notified by the Engineer to the Contractor before the end of this period have been corrected.
- 48.3 On completion of the whole of the works, the contractor may substitute the balance half of retention money by an unconditional bank guarantee. In the case of contracts beyond duration of 12 months, substitution of retention money by such a bank guarantee may be allowed on completion of 50% of the value of contract and duly certified by the Project Manager. The bank guarantee shall be valid until the issue of No Defects Liability Certificates by the Project Manager that all defects notified by the Project Manger to the Contractor have been rectified to his satisfaction before the end of this period. If the Contractor fails to remedy any reported defect within the Defect Liability Period, the Employer shall withhold the payment or realize claims from the bank guarantee of an amount which in the opinion of the Employer represents the cost of the defect to be remedied.

49. Liquidated Damages

49.1 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 ten percent (10%) of the Initial Contract Price. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

50. Advance Payment

50.1 The Employer shall make advance payment to the Contractor of the amount stated in the SCC (mobilization and secured advances) by the date stated in the SCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies 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.

- 50.2 The secured advances shall be paid to the contractor as specified in SCC on the following conditions:
 - a. The materials shall be in accordance with the specifications and shall not be in excess of the requirements;
 - b. The materials shall be delivered at the site of the works, properly stored and protected against loss, damage or deterioration;
 - c. A declaration shall be given by the contractor passing on the lien on the rights of the materials to the Procuring Agency.
 - d. The amount of the secured advance shall not be more than seventy five percent (75%) of the cost of materials delivered at the site of works which shall be supported by the original invoices/bills from the contractors. All materials imported from other countries shall be supported by Bhutan Sales Tax Receipts or Customs Clearance. In case of fabrication works off site, secured advance may be paid to the Contractor after site inspection is carried out by the Procuring Agency at the cost of the contractor, submission of proof of payment (work order) and submission of supply order.

The secured advance shall be recovered from the interim progress payments in the months in which these materials are used in the works.

- 50.3 The Contractor is to use the advance payment only to pay for, Plant, Materials and mobilization expenses required specifically for execution of the Contract.
- 50.4 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. All advances shall be recovered when eighty percent (80%) of the contract is executed. 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.

51. Securities

- 51.1 The Performance Security 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 bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 30 days from the date of issue of the Certificate of Completion.
- 51.2 Following the successful completion of the Contract, the Employer shall return the Performance Security to the Contractor within 14 days of receipt of the Certificate of Completion.
- 51.3 The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract in the event of:
- (a) failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount of the Performance Security.
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Clause 43 [payments] or Clause 62 [payment upon Termination], within 42 days after this agreement or determination,
- (c) circumstances which entitle the Employer to terminate the contract under Clause 58 [Termination], irrespective of whether notice of termination has been given.

52. Day works

- 52.1 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.
- 52.2 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 2 days of the work being done.
- 52.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms and at the rate quoted for Day works.

53. Cost of Repairs

53.1 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.

E. Completion of the Contract

54. Completion

54.1 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.

55. Taking Over

- 55.1 The Employer shall take over the Site and the Works and shall issue the completion Certificate within 7 days of taking over. The completion certificate shall include the following mandatory information:
 - i. Name of Contract firm
 - ii. Name of Proprietor
 - iii. CDB Registration No.
 - iv. Trade License No.
 - v. Contract Amount
 - vi. Year of Completion
 - vii. Award order No. with Date.

56. Final Account

56.1 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 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 30 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.

57. Operating and Maintenance Manuals

- 57.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.
- 57.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the SCC from payments due to the Contractor.

58. Termination

- 58.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 58.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (a) 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;
 - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
 - the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) The Contractor fails to employ the personnel proposed in the Bid document pursuant to Qualification Information Paragraph 1.5,
 - (e) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 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 Contractor does not maintain a security, which is required;
 - (h) the Contractor subcontracts any or whole of the Works without the approval of the Employer:
 - (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 in case of joint venture any or all parties fail to fulfill the contractual obligations.
- 58.3 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 Sub-Clause 58.2 above, the Project Manager shall decide whether the breach is fundamental or not.
- 58.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 58.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

59. Corrupt or Fraudulent Practices

- 59.1 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 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of GCC Sub-Clause 59.5 shall apply.
- 59.2 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 Sub-Clause 10.2
- 59.3 For the purposes of this Sub-Clause:
 - (a) "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (b) "fraudulent practice" 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;
 - (c) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (d) "coercive practice" 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;
 - (e) "obstructive practice" is
 - (i) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order materially to impede any 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
 - (ii) acts intended materially to impede the exercise of the inspection and audit rights of the Employer and/or any other relevant RGoB agency provided for under GCC Clause 23.

60. Payment upon Termination

- 60.1 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 and less the percentage to apply to the value of work not completed, as indicated in the SCC. 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 by the Contractor to the Employer.
- 60.2 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.

61. Property

61.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer if the contract is terminated because of a Contractors default.

62. Release from Performance

62.1 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.

Section VI. Special Conditions of Contract

A. General						
GCC 1.1 (o)	The Employer is					
(0)	Manager,					
	Administration and Finance Department					
	Bhutan Broadcasting Service Corporation					
	Chubachu, P.o.Box: 101, Thimphu Bhutan					
GCC 1.1 (r)	The Intended Completion Date for the whole of the work is 6 months from the date					
	of award of work.					
GCC 1.1 (v)	The Project Manager is					
	Ngawang Dorji					
	Technical department, transmission division					
	BBSC, Thimphu Bhutan					
GCC 1.1 (y)	The Site location: Supply and delivery of goods CIF, BBSC, CHubachu Thimphu,					
200 ((())	Bhutan					
GCC 1.1 (bb)	The Start Date shall be as soon as the purchase order is issued.					
GCC 1.1 (ff)	The Works consist of Supply, Installation, Testing & Commissioning of BBSC					
	transmission infrastructure (Construction of Prefabricated shelter, Tower and Power					
GCC 2.2	system)] Sectional Completions are: lineart nature and dates, if appropriate!					
GCC 2.2 GCC 2.3 (9)	Sectional Completions are: [insert nature and dates, if appropriate] The following documents also form part of the Contract:					
GCC 2.3 (9)	[list documents; e.g. (delete or add to as appropriate)]					
	Schedule of Other Contractors (GCC 9)					
	Schedule of Key Personnel (GCC 10)					
	Schedule of Key Personnel (GCC 10) Site Investigation Reports (GCC 11)					
	Schedule of Operating and Maintenance Manuals (GCC 57)					
GCC 3.1	The language of the contract is [English] The language shall be that of the Bid].					
	The law that applies to the Contract is the law of the Kingdom of Bhutan.					
GCC 9.1	Schedule of other contractors: [insert Schedule of Other Contractors, if appropriate]					
GCC 10.1	Key Personnel: [insert Schedule of Key					
	The amount to be deducted for the key personnel not employed by the contractor					
	for each personnel is Nu. [insert monthly salary of the personnel					
	The amount to be deducted for the equipments not available at site is Nu. [insert					
	monthly hiring charges of the equipments]					
	The amount to be deducted for the VTI/local skilled labourers not employed by the					
	contractor for each personnel is Nu. [insert monthly salary of the personnel]					
	The amount to be deducted for the VTI graduates not employed by the contractor					
	as interns for the contract for each personnel is Nu. [insert monthly salary of the personnel]					
GCC 14.1	The minimum insurance amounts and deductibles shall be:					
300 14.1	(a) loss of or damage to the Works, Plant and Materials to be built into the					
	works: [insert amounts].					
GCC 15.1	Queries.					
	1. regarding tender document; procurement officer, AFD, BBSC					
	2. Regarding Technical, AE transmission engineer, Technical dept, BBSC					
GCC 21.1	The Site Possession Date(s) shall be: [insert location(s) and date(s)]					
GCC 25.2	Fees and types of reimbursable expenses to be paid to the Adjudicator: [insert					
	hourly fees and reimbursable expenses].					
GCC 25.3	[For smaller contracts, the institution is usually from Bhutan. For contracts that are					
	awarded to international contractors it is recommended that the arbitration					
	procedure of an international institution be used]					
	Institution whose arbitration procedures shall be used:					
	For Contracts with Bhutanese Contractors					
	Construction Development Board (CDB) or other Independent Agency:					

GCC Sub-Clause 24.3—All disputes arising in connection with the present Contract shall be for finally resolved by arbitration in accordance with the rules and procedures of the CDB or any other independent agency that has been appropriately mandated at the time of submission of the dispute through its National Arbitration Committee. The arbitration award shall be final on the parties who shall be deemed to have accepted to carry out the resulting award without delay and to have waived their right to any form of appeal insofar as such waiver can validly be made.

For Contracts with International Contractors

[one institution from among those listed below; insert the corresponding wording] "United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules:

GCC Sub-Clause 25.3—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force."

Or

"Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC):

GCC Sub-Clause 25.3—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules."

or

"Rules of the Arbitration Institute of the Stockholm Chamber of Commerce:

GCC Sub-Clause 25.3—Any dispute, controversy or claim arising out of or in connection with this Contract, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the Rules of the Arbitration Institute of the Stockholm Chamber of Commerce."

or

"Rules of the London Court of International Arbitration:

GCC Sub-Clause 25.3—Any dispute arising out of or in connection with this Contract, including any question regarding its existence, validity or termination shall be referred to and finally resolved by arbitration under the Rules of the London Court of International Arbitration, which rules are deemed to be incorporated by reference to this clause."

The place of arbitration shall be: [Insert city and country]

Appointing Authority for the Adjudicator: [insert name of Authority].

B. Time Control

GCC 27.1

GCC 26.1

The Contractor shall submit for approval a Program for the Works within *[number]* days from the date of the Letter of Acceptance.

The Program shall include, but not be limited to, the following elements under the conditions stipulated:

(a) Quality Assurance Plan (QAP)

The Quality Assurance Plan shall specify the work methodology, quality control tests and intervals for such tests in accordance with the work specifications for each item of the Works. If in the opinion of the Project Manager the QAP submitted by the Contractor does not fully represent the spirit of the General Conditions of Contract or the Specifications he may seek further clarification from the Contractor before his approval. The Contractor shall strictly follow the QAP in the execution of the Works. If the Contractor does not comply with the QAP, he shall not be allowed to proceed further with the Works. Details of all procedures and compliance documents shall be submitted to the Project Manager for information before each execution stage is commenced. Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities

under the contract.								
GCC 27.3	The period between Program updates is [insert number] days.							
GCC 27.3	The amount to be withheld for late submission of an updated Program is <i>[insert</i>]							
	amount].							
C. Quality Control								
	GCC 35.1 The Defects Liability Period is: [365] days/12 months.							
D. Cost Control								
GCC 43.1	PAYMENT TERMS AND CONDITIONS:							
	The payments to the Contractor for the performance of the Contract will be made							
	by the Employer in the currency identified in the Contract as per the methods,							
	terms and conditions specified herein.							
	1. Advance Payment: Ten percent (10%) of the Contract price shall be paid							
	within 30 days of submission of (i) Advance Payment Guarantee for							
	equivalent amount favoring Employer, (ii) Performance Security. The value							
	of the Bank Guarantee towards advance payment shall be proportionately							
	reduced against supplies made.							
	2. For Supply of Goods:							
	CIF price of Goods identified in the Notification of Award/Letter of Award will be paid as under:							
	a. Progressive Payment							
	i. Seventy percent (70%) of the CIF price component (excluding							
	spares) for all the equipment and materials shall be within 30 days							
	on submission of documents as specified below:							
	ii. Application for payment							
	iii. Supplier's invoice (one original + 3 copies) showing Goods'							
	description, quantity shipped, unit price, total amount, amount							
	payable on dispatch.							
	iv. Original and two (2) copies of the negotiable, clean onboard Bill of							
	Lading marked freight prepaid and two (2) copies of non-negotiable							
	Bill of Lading.							
	v. Three (3) copies of packing list identifying contents of each package vi. Insurance certificate in 2 copies							
	vii. Manufacturer's/Suppliers' Guarantee Certificate of quality.							
	viii. Material Inspection & Clearance Certificate (MICC) for dispatch							
	issued by the Employer's Representative and the Supplier's factory							
	inspection report (2 copies); and							
	ix. Certificate of origin (3 copies)							
	b. Final Payments: The balance twenty percent (20%) of the CIF price							
	for materials as identified in price schedule enclosed with the							
	Notification of Award/Letter of Award shall be paid within 30 days of							
	Final Acceptance Test, as per the Contract and on submission of claim							
	by the Contractor and verification by the Employer as per the clause							
	no.7 in SCC (payment terms and conditions). 3. For Services							
	Expatriate supervision & local service charges i.e. inland transportation							
	of materials to the site, insurance, erection, construction, foundation,							
	labor charges testing & commissioning charges shall be paid as							
	follows:							
	a. Seventy percent (70%) of the charges shall be paid on prorate basis							
	after installation at Site and on certification by the Employer's							
	Representatives.\							
	b. Twenty percent (20%) of the charges shall be paid within 30 days of							
	the final site acceptance tests along with the corresponding final							
	payment for supply portion mentioned at clause 2, (a) above							

A Mada (D					
4. Mode of Payment					
a. Payment to the Foreign Contractor shall be made by the					
by TT transfers. Therefore, all invoices including do					
evidence/ documents shall be addressed and submitt	ed to the				
Employer.					
b. Payment to the local contractor shall be made by the Er	nployer by				
check in favor of address prescribed by the supplier.					
5. Payment shall be made promptly by the Employer, but in no case la					
thirty (30) days after submission of an invoice or claim by the Sup					
6. The currency or currencies in which payment is made to the					
under this contract will be made in the currency or currencies s	specified in				
the bid form.	40 :				
7. A verification certificate in accordance with above clause 2,a (i					
be issued before any final payments in accordance with above cl	ause ii can				
be made.	ac foreign				
8. Payment terms and conditions will remain same for local as well	as loreign				
supplier. 9. Any foreign contractor does not agree upon the specified payr	nent terms				
and conditions, their bid will be rejected and consider as non-res					
CC 44.1 (I) Other Compensation Events are: ["none"]	porisive.				
CC 45.1 In case of certain Tax exemptions, such as in foreign assistance pro	niects this				
specific exemption(s) should be clearly specified in this clause.	ojecis, iilis				
	dance with				
GCC Clause 47. [Price Adjustment is applicable only for Contracts of dur	The Contract [insert "is" or "is not"] subject to price adjustment in accordance with				
than 12 months}	auon more				
The proportion of payments retained is: [10% of the contract price]					
	The liquidated damages for the whole of the Works are [0.1% 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.					
	The Mobilization Advance Payment shall be ten percent (10%) of the Contract				
	Price and shall be paid to the Contractor no later than 30 days after receipt by the				
Employer of an acceptable Advance Payment Guarantee.					
	The secured advance is [70%] after verification certificate in accordance with				
	above SCC sub clause 43.1, 2, i (a,b,c,d,e,f,g,h) of the payment terms and				
	conditions, must be issued before any payment.				
	The Performance Security amount shall be ten percent (10%) of the Contract Price,				
denominated in the types and proportions of the currencies in which the					
	Price is payable, or in a freely convertible currency acceptable to the Employer].				
Finishing the Contract					
The date by which operating and maintenance manuals are required	is [insert				
date].	-				
The date by which "as built" drawings are required is [insert date].	-				
CC 57.2 The amount to be withheld for failing to produce "as built" drawing	ngs and/or				
	operating and maintenance manuals by the date required in GCC Sub-Clause 57.1,				
or failing to obtain the Project Manager's approval of them by the sa	id date, is				
[insert amount in local currency].					
CC 58.2 Additional condition:					
Performance security will be forfeited if the contract is term	ninated by				
the employer					
CC 58.2 (i) The maximum number of days is: [100 days; consistent with SCC Sub-C	Clause 49.1				
on liquidated damages].					
	The percentage to apply to the value of the work not completed, representing the				
Employer's additional cost for completing the Works, is <i>[insert percenta</i>					
20% up to a maximum of 10% of the initial contract price]	ge ,usually				

Section VII Specifications and Performance Requirements ANNEXURE-I

Section VIII Drawings Annexure-II

Sl	Drawing
1	Shelter foundation drawings
2	Tower foundation drawing
3	Prefabricated shelter drawing
4	Tower structural drawing

Section IX Bill of Materials (Quantities) - ANNEXURE-III

Section X. Bid Security Forms

Form of Bid Security	(Bank Guarantee)
----------------------	------------------

Bidder") has submitted its bid dated Transmission Equipment against Lot #_ Description of the Goods) (Hereinafter called	(Hereinafter called "the for the supply and delivery of (Insert Brief "the Bid"). KNOW ALL MEN by these present that WE of having our registered office at (hereinafter called "the Bank") are
(hereinafter called the Ngultrum	n Broadcasting Service Corporation, Thimphu: Bhutan) Employer) in the sum of
the Bank binds itself, its successor and assign	well and truly to be made to the said Employer, ns, by these presents. Sealed with the Common day of2016.
THE CONDITIONS of this obligation are:	
Form; or	period of bid validity specified by the Bidder on the Bid ceptance of its Bid by the Employer during the period of
We undertake to pay to the Employer up to the first written demand, without the Employer had demand the Employer will note that the amount	e Security, in accordance with the instructions to Bidder; he above amount, according to, and upon receipt of, its naving to substantiate its demand, provided that in its unt claimed by it is due to it owing to the occurrence of s, specifying the occurred condition or conditions.
(NAME OF BANK) BY	
(Title) Authorized Representative	
(Signature of Witness) Name of Witness Address of Witness	_

Performance Demand Bank Guarantee

(Unconditional)

Performance Security Form

(Name of the supplier)
o (Supply, Installation, Testing &
Construction of Prefabricated shelter,
dated2016, hereinafter
act the Contractorshall furnish you with a ed therein as security for compliance with le Contract; luarantee; THEREFORE WE hereby affirm behalf of the Supplier, up to a total (Amount of the
(Amount of the ay you, upon your first written demand and without cavil or argument, any sum or (amount of guarantee) as or reasons for your demand or the sum 6.

[signature(s) of an authorized representative(s) of the bank]

Bank Guarantee for Advance Payment

Bank Guarantee for Advance Payment

To
The General Manager
Administration and Finance Department,
Bhutan Broadcasting Service Corporation
Thimphu Bhutan

In accordance with the provisions of the Conditions of Contract, Clause [insert Clause No.] ("Advance Payment") of the above-mentioned Contract, [name and address of Supplier] (hereinafter called "the Supplier") shall deposit with Bhutan Broadcasting Service Corporation (Employer) a Bank Guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of [amount of Guarantee] [amount in words]. We, the [Bank or Financial Institution], as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to Bhutan Broadcasting Service Corporation (Employer) on his first demand without whatsoever right of objection on our part and without his first claim to the Supplier, in the amount not exceeding [amount of Guarantee] [amount in words].

We further agree that no change or addition to or other modification of the terms of the

Contract or of Works to be performed there under or of any of the Contract documents which may be made between *Bhutan Broadcasting Service Corporation (Employer)* and the Supplier, shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until [name of Employer] receives full repayment of the same amount from the Supplier. Yours truly,

Signature and seal:
Name of Bank/Financial Institution:
Address:

Invitations for bids 58

INVITATIONS FOR BIDS

 Bhutan Broadcasting Service Corporation hereinafter referred to as "Employer" invites sealed bids for the SUPPLY, INSTALLATION, TESTING & COMMISSIONING (SITC) of BBSC TRANSMISSION INFRASTRUCTURE "Construction of prefabricated shelter, tower and power system"

2. The Bidding documents shall be available both in soft and hard copies. The eligible bidders can also download the bidding document from the BBSC web site www.bbs.bt. The bidder can also purchase the documents (both in hard and soft copies) from Procurement office, Administration and finance Department.

3. FEATURES OF BID

1	TENDER DATE:					
2	BID DETAILS					
	a. Cost of the document, hard copy Nu:					
	b. Cost of bidding document, soft copy Nu:					
	 c. Place and date of sale 		Procurement office, AFD, BBSC, Thimphu			
	d. Last date and Place of subm	l. Last date and Place of submission/2016, Procurement office, BBSC				
	e. Opening date and place/2016, BBSC conference hall.					
3	Bid Security 2% of the quoted amount (EMD) in (Nu):					
4		30 days from the day of the opening of bids				
	EMD Validity Period	(/2016)				
5		90 days after the date of tender opening				
	Bid Validity Period	(/2016)				
6	Quantity Variation	(+/-) 20 % (percentage)				

- 4. Any bid received after above stipulated time shall be rejected and returned unopened to the bidder. It is the sole responsibility of the bidders to ensure the delivery of their bids before the time; delay due to any kind of reason shall not take into consideration.
- **5.** The Employer will not be responsible for any costs or expenses incurred by bidders with the preparation or delivery of bids.
- **6.** The Employer reserves the right to cancel/withdraw the invitation for Bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.
- 7. Eligible bidders may obtain further information if required from the office of the Procurement officer, AFD Department, BBSC, Thimphu, Bhutan
 Contact: . Mail: tsheten@bbs.bt
- 8. The bidder shall fulfill the following eligibility criteria
 - **a.** Experience of having successfully execution of similar project in hilly terrain and should submit the successful work completion certificates for the same.
 - **b.** The bidder must show the Annual Financial Turnover during last 3 years to see the financial capacity.
 - c. Bidder should provide certificates of all the qualified technicians, skilled labor and engineers which have sufficient experience in same work.
 - d. Bidder should visit the sites and should submit the detail site survey report along with technical bid.

Invitations for bids 59

e. The bidder should not have been barred by their respective government from doing similar kind of project in Bhutan. A certificate to this may be submitted by the bidders. (only for international bidders)

- f. Bidder should have ISO 9001:2008, ISO 14001:2004, & OHSAS 18001:2007 accreditation (for OEM)
- g. Bidder must submit valid trade license

Note: Bidder must provide necessary supporting documents as proof in respect of the eligibility criteria mentioned above. Any bidder does not fulfill the above mentioned eligibility criteria; his/her bid will be rejected.

9. CHECK LIST FOR BID SUBMISSION

SI	Particulars	Purchaser requirement	Bidders to fill up	
			Yes	No
1	Valid Trade license	Yes		
2	Signed bid form (original)	Yes		
3	Signed original technical bid + copy	Yes		
4	Signed original financial bid + copy	Yes		
5	Copy of all the necessary documents except bid document	Yes		
6	EMD in favor of BBSC, MD	Yes		
7	Tax Clearance Certificates	Yes		
8	Manufacturer authorization certificates for OEM and dealership certificates for authorized dealer	Yes		



BHUTAN BROADCASTING SERVICE CORPORATION

Tender No: BBSC/TECH-Trans (Infrastructure)/2016/

ANNEXURE-II

Bill of Materials for BBSC FM/TV Station Infrastructure Development

Α	Construction of Shelter and Power system					
A.1	Prefabricated and shelter and equipment rack					
SI No.	Material	Qty	Unit Price	Total	Remarks	
1	Supply of Pre-fabricated shelter with external sheet roofing and lighting facility: Indoor cable lader H-shape . Feeder window Ext: 3600 x 2600 x 2500 (L x W x H in mm). Panel with form - 60mm, Material of skin - 0.6mm, Floor ply 18mm and PVC 2 m.	5				
2	19 inch equipment Rack	5				
	Service					
3	Shelter foundation and erection of shelter with adequate lighting facility - AC 230V	5				
4	Local Transportation of tower material to the site	5				
	Total					
A.2	Earthing system					
SI No.	Description	Qty	Unit Price	Total	Remarks	
1	Earthing and Bonding with DC surge protection - Chemical based earthing system with 48V DC SPD.	5				
2	Earth cable (Green and yelow mixed) - 1 C, 25 sqmm, 1.1 kV, PVC insulated, un armored, copper multi-stand, 10 meter per site	5				
3	TVSS - 50 kA Transient Voltage Surge Suppressor, 1 Phase, 230V, 50 Hz	5				
	Service					
5	Installation charges	5				
4	Local Transportation of tower material to the site	5				
	Total					
A.3	AC and ventillation					
SI No.	Description	Qty	Unit Price	Total	Remarks	
1	Ventilation System (4in 4 out) with temperature & humidity control system with complete cable and accessories packed with the unit.	5				



२००१ तर्ज्या मृदः नर्ज्या याया पर्दे व

BHUTAN BROADCASTING SERVICE CORPORATION

2	Airconditioner with approriate rating of MCB along with stand for outdoor unit (split type) with cable.	5				
3	Battery 2V/200AH@c10. 48VDC 400AH per site with accesoriese	6				
4	SMPS Rectifier,-48v 120Amps(30Amps 4module)	6				
5	Inverter 2*3Kva Pure sinewave	6				
6	Dc power cable 50sqmm red 20meter	6				
7	Dc power cable 50sqmm black 20meter	6				
8	Line Conditioner / Stabilier - 5 KVA, I/P 150 -290 AC, O/P 230 +/- 10%, 50 Hz.	6				
	Service					
10	Installation charges	6				
11	Local Transportation of tower material to the site	6				
	Total					
В	Construction of 25 meter 3 legged tower					
SI No.	Description of Materials	Qty	Unit Price	Total	Remarks	
1	25 Meter Tower: Complete supply, Fabrication, Galvanization (85 micron) self supported 3 legged triangular tower.	4				
SI No.	Service					
2	Local Transportation of tower material to the site	4				
3	Tower foundation works including excavation, concrete works and RCC works complete and back filling	4				
4	Erection and Painting	4				
	Total					

Tender No: BBSC/TECH-Trans (Infrastructure)/2016

ANNEXURE-I

Technical Specification for BBSC FM/TV Station Infrastructure Development

SCOPE OF WORK: The scope of works includes Supply, Installation, Testing & Commissioning of BBSC Transmission Infrastructure "Construction of Towers, shelter and power system".

GENERAL

1. Documents and articles necessary for approval by the local approving authorities are as shown in the following table:

SL	ITEMS	TIME FOR SUBMISSION	QUANTITY	REQUIRE
а	Test certificates	Whenever occasion arises	2	All except for fencing
	and report			
b	Shop drawings	Whenever occasion arises	2	Shop drawing only for
	and			tower, rest all need.
	manufacturer's			fencing drawing will be
	drawings			provided by purchaser
С	Samples and	Whenever occasion arises	As specified in	All except for fencing
	catalogues		document	
d	Any other	Whenever demanded by	As specified in	All
	documents	The Purchaser / Local	document	
		Approving authorities.		
е	Foundation	With bid document	As specified in	Only Shelter and tower
	drawing		document	

The outline of the aforesaid documents and articles are as follows:

a. Test Certificates and Reports

Test certificates and reports on the tests carried out at factories, laboratories or at the Sites shall be submitted occasionally. Not only the tests specified in this specification but also the tests required by the supplier shall be carried out according to the instructions.

b. Shop Drawings and Manufacturer's Drawings.

The drawings specified in this Specification shall be submitted according to the Purchaser's instructions. The supplier shall submit revised drawings if the Purchaser so requires. No work shall commence before getting the Purchaser's approval to the relevant shop and manufacturer's drawings.

- c. Samples and Catalogues. Samples and catalogues shall be specified in this specification.
- **d. Any other Documents**. Any other documents specified in this Chapter or the documents directed by the Purchaser during the progress of the Civil Works shall be submitted.

2. Modification of Materials and Methods of Works

Except in cases where the modification of design is required by Purchaser or the approving authorities, the supplier shall strictly comply with the approved Specifications and Drawings. If the Supplier requires modification of designs or alteration of materials and methods of works specified in this document, he shall submit the report stating the reasons for the modifications and the details of such modifications clearly, comprehensively and correctly besides submitting samples of modified materials with relevant specifications from the manufacturers. No modified works shall be carried out before getting the Purchaser's



৯৯ । বরুগা ক্রুদ্ বর্ষুগ্রমাথা এইর

BHUTAN BROADCASTING SERVICE CORPORATION

consent. If the bidder feels that the design specified by the Purchaser is inadequate, an alternative design may be proposed at no additional cost to the Purchaser.

A. TECHNICAL SPECIFICATIONS AND DESIGN OF TOWER

Design Requirements

The Supplier is required to design the towers of 3-legged triangular self supporting tower for the height of 25meter considering the following factors:

1. General

- **1.1** The supplier shall establish the design conditions of the antenna supporting structures and all the other related facilities to carry out the structural load calculations and to prepare the drawings and descriptions.
- **1.2** Before commencement of the works the supplier shall submit the following information for approval by the Purchaser:
 - a. The list of standards, which is intends to apply in accordance with this Specification.
 - b. Grade of steel materials to be used including reinforcing bars and their allowable design stress

c. Outline of design criteria for structural calculations based on:

- i. Wind load and.
- ii. Seismic load where required.
- iii. Dead load.
- iv. Twist, sway and displacement.
- v. Snow load.(Gagar and khando phung station)
- vi. Stress analysis for reinforced concrete of the foundation.
- d. Allowable bearing strength of soil and, if required, statement of the soil bearings described in this Specification.
- e. Typical schematic drawings showing outline of the proposed facilities and structures.
- Climatic conditions of each site including items relating to wind load, ice coating load and seismic load.
- g. Outline of geographical condition of each site
- h. Detail time schedule of execution of the design.
- i. Any other important items to be determined before structural calculation and preparing drawings and specifications.
- **1.3** After completion of preparation of the drawings and descriptions, the following information / details shall be submitted in two (2) copies to the Purchaser for approval:

a. Explanation on Design, including:

- List of the standards applied.
- Climatic conditions of each site including items relating wind load, ice coating load and seismic load.
- Type, size, dimensions weight, quantity and positions of antennas to be mounted on the antenna supporting structure, including future plan.

b. Structural calculations for the facilities structures, showing:

 Calculation of load, viz. dead load, including ice coating load, wind load and seismic load where required.

c. Stress analysis and section designs, including:

- Line diagram showing each member stress corresponding to various loading conditions.
- Tables on load carrying members, listing sizes, lengths, slenderness ratios, allowable stress, actual stress and the sizes and members of bolts at each connection.



७७। यतुगा कुर यत्रुगरा यस यहें दा

BHUTAN BROADCASTING SERVICE CORPORATION

- Local stress analysis and section design of the structure at the parts on which the antennas and the appurtenances are to be mounted (including adjacent members affected).
- Maximum twist, sway and displacement of the main supporting structure in the worst loading condition.

d. Structural calculations for the foundations, including:

- Load on the foundation by the facilities structure in the various loading conditions.
- Calculations of stability against uplift, shearing and down-thrust stresses caused by the load.
- · Calculations for the reinforcement.

e. Drawings, showing:

Layout of the foundations and facility's structures station wise, details of the foundations and facility's structures station wise, and position, dimension and type of the antennas to be mounted on the antenna supporting structure.

- 1.4 Immediately after approval by the Purchaser, the supplier shall submit three (2) sets of the approved explanation on design, structural calculations, drawings and descriptions.
- 1.5 The approval of the design conditions, calculations, drawings and descriptions shall not relieve the supplier from his responsibility for the accuracy, adequacy and reliability of the facilities to be constructed.
- 1.6 Where necessity of change of the approved design conditions, calculations, drawings and / or description arises, these shall be approved by the Purchaser.

2. Structural Design

2.1 General

- a. Unless otherwise specified, the antenna supporting structure shall be self-supporting with self supporting type and the foundation shall be of reinforced concrete.
- b. Any stress of component of facilities, of steel, bolt, reinforcing bar and concrete shall not exceed allowable stress of material specified in the Standard.
- c. The design for steel structure shall be based on the following concept and assumption in-case if the tower structure to be constructed:
 - i. Steel structure shall be regarded as an elastic body.
 - ii. Steel structure shall be analyzed as a space framework. However, in common trussed structures, the stress may be calculated as a plane, truss of which the members are frame din one plane, substituting the space framework, and furthermore, where the common truss has small inclination, the truss may be calculated on the projection of the truss on the vertical plane. In this case, the following shall be taken into consideration:
 - Where the inclination of the truss is not uniform, interaction between two inclination
 - Other influence caused by construction of the plane trusses as a space framework.
 - iii. Neither the stress caused by dead load including ice coating load, nor the stress resulting from the combined load of dead load and wind load or seismic load shall exceed allowable stress of the materials specified in the Standard.
- d. The stress analysis may be carried out by means of electronic computer subject to applying the proven stress analysis program.
- e. While designing 3-Legged Self supporting Towers of 25M a maximum weight for each section member shall not exceed 40Kg/section-leg to ease head load transportation burden to some of difficult sites. While the weight of section member above 25M tower shall not exceed 50kg/section.

2.2 Loads on Facility's Structure

a. Dead Load



७७। यतुगा कुर यत्रुगरा यस यहें दा

BHUTAN BROADCASTING SERVICE CORPORATION

Dead load means the dead weight of the antenna supporting structure and all other facility's structure, all appurtenances and other such items as antennas, which are to be mounted on the main supporting structure. Where required, dead weight of the ice, which is expected to coat on all members of the antenna supporting structure and all other facility's structure, the appurtenances, antenna, etc., shall be included in the dead load. At sites over 2,500 meters above sea level, antenna supporting structures, antennas and all other facilities shall be considered for ice coating load. Unless otherwise specified, radius thickness of the ice coating and density of the ice may be assumed as 10 mm and 0.6 g / cu.cm respectively.

b. Wind Load

- i. Full calculation shall be taken in the wind load acting on the antenna supporting structure and all other facilities, the appurtenance and antenna, etc. to be attached on the main supporting structure. The ice coating, if required, shall be included as a part of the projected area for locations over 2,500 meters above sea level.
- ii. The combined effects of dead load and wind load shall be taken into calculation in the stress analysis so that the worst stress in all component part can be determined. Where height, direction, size and/or type of the antennas are not specified and they cannot be determined at the stage of structural calculation, these shall be so assumed that they cause the worst effects on the structure when wind load is calculated.
- iii. Unless otherwise specified, any formulas, coefficients and factors required for calculation of the wind load shall be in accordance with the standard, or the results of tunnel test as an alternative of the Standard.
- iv. For the purpose of design and calculations, the wind speed shall be taken at 180 Km / hour

c. Seismic load

- i. Where required to consider, the combined effect of dead load and seismic load shall be taken into the calculation.
- ii. Combined effects of seismic load and wind load may not be taken into the calculation.
- iii. The lateral seismic factor may be assumed as k = 0.1 from the 100 year probability value of 100 gal given in the maximum expected seismicity distribution map of the world published by the Building Research Institute (Ministry of Construction, Japan) or an equally renowned institute, for the calculation.
- d. Soil Bearing Capacity

Soil bearing capacity at all the sites is assumed as at least 10 tons / sq.m.

2.3 Twist, Sway and Displacement.

- a. Twist means horizontal angular displacement of the main supporting structure at each antenna mounting elevation from no wind load position to worst wind load position. Sway means vertical angular displacement of the central vertical axis at each antenna mounting elevation from its no wind position to the worst wind load position, divided by each corresponding elevation.
- b. Unless otherwise specified, twist, sway and displacement shall not exceed the following values:

Twist: 1 deg.Sway: 1 deg.

Displacement: 1/100

2.4 Welding Materials

The electrodes to be used for welding shall be standard products. Appropriate electrodes shall be selected for the type of steel to be welded. Welding materials other than those stipulated above shall be selected according to the method of welding to be employed.

a. Bolt Holes.

The diameter of bolt holes shall be larger by 0.5 mm than the diameter of the bolt itself. Anchor bolts shall be secured by using two (2) nuts. For bolts, other than those mentioned



७७। यत्रुगा कुर यत्रुगरा यस यहें त

BHUTAN BROADCASTING SERVICE CORPORATION

above, and for those embedded in concrete proper precaution shall be taken to prevent nut loosening by using either double nuts or spring washers or any other acceptable methods.

2.5 Welding.

a. General

This clause applies to the arc welding of structural steel elements.

- In-site welding shall be carried out after inspection of the steel fabrication and election.
- ii. The welding shall be done only by qualified and experienced welders.

2.6 Product Inspection

- The products shall be inspected by the Purchaser after it reaches to Purchaser's specified sites.
- b. Faulty portions shall be promptly rectified.

3. Antenna Support Structure

3.1 General

- a. The antenna supporting structure to be constructed shall consist of foundation, main structure, and appurtenances.
- b. All steel materials including bolts and nuts shall confirm to international standards. All materials of antenna supporting structure including other steel members used in the structure shall be coated by hot-dip galvanizing after all fabrication works has been completed.
- c. The antenna supporting structures shall be inspected by the Purchaser during the construction as well as after the completion of the construction works.
- d. A copy of the final drawings and instructions shall be submitted to the Purchaser promptly after the completion of the antenna supporting structures for the Purchaser's record.

3.2 Tower Shape

- a. The towers shall be of triangular shaped lattice self supporting towers, made of tubular members designed to cater total load of maximum 250kg(Max.) which shall consist of 3 nos. each of TV&FM antenna and VHF communication antenna etc.
- b. The towers are to be designed for height 25meters for 3-legged self supporting triangular tower.
- c. Tower shall equipped with a variety of accessories, such as working plate forms (mesh type), antenna mounts, safety devices, ladders, obstruction lights, lightning protection kit etc, which can be installed at any desired height and orientation.

d. Antenna Mounting

- i. Consistent with tower height, towers shall be arranged to support antennas at a number of different levels, 4.0 meters apart, measured vertically. This distance may be altered slightly to fit in with the geometry of the tower bracing.
- **ii.** Each antenna mounting position shall be capable of being served by an access platform located approximately 1 meter below the centre-line of the antenna position it serves.
- **iii.** Mounting platforms shall be provided for all antenna positions, which are to be utilized by the Bidder in meeting the radio system requirements. Mounting platforms are not required for unequipped antenna mounting positions.
- **iv.** Antennas shall be mounted on mounting bars to be attached at each mounting level, at set specified vertical distance apart. This distance shall be specified by the Bidder, but should be typically of the order of 1.5 meters. Three sectored Radio antennas shall be mounted on bars/pipes of 50mm-100mm in diameter and 3000mm in length. In addition, two similar bars/pipes shall be provided below also for mounting bay of antenna.
- **v.** Appropriately sized holes shall be provided in the tower legs at each mounting level for mounting bars to be added as required for future radio systems.
- vi. Bidders shall allow for 2 pairs of holes per leg on each face at each mounting level.

e. Antenna Feeder Runway



७७। यतुगा कुर यत्रुगरा यस यहें त

BHUTAN BROADCASTING SERVICE CORPORATION

- i. Each tower shall be equipped with a straight, vertical antenna runway extending from the ground to the top of each tower for the provision of coaxial cable and wave guide feeders as necessary. This runway shall have provision for future radio system expansion of:
 - 10 cables -16mm Dia.
 - 10 cables/waveguides -28mm Dia.
- ii. For towers with a central runway, the lower end of the runway shall be set in a concrete foundation laid on a solid base. Typically this would consist of a concrete foundation block approximately 1.0m x 0.4m deep.
- iii. The Bidder shall include design details for a suitable sized antenna feeder gantry extending from the tower structure to the equipment building. This gantry shall be of sturdy construction utilizing galvanized steel members and offer some protection to the feeder cables in the event of flying debris in high winds. Feeder cables should preferably be laid on the underside of the gantry.

f. Platforms

- i. Working platforms shall be provided to allow access to each antenna equipped for the initial installation specified in these bidding documents.
- ii. In addition rest platforms shall be provided on all towers where the vertical spacing between working platforms, or the lowest working platform and ground level, exceeds 15 meters. Rest platforms, where practicable, shall be provided at levels, which coincide with the levels of the working platform for antenna mounting positions.
- iii. Platform decking shall be of expanded metal mesh, or similar construction, and shall be adequately supported on steel members of appropriate size.

g. Guard Rails

- i. Platforms shall be provided with handrails at a height of approximately 1 meter above the decking, intermediate rails at approximately 0.5 meter above the decking and kick rails at the decking level.
- ii. All rails shall consist of suitably sized rolled steel angle section.
- iii. Guardrails shall be provided on all platforms and shall be continuous around the outside perimeter and the runway opening of each platform and shall encompass the ladder and ladder guard so that free access to the ladder may be gained from the platforms.
- iv. Handrails on platforms shall not be structural members and shall be removable to facilitate the mounting of antennas.

h. Ladders

- i. Steel ladders with ladder guards shall be provided from ground level to the highest working platform on each tower.
- ii. The ladder guard shall be so arranged that at each antenna mounting level, a section may be removed to provide access to the further platform without having cut to the vertical strips.
- iii. Ladder shall, where practicable, continue for a distance of at-least 1 meter above the upper surface of the platform that is served. The stainless shall not, however,, project above the top of a tower.
- iv. Ladders, ladders guards and ladders support shall not infringe on the space reserved for antenna feeders.
- v. Ladders shall be adequately supported to resist lateral movement.

i. Lightning Protection

- i. Two lightning discharge rods of height approximately 2.4 meters shall be securely fixed to the top of each tower on diagonally opposite corners.
- ii. Each rod shall consist of a steel tube with four 13mm diameter rods of length 0.5 meter (approximately) welded to the top of the tube, disposed equally around the tube and splayed upwards at 45 degrees.
- iii. No separate earth conductor need be provided from the discharge rods to ground and it is necessary, therefore, that all bolted connections in the tower should be free from paint



७७। यतुगा कुर यत्रुगरा यस यहें दा

BHUTAN BROADCASTING SERVICE CORPORATION

and reasonably clean at the time of assembly. This applies particularly to the point of attachment of the discharge rods to the top of the tower.

i. Earthing

- i. An earthing system, generally to the provisions of internationally accepted standard shall be provided at each tower. This shall consist of at least one radial earth strap extending from each tower leg, one loop encircling the tower and a separate loop encircling the equipment building.
- ii. Particular attention shall be paid to the bonding of earthing straps to tower, runway, gantry and building steelwork.
- iii. Earthing strap shall consist of pure copper of nominal dimensions 3cm x 2.5 cm.
- iv. The completed earth system shall have a resistance of less than 2 ohms, when measured with a specific earth resistance-measuring instrument.

3.3 Complete Tower

- a. Each erected tower, under conditions of negligible wind, shall not deviate from the vertical position by more than one-eighth of one percent of its height. Each erected tower, under conditions of negligible wind, shall be straight within 25mm of the nominal geometric position.
- b. Each erected tower shall be free of inherent twist.
- c. Where bolts are placed in a generally vertical position, the bolt heads shall be uppermost.

3.4 Lighting

- a. Where tower lighting is required the tower shall be equipped with suitable air navigation warning lighting.
- b. Two 100 watt weather-proof incandescent globes shall be installed at the tower top.
- c. Operation shall be from 230 volt AC supply and all power conduits shall be of galvanized iron construction. PVC or other plastic conduit is not acceptable.

3.5 Foundations:

- a. The foundations for the towers shall be constructed by successful bidder.
- b. The bidder shall submit detailed design of the tower foundations.
- c. The foundation design should be submitted along with the bid document based on the assumption that the load bearing capacity of the soil at all the sites is 10 ton / sqm.
- d. All necessary Anchor bolts and templates shall be provided by the contractor.

3.6 Additional Information:

- a. The weight and base details shall be as under:
- Tower Ht=25mtrs,
- Base Size (Approx) for 3 legged triangular tower=3500mm (approx)
- Weight for 3-legged tower=4500KG (approx)

Superstructure: Tower has a tapering structure except for the top 7.5m.

*Note: Weight of tower is inclusive of all parts of Superstructure (including the weight of MW antennas mounting arrangement i.e. antenna fixtures, Horizontal cable Tray (6 m) along with foundation Bolts &Templates) and must not be less than the weights mentioned above.

- b. The bidder must adhere to following Specification in order to qualify for the supply of Tower:
- i. Material specification: MS angles of grade 'A' as Per IS: 2062 (1999) with latest amendment and IS: 808(1989) shall he used. All MS angles are to be hot dip galvanized as per IS: 4759(1996), Standard zinc for galvanizing should conform to IS: 13229 (1991) or 1S:209(1992).
- ii. Gusset /Splice Plates: MS of grade A' is per IS: 2062 (1999) with latest amendments and all the plates are hot dip galvanized as per IS: 4759(1996). Standard zinc for galvanizing should conform to IS: 13229 (1991) or 1S:209(1992).
- iii. Nuts, Bolts & Washers: Nuts & Bolts of grade 5.6 as per IS 6639(1972)/ IS 1364, IS: 1367 part8 (1992), and Plain washers as per IS 6610 (1972) & spring washers Type B as per IS 3063:1994 shall be used.



७७। यतुगा कुर यत्रुगरा यस यहें दा

BHUTAN BROADCASTING SERVICE CORPORATION

B. TECHNICAL SPECIFICATIONS FOR PREFABRICATED SHELTER

1. General

1.1 Requirement of a shelter:

- a. Closed Chamber.
- b. Heat Resistant.
- c. Weather Resistant.
- d. Sound / Noise Insulation.
- e. Sealed from external environment.
- f. Easy to install
- 1.2 The bidder shall propose weatherproof prefabricated shelters for housing the Broadcasting equipment including power supply facilities.
- 1.3 The enclosures shall be mounted on concrete footings at least 2.5 feet above ground level. Proper steps materials (step ladder made of galvanized steel) shall be supplied for easy access to the shelter.
- 1.4 The enclosures shall be, preferably, fabricated from high-grade plastic/PVC/other similar lightweight materials with metal sandwich. The materials used for the prefabricated enclosure shall be fire resistant and shall not corrode with age in outdoor installations.
- 1.5 The enclosure/shelter shall be designed to provide ventilation to the equipment while preventing moisture build-up inside. All materials required to shield the ventilation holes (window shade, sealing materials) should be included in the supply.
- 1.6 It shall be extremely robust, corrosion resistant, high seismic resistance, wind & dust proof with thermal insulation.
- 1.7 It shall offer extruded aluminium alloy C-rails for a multipurpose user-friendly mounting arrangement for equipment racks and cable trays etc.
- 1.8 It shall have three way locking system in tandem with a cam profiled wedge (Which pulls the door leaf inside for proper closer) and EPDM gasket to make the door air and water tight to achieve an IP 54 level protection.

2. Shelter Dimensions:

- a. Ext.: 3600x2620x2500 (LxWxH in mm)
- b. Panel with Foam 60 mm
- c. Material of Skins 0.6mm x 0.6mm Pre-coated Steel
- d. Floor Ply 20 mm and PVC 2mm.

3. Shelter Accessories:

- a. Shelter should include power energy meter box, mounted on one of the shelter's side wall. The dimension on of energy meter box- 300x400x300 (LxHxW in mm), It should have tow cable hole from below the box.
- b. The shelter should include 4x16amp and 2x10amp power point. It should include 63amps main Cut-off DP switch and MCB box including six 16 amp MCB.
- c. Shelter should also include one emergency light, external light and 2x 40w fluorescent light.
- d. Shelter should include 4 cable ladder, cable hole (roxtech hole),

4. Foundations:

- a. The foundations for the shelter shall be constructed by successful bidder.
- b. The bidder shall submit detailed design and drawing of the shelter foundations.
- c. All necessary accessories shall be provided by the contractor.
- d. Shelter foundation should be six legged concrete footing.

5. Ventilation system for Prefab-shelter:

5.1 General Specifications

- a. A set of Ventilation system (1 in 1 out) consists of inlet blower (2 fans), exhaust blower (2 Fans), automatically control panel, air filter device and other installation accessories.
- b. When the indoor Temp reaches the above "vent ON" temperature, Ventilation controller



७७। यतुगा कुर यत्रुगरा यस यहें त

BHUTAN BROADCASTING SERVICE CORPORATION

should check the outside temperature and if found less than the inside temperature then switch ON the inlet and exhaust fans and bring in the cold air from outdoor, exhaust indoor hot air, so that to cool the room and when the indoor Temp reaches lowest point, fans will automatically closed to stop cross-ventilation.

- c. In case the outside temperature is higher than inside temperature then system will check the "Aircon ON" temperature, once the inside temperature reaches to "Aircon ON" temperature Ventilation system will switch ON the Air-conditioner if AC mains supply is available. System can handle two Air- conditioners.
- d. When indoor humidity reaches the maximum set point then, ventilation system will be shut down and indoor Temp reaches AC start point. AC units start working. Or the humidity reaches <60% the ventilation will start again.
- e. System should have the facility to store (event log data) for minimum 1000 events.

5.2 Technical Specification:

SI No	Description	Specification
1	Temperature Environment temperature	-10oC to +60 oC
2	Working Voltage	36 to 56VDC
3	Maximum Power Consumption	≤ 1.5 A
4	Ventilation volume	≥800 m3/h

6. Air conditioner (AC) system for prefab-shelter:

6.1 General Requirement: 1.5 Tr Split Air-conditioner should be installed in 5 sites.

a. AC Specifications:

i. Capacity: 1.5 ton

ii. Cooling capacity: 5.25kW ± 2%

iii. Electricity in put: 230V/50Hz/Single Phase
iv. Coefficient of performance: 3 (Minimum)
v. Max. Ambient temperature: 48°C ± 5%
vi. Moisture removal rate: 2 ± 10% litre/ hour

vii. Air flow rate : 5.6 cmm (Minimum) viii. Noise level Indoor unit : Less than 45 db

ix. Outdoor unit: Less than 55 db

- x. Function modes: Auto/Cool/Fan/Dry shall have sleep and power saving modes, Auto restart, speed setting etc.
- xi. Other features: Automated vertical swing for horizontal louvers, Antifreeze thermostat, Dehumidification
- xii. Compressor : Rotary type
- xiii. Body surface finish: powder coated/high quality paint finish
- xiv. Air filtering unit: Activated carbon cartridge, dust proof and anti bacteria filter Length of tubing: 15 m or as per the installation requirement
- xv. Remote handset: LCD display with night glow
- xvi. Voltage Stabilizer: Stabilizer having ISI quality certification and power rating that matches with the power rating of the A/C unit

b. Line conditioner:

5KVA Line conditioner has to be installed along with Air-conditioner to stabilize the input



🥯 বর্গ'র্চু দের্মুগ্রম'থম'রইর

BHUTAN BROADCASTING SERVICE CORPORATION

voltage.

- a. Input voltage 150 290 V AC
- b. Output Voltage 230 V AC +/- 10%

6.2 Surge Protection Devices:

Surge protection devices (SPD) should ideally operate instantaneously to divert a surge current to ground with no residual common-mode voltage presented at the equipment terminals. Once the surge current has subsided, the SPD should automatically restore normal operation and reset to a state ready to receive the next surge. Surge protection device should be MOV based technology and should be able to able to handle 50 kA 8/20 micro sec.

C. TECHNICAL SPECIFICATIONS FOR POWER SYSTEM (UPS)

1. General:

- a. The Power Supply Facilities shall be easy to maintain and be able to keep the required characteristics stably for at least twelve (12) years.
- b. The Power supply facilities to be provided shall be composed of the following:
 - i. VRLA SMF Storage Batteries.
 - ii. SMPS Rectifier
 - iii. Inverter
 - iv. 19 inch battery Rack
 - v. Earthing & Bonding
 - vi. Surge Protection Devices
 - vii. Power Cables

2. Storage Batteries:

- a. The storage batteries shall be provided with battery racks, necessary connectors, name plate, battery transparent cover, etc.
- b. The storage batteries shall be sealed maintenance free (SMF) Valve Regulated Lead Acid (VRLA) type
- c. The container shall be strong enough to withstand rough handling.
- d. Explosion-proof vent plug shall be provided.
- e. Connectors- Lead Plated Solid Copper Connectors
- f. Battery 2V/400 AH @ C10 @ 1.75 ECV @ 27 Deg C, -48V DC, 400 AH
- g. Float Life: 12 + years design life at 27 Deg. C
- h. Cycle Life: 1200 cycles at 80% DOD at 27 Deg.C
- i. Self-Discharge: <2% per Month at 27 Deg.C AH
- j. Layout of batteries shall be such that it permits easy access and sufficient flexibility at the time of cell unit replacement, and also easy to check the status.

3. SMPS Rectifier:

3.1 General Requirements:

This SMPS rectifier system should consists of rectifier modules, standard controller unit and DC Distribution which consists of distribution unit of load and battery. This system should be used as a power supply to charge the battery.

3.2 Features:

- a. Easy to install, easy to operate and easy to maintain.
- b. Wide Input AC Voltage Range of 150 ~ 275 V
- c. Rectifier Efficiency > 92%
- d. Extra Low EMI of Rectifier
- e. High Power Density of Rectifier
- f. Rectifier should have damage free hot swappable function; the replacement time shall be less than 1 min.
- g. Perfect Battery Management with BLVD function.
- h. Lightning and surge protection device.



२००१ वर्जुग कुंट वर्जुग याया वर्षेत्र

BHUTAN BROADCASTING SERVICE CORPORATION

3.3 Specifications:

- a. Input Supply: Single Phase, 230V, 50 Hz
- b. Output: -48V DC, 120 Amps

3.4Inverter:

- a. The Inverter system should be pure sine wave.
- b. Input Supply 48 V DC
- c. Output 230V AC
- d. Capacity 2x3kva

D. TECHNICAL SPECIFICATIONS FOR 19 inch EQUIPMENT RACK

1. General Requirements:

The 19 inch rack shall be a good quality and powder quoted with black color. Material thickness should be minimum 3 mm thickness. Rack should contain fixed shelf for the installation of equipment

2. Features

- a. Static load rating of 1400kg
- b. Seismic rating of 900kg
- c. Inset corner posts
- d. Depth adjustable RU marked rails
- e. Integrated bayed cabinets with simple accessory
- f. Innovative modular cable management facilities
- g. Frame designed to allow two or more people to work on installation at once
- h. Comprehensive range of accessories

3. Materials

- a. Body Zinc coated steel
- b. Frame thickness 1.6mm
- c. Rail thickness 3.0mm
- d. Surface finish Powder coated textured matt black

I. Inclusions

- 1. Frame
- 2. 2 x RU marked mounting rails
- 3. Gland plates in roof
- 4. Bolt down brackets

5. Dimension in (mm)

- a. height 45 (RU), 2135
- b. width 800 and depth 900

6. Accessories

- a. Fan-kit two unit high speed, axial with integrated with thermostat, should be install on the top on rack
- b. Cable management fingers type on the both side of the rack
- c. Rack shelf heavy duty -fixed type full mount, 750mm deep. quantity 12 shelf
- d. Two numbers of Vertical power rails, 10x10amp-multi-pin socket and 10x16amp multi-pin socket. Power socket at the both side of the rack vertically mounted. Rack should also include two numbers of 32 amp DP switch installed at the bottom level of rack. Power Input for both the power rail should be connected through DP switch.