



**Bidding Documents for the Re-Tender of the  
Supply, Installation, Testing and Commissioning of  
Broadcast Equipment for BBSCL Television**

**PROCURING AGENCY: BHUTAN  
BROADCASTING SERVICE CORPORATION  
LIMITED  
- 2022 -**

**Invitation for Bid no: BBSCL/ADM-7/2022/HDequipment/1675**



# PREFACE

This Standard Bidding Document for the Procurement of Goods have been prepared by the Bhutan Broadcasting Service Corporation Limited to be used for the Procurement of Goods through National and International Competitive Bidding in projects that are financed Government of India (GoI). This document reflects the structure and the provisions of the Master Procurement Document prepared by Ministry of Finance, RGoB for the Procurement of Good. It should be used in conjunction with the Procurement Rules and Regulations 2019.





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# STANDARD BIDDING DOCUMENTS

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# **PART 1**

## **BIDDING PROCEDURES**



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## A. GENERAL

- 1. Scope of Bid and Source of Funds** The Purchaser, as indicated in the Bid Data Sheet (BDS), issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in Section VI, Schedule of Supply. The name, identification number, and number of lots within this procurement are provided in the BDS

Throughout these Bidding Documents:

- (a) the term “in writing” means communicated in written form (eg by mail, electronic mail, fax, telex) with proof of receipt;
- (b) if the context so requires, “singular” means plural” and vice versa; and
- (c) “day” means calendar day.

The Employer as defined in section II, Bidding Data Sheet

(BDS) has received a budget from GoI towards the cost of the Goods defined in the BDS and intends to apply the funds to cover eligible payments under this contract.

- 2. Fraud and Corruption** It is RGoB policy to require that Purchasers, Bidders, Suppliers, Contractors and their Subcontractors observe the highest standards of ethics during the procurement and execution of contracts.<sup>8</sup> In pursuance of this policy, the RGoB:

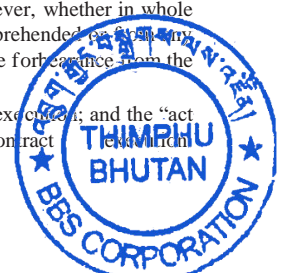
- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) “Corrupt practice”<sup>9</sup> is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value<sup>10</sup> to influence improperly the actions of another party;
  - (ii) “Fraudulent practice”<sup>11</sup> 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;

<sup>8</sup> In this context, any action taken by a Bidder, Supplier, Contractor or a Subcontractor to influence the procurement process or contract execution for undue advantage is improper.

<sup>9</sup> “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes staff and employees of any organizations (including any institutions providing finance for the Goods) taking or reviewing procurement decisions.

<sup>10</sup> “anything of value” includes, but is not limited to, any gift, loan, fee, commission, valuable security or other asset or interest in an asset; any office, employment or contract; any payment, discharge or liquidation of any loan, obligation or other liability whatsoever, whether in whole or in part; any other services, favour or advantage, including protection from any penalty or disability incurred or apprehended, or any action or proceeding of a disciplinary or penal nature, whether or not already instituted and including the exercise or the forbearance from the exercise of any right or any official power or duty.

<sup>11</sup> a “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.



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- (iii) “Collusive practice”<sup>12</sup> 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”<sup>13</sup> 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 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
    - (bb) acts intended materially to impede the exercise of the inspection and audit rights of the Purchaser or any organization or person appointed by the Purchaser and/or any relevant RGoB agency provided for under ` Sub-Clause 2.1 (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 an RGoB-financed 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, an RGoB-financed contract;
  - (d) will have the right to require that a provision be included in Bidding Documents and in contracts financed by the RGoB, requiring Bidders, Suppliers, Contractors and their Subcontractors to permit the Purchaser, any organization or person appointed by the Purchaser and/or any relevant RGoB agency to inspect their accounts and records and other documents relating to their Bid submission and contract performance and to have them audited by auditors appointed by the Purchaser;

12 “parties” refers to participants in the procurement process (including public officials) and an “improper purpose” includes attempting to establish bid prices at artificial, non competitive levels.

13 a “party” refers to a participant in the procurement process or contract execution.



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- (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 as specified in the BDS. Failure to provide a duly executed Integrity Pact Statement may 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 Sub- Clause 36.1 (a) (iii) of the General Conditions of Contract.

### **3. Eligible Bidders**

A Bidder, and all parties constituting the Bidder, may have the nationality of any country, subject to the restrictions specified in Section V, Eligible Countries and any specific category of trade license if so specified in the BDS. 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 suppliers for any part of the Contract including Related Services.

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 with one or more parties in this bidding process if they:

- (a) are associated, or have been associated in the past, with a firm or any of its affiliates which has been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications and/or other documents to be used for the procurement of the Goods to be purchased pursuant to these Bidding Documents, or
- (b) submit more than one Bid in this bidding process, except for alternative offers permitted under ITB Clause 17. However, this does not limit the participation of subcontractors in more than one Bid.
- (c) employ or otherwise engage, either directly or through any of their affiliates, a spouse, dependent or close relative of a public servant of the RGoB who either is employed by the Purchaser or has an authority over it. 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.
- (d) they have at least one controlling partner in common;
- (e) they receive or have received any direct or indirect subsidy from either party;



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- (f) they have the same authorized legal representative for purposes of this Bid;
  - (g) 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;

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 (directly or indirectly) of the Purchaser.

A Bidder that is under a declaration of ineligibility pursuant to ITB Sub-Clause 2.1 (c) shall not be eligible to participate in this bidding process in any capacity. Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser as the Purchaser shall reasonably request.

#### **4. Exclusion of Bidders**

A Bidder shall be excluded from participating in this bidding process under the following circumstances:

- (a) as a matter of law or official regulation, RGoB prohibits commercial relations with the country in which the Bidder 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, RGoB prohibits (i) any import of Goods or contracting of Services from the country in which the Bidder is constituted, incorporated or registered or (ii) any payments to persons or entities in that country; or
- (c) 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 creditors; or
- (d) his business affairs are being administered by a court, judicial officer or appointed liquidator; or
- (e) he has suspended business or is in an analogous situation arising from similar procedures under the laws and regulations of his country of establishment; or
- (f) he has been found guilty of professional misconduct by a recognized tribunal or professional body; or
- (g) 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
- (h) he is guilty of serious misrepresentation in supplying information in his tender; or
- (i) he has been convicted for fraud and/or corruption by a competent authority; or



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- (j) he has not fulfilled any of his contractual obligations with the Purchaser in the past.
  - (k) he has been debarred from participation in public procurement by any competent authority as per law.

**5. Eligible Goods and Related Services**

All the Goods and Related Services to be supplied under the Contract may have their origin in any country in accordance with Section V, Eligible Countries and if so required shall comply with requirements specified in the **BDS**.

For the purposes of this Clause, the term “Goods” includes commodities, raw material, machinery, equipment and industrial plants; and “Related Services” includes services such as insurance, installation, training, and initial maintenance.

The term “origin” means the country where the Goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

## **B. CONTENTS OF BIDDING DOCUMENTS**

**6. Parts of Bidding Documents**

6.1. The Bidding Documents consist of Parts 1, 2 and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 9.

**PART 1 Bidding Procedures**

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

**PART 2 Supply Requirements**

- Section VI. Schedule of Supply

**PART 3 Contract**

- Section VII. General Conditions of Contract (GCC)
- Section VIII. Special Conditions of Contract (SCC)
- Section IX. Contract Forms

**7. General Information**

The Invitation for Bids issued by the Purchaser is not part of the Bidding Documents.

The Purchaser is not responsible for the completeness of the Bidding Documents and their addenda, if any, if these were not obtained directly from the Purchaser.



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7.3. The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the Bid.

**8. Clarification of Bidding Documents**

Bidders shall not be allowed to seek any clarification of the Bidding Documents in person or by telephone or other verbal means.

A prospective Bidder requiring any clarification of the Bidding Documents shall notify the same to the Purchaser in writing at the Purchaser's address specified in the BDS;

The Purchaser shall respond in writing to any such request for clarification, provided that it is received no later than fifteen (15) days prior to the deadline for submission of Bids. Copies of the Purchaser's response shall be forwarded to all those who have acquired the Bidding Documents directly from the Purchaser, including a description of the enquiry without disclosing the name of the Bidder(s) seeking clarification. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 9 and ITB Sub-Clause 29.2; and

A pre-bid meeting shall be conducted only if strictly necessary to clarify doubts and concerns of the Bidders prior to submission of Bids. Minutes of the pre-bid meeting shall be circulated to all Bidders that have purchased Bidding Documents.

**9. Amendment of Bidding Documents**

At any time prior to the deadline for submission of Bids the Purchaser may amend the Bidding Documents by issuing an addendum. This may be done either on the Purchaser's own initiative or in response to a clarification request from a prospective Bidder.

Any addendum thus issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents directly from the Purchaser. Such addendum shall be binding on the prospective Bidders, and shall require that prospective Bidders confirm receipt of it before the time established for the opening of Bids;

The Purchaser may, at its discretion, extend the deadline for submission of Bids pursuant to ITB Sub-Clause 29.2 to allow prospective Bidders reasonable time in which to take the addendum into account in preparation of their Bids.





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## C. QUALIFICATION CRITERIA

### 10. Financial Capacity

10.1. The bidder shall have the minimum level of financial capacity if so specified in the BDS to qualify for supply of goods and related services under the contract.

### 11. Experience and technical capacity

The bidder shall have the following minimum level of experience to qualify for supply of goods and related services under the contract:

- (a) the minimum number of years of experience in the supply of goods and related services if so specified in the BDS;
- (b) specific experience in the supply of similar goods and related services if so specified in the BDS; and
- (c) minimum production capacity or availability of the equipments if so specified in the BDS.

## D. PREPARATION OF BIDS

### 12. Cost of Bidding

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

### 13. Language of Bid

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

### 14. Documents Comprising the Bid

The Bid shall comprise the following:

- (a) Bid Submission Sheet and the applicable Price Schedules in accordance with ITB Clauses 15, 16, 18 and 20;
- (b) Bid Security, in accordance with ITB Clause 26;
- (c) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 27;
- (d) Documentary evidence in accordance with ITB Clause 21 establishing the Bidder's eligibility to bid;
- (e) Documentary evidence in accordance with ITB Clause 22 that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
- (f) Documentary evidence in accordance with ITB Clauses 23 and 35 that the Goods and Related Services conform to the Bidding Documents;
- (g) Documentary evidence in accordance with ITB Clause 24 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;



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- (h) Alternative Bids, if permissible, in accordance with ITB Clause 17;
  - (i) Documentary evidence or certified statements that the Bidder is not in any of the exclusion categories stipulated in ITB Sub- Clause 4.1;
  - (j) Integrity Pact Statement, in accordance with ITB Sub-Clause 2.1 (e) as specified in BDS; and
  - (k) Any other document required in the BDS.

14.2. In addition to the requirements under ITB 14.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

**15. Bid Submission Sheet**

15.1. The Bidder shall submit the Bid Submission Sheet using the form furnished in Section IV, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

**16. Price Schedules**

16.1. The Bidder shall submit the Price Schedules for Goods and Related Services, according to their origin as appropriate, using the forms furnished in Section IV, Bidding Forms.

**17. Alternative Bids**

17.1. Unless otherwise indicated in the BDS alternative Bids shall not be considered.

**18. Bid Prices and Discounts**

The prices and discounts quoted by the Bidder in the Bid Submission Sheet and in the Price Schedules shall conform to the requirements specified below.

All lots and items in the Schedule of Supply must be listed and priced separately in the Price Schedules.

The price to be quoted in the Bid Submission Sheet shall be the total price of the Bid excluding any discounts offered.

The Bidder shall quote any unconditional discounts and the methodology for their application in the Bid Submission Sheet.

The terms EXW, CIF, CIP and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce as specified in the BDS.





Unless otherwise stated in the BDS, Prices shall be quoted inclusive of all applicable taxes and levies, insurance, transportation, handling costs and any other associated cost to fulfill the contractual obligations, as specified in the Price Schedule forms for Goods and related services included in Section IV Bidding Forms. However, to avail margin of preference, prices shall be quoted as specified in the Price Schedule for Goods Manufactured in Bhutan in section IV Bidding Forms. The disaggregation of price components shall be solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V, Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V, Eligible Countries. Prices shall be entered in the following manner:

- (a) For goods manufactured in Bhutan:
  - (i) the price of the Goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all Customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;
  - (ii) any Bhutan sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and
  - (iii) the price for inland transportation, insurance and other local services required to deliver the Goods to their final destination (Project Site) specified in the BDS.
- (b) For Goods manufactured outside the Purchaser's Country, to be imported:
  - (i) the price of the Goods, quoted CIP named place of destination, in the Purchaser's Country, as specified in the BDS;
  - (ii) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified in the BDS;
- (c) For Goods manufactured outside the Purchaser's Country, already imported:
  - (i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported;
  - (ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;



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- (iii) the price of the Goods, obtained as the difference between (i) and (ii) above;
  - (iv) any Purchaser's Country sales and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
  - (v) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified **in the BDS.**

(d) for Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Supply, the price of each item comprising the Related Services (inclusive of any applicable taxes).

18.7. If so indicated in ITB Sub-Clause 1.1, Bids are being invited for individual items, lots or packages. Unless otherwise indicated in the BDS, prices quoted shall correspond to one hundred percent (100%) of the items specified for each lot and to one hundred percent (100%) of the quantities for each item of a lot. Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB Sub-Clause 18.4, provided the Bids for all lots are submitted and opened at the same time.

## **19. Price Variation**

19.1. Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise specified in the BDS. A Bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected pursuant to ITB Clause 35 unless adjustable price quotations are permitted by the BDS. If, in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

## **20. Currencies of Bid**

20.1. The unit rates and prices shall be quoted by the Bidder entirely in Ngultrum (Nu). Foreign currency requirements shall be indicated and shall be payable at the option of the Bidder in up to three foreign currencies. In case of International procurement, bidders may express the unit rates and prices in fully convertible currency. If the bidders wish to be paid in a combination of amounts in different currencies, it may quote its price accordingly up to three foreign currencies.



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The rates of exchange to be used in arriving at the local currency equivalent shall be the selling rates for similar transactions established by RMA on the day of bid opening. These exchange rates shall apply for all payments so that no exchange risk shall be borne by the Bidder.

Bids shall be evaluated as quoted in Ngultrum (NU) in accordance with ITB Sub-Clause 20.1, unless a Bidder has used different exchange rates than those prescribed in ITB Sub-Clause 20.2, 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 20.2.

Bidders shall indicate details of their expected foreign currency requirements in the Bid.

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 20.1.

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 20.3 above, but the payment shall be made in the currency of bid.

**21. Documents**  
**Establishing the**  
**Eligibility of the**  
**Bidder**

21.1. To establish their eligibility in accordance with ITB Clause 3, Bidders shall complete the Bid Submission Sheet included in Section IV, Bidding Forms.

**22. Documents**  
**Establishing the**  
**Eligibility of the**  
**Goods and Re-**  
**lated Services**

22.1. To establish the eligibility of the Goods and Related Services in accordance with ITB Clause 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms included in Section IV, Bidding Forms.

**23. Documents**  
**Establishing the**  
**Conformity of the**  
**Goods and Related**  
**Services**

To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid documentary evidence that the Goods conform to the technical specifications and standards specified in Section VI, Schedule of Supply.

The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specifications and, if applicable, a statement of deviations and exceptions to the provisions of the Schedule of Supply.



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The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified in the BDS following commencement of the use of the Goods by the Purchaser.

Standards for workmanship, process, material and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Supply, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names and/or catalogue numbers, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure equivalence or are superior to those specified in the Schedule of Supply.

**24. Documents**  
**Establishing the**  
**Qualifications of**  
**the Bidder**

The documentary evidence of the Bidder's qualifications to perform the contract if its Bid is accepted shall establish to the Purchaser's satisfaction:

- (a) that, if required by the BDS, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Bhutan;
- (b) that, if required in the BDS, in the case of a Bidder not doing business within Bhutan, the Bidder is or will be (if awarded the Contract) represented by an agent in Bhutan equipped and able to carry out the Supplier's maintenance, repair and spare parts- stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications;
- (c) that Bids submitted by a Joint Venture, Consortium or Association (JV/C/A) of two or more firms as partners comply with the following requirements:
  - (i) the Bid is signed so as to be legally binding on all partners;
  - (ii) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
  - (iii) one of the partners is nominated as being in charge, authorized to incur liabilities, and to receive instructions for and on behalf of any and all partners of the JV/C/A;
  - (iv) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge; and
  - (v) a copy of the JV/C/A Agreement entered into by the partners is submitted with the Bid; or a Letter of Intent to execute a JV/C/A Agreement in the event of a successful Bid is signed by all partners and submitted with the Bid, together with the proposed Agreement.



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(d) that the Bidder meets each of the qualification criteria specified in Section III, Evaluation and Qualification Criteria.

**25. Period of Validity of Bids** Bids shall remain valid for the period specified in the BDS from the Bid submission deadline prescribed by the Purchaser. A Bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

In exceptional circumstances, prior to expiry of the Bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security shall also be extended for a corresponding period. A Bidder may refuse the request to extend the validity of its Bid without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB Sub-Clause 25.3

In the case of fixed price contracts, if the award is delayed by a period exceeding sixty (60) days beyond the expiry of the initial Bid validity, the Contract price shall be adjusted as specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

**26. Bid Security** The Bidder shall furnish, as part of its Bid, a Bid Security in original form, denominated in Ngultrum or a freely convertible currency and in the amount specified in the BDS.

The Bid Security shall:

- (a) at the Bidder's option, be in any of the following forms:
  - (i) an Unconditional Bank Guarantee; or
  - (ii) a Banker's Certified Cheque/Cash Warrant; or
  - (iii) a Demand Draft;
- (b) be issued by a financial institution in Bhutan acceptable to the Purchaser and selected by the Bidder. If the institution issuing the Bid Security is located outside Bhutan it shall have a correspondent financial institution located in Bhutan to make the Bid Security enforceable.
- (c) in the case of a bank guarantee, be substantially in accordance with the form of Bid Security included in Section IV, Bidding Forms, or other form approved by the Purchaser prior to Bid submission;
- (d) be promptly payable upon written demand by the Purchaser in case any of the conditions listed in ITB Sub-Clause 26.6 are invoked;
- (e) be submitted in its original form; copies shall not be accepted;
- (f) remain valid for a period of sixty (60) days beyond the end of the validity period of the Bid, as extended, if applicable, in accordance with ITB Sub-Clause 25.1.



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Any Bid not accompanied by a responsive Bid Security shall be rejected by the Purchaser as non-responsive.

The Bid Securities of unsuccessful Bidders shall be discharged/ returned as promptly as possible upon award of contract, but in any event not later than sixty (60) days after the expiration of the period of bid validity prescribed by the procuring agency and the successful Bidder furnishing the Performance Security pursuant to ITB Clause 51.

The Bid Security of the successful Bidder shall be returned as promptly as possible after the successful Bidder has signed the Contract and furnished the required Performance Security.

The Bid Security shall 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 in ITB Sub-Clause 25.2; or
- (b) if the successful Bidder fails to:
  - (i) sign the Contract in accordance with ITB Clause 50;
  - (ii) furnish a Performance Security in accordance with ITB Clause 51; or
  - (iii) accept the correction of its Bid Price pursuant to ITB Sub-Clause 36.4

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.

## **27. Format and Signing of Bid**

The Bidder shall prepare ONE Original of the documents comprising the Bid as described in ITB Clause 14 and clearly mark it "ORIGINAL." In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS, and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder.

Any interlineations, erasures or overwriting shall be valid only if they are signed or initialled by the person signing the Bid.





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## E. SUBMISSION AND OPENING OF BIDS

### 28. Submission, Sealing and Marking of Bids

Bids shall be delivered by hand, courier or registered post. The Bidder shall seal the original Bid and the number of copies stipulated in the BDS, 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.

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”;

The outer envelope shall:

- (a) be marked “Confidential”;
- (b) be addressed to the Purchaser at the address<sup>14</sup> provided in the BDS;
- (c) bear the name and identification number of the Contract as defined in the BDS; and
- (d) provide a warning not to open before the specified time and date for Bid Opening as defined in the BDS.

In addition to the identification required in ITB Sub-Clause 28.2, 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 30.

If the outer envelope is not sealed and marked as above, the Purchaser shall assume no responsibility for the misplacement or premature opening of the Bid.

In the Two-Stage Process, Bidders shall be advised to submit only the technical proposal in the first stage. In the second stage, Bidders shall be requested to submit both their technical proposals as modified and agreed with the Purchaser and the financial proposals based on the modified technical proposal simultaneously in two separate sealed envelopes.

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.

<sup>14</sup> The receiving address shall be an office that is staffed during normal working hours by personnel authorized to certify time and date of receipt and assure safe-keeping until Bid opening. A post office address is not to be used. The address must be the same as the receiving address described in the Invitation for Bids.



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**29. Deadline for Submission of Bids** Bids shall be delivered by hand, courier or registered post to the Purchaser at the address and no later than the date and time indicated in the BDS.

The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with ITB Clause 9, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

**30. Late Bids** 30.1. The Purchaser shall not consider any Bid that is submitted after the deadline for submission of Bids. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

**31. Withdrawal, Substitution and Modification of Bids** A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 28, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB Sub-Clause 27.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:

- (a) submitted in accordance with ITB Clauses 27 and 28 (except that withdrawal notices do not require copies) and, in addition, the respective envelopes shall be clearly marked “**Withdrawal**”, “**Substitution**” or “**Modification**,” and
- (b) received by the Purchaser prior to the deadline prescribed for submission of Bids, in accordance with ITB Clause 29.

Bids requested to be withdrawn in accordance with ITB Sub-Clause 31.1 shall be returned unopened to the Bidders.

No Bid may be withdrawn, substituted or modified in the interval between the deadline for submission of Bids and the expiry of the period of Bid validity specified by the Bidder on the Bid Submission Sheet or any extension thereof.

Withdrawal of a bid between the deadline for submission of bids and expiration of the period of bid validity specified in the BDS or as extended pursuant to Clause 25.1, may result in the forfeiture of the Bid Security pursuant to Clause 26.6. If the lowest or the lowest evaluated bidder withdraws his bid between the periods specified in this clause, 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 fourteen (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. In the case of framework contracts, the bid security shall be forfeited and the supply of the particular item will be re-tendered.





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**32. Bid Opening**

The Purchaser shall conduct the Bid Opening in public, in the presence of Bidders' designated representatives who choose to attend, and at the address, date and time specified in the BDS. Any specific electronic Bid Opening procedures required if electronic bidding is permitted in accordance with ITB Sub-Clause 28.7 shall be as specified in the BDS.

Bidders, their representatives and other attendees at the Bid Opening shall not be permitted to approach any members of the Bid Opening Committee or any RGoB officials.

First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but shall be returned to the Bidder. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid Opening. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted. The substituted Bid shall not be opened, but shall be returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid Opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid Opening. Only envelopes that are opened and read out at Bid Opening shall be considered further.

All other envelopes shall be opened one at a time. The Bidders' names, the Bid prices, the total amount (or lot-wise) 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, responses to any Bidding Documents addenda, and such other details as the Purchaser may consider appropriate shall be announced by the Purchaser at the Bid 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. No Bid shall be rejected at Bid Opening except for late Bids pursuant to ITB Clause 30. Substitution Bids and modifications submitted pursuant to ITB Clause 31 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.



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The Purchaser shall prepare a record of the Bid Opening, which shall include the information disclosed to those present in accordance with ITB Sub-Clause 32.4. 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;
- (g) the 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
- (j) 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.

## **F. EVALUATION AND COMPARISON OF BIDS**

### **33. Confidentiality**

Information relating to the examination, evaluation, comparison and qualification of Bids, and recommendation of Contract Award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the Contract Award.

Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison and qualification of the Bids or Contract Award decisions may result in the rejection of its Bid.

Notwithstanding ITB Sub-Clause 33.2, from the time of Bid Opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.



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**34. Clarification of Bids**

34.1. To assist in the examination, evaluation, comparison and qualification of the Bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Bids, in accordance with ITB Clause 36.

**35. Responsiveness of Bids**

35.1. The Purchaser's determination of a Bid's responsiveness shall be based on the contents of the Bid itself, and is to determine which of the Bids received are responsive and thereafter to compare the responsive Bids against each other to select the lowest evaluated Bid.

A substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the Bidding Documents without material deviation, reservation or omission. A material deviation, reservation or omission is one that:

- (a) affects in any substantial way the scope, quality or performance of the Goods or Related Services required; or
- (b) limits in any substantial way inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
- (c) if rectified would affect unfairly the competitive position of other Bidders presenting responsive Bids

If a Bid is not substantially responsive to the Bidding Documents it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation or omission.

**36. Non-conformities, Errors and Omissions**

Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.

Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify non-material non-conformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.



Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to ITB Sub-Clauses 36.3 (a) and (b) above.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited.

### 37. Preliminary Examination of Bids

The Purchaser shall examine the Bids to confirm that all documents and technical documentation requested in ITB Clause 14 have been provided, and to determine the completeness of each document submitted.

The Purchaser shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected.

- (a) Bid Submission Sheet, in accordance with ITB Sub-Clause 14.1 (a);
- (b) Price Schedules, in accordance with ITB Sub-Clause 14.1 (a);
- (c) Bid Security, in accordance with ITB Clause 26.

### 38. Examination of Terms and Conditions; Technical Evaluation

The Purchaser shall examine the Bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.

The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 23, to confirm that all requirements specified in Section VI, Schedule of Supply of the Bidding Documents have been met without any material deviation or reservation.

If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 35, the bid shall not be considered for evaluation.



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**39. Conversion to Single Currency**

39.1. For evaluation and comparison purposes, the Purchaser shall convert all Bid prices expressed in amounts in various currencies into a single currency and using the exchange rates specified in the BDS.

**40. Margin of Preference**

40.1. A margin of preference may apply to domestic goods manufactured in Bhutan as provided for in the BDS. To avail a margin of preference, the bidder shall provide a value addition certificate from the Ministry of Economic Affairs.

**41. Evaluation of Bids**

The Purchaser shall evaluate each Bid that has been determined, upto this stage of the evaluation, to be substantially responsive.

To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined in this ITB Clause 41. No other criteria or methodology shall be permitted.

To evaluate a Bid, the Purchaser shall consider the following:

- (a) evaluation shall be done for Items or Lots, as specified in the BDS;
- (b) the Bid Price, as quoted in accordance with ITB Clause 18;
- (c) price adjustment for correction of arithmetic errors in accordance with ITB Clause 36.3;
- (d) price adjustment due to discounts offered in accordance with ITB Clause 18.4;
- (e) adjustments due to the application of the evaluation criteria specified in the BDS from amongst those set out in Section III, Evaluation and Qualification Criteria; and
- (f) adjustments due to the application of a margin of preference, in accordance with ITB Clause 40, if applicable.

The Purchaser's evaluation of a Bid shall exclude and not take into account:

- (a) in the case of Goods manufactured in Bhutan, sales and other similar taxes which will be payable on the Goods if the Contract is awarded to the Bidder;
- (b) in the case of Goods manufactured outside Bhutan, already imported or to be imported, Customs duties and other import taxes levied on the imported Goods, sales and other similar taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
- (c) any allowance for price adjustment during the period of execution of the Contract, if provided in the Bid.



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The Purchaser's evaluation of a Bid may require the consideration of other factors in addition to the Bid Price quoted in accordance with ITB Clause 18. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise specified in Section III, Evaluation and Qualification Criteria. The factors, criteria and the methodology of application shall be as specified in ITB Sub-Clause 41.3 (e).

If so specified in the BDS, these Bidding Documents shall allow Bidders to quote separate prices for one or more lots, and shall allow the Purchaser to award one or multiple lots to more than one Bidder. The methodology of evaluation to determine the lowest evaluated lot combinations is specified in Section III, Evaluation and Qualification Criteria.

The purchaser shall ensure that the lowest evaluated bid price is consistent and reasonable with the current market prices. If the prices are unreasonable compared to prevailing market prices purchaser may reject the bid.

#### **42. Comparison of Bids**

42.1. The Purchaser shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 41 to determine the Bid that has the lowest evaluated cost. The comparison shall be on the basis of CIP (place of final destination) prices for imported goods and EXW prices, plus cost of inland transportation and insurance to place of destination, for goods manufactured within the purchaser's country, together with prices for any required installation, training, commissioning and other services. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods quoted CIP and sales and similar taxes levied in connection with the sale or delivery of goods.

#### **43. Abnormally Low Bid**

An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns with the Purchaser as to the capability of the Bidder to perform the Contract for the offered Bid price.

In the event of identification of a potentially Abnormally Low Bid, the Purchaser shall seek written clarification from the Bidder, including a detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, delivery schedule, allocation of risks and responsibilities and any other requirements of the bidding document.

After evaluation of the price analyses, in the event that the Purchaser determines that the Bidder has failed to demonstrate its capability to perform the contract for the offered Bid price, the Purchaser shall reject the Bid.





**44. Seriously unbalanced Bids**

If the Bid that is evaluated as the lowest evaluated cost is, in the Employer's opinion, seriously unbalanced the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Bid prices with the scope of works, proposed methodology, schedule and any other requirements of the bidding document.

After the evaluation of the information and detailed price analyses presented by the Bidder, the Employer may as appropriate:

- (a) accept the Bid and require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding twenty percent (20%) of the initial Contract price in addition to ten percentage(10) of the Performance Security.; or
- (b) Reject the Bid.

**45. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids**

45.1. The Purchaser reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to Bidders.

## **G. AWARD OF CONTRACT**

**46. Award Criteria**

46.1. The Purchaser shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Documents.

**47. Purchaser's Right to Vary Quantities at Time of Award**

47.1. At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VI, Schedule of Supply, provided this does not exceed the percentages indicated in the BDS, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Documents.

**48. Letter of Intent to Award the Contract/Letter of Acceptance**

The Employer shall notify the concerned Bidder whose bid has been selected in accordance with ITB 46 in writing (in the format in section IV-hereafter called the letter of Intent to award the contract) that the Employer has intention to accept its bid and the information regarding the name, address and amount of selected bidder shall be given to all other bidders who submitted the bid. Such notification should be communicated in writing, including by cable, facsimile, telex or electronic mail to all the bidders on the same day of dispatch. The Employer shall ensure that the same information is uploaded on their website on the same day of dispatch.

If no bidder submits an application pursuant to ITB 52 within a period of ten (10) days of the notice provided under ITB 48.1, prior to expiry of the period of Bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted.



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Until a formal Contract is prepared and executed, the letter of acceptance shall constitute a binding Contract.

Upon the successful Bidder furnishing the signed Contract Form and the Performance Security pursuant to ITB Clause 51 the Purchaser:

- (a) shall promptly notify each unsuccessful Bidder and discharge its Bid Security, pursuant to ITB Sub-Clause 26.4; and
- (b) publish a notification of award on the Purchaser's website.

The notifications to all unsuccessful Bidders and the notification posted on the Purchaser's website shall include the following information:

- (a) the Bid and lot numbers;
- (b) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the Contract awarded; and
- (c) the date of the award decision.

#### **49. Debriefing by the Employer**

On receipt of the Employer's Notification of Intention to Award referred to in ITB 48, an unsuccessful Bidder has three (3) working Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

Where a request for debriefing is received within the deadline, the Employer shall provide a debriefing within five (5) working days.

The Procuring Agency shall discuss only such Bid and not the bids of other competitors. The debriefing shall not include:

- (a) point-by-point comparisons with another Bid; and
- (b) Information that is confidential or commercially sensitive to other Bidders.

The purpose of debriefing is to inform the aggrieved bidder of the reasons for lack of success, pointing out the specific shortcomings in its bid without disclosing contents of other bids

#### **50. Signing of Contract**

At the same time as notifying the successful Bidder in writing that its Bid has been accepted the Purchaser shall send the successful Bidder the Contract Agreement and the Special Conditions of Contract.

Within fifteen (15) days of receipt of the Contract Agreement the successful Bidder shall sign, date and return it to the Purchaser.





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50.3. Notwithstanding ITB Sub-Clause 50 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to Bhutan, or to the use of the products/Goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/Goods, systems or services, the Bidder shall not be bound by its Bid, always provided, however, that the Bidder can demonstrate to the satisfaction of the Purchaser that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and/or licenses necessary for the export of the products/Goods, systems or services under the terms of the Contract.

**51. Performance  
Security**

Within fifteen (15) working days of the receipt of letter of acceptance from the Purchaser, the Bidder shall submit the Performance Security in accordance with the GCC, using for that purpose any of the following security forms:

- (a) unconditional bank guarantee in the form provided for in Section IX, Contract Forms, or another form acceptable to the Purchaser, or
- (b) banker's certified cheque/cash warrant, or
- (c) demand draft.

If the Performance Security is provided by the successful Bidder in the form of a demand bank guarantee it shall be issued, at the Bidder's option, by a financial institution located in Bhutan.

51.3. Failure by the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily. Such a failure shall be considered as "withdrawal" and all relevant clauses shall apply.



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**52. Complaint and Review**

If the Bidder has or is likely to suffer, loss or injury due to breach of a duty imposed on the Employer by the provisions of this bidding document, the Bidder shall submit the complaint in writing to the Employer within ten (10) days from the date of letter of intent to award the contract. In the first instance, the Bidder shall submit the complaint to the Employer.

The head of agency shall, within 7 days after the submission of the complaint, issue a written decision.

The Bidder may appeal to the Independent Review Body within 5 days of the decision of the Head of the Procuring Agency or, where no such decision has been taken, within 15 days of the original complaint and the copy of the appeal shall be given to procuring agency on the same day.

Once the appeal copy is received by the procuring agency, it shall not proceed further with the procurement process until receipt of notification from the Independent Review Body Secretariat.



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## SECTION II. BID DATA SHEET

| A. INTRODUCTION           |  |
|---------------------------|--|
| ITB 1.1                   | The Purchaser is: <i>Bhutan Broadcasting Service Corporation Limited, Thimphu, Bhutan</i>  |
| ITB 1.1                   | <p>The name, identification number and number of lots within this procurement are: <i>of Broadcast Equipment for BBSCL Television</i></p> <p>The Bid has been divided into three lots,</p> <ul style="list-style-type: none"> <li>- Lot 1: HD OB Van</li> <li>- Lot 2: Archive System</li> <li>- Lot 3: Radio Automation System</li> </ul> <p><b>BBSC/ADM-7/2022/HDequipment/1675</b></p>  |
| ITB 3.1                   | Category of trade License eligible for this bidding process is: <i>Trade Licence</i>   |
| ITB 5.1                   | All goods and related services to be supplied under the contract shall comply with <i>the laws of the country in accordance with Section V, Eligible Countries.</i>  |
| B. BIDDING DOCUMENTS      |  |
| ITB 8.2                   | <p>For <u>clarification of Bid purposes</u> only, the Purchaser's address is:</p> <p>Attention: <i>Project Manager</i></p> <p>Address: <i>Bhutan Broadcasting Service Corporation Limited, Chubachu, Thimphu, 101, Bhutan</i></p> <p>Landline number: <b>+975-2-322770 / 322600</b></p> <p>Electronic mail address: <a href="mailto:bbshdprojectmanager@gmail.com">bbshdprojectmanager@gmail.com</a></p>   |
| ITB 8.4                   | <p>As per SPRR 2021, pre-bid meeting shall be conducted to clarify doubts and concerns of the bidders prior to submission of bid.</p> <p>For <u>pre-bid meeting</u>, the address is:</p> <ul style="list-style-type: none"> <li>- <i>Address: Head Office, BBSCL, Chubachu, Thimphu; Bhutan</i></li> <li>- <i>Virtual Address: <a href="mailto:bbshdprojectmanager@gmail.com">bbshdprojectmanager@gmail.com</a></i><br/>[meeting link shall be shared to the participants prior to the meeting (eg. via zoom)]</li> </ul> <p>Date: <b>19<sup>th</sup>, December, 2022</b></p> <p>Time: <b>11:30 AM Bhutan Time</b></p>   |
| C. QUALIFICATION CRITERIA |  |
| 10.1                      | <p>The minimum amount of financial resource is [specify minimum amount of financial resources if required and evidence to be submitted by the bidder]</p> <p><b>-Only authorised dealers, distributors and suppliers may participate in the bid.</b></p> <p><b>Financial Evidence to be submitted are:</b></p> <ul style="list-style-type: none"> <li>- <i>Audit balance sheet for the last three (3) years by a recognised firm or Chartered Accountants/Certified Accountants / Certified Public Accountant</i></li> <li>- <i>A certified statement of the previous five (5) years' overall turnover in respect of supplies and services.</i></li> <li>- <i>A valid tax clearance certificate</i></li> </ul> |





|              |   |
|--------------|---|
| ITB 19.1     | The prices quoted by the Bidder <b><i>shall not</i></b> be adjustable.  |
| ITB 20.1     | The Bidder <b><i>“is not”</i></b> required to quote in Ngultrum (BTN)/ INR Rupees   |
| ITB 20.2     | In case of foreign currencies other than INR Rupees the exchange rate applicable on the date of opening of the Bids will be considered for evaluation.  |
| ITB 23.3     | <p>The period of time for which the Goods are expected to be functioning (for the purpose of spare parts, special tools, etc) is <b><i>Minimum of 18 months from the date of commissioning of the entire system at BBS, Chubachu, Thimphu, Bhutan for both hardware and software.</i></b></p> <p><b><i>Bidder Should submit and disclose the list of spare parts, software updates and tentative price list which will be required regularly (Item wise break-up of spares should be listed with individual cost and enclosed in Technical Bid.)</i></b></p>  |
| ITB 24.1 (a) | Manufacturer’s authorization <b><i>“is”</i></b> required  |
| ITB 24.1 (b) | After sales maintenance, repair, spare parts stocking and related services <b><i>“are”</i></b> required.  |
| ITB 24.1 (c) | Joint Venture, Consortium or Association (JV/C/A) bids are: <b><i>not permitted</i></b>   |
| ITB 25.1     | The Bid validity period shall be <b><i>60 days from the date of opening of bid.</i></b>   |
| ITB 26.1     | <p>The amount and currency of the Bid Security is <b><i>2% of Bid Price</i></b> in the form of <i>Unconditional Guarantee/Banker’s Cheque/Cash Warrant/Demand Draft</i> issued by a <i>reputed Financial Institution in Bhutan acceptable to the procuring agency. If the institution issuing those instruments is located outside Bhutan, it shall have a correspondent financial institution located in Bhutan to make the financial instrument enforceable.</i></p> <p><b><i>The Unconditional Guarantee/Banker’s Cheque/Cash Warrant/Demand Draft should be submitted in the <u>financial bid envelope</u>.</i></b></p> |

## E. SUBMISSION AND OPENING OF BIDS

|          |   |
|----------|---|
| ITB 27.1 | <p>In addition to the original of the Bid, the number of copies is:</p> <p>This bidding document is a <u>two envelope system</u>; Technical and Financial (One stage)</p> <p><b>Hard copy:</b></p> <ul style="list-style-type: none"> <li>- The bidder shall submit <b>two copies</b> of <b>Technical bid</b> sealed <b>ORIGINAL</b> and <b>COPY</b> in two different envelopes.</li> <li>- The bidder shall submit two copies of financial bid Sealed <b>ORIGINAL</b> and <b>COPY</b> in two different envelope.</li> <li>- The bidder shall submit soft copy of both technical and Financial Bid in two different envelopes. (To add or not)</li> <li>- Both Technical bids and soft copy shall be packed in one envelope and both financial bid and soft copy shall be submitted in one envelope.</li> </ul> <p><b>Electronic:</b></p> <ul style="list-style-type: none"> <li>- The bidder shall submit <b>two scanned copies</b> of the <b>ORIGINAL</b> documents for <b>Financial and Technical bid</b> titled ‘Original’ and ‘COPY’ in a password protected in different files. The password shall be provided to the opening committee on the day of opening the bid.</li> <li>- The bidder shall provide with different password for technical and financial</li> </ul> |
|----------|---|



|              |   |
|--------------|---|
|              | <p><i>bids during opening of the bid.</i></p> <ul style="list-style-type: none"> <li>- <i>The purchaser shall ask for the financial password only from the bidders who are qualified in the technical bid during the financial opening.</i></li> <li>- <i>The bid along with other required documents must be submitted in scanned soft copy in PDF format.</i></li> </ul>  |
| ITB 28.1     | <ul style="list-style-type: none"> <li>- <b>Hard Copy:</b> <i>Bids shall be delivered by hand, courier or registered post.</i></li> <li>- <b>Soft Copy:</b> <i>Bidder(s) have the option of submitting bids electronically.</i></li> </ul> <p><i>For e-bid: Refer ITB 27.1 and ITB 28.7</i></p>   |
| ITB 28.3 (c) | The name and identification number of the Contract is <b><i>the re-tender of the supply, installation, testing and commissioning of Broadcast Equipment for BBSC Television, BBSC/ADM-7/2022/HDequipment/1675</i></b>   |
| ITB 28.3 (d) | The time and for Bid Opening is [11:30AM] <b><u>Bhutan time</u></b> on [4th January, 2023].   |
| ITB 28.7     | <p>Bidders “<b><i>shall</i></b>” have the option of submitting their Bids electronically.</p> <p>If Bidders shall have the option of submitting their Bids electronically, the electronic bidding submission procedures shall be:</p> <ul style="list-style-type: none"> <li>- <i>The tender document may be downloaded from BBS website <a href="http://www.bbs.bt/news/?p=178431">http://www.bbs.bt/news/?p=178431</a> or purchased from Procurement Section upon payment of non-refundable fee of Nu. / INR 2,000.00 (Two Thousand) only or equivalent foreign currency.</i></li> <li>- <i>The duly filled, signed and sealed documents (including Integrity Pact) may be mailed to the address given below in scanned copy.</i></li> <li>- <i>The Bid file must be password protected and the password shall be availed by the Procuring Agency/Tender Committee during the Tender Opening Meeting.</i></li> <li>- <i>Bidder(s) are requested to submit the EMD/Bid Security and e-Bid along with the bid document</i></li> <li>- <i>Bidders may participate in the opening of the bid either by the representative or through virtual meeting.</i></li> <li>- <i>Any other correspondence shall be carried out via electronic means (email) at the address given below.</i></li> <li>- <i>The electronic bids should be submitted <b><u>as per ITB 27</u></b></i></li> </ul> |
| ITB 29.1     | <p>For <b><u>Bid submission</u></b> purposes, the Purchaser’s address is:</p> <p>Attention: <b><i>Project Manager</i></b></p> <p>Address: <b><i>Bhutan Broadcasting Service Corporation Limited, Chubachu, Thimphu, 101, Bhutan.</i></b></p> <p>Landline no.: +975-2-322770</p> <ul style="list-style-type: none"> <li>• e-Bid Address: <a href="mailto:bbshdbidsubmission@gmail.com">bbshdbidsubmission@gmail.com</a></li> </ul> <p>The deadline for the submission of Bids is:</p> <p>Date: <b>[4th January, 2023]</b></p> <p>Time: <b>[10:30 AM] <u>Bhutan time</u>.</b></p>   |
| ITB 31       | <p>Substitute and modification of the bid “<b><i>shall not</i></b>” be accepted.</p> <p>However, they will be allowed to add or subtract a few minor components which may be required as per the design. The same shall be indicated clearly. (Refer ITB 41.3(f))</p>   |





|   |  |
|---|--|
| ITB 32.1                                    | <p>The <u>Bid Opening</u> shall take place at:</p> <p>Address: <b>Head Office, Bhutan Broadcasting Service Corporation Limited, Chubachu, Thimphu, 101, Bhutan.</b></p> <p>Date: <b>[4th January, 2023]</b></p> <p>Time: <b>[11:30 AM] Bhutan time.</b></p> <p>The <u>electronic Bid Opening</u> procedures shall be as follows:</p> <ul style="list-style-type: none"> <li>- <i>A virtual tender opening will be conducted for the electronic bidders on the <b>above mentioned date and time.</b></i></li> <li>- <i>The bidders will be notified with the link (eg. Zoom) for the virtual meeting an hour before the meeting via mail.</i></li> <li>- <i>Interested bidders (i.e. authorised representatives with power of attorney) may join the virtual meeting which will be conducted along with the opening of manually submitted bids in presence of the representatives.</i></li> </ul> |
| <b>F. EVALUATION AND COMPARISON OF BIDS</b> |  |
| ITB 39.1                                    | <p>Bid prices expressed in different currencies shall be converted into Ngultrum (BTN).</p> <p>The source of exchange rates shall be the Royal Monetary Authority of Bhutan.</p> <p>The date for the exchange rates shall be the date of Bid Opening, as prescribed in ITB Sub-Clause 32.1.</p>  |
| ITB 41.3 (a)                                | <p>Evaluation will be done lot by <b><i>Lot (lot wise) and will be awarded lot by lot</i></b></p> <p><i>Bids will be evaluated lot by lot. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. An item not listed in the Price Schedule shall be assumed to be not included in the Bid and, provided that the Bid is substantially responsive, the average price of the missing item(s) quoted by substantially responsive Bidders shall be added to the Bid price and the equivalent total cost of the Bid so determined will be used for price comparison.</i></p> <p><i>Methodology/ criteria for evaluation</i></p> <p><i>ITB 41 lowest evaluated cost</i></p>   |





|                             |  |
|-----------------------------|--|
| ITB 41.3 (e)                | <p>The adjustments shall be determined using the following criteria from amongst those set out in Section III, Evaluation and Qualification Criteria: <i>[refer to Schedule III, Evaluation and Qualification Criteria; insert complementary details if necessary]</i></p> <p>(a) Deviation in payment schedule: <i>[NO]</i></p> <p>(b) The cost of major replacement components, mandatory spare parts, and service: <i>[NO]</i>.</p> <p>(c) The availability in Bhutan of spare parts and after-sales services for the equipment offered in the Bid <i>[NO]</i></p> <p>(d) The projected operating and maintenance costs during the life of the equipment <i>[ NO]</i></p> <p>(e) The performance and productivity of the equipment offered: <i>[NO]</i></p> <p><u>Other criteria:</u></p> <p>(f) <i>Any additional equipment quoted beyond what is specified in the BOQ will be evaluated separately. The additional item specification/description and the price should be listed in technical and financial bid respectively. (as per TS 2.17)</i></p> <p>(g) <i>Bidder should submit and disclose the list of spare parts, software updates and tentative price list which will be required regularly (Item wise break-up of spares should be listed with individual cost and enclosed in Technical Bid). (As per ITB 23.3)</i></p> <p>(h) Evaluation will be done on <b><i>Two envelop system</i></b>. <b><i>Technical bid and financial bid</i></b><br/> <b><i>The technical qualification bench mark will be 80%. The work will be awarded to the lowest bidder (financial) from amongst technically qualified bidders.</i></b></p> <p><b>The major points for the Technical qualification Criteria as follows:</b></p> <ol style="list-style-type: none"> <li><b><i>1. Technical specification and compatibility</i></b></li> <li><b><i>2. Detail designs and drawings as per the equipment proposed</i></b></li> <li><b><i>3. Financial resources (With reference to the evidence document)</i></b></li> <li><b><i>4. Number of years of experience (With reference to the evidence document)</i></b></li> <li><b><i>5. Experience in handling the broadcast equipment and/or similar contracts (With reference to the evidence document)</i></b></li> <li><b><i>6. Equipment and spare parts availability (With reference to the evidence document)</i></b></li> </ol> |
| ITB 41.6                    | Bidders <i>["shall not"]</i> be allowed to quote separate prices for the same lot.   |
| <b>G. AWARD OF CONTRACT</b> |  |
| ITB 47.1                    | <p>The maximum percentage by which quantities may be increased is <i>[20%]</i></p> <p>The maximum percentage by which quantities may be decreased is <i>[20%]</i></p>  |



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## SECTION III. EVALUATION AND QUALIFICATION CRITERIA

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## 1. Domestic Preference (ITB 40)

If the Bidding Data Sheet (BDS) so specifies, the purchaser may grant a margin of preference to goods manufactured in the Purchaser's country for the purpose of bid comparison, in accordance with the procedure outlined in subsequent paragraphs:

Bids will be classified in one of the three groups, as follows:

- (a) Group A: Bids offering goods manufactured in Bhutan, for which (i) labour, raw materials and components from within the country account for more than thirty (30) percent of the EXW price; and (ii) the production facility in which they will be manufactured or assembled has been engaged in manufacturing or assembling such goods at least since the date of bid submission.
- (b) Group B: All other bids offering Goods manufactured in Bhutan
- (c) Group C: Bids offering Goods manufactured outside Bhutan that have been already imported or that will be imported.

The price quoted for goods in bids of Group A and B shall include all duties and taxes paid or payable on the basic materials or components purchased in the domestic market or imported, but shall exclude the sales and similar taxes on the finished product. The price quoted for goods in bids of Group C shall be on CIF or CIP (place of destination), which is exclusive of customs duties and other import taxes already paid or to be paid.

In the first step, all evaluated bids in each group shall be compared to determine the lowest bid in each group. Such lowest evaluated bids shall be compared with each other and if, as a result of this comparison, a bid from Group A or Group B is the lowest, it shall be selected for the award.

If as a result of preceding comparison, the lowest evaluated bid is a bid from Group C, the lowest evaluated bid from Group C shall be further compared with the lowest evaluated bid from Group A after adding to the lowest evaluated price of goods offered in the bid from Group C, for the purpose of this further comparison only, an amount equal to five (5) percent of the CIF or CIP bid price. The lowest evaluated bid determined from this last comparison shall be selected for the award.

## 2. Evaluation Criteria (ITB 41.3 (e))(\*NOT APPLICABLE)

The Purchaser's evaluation of a Bid may take into account, in addition to the Bid Price quoted in accordance with ITB Sub-Clause 18.6, one or more of the following factors as specified in ITB Sub-Clause 41.3(e) and in the BDS referring to ITB Sub-Clause 41.3(e), using the following criteria and methodologies.

(a) Deviation in Payment Schedule. *(insert one of the following)*

- (i) *Bidders shall state their Bid price for the payment schedule outlined in the SCC. Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid Price they wish to offer for such alternative payment schedule. The Purchaser may consider the alternative payment schedule and the reduced Bid Price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the SCC.*

**or**

- (ii) *The SCC stipulates the payment schedule specified by the Purchaser. If a Bid deviates from the schedule and if such deviation is considered acceptable to the Purchaser,*





The Purchaser shall:

- (a) evaluate only lots or contracts that include at least the percentages of items per lot and quantity per item as specified in ITB Sub-Clause 18.7.
- (b) take into account:
  - (i) the lowest-evaluated Bid for each lot; and
  - (ii) the price reduction per lot and the methodology for its application as offered by the Bidder in its Bid.



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## SECTION IV: BIDDING FORMS

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| Letter Of Intent   | 56   |



## Bidder Information Form

*[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]*

Date: *[insert date (as day, month and year) of Bid submission]*

Bid No.: *[insert number of bidding process]*

Page \_\_\_\_\_ of \_\_\_\_\_ pages

|  |
|--|
| 1. Bidder's Legal Name <i>[insert Bidder's legal name]</i>   |
| 2. In the case of a Joint Venture, Consortium or Association (JV/C/A) legal name of each party:<br><i>[insert legal name of each party in JV/C/A]</i>  |
| 3. Bidder's actual or intended Country of Registration: <i>[insert actual or intended Country of Registration]</i>   |
| 4. Bidder's Year of Registration: <i>[insert Bidder's year of registration]</i>  |
| 5. Bidder's Legal Address in Country of Registration: <i>[insert Bidder's legal address in country of registration]</i>  |
| 6. Bidder's Authorized Representative Information<br>Name: <i>[insert Authorized Representative's name]</i><br>Address: <i>[insert Authorized Representative's Address]</i><br>Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i><br>E-mail Address: <i>[insert Authorized Representative's e-mail address]</i>  |
| 7. Attached are copies of the following original documents: <i>[check the box(es) of the attached original documents]</i><br><input type="checkbox"/> Articles of Incorporation or Registration of firm named in 1 above, in accordance with ITB Sub-Clause 3.1.<br><input type="checkbox"/> In the case of a JV/C/A, letter of intent to form the JV/C/A, or the JV/C/A agreement, in accordance with ITB Sub-Clause 24.1 (c) (v).<br><input type="checkbox"/> In the case of a government owned entity from Bhutan, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 3.3.<br><input type="checkbox"/> Power of attorney authorizing the signatory of the Bid to sign on behalf of the Bidder. |



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## Joint Venture, Consortium or Association (JV/C/A) Partner Information Form

*[The Bidder shall fill in this Form in accordance with the instructions indicated below].*

Date: *[insert date (as day, month and year) of Bid submission]*

Bid No.: *[insert number of bidding process]*

Page \_\_\_\_\_ of \_\_\_\_\_ pages

|   |
|---|
| 1. Bidder's Legal Name: <i>[insert Bidder's legal name]</i>   |
| 2. JV/C/A Party's legal name: <i>[insert JV/C/A Party's legal name]</i>   |
| 3. JV/C/A Party's Country of Registration: <i>[insert JV/C/A Party's country of registration]</i>   |
| 4. JV/C/A Party's Year of Registration: <i>[insert JV/C/A Party's year of registration]</i>   |
| 5. JV/C/A Party's Legal Address in Country of Registration: <i>[insert JV/C/A Party's legal address in country of registration]</i>   |
| 6. JV/C/A Party's Authorized Representative Information<br>Name: <i>[insert name of JV/C/A Party's authorized representative]</i><br>Address: <i>[insert address of JV/C/A Party's authorized representative]</i><br>Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV/C/A Party's authorized representative]</i><br>E-mail Address: <i>[insert e-mail address of JV/C/A Party's authorized representative]</i>   |
| 7. Attached are copies of the following original documents: <i>[check the box(es) of the attached original documents]</i><br><input type="checkbox"/> Articles of Incorporation or Registration of firm named in 2 above, in accordance with ITB Sub-Clause 3.1.<br><input type="checkbox"/> In the case of a government owned entity from Bhutan, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 3.3. |

**\*NOT APPLICABLE**





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## Bid Submission Sheet

*[The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.]*

Date: *[insert date of Bid submission]*

Invitation for Bid No.: *[insert number of IFB]*

Alternative No.: *[insert number, if this Bid is for an alternative]*

To: *[insert complete name of the Purchaser]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and date of issue of each addendum]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Supply the following Goods and Related Services: *[insert a brief description of the Goods and Related Services]*;
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is: *[insert the Bid Price in words and figures, indicating the various amounts and their respective currencies]*;
- (d) The discounts offered and the methodology for their application are:

**Discounts.** If our Bid is accepted, the following discounts shall apply:

*[Specify in detail each discount offered and the specific item of the Schedule of Supply to which it applies.]*

**Methodology of Application of the Discounts.** The discounts shall be applied using the following methodology:

*[Specify in detail the methodology that shall be used to apply the discounts];*

- (e) Our Bid shall be valid for a period of *[insert number]* days from the date fixed for the Bid submission deadline in accordance with ITB Sub-Clause 29.1, and it shall remain binding upon us and may be accepted at any time before expiry of that period;
- (f) If our Bid is accepted, we commit to provide a Performance Security in accordance with ITB Clause 51 and GCC Clause 19 for the due performance of the Contract;
- (g) We are not participating, as Bidders, in more than one Bid in this bidding process, other than any alternative offers submitted in accordance with ITB Clause 17;
- (h) We, including any subcontractors or suppliers for any part of the Contract, have nationality from eligible countries, viz: *[insert the nationality of the Bidder, including that of all parties that comprise the Bidder if the Bidder is a JV/C/A, and the nationality each subcontractor and supplier]*
- (i) We have no conflict of interest pursuant to ITB Sub-Clause 3.2;
- (j) Our firm, its affiliates or subsidiaries - including any subcontractors or suppliers for any part of the contract - has not been declared ineligible by the Purchaser under the laws or official regulations of Bhutan, in accordance with ITB Sub-Clause 3.4;
- (k) The following commissions, gratuities or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or*



---

| Name of Recipient | Address | Reason | Amount |
|-------------------|---------|--------|--------|
| _____             | _____   | _____  | _____  |
| _____             | _____   | _____  | _____  |

(If none has been paid or is to be paid, indicate “none.”)

- (l) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (m) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.

Signed:\_\_\_\_\_ *[insert signature of person whose name and capacity are shown]*

In the capacity of \_\_\_\_\_ *[insert legal capacity of person signing the Bid Submission Sheet]*

Name: \_\_\_\_\_ *[insert complete name of person signing the Bid Submission Sheet]*

Duly authorized to sign the bid for and on behalf of: \_\_\_\_\_ *[insert complete name of Bidder]*

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of signing]*



---

## Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in Column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Supply.]*

**Note:** *As per the Bill of Quantity (BOQ) attached in the document.*



## Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be imported

|  |                       |  |                                       |   |   |  |  |  |
|--|-----------------------|--|---------------------------------------|---|---|--|--|--|
| (Group C Bids, goods to be imported)<br>Currencies in accordance with ITB 17 |                       |  |                                       |   |   |  |  | Date: _____<br>RFB No: _____<br>Alternative No: _____<br>Page N° <input type="checkbox"/> of _____ |
| 1  | 2                     | 3                                      | 4                                     | 5   | 6   | 7                                      | 8  | 9  |
| Line Item N°   | Description of Goods  | Country of Origin                      | Delivery Date as defined by Incoterms | Quantity and physical unit  | Unit price <b>cip</b> /insert place of destination/ in accordance with ITB 18.6(b)(i) | CIP Price per line item (Col. 5x6)     | Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination specified in BDS | Total Price per Line item (Col. 7+8)   |
| [insert number of the item]  | [insert name of good] | [insert country of origin of the Good] | [insert quoted Delivery Date]         | [insert number of units to be supplied and name of the physical unit] | [insert unit price CIP per unit]  | [insert total CIP price per line item] | [insert the corresponding price per line item]   | [insert total price of the line item]  |
|  |                       |  |                                       |   |   |  |  |  |
|  |                       |  |                                       |   |   |  |  |  |
| Total Price  |                       |  |                                       |   |   |  |  |  |

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [Insert Date]



**Price Schedule: Goods Manufactured Outside the Purchaser's Country, already imported**

\*

| (Group C Bids, Goods already imported)<br><br>Currencies in accordance with ITB 20 |                        |  |                                       |   |   |   |  |  | Date: _____<br>RFB No: _____<br>Alternative No: _____<br>Page N° <input type="checkbox"/> of <input type="checkbox"/>   |   |  |
|--|------------------------|--|---------------------------------------|---|---|---|--|--|---|---|--|
| 1  | 2                      | 3                                      | 4                                     | 5   | 6   | 7   | 8  | 9  | 10  | 11  | 12                                       |
| Line Item N°   | Description of Goods   | Country of Origin                      | Delivery Date as defined by Incoterms | Quantity and physical unit  | Unit price including Custom Duties and Import Taxes paid, in accordance with ITB 18.6(c)(i) | Custom Duties and Import Taxes paid per unit in accordance with ITB 18.6(c)(ii), [to be supported by documents] | Unit Price net of custom duties and import taxes, in accordance with ITB 18.6 (c) (iii) (Col. 6 minus Col.7) | Price per line item net of Custom Duties and Import Taxes paid, in accordance with ITB 18.6(c)(i) (Col. x58) | Price per line item for inland transportation and other services required in the Purchaser's Country to convey the goods to their final destination, as specified in BDS in accordance with ITB 18.6 (c)(v) | Sales and other taxes paid or payable per item if Contract is awarded (in accordance with ITB 18.6(c)(iv) | Total Price per line item (Col. 9+10+11) |
| [insert number of the item]  | [insert name of Goods] | [insert country of origin of the Good] | [insert quoted Delivery Date]         | [insert number of units to be supplied and name of the physical unit] | [insert unit price per unit]  | [insert custom duties and taxes paid per unit]  | [insert unit price net of custom duties and import taxes]  | [insert price per line item net of custom duties and import taxes]   | [insert price per line item for inland transportation and other services required in the Purchaser's Country]   | [insert sales and other taxes payable per item if Contract is awarded]                                    | [insert total price per line item]       |
|  |                        |  |                                       |   |   |   |  |  |   |   |  |
|  |                        |  |                                       |   |   |   |  |  |   |   |  |
|  |                        |  |                                       |   |   |   |  |  |   | Total Bid Price   |  |

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]

\* [For previously imported Goods, the quoted price shall be distinguishable from the original import value of these Goods declared to customs and shall include any rebate or mark-up of the local agent or representative and all local costs except import duties and taxes, which have been and/or have to be paid by the Purchaser. For clarity the Bidders are asked to quote the price including import duties, and additionally to provide the import duties and the price net of import duties which is the difference of those value



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**Price Schedule: Goods Manufactured in Bhutan.**

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|   |                              |                                       |  |                                |   |  |   |  |  |
|---|------------------------------|---------------------------------------|--|--------------------------------|---|--|---|--|--|
| Currencies in accordance with ITB Clause 18 |                              |                                       |  |                                |   |  |   | Date: _____<br>IFB No: _____<br>Alternative No: _____<br>Page No: _____ of _____                                     |  |
| 1   | 2                            | 3                                     | 4  | 5                              | 6   | 7  | 8   | 9  | 10                                     |
| Line Item N°                                | Description of Goods         | Delivery Date as defined by Incoterms | Quantity and physical unit   | Unit price EXW                 | Total EXW price per line item (Col. 4x5)      | Price per line item for inland transportation, insurance and other services required in Bhutan to convey the Goods to their final destination (project Site) | Cost of local labor, raw materials and components with origin in Bhutan % of Col. 5                                       | Sales and other taxes payable per line item if Contract is awarded [in accordance with ITB Sub-Clause 18.6 (a) (ii)] | Total Price per line item (Col. 6+7+9) |
| <i>[insert number of the item]</i>          | <i>[insert name of Good]</i> | <i>[insert quoted Delivery Date]</i>  | <i>[insert number of units to be supplied and name of the Physical unit]</i> | <i>[insert EXW unit price]</i> | <i>[insert total EXW price per line item]</i> | <i>[insert the corresponding price per line item]</i>  | <i>[Insert cost of local labor, raw material and components from within Bhutan as a % of the EXW price per line item]</i> | <i>[insert sales and other taxes payable per line item if Contract is awarded]</i>                                   | <i>[insert total price per item]</i>   |
|   |                              |                                       |  |                                |   |  |   |  |  |
|   |                              |                                       |  |                                |   |  |   | Total Price  |  |

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*



### Price and Completion Schedule – Related Services

| Currencies in accordance with ITB Clause 18 |   |   |   |  | Date: _____<br>IFB No: _____<br>Alternative No: _____<br>Page No: _____ of _____ |  |
|---|---|---|---|--|--|--|
| 1   | 2   | 3   | 4   | 5  | 6  | 7  |
| Service N°                                  | Description of Services (excludes inland transportation and other services required in Bhutan to convey the Goods to their final destination) | Country of Origin                                 | Delivery Date at place of Final destination                             | Quantity and physical unit   | Unit price   | Total Price per Service (Col. 5*6 or estimate) |
| <i>[insert number of the Service]</i>       | <i>[insert name of Services]</i>  | <i>[insert country of origin of the Services]</i> | <i>[insert delivery date at place of final destination per Service]</i> | <i>[insert number of units to be supplied and name of the physical unit]</i> | <i>[insert unit price per item]</i>  | <i>[insert total price per item]</i>           |
|   |   |   |   |  |  |  |
|   |   |   |   |  |  |  |
|   |   |   |   |  |  |  |
|   |   |   |   |  |  |  |
|   |   |   |   |  |  |  |
| Total Bid Price                             |   |   |   |  |  |  |

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*



Section IV

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## Bid Security (Bank Guarantee)

*[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]*

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

**Beneficiary:** \_\_\_\_\_ *[Name and Address of Purchaser]*

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

**BID GUARANTEE No.:** \_\_\_\_\_

We have been informed that *[insert name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its Bid dated (hereinafter called "the Bid") for the execution of *[insert name of Contract]* under Invitation for Bids No. *[insert IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

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

- (a) has withdrawn its Bid during the period of Bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Purchaser during the period of Bid validity, (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the Performance Security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful Bidder; or (ii) thirty days after the expiration of the Bidder's Bid.

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

*[signature(s)]*





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## Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the **BDS**.]*

Date: [insert date of Bid Submission]

Invitation for Bid No.: [insert IFB number]

Alternative No.: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of the Purchaser]

### WHEREAS

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

We hereby extend our full guarantee and warranty in accordance with Clause 29 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of the authorized representative(s) of the Manufacturer]

Title: [insert title(s) of the authorized representative(s) of the Manufacturer]

Duly authorized to sign this Authorization for and on behalf of [insert complete name of the Bidder]

Dated on the [insert number] day of [insert month], [insert year].



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## INTEGRITY PACT

*(Note: The original (signed and sealed by BBSCL) scanned copy of Integrity pact needs to be duly signed and submitted along with your Technical Bid)*

### 1. General:

Whereas **Mr. Kaka Tshering** (*Name of head of the procuring agency or his/her authorized representative, with power of attorney*) representing the **Bhutan Broadcasting Service Corporation Limited** (*Name of procuring agency*), Royal Government of Bhutan, hereinafter referred to as the “**Employer**” on one part, and \_\_\_\_\_ (*Name of bidder or his/her authorized representative, with power of attorney*) representing \_\_\_\_\_ (*Name of firm*), hereinafter referred to as the “**Bidder**” on the other part hereby execute this agreement as follows:

This agreement shall be a part of the standard bidding document, which shall be signed by both the parties and submitted along with the tender document. The head of the procuring agency or his/her authorized representative with power of attorney should be the signing authority. For the bidders, the bidder or his/her authorized representative with power of attorney must sign the Integrity Pact (IP). If the winning bidder had not signed during the submission of the bid, the tender 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**<sup>15</sup> and **contract administration**<sup>16</sup>, with a view to:

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

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:-

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, favour 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.

The Employer further confirms that its officials shall not favour 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.

<sup>15</sup> Bidding process, for the purpose of this IP, shall mean the procedures covering tendering process starting from bid preparation, bid submission, bid processing, and bid evaluation.

<sup>16</sup> Contract administration, for the purpose of this IP, shall mean contract award, contract implementation, un-authorized sub-contracting and contract handing/taking over.



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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.

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 :-

The Bidder shall not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, 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.

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.

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.

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.

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:**

The respective procuring agency shall be responsible for administration and monitoring of the IP as per the relevant laws.

The bidder shall have the right to appeal as per the arbitration mechanism contained in the relevant rules.





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**Letter of Intent**  
(Letterhead paper of the Employer)

**Notes on standard form of letter of Intent**

*This issuance of Letter of Intent (always before letter of acceptance) is the information of the selection of the bid of the successful bidder by the Employer and for providing information to other unsuccessful bidders who participated in the bid as regards the outcome of the procurement process*

*The Employer shall allow 10 days as described in ITB 35.2 between this letter of intent and letter of acceptance to allow aggrieved bidders to complaint the decision if they feel they have treated unfairly.*

(Insert date)

To: \_\_\_\_\_ [Name and address of the Supplier]

This is to notify you that, it is our intention to award the contract for your Bid dated-----  
-----[Insert date] for execution of the-----[Insert name of  
the contract and identification number, as given in the BDS/SCC] for the Contract Price of-----  
-----[Insert amount in figure and words and name of currency] as corrected and  
modified [if any corrections] in accordance with the Instructions to Bidders or (for item-wise contract  
insert list of items price schedule as attachment)

Authorized Signature: -----

Name and Title of Signatory:-----

Name of Agency: -----

CC:

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



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## SECTION V: ELIGIBLE COUNTRIES

### **Eligibility for the Provision of Goods and Related Services in RgoB-financed Procurement**

The RgoB permits firms and individuals from all countries to offer Goods and Related 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:

as a matter of law or official regulation, the RgoB prohibits commercial relations with that Country; or

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.

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]*





# **PART 2**

## **SUPPLY REQUIREMENTS**





## SECTION VI: SCHEDULE OF SUPPLY

|   |    |
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| 7. Inspections and Tests                            | 96 |



## Section VI: Schedule of Supply

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### Notes for Preparing the Schedule of Supply

The Schedule of Supply shall be included in the Bidding Documents by the Purchaser, and shall cover, at a minimum, a description of the Goods and Services to be supplied and the delivery schedule.

The objective of the Schedule of Supply is to provide sufficient information to enable Bidders to prepare their Bids efficiently and accurately, in particular the Price Schedule, for which a form is provided in Section IV. In addition, the Schedule of Supply, together with the Price Schedule, should serve as a basis in the event of quantity variation at the time of award of Contract pursuant to ITB Clause 47.

The date or period for delivery should be carefully specified, taking into account (a) the implications of delivery terms stipulated in the Instructions to Bidders pursuant to the *Incoterms* rules (i.e., EXW; or CIF, CIP, FOB, FCA where “delivery” takes place when the Goods are delivered **to the carriers**), and (b) the date prescribed herein from which the Purchaser’s delivery obligations start (i.e., notice of award, contract signature, opening or confirmation of the letter of credit).



## 1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column “Bidder’s Offered Delivery Date”, which is to be filled by the Bidder]

| Line Item N°     | Description of Goods          | Quantity                                 | Physical unit                           | Final (Project Site) Destination as specified in BDS                       |   |         | Bidder’s Offered Delivery Date [ <i>to be provided by the Bidder</i> ]       |
|------------------|-------------------------------|--|---|--|---|---------|--|
|                  |                               |  |   |  | Delivery Date   |         |  |
|                  |                               |  |   |  | [insert the number of days following the date of effectiveness of the Contract] |         |  |
| [insert item No] | [insert description of Goods] | [insert quantity of item to be supplied] | [insert physical unit for the quantity] | [insert place of Delivery]   |   |         | [insert the number of days following the date of effectiveness the Contract] |
| 1                | Lot 1                         | As per BOQ                               | As per BOQ                              | Bhutan Broadcasting Service Corporation Ltd.,<br>Chubachu, Thimphu; Bhutan | 90 Days   | 90 Days |  |
| 2                | Lot 2                         | As per BOQ                               | As per BOQ                              |  | 90 days   | 90 days |  |
| 3                | Lot 3                         | As per BOQ                               | As per BOQ                              |  | 90 days   | 90 days |  |
|                  |                               |  |   |  |   |         |  |
|                  |                               |  |   |  |   |         |  |



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## 2. List of Related Services and Completion Schedule

*[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic and consistent with the required Goods Delivery Dates (as per Incoterms)]*

| Service | Description of Service   | Quantity <sup>1</sup> | Physical Unit | Place where Services shall be performed                                   | Final Completion Date(s) of Services |
|---------|--|-----------------------|---------------|---|--------------------------------------|
|         |  |                       |               |   |                                      |
| 1       | <i>Installation, testing and commissioning.</i>                                |                       |               | <i>Bhutan Broadcasting Service Corporation, Chubachu, Thimphu, Bhutan</i> | <i>1 month</i>                       |
| 2       | <i>Maintenance Support (Hard and Soft Part)</i>                                |                       |               | <i>BBSCl, Thimphu, Bhutan</i>   | <i>12 months (warranty period)</i>   |
| 3       | <i>The successful bidder shall provide training on the equipment supplied.</i> |                       |               | <i>BBSCl/OEM/supplier</i>   | <i>Two weeks to one month</i>        |
|         |  |                       |               |   |                                      |
|         |  |                       |               |   |                                      |

1. If applicable



### 3. Technical Specifications

*The purpose of the Technical Specifications (TS) is to define the technical characteristics of the Goods and Related Services required by the Purchaser. The Purchaser shall prepare the detailed TS taking into account that:*

- *The TS constitute the benchmarks against which the Purchaser will verify the technical responsiveness of Bids and subsequently evaluate the Bids. Therefore, well-defined TS will facilitate preparation of responsive Bids by Bidders, as well as examination, evaluation and comparison of the Bids by the Purchaser.*
- *The TS shall require that all goods and materials to be incorporated in the Goods be new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided for otherwise in the Contract.*
- *The TS shall make use of best practices. Samples of specifications from successful similar procurements may provide a sound basis for drafting the TS.*
- *Standardizing technical specifications may be advantageous, depending on the complexity of the Goods and the repetitiveness of the type of procurement. Technical Specifications should be broad enough to avoid restrictions on workmanship, materials and equipment commonly used in manufacturing similar kinds of Goods.*
- *Standards for equipment, materials and workmanship specified in the Bidding Documents shall not be restrictive. Recognized international standards should be specified as much as possible. Reference to brand names, catalogue numbers or other details that limit any materials or items to a specific manufacturer should be avoided as far as possible. Where unavoidable, such item description should always be followed by the words “or equivalent or higher.” When other particular standards or codes of practice are referred to in the TS a statement should follow to the effect that other authoritative standards that ensure at least a substantially equal quality will also be acceptable.*
- *Technical Specifications shall be fully descriptive of the requirements in respect of, but not limited to, the following:*
  - (a) Standards of materials and workmanship required for the production and manufacturing of the Goods.
  - (b) Detailed tests required (type and number).
  - (c) Other additional work and/or Related Services required to achieve full delivery/ completion.
  - (d) Detailed activities to be performed by the Supplier, and participation of the Purchaser therein.
  - (e) List of detailed functional guarantees covered by the Warranty and the specification of the liquidated damages to be applied in the event that such guarantees are not met.
- *The TS shall specify all essential technical and performance characteristics and requirements, including guaranteed or acceptable maximum or minimum values, as appropriate. Whenever necessary, the Purchaser shall include an additional ad-hoc bidding form (to be an Attachment to the Bid Submission Sheet), where the Bidder shall provide detailed information on such technical performance characteristics in respect of the corresponding acceptable or guaranteed values.*

*When the Purchaser requests that the Bidder provides in its Bid a part or all of the Technical Specifications, technical schedules or other technical information, the Purchaser shall specify in detail the nature and extent of the required information and the manner in which it has to be presented by the Bidder in its Bid.*



## Section VI: Schedule of Supply

*[If a summary of the Technical Specifications (TS) has to be provided, the Purchaser shall insert information in the table below. The Bidders shall prepare a similar table to justify compliance with the requirements]*

**“Summary of Technical Specifications.** The Goods and Related Services shall comply with following Technical Specifications and Standards:

| <b>Item No</b>          | <b>Name of Goods or Related Service</b> | <b>Technical Specifications and Standards</b> |
|-------------------------|---|---|
| <i>[insert item No]</i> | <i>[insert name]</i>                    | <i>[insert TS and Standards]</i>              |
| Lot 1                   | As per BOQ                              | As Per BOQ                                    |
| Lot 2                   | As per BOQ                              | As per BOQ                                    |
| Lot 3                   | As per BOQ                              | As per BOQ                                    |
|                         |   |   |

*Detailed Technical Specifications and Standards [whenever necessary].*

*[Insert detailed description of TS] This bidding document is for the supplying of the broadcast equipment with detail design of the proposed facilities room as specified in the technical specification and drawing. The bidder should ensure that all the equipment in the proposal should be compatible to each other and should not propose or quote incompatible equipment.*

### Compliance Statement Table

*[To be filled by bidder and enclosed in Technical Bid as per **ITB 14.1 (k)**]*

| Sl.No. | Description of specification<br>(Lot and Item-wise as per BOQ) | Compliance statement | Performance Fig. of equipment Offered | Deviations in case of non-compliance | Do you require additional items to make the system complete? | Features in the system Offered which exceed specs |
|--------|--|----------------------|---------------------------------------|--------------------------------------|--|---|
| 1      |  |                      |                                       |                                      |  |   |
| 2      |  |                      |                                       |                                      |  |   |
| 3      |  |                      |                                       |                                      |  |   |
| 4      |  |                      |                                       |                                      |  |   |
|        |  |                      |                                       |                                      |  |   |
|        |  |                      |                                       |                                      |  |   |
|        |  |                      |                                       |                                      |  |   |



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## TECHNICAL SPECIFICATIONS

- 1. Scope:** The purpose of the tender specification is to procure broadcast equipment for the Bhutan Broadcasting Service Corporation's (BBSC) Outside Broadcasting van, Archive System, and Radio Automation System. Additionally, it covers the project's installation, testing, and commissioning.

The bid has been divided into three lots:

Lot 1: HD Outside Broadcasting Van

Lot 2: Archive and MAM System

Lot 3: Radio Automation System

### 2. General

- 2.1. BBS has two TV channels and two radio stations, which broadcast 24 hours a day, seven days a week.
- 2.2. The HD equipment will be installed in the TV building and radio building. The building layout indicating the rooms are given in Annexures.
- 2.3. The existing Harmonics video servers, AVECO automation system, Graphics WASP 3D and News Octopus system will remain as it is. It is located in the Central Apparatus Room (CAR). The required HD licenses and hardware will be upgraded by BBS.
- 2.4. There is a fiber cable of single mode 48 core laid out between TV and Radio buildings. All the connections should be done via fiber cable.
- 2.5. The entire video facilities will be in High Definition (HD) while the audio will be digital stereo.
- 2.6. The control room monitoring speakers and Studio fold back speakers should be provided according to the size of the room.
- 2.7. The requirement of the analogue and digital MUX and DMUX, MADI, and Dante depends on the audio solution provided by the bidders. Preference will be given to the latest audio solution.
- 2.8. All the glues offered should be in the form of card modules with connectors on the back plate, to be mounted in 19" rack frame units with redundant power supply, advanced networking and cooling fans. It should also be possible to house different types of converters in the same frame.
- 2.9. The Bidder will be required to use high quality video/ audio cables, connectors and other accessories equivalent to Canare products.
- 2.10. All the input and output routing of HD video signals to and from the switchers and all connecting equipment will be through video patch panels. All equipment should be connected through a patch panel for easy maintenance and troubleshooting. Only high-quality digital patch panels which support high bandwidth should be offered. The patch panels should be compatible with router and connecting equipment connector and should be straight through with 75-ohm termination.
- 2.11. All input and output of audio lines to and from the audio mixers of both the studios will also be through patch panels. The firm must use high quality audio patch panels equivalent to Canare products.
- 2.12. Routers and glues should be the same brand for better integration, otherwise provide proper justification.
- 2.13. Bidders may provide the indicative list if it's necessary to complete the system according to their bid. However, in such cases, they should quote the additional equipment with justifiable reasons. Bidders must ensure the completeness of the system including all the required accessories.
- 2.14. All broadcast products must be from reputed and renowned manufacturers. The offers with little known unproven and obsolete products will be rejected.
- 2.15. The bidder should supply the cables according to colour coding of the system design.
- 2.16. The bidders shall supply HD equipment with detailed design and drawings according to the information given below. The successful bidder shall be required to provide support to BBS during the setup of the system whenever required.
- 2.17. The tender specifications include various works including technical specifications for major equipment. However, since it is not possible to give minute details of all the works involved, the bidder must take into account all the works involved in setting up such facilities. If necessary, the firm may also officially enquire with BBSC officials. It would be advisable that the representative of the firm visit the site and assess the work requirements before submitting the tender.



## TECHNICAL SPECIFICATIONS FOR MAJOR EQUIPMENT

### LOT A: HD Outside Broadcasting Van

BBS wants to procure six cameras high-definition OB van capable of covering sports like football, archery and other events. OB Van should be equipped with two High Frame Rate cameras. The camera can be HD with the option of upgrading to a 4K camera system. Fiber cable will be used to link the CCU to the camera head.

It should be a full-fledged OB van with 6 cameras and backup power via generator, as well as an inbuilt power stabilizer to protect the equipment from overvoltage and low voltage. There should be a facility to turn on and off the main power from the power rack, as well as a facility to turn on the generator from the power rack in the event of a main power failure.

To keep the equipment, cool, the OB Control room should have an exhaust fan. The Control room of the OB Van should be equipped with a heating and cooling system. The control room should have an adequate lighting system.

#### 1. OB camera chain

- 1.1. OB should be equipped with six digital HD studio cameras with the option of upgrading to 4K. All six cameras should be of the same make.
- 1.2. Two cameras should be high frame rate camera which support up to 6x and more super slow motion in 1080/50i & 1080/50p. Include 3x slow motion license. The camera capture should be smooth, flicker-free slow-motion and normal-speed images with exceptional detail.
- 1.3. The cameras should be able to capture crisp and clear visuals, with the latest 3 CMOS sensor and global shutter technology that eliminates the 'jello effect' and banding noise which also allows to capture pristine images with low noise and excellent sensitivity.
- 1.4. The offered camera should work in fiber operation with LEMO connectors.
- 1.5. Each camera should be offered with a 7" high resolution viewfinder with viewfinder hood. It should be Colour LCD viewfinder equipped with LED backlit LCD panel having the resolution of 1920 (H) x 1080 (V) pixels or better. The Viewfinder should draw power supply from camera head.
- 1.6. The Camera should support High Dynamic Range (HDR): (HLG & SLog-3) & Wide Colour Gamut/Space (WCG).
- 1.7. The Camera should have a focus assist function to make more accurate and fine focus adjustments through the viewfinder.
- 1.8. The Camera head should be equipped with motorized ND filter wheel and Optical/Electronic Colour Correction (ECC) filters, both filters should be remotely controllable from the RCP.
- 1.9. Each camera should also be offered with full function Camera Remote Control Panel (RCP).
- 1.10. All the base station/ Camera Control Unit (CCU) should be 19" rack mountable.
- 1.11. The CCU should give minimum 2 HD SDI out, monitor out and prompter input and return input.
- 1.12. Cameras should be enabled with a software control panel which can be operated with a workstation or off the shelf available pads to control all cameras.
- 1.13. Provide return video to all the cameras.
- 1.14. Include a hard carrying case for all the cameras, lens and viewfinders.
- 1.15. Provide one set standard tools and alignment kit.

#### 2. Digital Production Switcher

- 2.1. The bidder should offer 24 inputs, 2 M/E HD digital production switcher for both the studios. The control panel of the switcher should have 16 direct accessible inputs on the panel. It should have capability to map all the sources to any cross point. Operational buttons should be well illuminated and should be able to customize the source names for different applications.
- 2.2. The control panel layout of the switcher should be simple to use and should be suitable for high quality video composing during live events. It should also have a display panel to give status of the switcher.





- 2.3. The switcher should Support Ultra High Definition (Quad Link), High-Definition format (16:9 Aspect Ratio) and Standard Definition format (16:9 and 4:3 Aspect Ratio). All hardware and software (with perpetual validity) required to support these formats should be included in the offered system.
- 2.4. Out of 24 video inputs at least 4 inputs should be multi-format and should have internal Up-conversion SD (4:3)/ (16:9) to HD (16:9) to accept SD sources.
- 2.5. The switcher should have 16 nos. outputs including Auxiliary Outputs. Out of 16 video outputs at least 2 outputs should be multi-format and should have internal Down-conversion (HD (16:9) to SD (4:3)/ (16:9) to provide SD outputs.
- 2.6. It should be reliable, robust, and durable, easy to install, set up, and operate.
- 2.7. The switcher should have multi format switcher processor (SD, HD and 4K), clip player, logo key, 3D DME (Size, Position, Rotation, etc.) or equivalent, DVEs and provide minimum of 6 configurable outputs for PGM, Preview, Clean, M/E, etc.
- 2.8. Media files should be easily and instantly loaded into the internal SSD storage directly from any network- connected device via a web browser and also should have enough space to store the switcher set-up parameter.
- 2.9. Offer two multi-viewer outputs with enhanced features with a choice of 4, 10, 13, and 16-way splits. Source Names and Tally indicators should also be supported.
- 2.10. The Tally connection to respective cameras should be integrated with the switcher.
- 2.11. Full quality signal processing with 16 full-function keyers (chroma, linear, luminance, borders etc.). Each keyer should have its own inbuilt resizer, allowing at least 8 Picture-in-Picture effects with perspective.
- 2.12. The switcher should have Macro, Snapshot, and Keyframe Effect to allow speedy memory store and recall in creative live operation. The switcher should have at least 8 channel Internal Frame Memory to store at least 900 frames of HD resolutions. It should support embedded audio. It should be possible to import frames/clips through a suitable interface.
- 2.13. 16GB minimum internal clip storage facility with 4 or more outputs supporting minimum 4 mins of uncompressed HD video with facility to grab incoming video or file through network / USB Storage
- 2.14. The switcher should have auto as well as manual transition facility with multiple transition effects.
- 2.15. Provide redundant power supplies for the switcher and control panel.
- 2.16. Provide at least 6 external ENG cameras and other video connections to the switcher via patch and external patch bay.
- 2.17. Provide at least 6 video outputs from the router and switcher to the external patch bay for the external connections.

### 3. Audio Mixer

- 3.1. The offered mixer should be the latest trending digital audio mixer with at least 16 microphones and 16-line inputs with EQ, Gate, Compression, Delay, and FX, out of which a minimum of four should be stereo line
- 3.2. All inputs and outputs should be balanced XLRs. RCA connectors or adapters will not be acceptable.
- 3.3. The offered mixer should have selectable line/mic input on each mono input fader.
- 3.4. The mixer should have 16 motorized channel faders with fixed and user-definable layers, 8 output/VCA faders and a minimum of 2 master faders.
- 3.5. It should have a built-in tone generator, Pre Fade Listening on each fader, and monitoring outputs.
- 3.6. The offered mixer should have a built-in VU meter for monitoring.
- 3.7. The mixer should be equipped with an intercom talkback system and connect to a fold back monitor in the studio.
- 3.8. It should also be equipped with a minimum of four groups and four auxiliary outputs with level control.
- 3.9. The master output should have a limiter.
- 3.10. The offered mixer should have dual redundant power supplies.



- 3.11. The offered mixer should be in accordance with the audio solution provided by the bidder. Latest audio solution is preferred.
- 3.12. Connect the audio from all the CCUs to the audio mixer and as well as via the external patch bay. Provide at least 12 inputs from the external patch bay.
- 3.13. Provide at least 6 audio outputs from audio mixer or DA to the external patch bay for the external connections.

#### **Wireless Communication System**

- 3.14. Wireless communication sets for communication between Online editor, Producers, Engineers and cameraman should be provided. Include all the base stations, cell stations, headphones, battery, and battery charger. The wireless communication should be able to cover around 350m or more. Provide the hard carrying case for the communication sets and necessary accessories.
- 3.15. The systems should be 19" rack mounting with dual redundant power supplies and require configuration software. Should have excellent ergonomics to provide a professional outlook in the installed area.
- 3.16. All the belt packs and headsets should be rugged in design to withstand frequent use, constructed of high-grade material, portable and light in weight. Digital wireless belt pack should include at least four talk and listen buttons with integral cross point level rotary controls and answer back and menu key. LED level and call signalization and OLED menu.
- 3.17. Double ear headset should be with superior audio quality and on/off switch in gooseneck microphone boom, includes ear sock and headset bag - field removable four-pin female XLR for standard connection.
- 3.18. Intercommunication should use a wide bandwidth system to maximize the intelligibility of the human voice. Noise attenuating headsets and noise canceling microphones should be used to reduce the ambient noise and minimize feedback.
- 3.19. The intercom systems should have a system interface to connect one intercom system to another. This is to enable the OB team to communicate with the studio team at HQ via fiber and internet links. BBS will use the AEQ CONEXTIA matrix system at the BBS HQ.
- 3.20. Provide one remote panel for Online editor and video engineer can use the main system for the communication. The panel should be equipped with electronically latching push ON and push OFF selector switches to enable hands free operation and sigma mode of calling (All select).
- 3.21. The system should have IFB (Interrupted Fold Back) configuration to provide communication to the anchor. Each IFB ear set should include an audio driver, coiled acoustic ear tube with clothing clip, 5 ft (1.5m) cable with 1/8" (3.5mm) straight mini-jack connector.
- 3.22. Anchor should be able to hear the cue from both the online editor and the final PGM. The size of the belt pack receiver should be small and compact and comfortable for the anchors.
- 3.23. Cameraman should be able to hear the cue from both the online editor and video engineer.
- 3.24. The system should allow two-way communication between control panels, producer, online, floor manager and cameramen.
- 3.25. The system should integrate with all the camera CCUs base stations via 4 wire/ 2 wire system.
- 3.26. Labels for the switches should be provided.
- 3.27. The bidder should ensure the completeness of the system. It will be the sole responsibility of the bidder to offer all the items including software, hardware, cables & connectors that are necessary to complete the system. The bidder should also offer the schematic depicting all the talkback stations of the offered system to help understand the completeness of the system.

#### **4. HD Routers**

- 4.1. The bidder should provide a 32x32 main router and it should be of Modular I/O cards and swappable. Able to easily customize with different I/O cards, MADI, Dante, fiber, etc.
- 4.2. Offered routers should be clean and quiet switching.
- 4.3. Should have easy audio routing matrix and upgradable to UHD by license.
- 4.4. Routers should be equipped with redundant power supplies which are modular and swappable.



- 4.5. The offered system should generate alarms like Video loss, Freeze Picture, Audio loss, silence and excessive audio levels and should support programmable color & alarm thresholds
- 4.6. The routers should be capable of being mounted in a standard 19" rack frame.
- 4.7. Provide two remote control panels, one for engineer and other for online editor.
- 4.8. Remote control panels shall be rack mounted. The remote-control panels should be of a dedicated button per source type. The output of each remote-control panel has to be sent to respective predefined destinations, which should be user configurable. The RCP should have lock/panel disable facilities to prevent anyone from accidentally changing the router status.
- 4.9. There should be a visual indication on the control panels about the source selected and the destination information.
- 4.10. The system should have storage facilities for control information, so that in case of power failure, the status of the switcher output should remain unchanged when the power supply is restored.
- 4.11. Provide two Integrated Multiview (customizable with audio bars). The multiviewer should be capable of displaying up to 32 tiles on a single screen, plus additional tiles for clocks and tallies.
- 4.12. The bidder should ensure the completeness of the system. It will be the sole responsibility of the bidder to offer all the items including software, hardware, cables & connectors that are necessary to complete the system.

## **5. Peripheral Equipment (Glues)**

- 5.1. All Peripheral equipment such as DVDA (Digital Video Distribution Amplifier), ADC, DAC, Embedder, De-embedder etc. should be of broadcast quality and should be from a reputed brand.
- 5.2. All the glue cards should be modular and swappable.
- 5.3. All Peripherals should be of the same manufacturer as the offered router.
- 5.4. The Peripheral equipment should be using higher bit processing wherever applicable and should meet all broadcast standard parameters.
- 5.5. Frame should have cooling and advanced networking with dual modular power supplies, with integral cooling, front panel display with fault indicator, IP info, web monitoring control of frame and associated cards.

## **6. Sync Pulse Generator and References**

- 6.1. User-definable safe area graticules and AFD graticule facilitate editing and format conversion tasks
- 6.2. The SPG should have highly stable output so as to make it ideal for either master generator or slave operation, in a TV studio broadcast environment
- 6.3. The SPG should have a high accuracy internal reference with less than 1ppm per year long term drift.
- 6.4. Should provide at least the following outputs: 4 independent pairs of Black-Burst / Tri-level Sync Reference output, 4 independent pairs of 3G/ HD/ SD SDI Black and Test Pattern Outputs (with embedded audio) including idents and motion, 2 AES digital audio outputs, Composite analogue video Test and Black outputs, LTC Outputs, Digital Audio Reference Signal (DARS), Word Clock outputs, VITC, IP Based Control and Monitoring via Dashboard
- 6.5. It should have a GPS receiver and should be supplied with a GPS antenna and cable.
- 6.6. It should be possible to prevent loss of timing settings in the event of power failure by storing the time settings in a non-volatile memory. Timing pre-set should be easily programmable.
- 6.7. Any ambiguous conditions are to be indicated by an LED display on the front panel.
- 6.8. The SPG system should consist of two SPG units and one automatic change over unit. The SPG will provide all the references and time to all the equipment in the BBS facilities.
- 6.9. The automatic change over unit in case of any failure in one of the SPG's should change over to another SPG smoothly. There should also be a manual change over in case of an erroneous signal level. The SPGs and automatic change over unit should have a modular redundancy power supply unit.
- 6.10. All the major equipment, video switcher, audio console, routers, frame, server etc should be provided with two reference signals.



## 7. Digital Waveform Monitor

- 7.1. 3G/HD/SD Waveform Monitor, 4 SDI Inputs (3G, HD and SD-SDI support on the same inputs-auto detect). Base unit includes HD, SD and Dual-Link signal formats supporting Option 3G required for 3GSDI support.
- 7.2. Full rack, short depth, 3RU rack mount to fit one or two WFM with Final assy, filler panel to cover unused rack.
- 7.3. Allows you to perform basic video and audio monitoring of SD / HD signals with sharp CRT like traces
- 7.4. Auto-detection of HD / SDI signals
- 7.5. 4 SDI inputs with multi-format and multi-standard support
- 7.6. Dual link video formats supported 4:2:2, 4:4:4, alpha channel, 10 bit, and 12 bit
- 7.7. High-brightness display with LED backlight, ideal for indoor and outdoor usage
- 7.8. Intuitive menu structure and context-sensitive help 4-tile display
- 7.9. Overlays the waveform and vector or waveform and lighting displays with picture thumbnails
- 7.10. Full screen display mode maximizes display size for precise calibration
- 7.11. 32 instruments presets for quick access of regularly used configurations
- 7.12. Several sweep rates and easy control of vertical gain / horizontal magnification for easy measurements of video waveform parameters
- 7.13. Calibrates facility and interchannel timing via timing and lighting display
- 7.14. Measures external reference signals such as Black Burst or Tri-Level Sync
- 7.15. Black picture and frozen frame detection alerts the operator to an issue in the transmission chain
- 7.16. Extensive alarms, status reporting, and error logging for over 10,000 events, simplifying the task of error correction
- 7.17. Voltage and timing cursor ensures precise measurement of video signals
- 7.18. Front-panel USB port for transfer of presets, screenshots, and error logs to a portable memory device
- 7.19. Audio channels monitoring via a headphone port on the front panel
- 7.20. SNMP and Ethernet remote interface capabilities and GPI control for centralized monitoring and control
- 7.21. HDMI connection for attaching a digital or analog XGA display to the monitor
- 7.22. Color gamut display to verify at a simple glance if the signal is RGB or Composite compliant. The display to monitor Composite gamut compliance from an SDI Component signal avoiding the need for a separate encoder.
- 7.23. Provide Power code.

## 8. Slow motion system

- 8.1. The offered server should be 4-channel (2 In, 2 Out) HD/SD Video Server and should be able to upgrade to 6 or 8 channel play/record configuration in future.
- 8.2. It should have an operator friendly user interface with full human intervention. Provide appropriate remote-control panels with T-Bar Slow-Motion and Rotary Dial Jog/Shuttle controls. The RCP should support multiple control protocols, providing integration with a broad range of third-party switchers. Ergonomically-designed and purpose-built hardware Control Surface.
- 8.3. Share the load by splitting/sharing server resources—so two operators can work independently on two replay events or work in collaboration on the same replay event.
- 8.4. It should have recording and playback. The system should support slow and as well as super slow motion replay functions.



- 8.5. The system should have built-in Input/Output Audio Router, control over external Video Routers, MultiViewer computer desktop video monitoring, HD-SDI Quad-Viewer outputs with programmable content Count-Down display.
- 8.6. Imports media files without the use of a video channel, allowing to dedicate all your server's channels to live recording and playout tasks. System should have Real-time Hardware Media Processing Engines with rock-solid Record & Playout Performance
- 8.7. Besides the standard codecs, it should support DVCPRO50 (SD), XDCAM HD
- 8.8. The offered server should have 16 TB or more enterprise class integrated/ internal storage in suitable SSD RAID 6 configuration or the latest version for standalone operations. The disk should be hot swappable.
- 8.9. The offered server should have auto-switchable redundant power supply units.
- 8.10. The server should have 4 independent High-Definition channels and should be capable of replaying sequences while recording is in progress.
- 8.11. The offered server should ingest two feeds simultaneously and playback the desired one on the third port and fourth port
- 8.12. The system should also have playlist editing features with a cut & paste facility.
- 8.13. The server should support SMPTE ST 2110 single raster UHD
- 8.14. It should be able to deliver media while recording to NAS
- 8.15. Build playlists with full transitions, audio, sound effects, and stinger animations. Intuitive asset management, fast and easy clipping and tagging system. Import and place custom logo branding and graphics. Should be able to provide sport related graphics like, time, count, etc. Support for MIDI, GPI, AMP protocol and many more.
- 8.16. Edit media files with different resolutions. Support for the latest file formats — Sony XAVC (Intra/ Long GOP)/XAVC S/XDCAM, Panasonic AVC-Ultra/AVC-Intra/ P2 and Canon XF-AVC/XF-HEVC (import only), Sony RAW, Canon Cinema RAW/Cinema RAW Light (import only), RED RAW (import only), ProRes, DNxHD/HR (option), still image RAW and more. Superior 4K HDR workflow, including support for Black-magic Design/AJA hardware (preview only) Export in 4K HDR for broadcasting and web distribution
- 8.17. Should support primary & 3-way color correction
- 8.18. High quality slow-motion (optical flow and advanced matching)
- 8.19. Should support Various synthetic video filters such as masks and keyers
- 8.20. All the workstation and hardware should be 19-inch rack mountable.

## 9. 4WD VAN

- 9.1. The size of the VAN should be of Toyota coaster bus or bigger with 4WD having good clearance from the ground to ply on Bhutan's mountainous road. The van should be equipped with all necessary equipment and accessories.
- 9.2. The van should have space for a production director, a vision mixer (online editor), an audio engineer, a slow-motion operator, etc. It must also have chairs for all the operators.
- 9.3. The VAN should be equipped with an appropriate DG set that is dust-, smoke-, and sound-proof. When the city's power goes out or arrives, it should automatically start and stop. Equipment in the VAN shouldn't be impacted by DG's noise or vibration, which should be kept to a minimum. Both the IN and OUT ducts for the generator should be included.
- 9.4. Diesel Generator should be 10KVA or more depending on the equipment power rating and design.
- 9.5. Provide extra power sockets to charge the batteries of the cameras and other important equipment.
- 9.6. The van should be equipped with the stabilizer jacks to support the van's and equipment's weight.
- 9.7. Install appropriate winch in front of the Van.
- 9.8. Van should have a compartment to keep the tripods and other necessary OB equipment.
- 9.9. The van should be of diesel engine; however, equipment housed in the van should operate from city power supply through power stabilizer.





- 9.10. A suitable rated and sound-less AC and heating system should be installed in the van.
- 9.11. The van should be equipped with Room lamp, search lamp, Rack lamp and Spot lamp for a good working environment. All lamps should be LED.
- 9.12. Provide CCTV at the rear of the van with a 7-inch monitor screen at the diver's cabin.
- 9.13. Equip a fire extinguisher with appropriate mounting kit.
- 9.14. The van should be equipped with six motorized cable drums for CCU cable, Multi cable drum, Electric power cable and with cable drum speed controller to roll and unroll the cable drum (automatically controller).
- 9.15. The van should be equipped with a side folding step, Rear bumper, roof stage, rack rear maintenance door, control Desk maintenance door, interior floor finish (mate & carpet).
- 9.16. All the video and audio I/Os, CCU connections should be connected to a patch bay placed at the lower part of the van and should have a flip open cover for the patch bay.
- 9.17. The indoor partition should be sound proof and also must have a ventilator for Rack, Desk and equipment (automatic controller).
- 9.18. Provide appropriate equipment desk and chairs.
- 9.19. The van must have a short power cable with cam lock, Assist battery, ground wire, and ground rod.
- 9.20. Connect the commercial Ku band receiver to the external patch bay and the roof, respectively. For monitoring purposes, connect the receiver's output to the router. Receiver and dish will be provided by BBS.
- 9.21. All the equipment should be attached to a 19-inch rack and all the camera, video out, audio out, video in and audio in should be connected to external patch bay attached to OB van.
- 9.22. The above generic requirement is not limited to and may subject to changes as per proposed solution design and workflow.

## **LOT B: Archiving and MAM System**

The digital archiving system should be capable of archiving both the TV and radio programme files such as videos, audios, images, and any other multimedia files. It should have a deep archiving system as well as an online system. BBS currently uses AVECO automation and an Omneon/Harmonic playout system for both TV channels; hence, the AVECO MAM (Media Asset Management) system for digital archiving will be preferable. However, if alternative solutions are more cost-effective and efficient, we would welcome them. The archive should also be able to connect with the new Radio Automation System.

The complete Digital Archiving Solution should be able to meet following general conditions or requirements:

### **1. Archive System**

- 1.1. Archive systems should be from a well-known brand and the most recent technology that is widely used in the media industry.
- 1.2. Should provide a hybrid archive system that includes both hard drives and optical drives.
- 1.3. A minimum of 200TB of usable HD storage and a 400TB optical drive library should be provided. In addition, you should provide high-speed hard drives that can be hot-swapped.
- 1.4. Such as quick and deep archives should be available. Quick archive files should be stored on a hard disk, whereas deep archive files should be sent to an optical drive either automatically or manually.
- 1.5. Archive should have capability to write the full file form rather than splitting the file into multiple media optical drives.
- 1.6. If data is accidentally erased, mechanisms for data recovery (DR) or a temporary recycle bin should be available.



- 1.7. For disaster recovery purposes it shall be possible to remove any individual drive and recover media files using an external computer or deck without special software.
  - 1.8. Storage should be rack mountable, with dual redundant hot plug power supplies
  - 1.9. The Archive shall be fully redundant with no single point of failure in the storage media. All power supplies and disks must be hot swappable without loss of service.
  - 1.10. The archive shall be based on a modular architecture and the configuration must be capable of expansion by adding modules as required. It should be easy, intuitive, easily upgradeable and scalable in nature.
  - 1.11. The Archive must support mixed optical drive capacities within the same array.
  - 1.12. The Archive shall support individually removable optical drives for shelf storage, and media transportation. Data shall be written as complete non-segmented files on the drive and replicated for protection against individual drive failure.
  - 1.13. Prospective bidders should specify the expected operational disk and drive life. Disk/drive life and replacement cost will be taken into account as part of the total lifetime cost of ownership of the Archive.
  - 1.14. The system should include functionalities for migrating to remote locations, Cloud-based archive systems and OTT solutions should be supported if required in future.
  - 1.15. Should interoperate with other equipment and technology in future.
  - 1.16. Should provide facilities for ingesting data from various sources such as an external drive, a shared drive, live feeds and any other sources.
  - 1.17. The above generic requirements are not limited to and may be subject to changes as per proposed solution design and workflow.
2. **MAM (Media Asset Management) or Archiving Software:** MAM or Archiving software must at least have following features:
- 2.1 BBS uses the Aveco automation control system for both TV channels (TV1 and TV2). The use of Aveco Gemini MAM (Media Asset Management) for the digital archiving system would provide us with additional benefits because it can be easily integrated with the existing automation system. However, we would also like to receive alternative proposals if they are more cost effective, efficient, and capable of integrating with the Aveco automation control system.
  - 2.2 Harmonic (Mediagrid) is used as the video server for TV1 and TV2. The system should be able to communicate with these servers. BBS uses Mac-based non-linear editing (NLE) sets, and the system should be able to connect at least 20 NLEs from TV1 and TV2. It should be able to connect more clients in the future.
  - 2.3 The media management software should be from a well-known brand and widely used in the media industry.
  - 2.4 It should have a proper metadata system, and the metadata should be customizable based on the needs. Moreover, it should also support local fonts (Dzongkha fonts)
  - 2.5 HSM (Hierarchical System Management) or different user roles should be offered, and it should handle an unlimited number of users. All-important actions should be privilege-based, with an audit trail for all user actions.
  - 2.6 The security of the Archive shall be based on keeping at least two replicas of every media file by default with the option to keep a third replica of strategically important content, or a single replica where the storage is deemed to be a backup volume, on a user selectable basis.



- 2.7 It should be archived using standard formats such as TAR and others. Different file formats for videos, audios, photos, and other media should be accepted.
- 2.8 Software should provide a low res proxy file for all the archived media along with thumbnail and storyboard view.
- 2.9 Should be accessible over Mac as well as on Windows operating system clients either using browser or desktop clients.
- 2.10 Media Management software should directly manage the optical drives without any additional software.
- 2.11 Software should be one-time or lifetime licensed.

### LOT 3: Radio Automation System

BBS has two radio stations: BBS radio-I transmits in English, Lhotsham, and Tshangla, while BBS radio-II broadcasts exclusively in Dzongkha, the national language. Both stations broadcast 24 hours a day, seven days a week. There is one music studio for live/recorded programming and two recording studios. The radio automation for both channels should be server-based for playout, ingesting the programs, and connecting to the editing terminals for both channels. Radio Channels I and II will each comprise ten editing stations.

## 1. General Specification

- 1.1. The complete Radio Automation should be from a well-known brand and the most recent technology that is widely used in the media industry or Radio stations.
- 1.2. Radio Automation should be a centralized database automation system.
- 1.3. The database server should be a 1+1 backup system for redundancy.
- 1.4. At least 30TB of usable storage space should be available. In addition, you should provide high-speed hard drives that can be hot-swapped.
- 1.5. If data is accidentally erased, mechanisms for data recovery (DR) or a temporary recycle bin should be available.
- 1.6. Storage should be rack mountable, with dual redundant hot plug power supplies.
- 1.7. It should be simple and easy to use, as well as easily upgradeable and scalable in future.
- 1.8. The system should include functionalities for migrating to remote locations, Cloud-based archive systems and OTT solutions should be supported if required in future.
- 1.9. One Radio Jockey should be able to perform both Playout and Ingest features from the same terminal.
- 1.10. Should provide 20 audio editing sets and connect to the automation server. There should be 10 editing sets for channel-1, which should be set up on the first floor of the radio building, and another 10 editing sets for channel-2, which should be set up on the second floor of the radio building.
- 1.11. The system should include an audio streaming solution that can be integrated into the website. Moreover, Radio CH1 and CH2 should have separate audio streams.
- 1.12. BBS uses the Octopus NRCS (Newsroom Control System) for news editing with TV automation. Your system should be able to integrate with Octopus NRCS or provide other alternatives so that radio news editors can easily edit and read news from a centralized server for broadcast.
- 1.13. Should interoperate with other equipment and technology in future.
- 1.14. In addition to radio automation, the system should be able to stream radio on TV using one external video camera in each channel. For each radio channel, provide the appropriate servers and accessories. It should be able to stream on Youtube, Facebook and any other social media streaming platform. Optionally, include the quotation for this solution.
- 1.15. The above generic requirements are not limited to and may subject to changes as per proposed solution design and workflow.

2. **Automation Software (Playout and Ingest application):** Radio Automation software must at least have following features
- 2.1. It should be extensively used in several national and international Radio and TV stations
  - 2.2. It should have extensive functionality, features and processes as required by large Radio Stations.





- 2.3. Should be an intuitive and easy to implement, maintain and use system with a user-friendly graphical user interface. Should be flexible to set up, highly configurable and customizable with user-defined parameters. Should be able to support local fonts (Dzongkha, Nepali, Hindi fonts)
- 2.4. All the schedules should be frame accurate and automatically generate the broadcast time for the schedule.
- 2.5. The system should provide real-time operational and management information reports.
- 2.6. The system should provide a high level of security by defining different levels of users and their Roles /rights at module level, component level, and specific case level.
- 2.7. System should have its own MAM (Media Asset Management) and archive features.
- 2.8. Software should have unlimited users licensed or additional license for future use.
- 2.9. Both playout and ingest have to be simple whereby one Radio Jockey can self-operate independently.
- 2.10. If data is accidentally erased, mechanisms for data recovery (DR) or a temporary recycle bin should be available.
- 2.11. A system should be easy and intuitive, easily upgradeable in future.
- 2.12. Mention the cost of the spare for every component such as hard disk, optical drive, RAID controller, PSU, etc.
- 2.13. All the glues/peripheral equipment should be included in the proposal.
- 2.14. Prepare a detailed implementation plan with installation/implementation documents (with all screenshots).
- 2.15. Prepare manual or documentation for an archive system that has to perform regularly in the future.

### 3. Radio Studio

- 3.1. Both the studio Audio console should equip with minimum of 5 microphones inputs, 8 balanced stereo inputs, 7 balanced stereo outputs, 1+4 Telco interface with GPIO, Bluetooth audio interface, 2 USB audio interface 2 digitals in/Out (AES EBU) or MADI/Dante as per the audio solution.
- 3.2. InBuilt display panels for configuration and VU meter display for each channel and PGM and PFL. HDMI Out - Full HD connection for mixer monitor [Selectable lay out for Audio input source level, 4+1 BUS output level, A/B sources, Display ON-Air sources, Microphone On timer (control room & studio), Large Clock, Audio output level (Loudspeakers & Headphones)].
  - 3.2.1. band fully parametric EQ, Dyn Processor on microphone inputs, 4+1 busses (PGM, SUB, Aux1, Aux2, PFL), GPS clock input, Talk back, with Redundant PSU.
- 3.3. Mixer should be able to connect social media apps.
- 3.4. Supply one Multi-colored RGB LEDs each for two studios, which is operated through an audio console. Operating mode: blink, blink 2-colors, and pulse always on, with mounting kit: wall and ceiling. Just 1 cable GPIs for remote control. Easy setting for color and switching mode. Customizable wording with Text and graphics (logos, icons, symbols and ideograms). Refer table for more detail.
- 3.5. Four Microphones and four headphones in each studio. Shure SM7B/Equivalent is preferred for the microphone and sennheiser/equivalent for headphones.
- 3.6. Four microphone cough switches for guests and presenters in each studio. It should have a Headphone amplifier with two 6.3mm outputs, On-Air Light, Microphone (On / off / Cough) or enable Talk back to the console.
- 3.7. Microphones arms should be of mounting system with on-air indicator. The arms should be equivalent in quality, structure and show to the yellowtec M!ka brand. It should also mount two display monitors for the automation client and back up work station.
- 3.8. Appropriate speakers in the studio for monitoring as per the audio console configuration. Refer table for more detail.
- 3.9. Telephone hybrid for each studio with at least 4 telephone line inputs. Single audio Fader should control the audio of the 4 telephone lines.
- 3.10. Design and supply broadcast desk which can accommodate an Anchor/RJ, a news reader and 3 guests. The racks, console, patch bay, speakers, PCs, telephone hybrid, audio mounting plates, PDU should be appropriately placed so that it is easily accessible for troubleshooting and maintenance. It should be equipped with a 19" rack to mount the equipment.

### 4. Music Studio

- 4.1. Mixing console should have 24 motor faders, (24 channels + 1 master), 48 input mixing channels (40 mono + 2 stereo + 2 return). 20 Aux (8 mono + 6 stereo) + stereo + Sub buses. 34x34 digital record and playback via USB + 2x2 USB storage device. Include Dante and stage box having 16 inputs and 8 outputs.



- 4.2. Professional condenser microphones for voice recording, drama recording and song recordings with frequency response 50- 20,000Hz. Provide Professional adjustable tablet holders that can accommodate a tablet, music sheets etc. Mic Isolation Shield, Pop Filter, High density absorbent foam to filter vocal for each microphone.
- 4.3. Provide at least 6 instrument dynamic microphones for delivering clean, accurate sound for various music instruments like Drums, flutes, Guitar etc. with a wide variety of mountings and position of ingenious mounting options, like clamps and clips.
- 4.4. 8 headphones that provide studio-quality audio performance with ANC (Active Noise Canceling). 8 headphone amplifiers and stands designed for musicians and performers for mobility without compromising audio quality.
- 4.5. 4 active speakers for control room and studio with clean overall sound, smooth high end, and a wide sweet spot sound for sound engineer and performers.  
 LF Driver: 8", HF Driver: 1" (25 mm) silk dome.  
 Frequency Response: 30Hz - 20 kHz,  
 Crossover Frequency: RMS 85 Watts.  
 Input analog 3 pole XLR, RCA, TRS jack. (@ 1 meter):4100 dB,  
 Input Impedance: 10 KOhms
- 4.6. Include Audio recorder Ethernet Audio Network Recorder/Player, which has Ethernet Audio network, 24-bit audio, WAV file format. Multiple channel recording. Provide software to record the music and programs. There need to be links for audio to and from the studio computers for playout and recordings.
- 4.7. Use patch to connect in between the equipment for easy troubleshooting and maintenance. Provide appropriate racks and PDUs for the equipment. Cat6 network cable and connectors, Audio cables and connectors; XLR male and female, RCA, TRS jack, Audio Patch Bay.
- 4.8. Design and supply broadcast desk which can be controlled by a single operator, Soundman. The console, speakers, PCs, and PDUs should be appropriately placed and should be easy for troubleshooting and maintenance.
- 4.9. Include Professional instrument like Piano, Electric Guitar (lead and bass), and Acoustic Guitar

For detail refer following table:

| Sl.No | Item                        | Location  | Qty | Remarks   |
|-------|-----------------------------|---|-----|---|
| 1     | Playout and Ingest terminal | Radio Studio-1(1 nos),<br>Radio Studio-2(1 nos)                       | 2   | <ul style="list-style-type: none"> <li>Each terminal should have both playout and ingest functions.</li> <li>One Radio Jockey should be able to function independently.</li> <li>Should have 24" monitor with HDMI or DP interface</li> </ul>   |
| 2     | Recording Ingest terminal   | Recording Studio-1 (1nos),<br>Recording Studio-2(1 nos)               | 2   | <ul style="list-style-type: none"> <li>Should have Ingest facility</li> <li>Able to access and ingest files to server through web browser or desktop clients</li> <li>Should provide 24" monitor with HDMI or DP interface</li> </ul>   |
| 3     | Archive Ingest terminal     | Archive   | 2   | <ul style="list-style-type: none"> <li>Each terminal should have an ingest facility.</li> <li>Able to access and ingest files to server through web browser or desktop clients</li> <li>Should be granted all privileges where an archivist is required.</li> <li>Should provide 24" monitor with HDMI or DP interface</li> </ul> |
| 4     | Other Ingest terminal       | Radio Studio-1(1 nos), Radio Studio-2 (1 nos)<br>Music Studio (2 nos) | 4   | <ul style="list-style-type: none"> <li>Each terminal should have an ingest facility.</li> <li>Able to access and ingest files to server through web browser or desktop clients</li> </ul>   |
| 5     | Audio Editing Sets          |   | 20  | <ul style="list-style-type: none"> <li>Each terminal should have an ingest facility.</li> <li>Able to access and ingest files to server through web browser or desktop clients</li> </ul>   |



## SOFTWARE

1. All software supplied from different vendors must be modular, compatible, expandable and proven to be bug-free. Only software that has a proven track record to work well in a similar environment should be offered. BBSC reserves the right to reject any software that is not proven or does not have a proven track record.
2. All the software supplied should be in USB drive or any other media and should be licensed in the name of BBSC. The successful bidder will therefore have to provide licensed certificates of major software including router, communication system, teleprompter, etc. from the OEM.
3. In case of software damage due to whatever reasons, the tenderer will repair it or replace the damaged software free of cost during the warranty period.
4. The bidder will also be required to customize the software to suit BBS's system requirements during installation as well as during warranty period.
5. All software licenses should be original and should come with manufacturers' guarantee.
6. BBS must be notified of any software upgrades or modifications to the system or software during the warranty period and even thereafter. The firm will have to provide all the upgraded software to BBS free of charge during the warranty period. The firm will have to give this undertaking with the tender and will have to spell out the methodology of automatically providing the information of any upgrades. The bidder should therefore provide the certificate to this effect from the OEMs

### System drawings

The bidders must submit the detailed coloured schematic drawings of all the equipment including cable schedule of the offered system. The detailed drawing should include the connection with the relevant existing system. The bidders will be disqualified if the diagrams do not have the enough details to show an understanding of the whole system. The details of the video server and automation are given in the Annexure.

Provide separate drawings for Video, Audio, sync/reference, Network, communication, power, etc. The bidders are required to provide the coloured schematic detailed drawings of the offered system. Editable soft copy to be submitted. Prefer Visio/AutoCAD format.

**Furniture:** The bidders must provide the final design and drawing of the proposed technical furniture based on the room's layout and based on the size of the equipment. The furniture design should take into account all the equipment based on the room/van that will house it. The design of the technical furniture should include the RU 19 mounting panels. The design of the technical furniture should be done based on the size of the room/van. The details of the rooms are as follows:

**Power supply:** The power supply in Bhutan is 230 volts between the phase to neutral and 50 Hz. Therefore, all the equipment supplied to BBS should be 230 volts, 50 Hz power supply. The bidders should submit the total power consumption of all the broadcast equipment according to the design. The bidder should supply the appropriate number of 19" RU PDUs along with the matching power cords for the equipment in each room. The bidders shall provide training to BBS staff on all the equipment installed. The training should be conducted for a period of two weeks to one month so that BBS can handle the operation and maintenance.

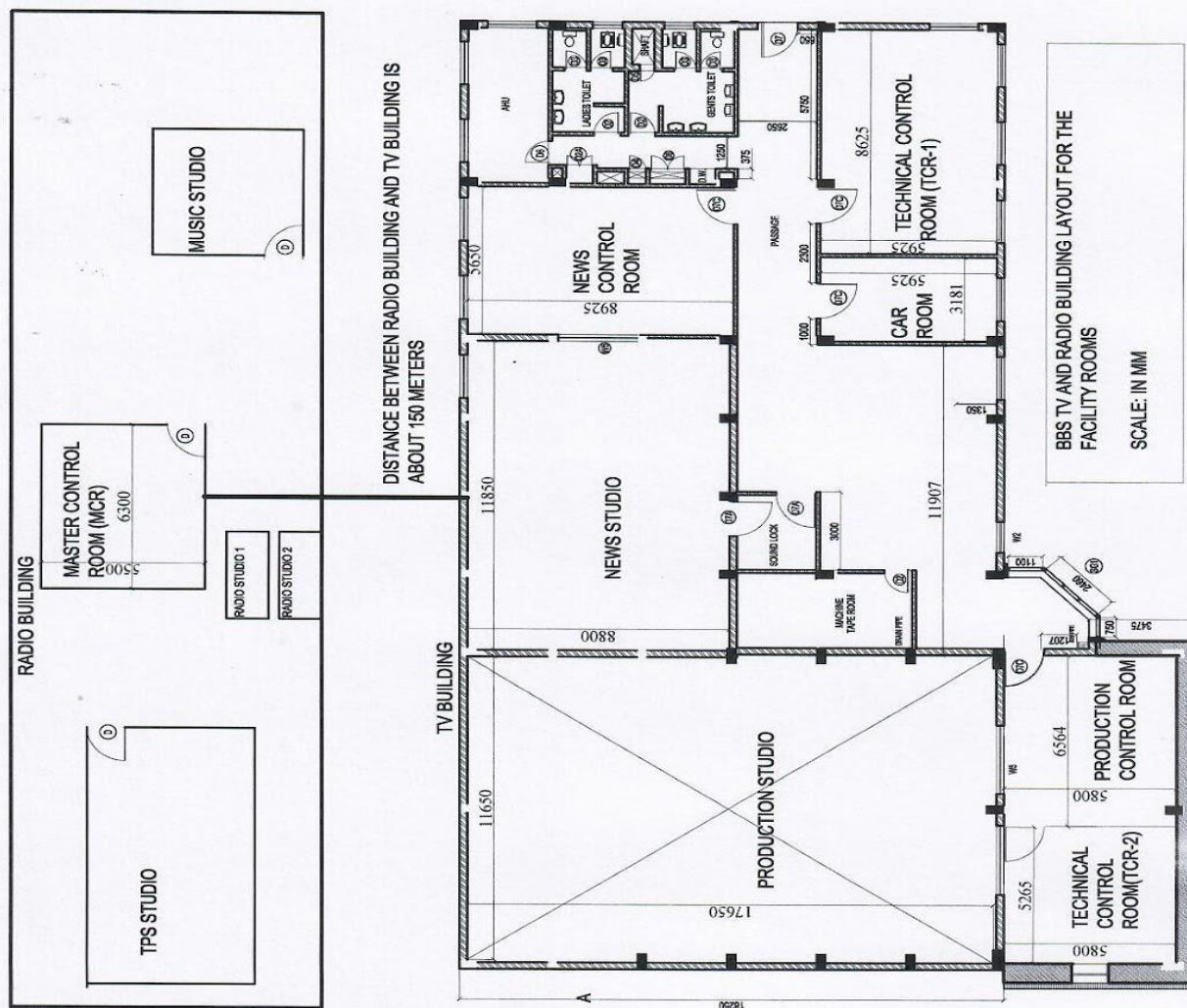
### Evaluation Criteria

The following criteria will be used to evaluate response.

1. Technical capability
2. Design and drawing
3. System capability
4. Functionality
5. Vendor support, responsiveness and follow-up
6. Ease of use
7. Flexibility and ease of product implementation
8. Implementation plan and support
9. Pricing
10. Timely and complete response to tender
11. Vendor client references
12. Results of requested demonstrations and presentations

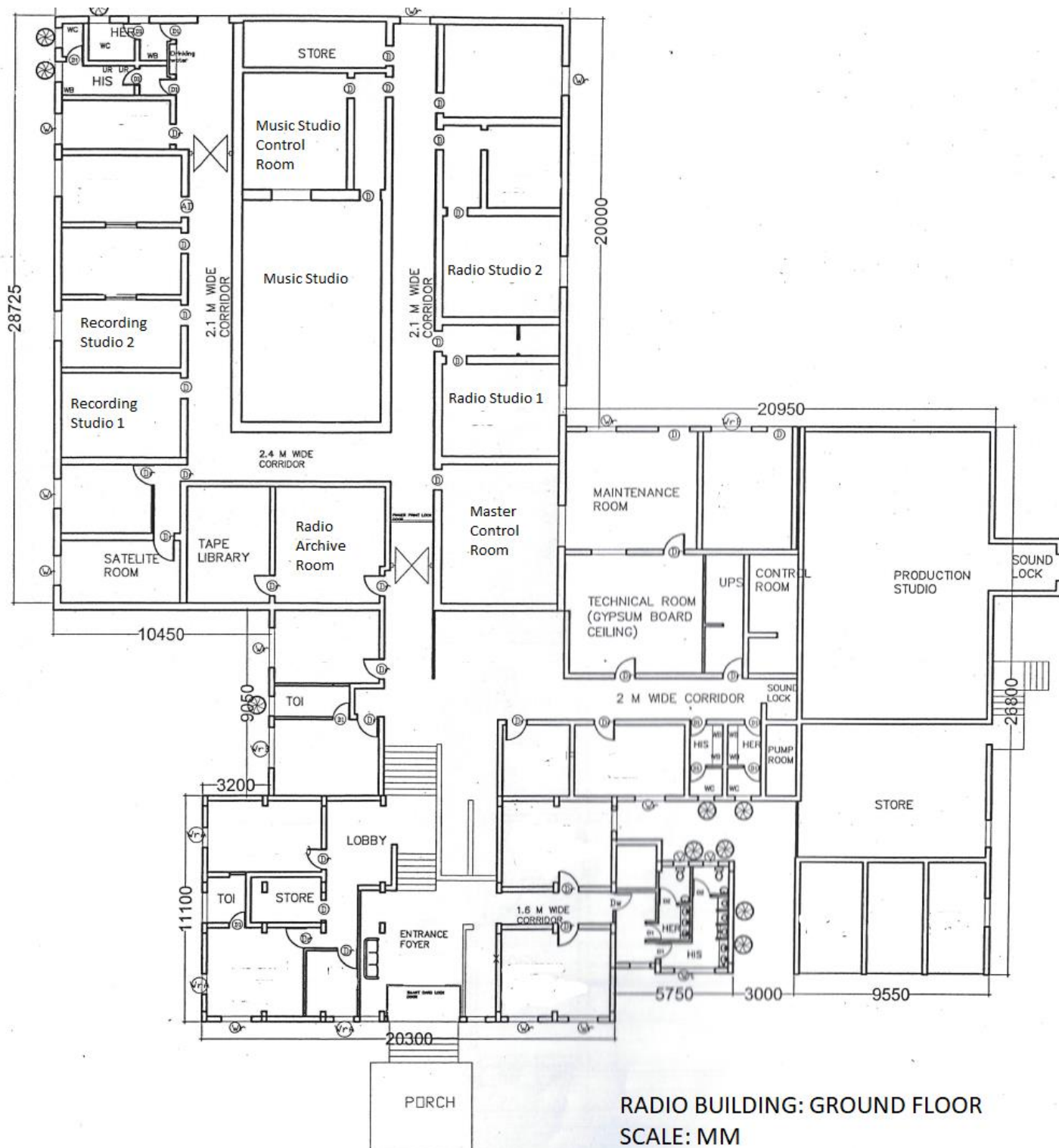


## Annexure I

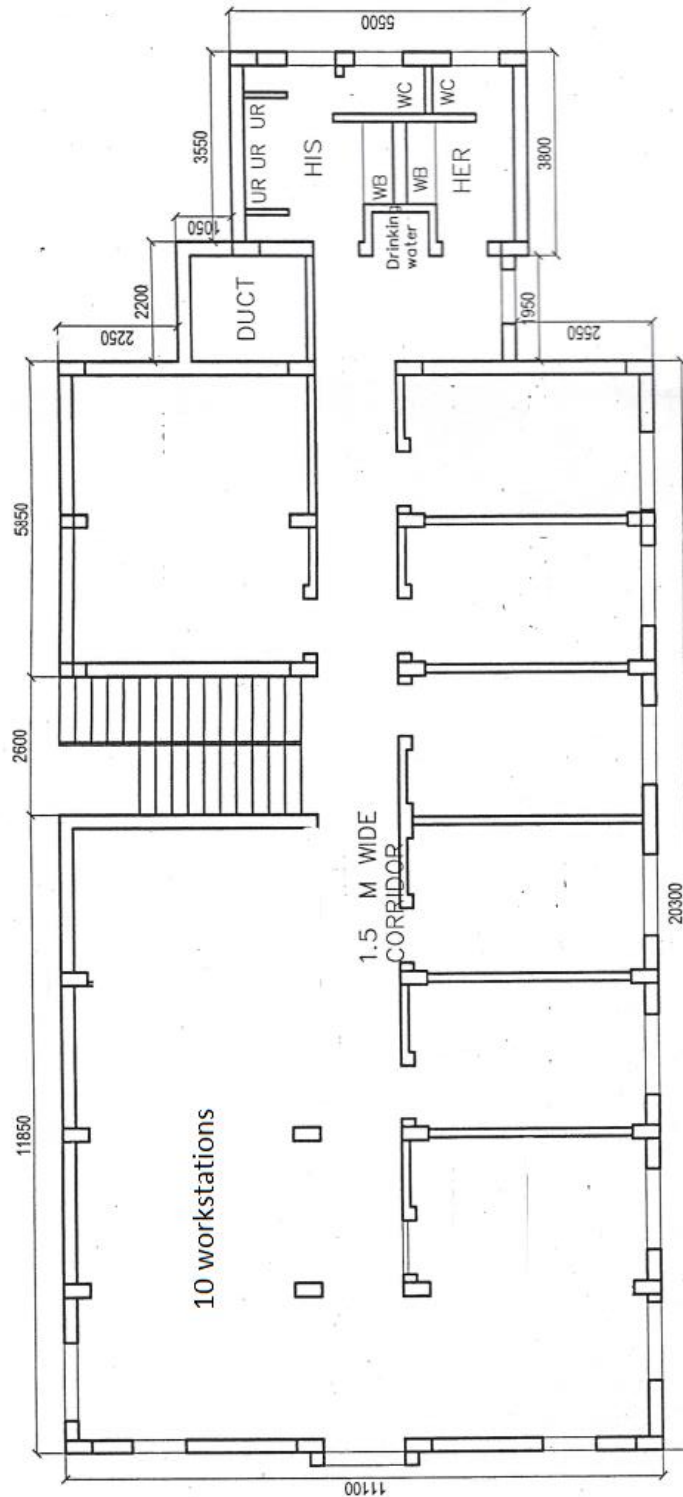




## Annexure II



# Annexure III



RADIO BUILDING: FIRST FLOOR  
SCALE: MM





## Annexure V

### Aveco System architecture

The structure of the present system is very simple, just one mirrored control server called BackOffice (BO) with four NUE (New User Experience) clients connected to it. Please note that new changeover unit has RS422 ports only, meaning that if there are devices to be integrated via RS232 then convertor to be used for.

#### 1. Mirrored control servers

A mirroring server is a fully equipped control server. When this server is on, the automation software is on as well. All playlist data is replicated in real time. Database is replicated once every three minutes, so only the data from the last three minutes may be missing in the case of a fault.

A serial changeover unit connected in between automation servers is used for switching of the control cables from the main server to mirror server.

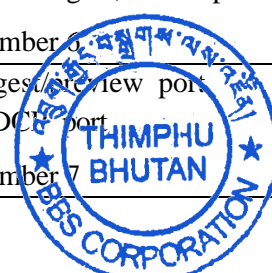
Switching to the backup Astra server is automatic, based on a heartbeat provided by the main server and listened to by the backup server. If the heartbeat is missing for 5 frames the backup commands the switchover unit to switch to backup, and takes over the control.

The BackOffice (BO) operates all services, like internal database, media management, ingest as well as playout. Please note that ingest is not mirrored. The mirror solution focuses only on keeping the station on air.

#### 2. Integrated systems

This is the list of equipment and systems interfaced to automation. Customer and supplier agreed on control of following equipment: All ports available on changeover unit are RS422.

| Item                      | ID     | QTY | SRV | ILC<br>port | GPI | IP | Description                                     |
|---------------------------|--------|-----|-----|-------------|-----|----|---|
| SRV1 port 1<br>(HARMONIC) | PLY-1A | 1   |     | 0           |     |    | PCR playout port,<br>VDCP port<br>number 1      |
| SRV1 port 2<br>(HARMONIC) | PLY-1B | 1   |     | 1           |     |    | PCR playout port, VDCP<br>port<br>number 2      |
| SRV1 port 3<br>(HARMONIC) | PLY-1C | 1   |     | 2           |     |    | BBS main playout port,<br>VDCP<br>port number 3 |
| SRV1 port 4<br>(HARMONIC) | PLY-1D | 1   |     | 3           |     |    | BBS back playout port,<br>VDCP<br>port number 4 |
| SRV2 port 1<br>(HARMONIC) | ING-1E | 1   |     | 15          |     |    | RAW ingest, VDCP port<br>number 5               |
| SRV2 port 2<br>(HARMONIC) | ING-1F | 1   |     | 16          |     |    | RAW ingest, VDCP port<br>number 6               |
| SRV2 port 3<br>(HARMONIC) | ING-1G | 1   |     | 17          |     |    | Ingest/review port<br>VDCP port<br>number 7     |





|                                 |               |   |  |    |  |   |
|---------------------------------|---------------|---|--|----|--|---|
| SRV2 port 4<br>(HARMONIC)       | ING-1H        | 1 |  | 18 |  | Ingest/preview port,<br>VDCP port<br>number 8                       |
| SRV3 port 1<br>(HARMONIC - FS1) | PLY-2A        | 1 |  | 5  |  | MCR playout MAIN for<br>channel<br>ENT, VDCP port number<br>21      |
| SRV3 port 2<br>(HARMONIC - FS1) | ING-2E        | 1 |  | 6  |  | Ingest/preview<br>VDCP port number 22                               |
| SRV3 port 3<br>(HARMONIC - FS1) | ING-2F        | 1 |  | 7  |  | VDCP<br>number 24   |
| SRV3 port 4<br>(HARMONIC - FS1) | PLY-2I        | 1 |  | 8  |  | Ingest/preview VDCP port<br>number 23                               |
| SRV4 port 1<br>(HARMONIC - FS2) | PLY-2B        | 1 |  | 19 |  | MCR playout port BACK<br>for channel ENT, VDCP<br>port number<br>25 |
| SRV4 port 2<br>(HARMONIC - FS2) | ING-2G        | 1 |  | 20 |  | Ingest/preview VDCP port<br>number 26                               |
| SRV4 port 3<br>(HARMONIC - FS2) | ING-2H        | 1 |  | 21 |  | Ingest/preview VDCP port<br>number 28                               |
| SONY compatible<br>VTR          | VTR1          | 1 |  | 22 |  | Dedicated for Ingest<br>purpose                                     |
| SONY compatible<br>VTR          | VTR2          | 1 |  | 23 |  | Dedicated for Ingest<br>purpose                                     |
| SONY compatible<br>VTR          | VTR3          | 1 |  | 24 |  | Dedicated for Ingest<br>purpose                                     |
| SONY<br>compatible<br>VTR       | VTR4          | 1 |  | 25 |  | Dedicated for Ingest<br>purpose                                     |
| SONY compatible<br>VTR          | BBS2-<br>VTR1 | 1 |  | 31 |  | Dedicated for Ingest<br>purpose                                     |
| SONY compatible<br>VTR          | BBS2-<br>VTR2 | 1 |  | 32 |  | Dedicated for Ingest<br>purpose                                     |
| SONY compatible<br>VTR          | BBS2-<br>VTR3 | 1 |  | 33 |  | Dedicated for<br>Ingest purpose                                     |
| SONY compatible<br>VTR          | BBS2-<br>VTR4 | 1 |  | 34 |  | Dedicated for Ingest<br>purpose                                     |
| Router                          | AUT_R<br>TR   | 1 |  |    |  | Network router 32x32  |
| Router                          | PROD_<br>RTR  | 1 |  |    |  | Network router 32x32  |



|                           |                             |   |  |  |  |   |
|---------------------------|-----------------------------|---|--|--|--|---|
| Router                    | BBS2_RTR                    | 1 |  |  |  | Network router 64x64  |
| Router                    | BKP_RTR                     | 1 |  |  |  | Network router 16x2   |
| SRV1 media management     | SRV1                        | 1 |  |  |  | IP od media director +IP of omneon media manager                        |
| SRV2 media Management     | SRV2                        | 1 |  |  |  | IP od media director + IP of omneon media manager                       |
| SRV3 media Management     | SRV3                        | 1 |  |  |  | IP od media director + IP of omneon media manager                       |
| SRV4 media Management     | SRV4                        | 1 |  |  |  | IP od media director + IP of omneon media manager                       |
| Mediagrid                 | MG_RAW<br>MG_PLAY<br>MG_NWS | 1 |  |  | 172.16.1.8-11/24                             | NAS for archiving and retrieving the clips                              |
| NRCS                      | Octopus                     | 2 |  |  | 192.168.5.1 /24 main<br>192.168.5.2 /24 back | Octopus news room system  |
| Traffic PC – asrun Export | ASRUN<br>LOG<br>_PC         | 1 |  |  | 192.168.6.12/24                              | Export of asruns for TV channel, all to one shared folder<br>As_run_log |
| LTC                       |                             | 1 |  |  |  | Time server to keep automation synchronized with real time              |
| AV server                 | AV<br>Server                | 1 |  |  | ???  | AV server for clip detection (clip detection)                           |

ID corresponds to “Device name”. ID of VTR or video server channel has to be same as router input/output when connected to any of the routers. All video server ports will be controlled via VDCP control protocol, VTR will be controlled via SONY. There are three independent HARMONIC standalone servers/storages. Each server is used for a different purpose; each has its own clips and database entry in automation database/content application.

Video server ports used for playout from playlist are controlled in parallel because of redundancy, there is “virtual name” defined for pairs of video server ports controlled in parallel.



Table below describes how the ports will be controlled.

| Video server parallel control                             |                     |                        |                        |                                     |
|---|---------------------|------------------------|------------------------|-------------------------------------|
| Virtual channel name<br>(users will see this name in GUI) | Virtual device Name | Main video server Port | Back video server port | Description                         |
| PLY-MCR   | VS                  | PLY-1C                 | PLY-1D                 | BBS channel – mirrored playout port |
| PLY-BBS2  | FS                  | PLY-2A                 | PLY-2B                 | ENT channel mirrored playout port   |

### 3. Delays

Automation does not compensate for any delay between audio & video signals (automation expects that those are always in SYNC). Automation requires the delay of signals to be static all the time for all the signals in ingest path as well as in playout signal path. This means that all the devices used in ingest or playout path needs to produce constant signal delay, and in case the device causes some delay (up/down converters etc.), it must stay in signal path (ingest or playout) permanently.

### 4. TV channels

There are two TV channels.

| TV channels |  |
|-------------|--|
| TV channel  | Description  |
| BBS         | Main channel - mirrored back-to-back playout (PLY-1C, PLY-1D)          |
| ETN         | Entertainment channel - mirrored back-to-back playout (PLY-2A, PLY-2B) |

### 5. Video standard

Video standard used in Bhutan is PAL, so also broadcasting will run in PAL, which means automation and all other devices to be configured to run in PAL.

### 6. Time zone

Automation controls the playout frame accurately and allows for fixed start time, meaning the start of the event at exact time. That's why system has to run in proper time zone: UTC + 6

Please note that it is very important to have automation synchronized with the master clock all the time, LTC preferred, NTP can be used as an option. LTC needs to be connected to both automation servers of course.

### 7. Language

Whole system will run in English, no national specific characters allowed.

Please note that clip ID, filenames should be without spaces, dots, doubled dots, question mark etc, means that [a-z][0-9]\_ are the supported characters only.



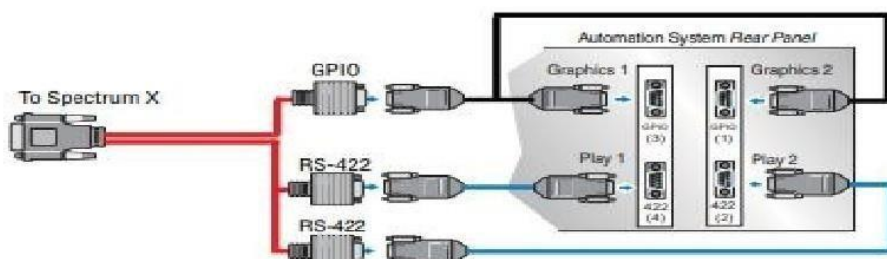
## Annexure VI

### Technical Harmonic/Omneon specification

|   |              |   |
|---|--------------|---|
| 1 |              | <p>Storage Redundancy: 3+1 RAID 4 (Single Parity) File Transfer: FTP, CIFS and AFP</p> <p>Network Redundancy: Network Failover supported on systems with dual I/O modules</p> <p>Media Wrappers: Quick Time Reference and self-contained MXF OP-1a and OP1-b</p> <p>Low Latency Wrapper for File Transfer while Ingest.</p> <p>UP, DOWN and CROSS CONVERSION: HD Capable per Channel. Audio Channel: up to 16 embedded audio channel per video Channel. Audio Format: Uncompressed 16-24- and 32-bit</p> <p>PCM at 48 Khz compressed audio</p>  |
| 2 | Media Center | <p>Back-to-back playback of clips of different formats• Simultaneous proxy creation during recording•</p> <p>Support for up to 16 channels of embedded audio per video clip• API-based audio track manipulation for multi-language applications•</p> <p>Edit-in-place for multiple Apple® Final Cut Pro® or Adobe® Premiere® Pro seats•</p> <p>Aspect ratio signaling to downstream equipment• Optional closed-caption and SCTE-104 file insertion•</p>   |
|   |              | Full VBI and VANC support   |
| 3 | Media Grid   | <p>Capacity (usable)48 TB to multiple peta bytes in a single file system Performance</p> <p>Bandwidth up to tens of GBps per system Scaling Linear Non-disruptive scaling by adding nodes RAID support RAID 4 or RAID 6 Operating System Support (with File System Driver) Windows MacOS Linux NAS Protocol</p> <p>SUPPORT FTP, CIFS and NFS via optional Content Bridge Network Interfaces10-Gb server interface with support for 10-, 40- and 100-Gb clients</p> <p>High Availability No single point of failure Redundant hot-swap controllers Hot-swap disk drives Hot-swap power supplies Redundant SAS fabric</p> <p>Online software upgrades Online firmware upgrades Replication for disaster recovery</p>  |
| 4 | Spectrum X   | <p>Video Format: SD /HD</p> <p>Video Codec for SD: MPEG-2 DV</p> <p>Video Codec for HD:MPEG-2, DV, XDCAMHD Video I/O SD/HD simulcast outputs on every channel SDI INPUT: up to Four SD /HD channel</p> <p>SDI OUTPUT: Up to Four SD / HD/4K</p> <p>Connectors: RS-422, AES, LTC and GPIO (multi-pin connector; available adapter cable) Two 1GE ports for connection to the Server, System Manager, file transfer or API control Automation Support: Clip Playback automation (Ethernet or RS422)</p> <p>Subtitle: Subtitle file insertion under VANC lines as OP47</p> <p>Storage Redundancy: 3+1 RAID 4 (Single Parity) File Transfer: FTP, CIFS and AFP</p> <p>Network Redundancy: Network Failover supported on systems with dual I/O modules</p> <p>Media Wrappers: Quick Time Reference and self-contained MXF OP-1a and OP1-b</p> <p>Low Latency Wrapper for File Transfer while Ingest.</p> <p>UP, DOWN and CROSS CONVERSION: HD Capable per Channel. Audio Channel: up to 16</p> <p>embedded audio channel per video Channel. Audio Format: Uncompressed 16-24- and 32-bit</p> |



Please find the RS 422 connection diagram for Automation and Spectrum Ports connector. All automation systems differ in their methods of interfacing with the Spectrum X. Spectrum X uses GPIO pin assignments or RS-422 to control graphics automation.



| Sl.No | Equipment  | Specification  |
|-------|------------|--|
| 1     | media deck | <p>Video Format: SD /HD</p> <p>Video Codec for SD: MPEG-2 DV</p> <p>Video Codec for HD:MPEG-2, DV, XDCAMHD Video I/O SD/HD simulcast outputs on every channel SDI INPUT: up to Four SD /HD channel<br/>SDI OUTPUT: Up to Four SD / HD</p> <p>Connectors: RS-422, Two 1 GE ports for File Transfer</p> <p>Automation Support: Clip Playback automation (Ethernet or RS422) Subtitle: Subtitle file insertion under VANC lines as OP47</p> |
|       |            | <p>PCM at 48 Khz compressed audio</p> <p>Graphics Formats PNG, JPG, TIFF, GIF, FLV, Targa, WEBM, MP4, with HTML5 or SWF</p>  |

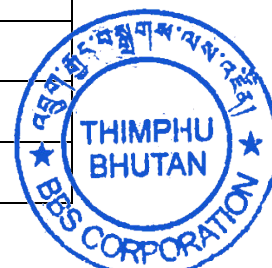
## HD format

Station format:1080/50p/3g,1080/50i Codec: XDCAM HD422  
Container format: MXF OP1a

### Technical standards for broadcasting system:

The following specification will be applied to all relevant equipment

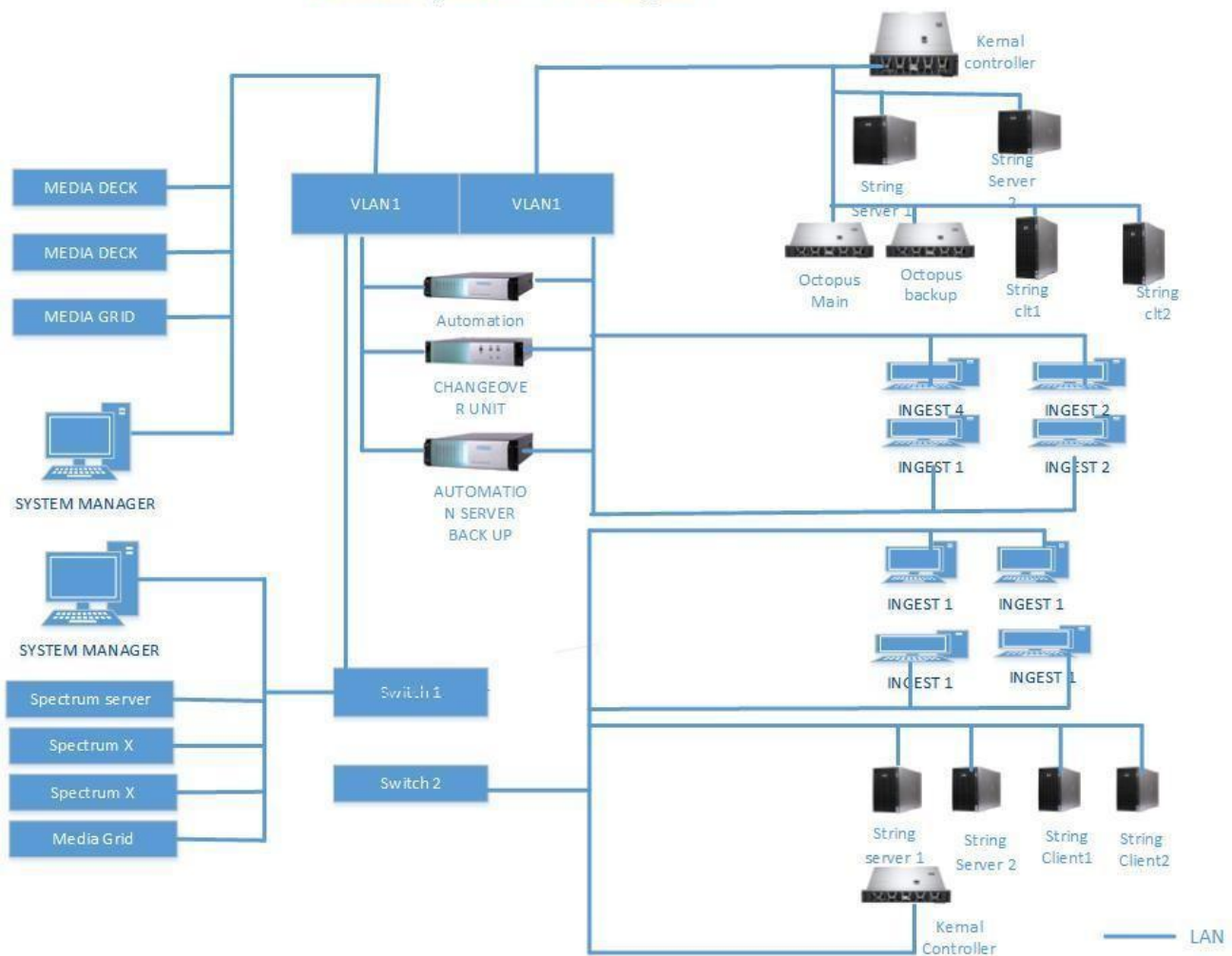
|   |               |
|---|---------------|
| A). Video signal Standards                            |               |
| Analog video input and output (Composite video)       | PAL 625, 50Hz |
| Video encoding (Studio encoding parameters) standards | ITU-R BT601   |
| SD-SDI video interface standard                       | SMPTE 259-C   |
| 3G-SDI video interface standard                       | SMPTE 424 M   |
| 12G-SDI video interface standard                      | SMPTE ST-2082 |
| B) Audio signal Standards                             |               |
| Digital Audio   | AES/EBU       |



|             |           |
|-------------|-----------|
| SD-embedded | SMPTE299  |
| HD-embedded | SMPTE-272 |

## Annexure VII

Automation general Network Diagram



#### 4. Drawings

These Bidding Documents include “*the following*” drawings.

| List of Drawings                      |  |  |
|---------------------------------------|--|--|
| Drawing No.                           | Drawing Name   | Purpose  |
| Technical Specification, Annexure I   | BBS TV and Radio building layout for the facility rooms                          | For audio, video and network design and drawing. |
| Technical Specification, Annexure II  | Radio ground floor building layout   | For audio, video and network design and drawing. |
| Technical Specification, Annexure III | Radio first floor building layout  | For audio, video and network design and drawing. |
| Technical Specification, Annexure IV  | Radio second floor building layout   | For audio, video and network design and drawing. |
| Technical Specification, Annexure VII | Existing TV Automation, playout, new automation, and GFX general network diagram | For audio, video and network design and drawing. |



## 5. Inspections and Tests

The following inspections and tests shall be performed:

- 1. The test and inspection for the broadcast equipment shall be conducted upon the supply, installation and commissioning of equipment to the final destination of the project i.e., Bhutan Broadcasting Service Corporation Limited, Head Office, Chubachu, Thimphu; Bhutan.*





# **PART 3**

## **CONTRACT**



## SECTION VII. GENERAL CONDITIONS OF CONTRACT

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## SECTION VII. GENERAL CONDITIONS OF CONTRACT

## 1. Definitions

The following words and expressions shall have the meanings hereby assigned to them:

- (a) **Award of Contract** means the decision of the Purchaser to enter into a Contract with the Supplier for supply and delivery of the specified Goods, including any Related Services.
- (b) **Bid** means an offer to supply Goods, including any Related Services, made in accordance with the terms and conditions set out in the Bidding Documents that preceded the placement of the Contract of which these GCC form a part. The term “tender” is synonymous with the term “Bid”.
- (c) **Bidder** means an eligible individual or legal entity that participated in the bidding process governed by the Bidding Documents that preceded the placement of the Contract of which these GCC form a part.
- (d) **Bidding Documents** means the set of Bidding Documents that preceded the placement of the Contract of which these GCC form a part, which were sold or issued by the Purchaser to potential Bidders, and in which the specifications, terms and conditions of the proposed procurement were prescribed.
- (e) **Contract Documents** means the documents listed in the Contract Agreement, including any amendments thereto.
- (f) **Contract Price** means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom as may be made pursuant to the Contract.
- (g) **Day** means calendar day.
- (h) **Delivery** means the transfer of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract Documents.
- (i) **GCC** means the General Conditions of Contract.
- (j) **Goods** means all of the commodities, raw materials, machinery and equipment, and/or other materials, including any object in solid, liquid or gaseous form that has an economic utility or value and which can be exchanged or traded, that the Supplier is required to supply to the Purchaser under the Contract.
- (k) The **Project Site**, where applicable, means the place named in the SCC.
- (l) **Purchaser** means the entity purchasing the Goods and Related Services, as specified in the SCC.
- (m) **Related Services** means the services incidental to the supply of the Goods, such as insurance, installation, training and initial maintenance and other obligations of the Supplier under the Contract.



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(n) **SCC** means the Special Conditions of Contract.

(o) **Subcontractor** means any natural person, private or government entity, or a combination thereof, including its legal successors and permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.

(p) **Supplier** means the natural person, private or government entity, or a combination of the above, whose Bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier.

**2. Contract Documents**

2.1. Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract Agreement shall be read as a whole.

**3. Fraud and Corruption**

If the Purchaser determines that the Supplier has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for or in executing the Contract then the Purchaser may, after giving fourteen (14) days notice to the Supplier, terminate the Supplier's employment under the Contract and cancel the Contract, and the provisions of GCC Clause 36 shall apply as if such termination has been made under GCC Sub-Clause 36.1.

Should any employee of the Supplier be determined to have engaged in corrupt, fraudulent, collusive, coercive or obstructive practice during the purchase of the Goods, then that employee shall be removed.

For the purposes of this Sub-Clause:

- (a) "corrupt practice"<sup>17</sup> is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value<sup>18</sup> to influence improperly the actions of another party;
- (b) "fraudulent practice"<sup>19</sup> 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;

17 "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes staff and employees of other organizations (including any institutions providing finance for the Goods) taking or reviewing procurement decisions.

18 "anything of value" includes, but is not limited to, any gift, loan, fee, commission, valuable security or other asset or interest in an asset; any office, employment or contract; any payment, discharge or liquidation of any loan, obligation or other liability whatsoever, whether in whole or in part; any other services, favour or advantage, including protection from any penalty or disability incurred or apprehended or any other action or proceeding of a disciplinary or penal nature, whether or not already instituted and including the exercise or the forbearance from the exercise of any right or any official power or duty.

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



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- (c) “collusive practice”<sup>20</sup> 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”<sup>21</sup> 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 Purchaser and/or any other relevant RgoB agency provided for under GCC Clause 11.

3.4. Any communications between the Supplier and the Purchaser related to matters of alleged fraud or corruption must be made in writing.

#### 4. Interpretation      If the context so requires it, singular means plural and vice versa.

##### Incoterms

- (a) Unless inconsistent with any provision of the Contract or otherwise specified in the SCC, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.
- (b) The terms EXW, CIF, CIP and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the SCC and published by the International Chamber of Commerce in Paris, France.

##### Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

##### Amendment

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

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20 “parties” refers to participants in the procurement process (including public officials) and an “improper purpose” includes attempting to establish bid prices at artificial, non competitive levels.

21 a “party” refers to a participant in the procurement process or contract execution.



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#### Non-waiver

- (a) Subject to GCC Sub-Clause 4.5 (b) below, no relaxation, forbearance, delay or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers or remedies under the Contract must be in writing, dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

#### Severability

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

### 5. Language

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

The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

### 6. Joint Venture, Consortium or Association

6.1. If the Supplier is a joint venture, consortium or association, all of the parties shall be jointly and severally liable to the Purchaser for the avourent of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium or association. The composition or the constitution of the joint venture, consortium or association shall not be altered without the prior consent of the Purchaser.

### 7. Eligibility

7.1. The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.



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7.2. All Goods and Related Services to be supplied under the Contract shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the Goods have been grown, mined, cultivated, produced, manufactured or processed; or through manufacture, processing or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

**8. Notices**

Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term “in writing” means communicated in written form, including electronic communication, with proof of receipt.

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

**9. Governing Law**

9.1. The Contract shall be governed by and interpreted in accordance with the laws of Bhutan.

**10. Settlement of Disputes**

The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute. No arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

Notwithstanding any reference to arbitration herein,

- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.





|   |  |
|---|--|
| <b>11. Inspections and Audit</b>        | 11.1. The Supplier shall permit the Purchaser and/or persons appointed by the Purchaser to inspect the Supplier's offices and/or the accounts and records of the Supplier and its Subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Purchaser if so required by the Purchaser. The Supplier's attention is drawn to GCC Clause 3, which provides, inter alia, that acts intended materially to impede the exercise of the inspection and audit rights provided for under this GCC Sub-Clause 11.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under ITB Sub-Clause 2.1 I of the Instructions to Bidders that preceded the placement of the Contract of which these GCC form a part). |
| <b>12. Scope of Supplies</b>            | <p>The Goods and Related Services to be supplied shall be as specified in the Schedule of Supply.</p> <p>Unless otherwise stipulated in the Contract, the Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery of the Goods and Completion of the Related Services as if such items were expressly mentioned in the Contract.</p>   |
| <b>13. Delivery and Documents</b>       | 13.1. Subject to GCC Sub-Clause 34.1, the delivery of the Goods and completion of the Related Services shall be in accordance with the delivery and completion requirements specified in the Schedule of Supply. The details of shipping and other documents to be furnished by the Supplier are specified in the SCC.   |
| <b>14. Supplier's Responsibilities</b>  | 14.1. The Supplier shall supply all the Goods and Related Services included in the Scope of Supplies in accordance with GCC Clause 12, and the delivery and completion requirements as per GCC Clause 13.  |
| <b>15. Purchaser's Responsibilities</b> | 15.1. Whenever the supply of Goods and Related Services requires that the Supplier obtain permits, approvals and/or import and other licenses or similar permissions from Bhutanese public authorities, the Purchaser shall, if so required by the Supplier, use its best efforts to assist the Supplier in complying with such requirements in a timely and expeditious manner, but without incurring any costs.  |
| <b>16. Contract Price</b>               | <p>The Contract Price shall be as specified in the Contract Agreement subject to any additions and adjustments thereto or deductions therefrom as may be made pursuant to the Contract.</p> <p>Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments authorized in the SCC.</p>  |





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**17. Terms of Payment**

The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the SCC.

The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon avourent of all the obligations stipulated in the Contract.

Payments shall be made promptly by the Purchaser, no later than thirty (30) days after the submission of verified invoice or request for payment by the Supplier, and the Purchaser has accepted it.

The currencies in which payments shall be made to the Supplier under this Contract shall be those in which the Bid Price is expressed.

In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the SCC, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the SCC, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.

**18. Taxes and Duties**

For Goods manufactured outside Bhutan the Supplier shall bear and pay all applicable taxes, stamp duties, licence fees and other similar levies imposed outside Bhutan.

For Goods manufactured within Bhutan the Supplier shall bear and promptly pay all applicable taxes, duties, licence fees and other similar levies incurred until delivery of the contracted Goods to the Purchaser.

If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in Bhutan the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

**19. Performance Security**

The Supplier shall, within fifteen (15) working days of the notification of contract award, provide a Performance Security for the due performance of the Contract in the amount and currency specified in the SCC.

The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.



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The Performance Security shall be denominated in the currency (ies) of the Contract or in a freely convertible currency acceptable to the Purchaser, shall be valid until the successful completion of the Supplier's performance obligations under the Contract, including any warranty obligations, and shall be in one of the forms stipulated by the Purchaser in the SCC.

The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the SCC,.

## **20. Copyright**

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

## **21. Confidential Information**

The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor(s) such documents, data and other information as it receives from the Purchaser to the extent required for the Subcontractor(s) to perform its/their work under the Contract, in which event the Supplier shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 21.

The Purchaser shall not use such documents, data and other information received from the Supplier for any purposes unrelated to the Contract. Similarly, the Supplier shall not use such documents, data and other information received from the Purchaser for any purpose other than the design, procurement or other work and services required for the performance of the Contract.

The obligation of a party under GCC Sub-Clauses 21.1 and 21.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier needs to share with the RgoB or other institutions participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;



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- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
  - (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

The above provisions of GCC Clause 21 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

The provisions of GCC Clause 21 shall survive completion or termination, for whatever reason, of the Contract.

## **22. Subcontracting**

The supplier shall not subcontract, in whole or in part, their obligations under this Contract, except with the prior written consent of the purchaser.

Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

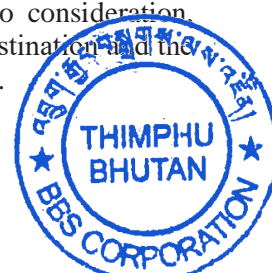
## **23. Specifications and Standards**

Technical Specifications and Drawings:

- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards stipulated in Section VI, Schedule of Supply and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the editions or the revised versions of such codes and standards shall be those specified in the Schedule of Supply. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 34.

## **24. Packing and Documents**

- 24.1. The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case sizes and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.



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

## **25. Insurance**

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

## **26. Transportation**

26.1. Unless otherwise specified in the SCC, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

## **27. Inspections and Tests**

At its own expense and at no cost to the Purchaser the Supplier shall carry out all such tests and/or inspections of the Goods and Related Services as are specified in the SCC.

The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in Bhutan as specified in the SCC. Subject to GCC Sub-Clause 27.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 27.2, provided that the Purchaser bears all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all travelling and board and lodging expenses.

The Purchaser may require the Supplier to carry out any test and/ or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.



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The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 27.4.

The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 27.6, shall release the Supplier from any warranties or other obligations under the Contract.

## **28. Liquidated Damages**

28.1. Except as provided for under GCC Clause 33, if the Supplier fails to deliver any or all of the Goods by the date(s) of delivery or fails to perform the Related Services within the period specified in the Contract, the Purchaser may, without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those SCC. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 36.

## **29. Warranty**

The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

Subject to GCC Sub-Clause 23.1 (b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials and workmanship, under normal use in the conditions prevailing in Bhutan.

Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.

The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.



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Upon receipt of such notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

If, having been notified, the Supplier fails to remedy the defect within the period specified in the SCC, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

### **30. Patent Indemnity**

The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 30.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in Bhutan; and
- (b) the sale in any country of the products produced by the Goods. Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or reasonably to be inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Supplier, pursuant to the Contract.

If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 30.1, the Purchaser shall promptly give the Supplier notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Supplier fails to notify the Purchaser within thirty (30) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.





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

**31. Limitation of Liability**

Except in cases of gross negligence or willful misconduct:

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

**32. Change in Laws and Regulations**

32.1. Unless otherwise specified in the Contract if, after the date thirty (30) days prior to the date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated or changed in Bhutan (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery/ Completion Schedule and/or the Contract Price, then such Delivery/ Completion Schedule and/or Contract Priceshallbe correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Sub-Clause 16.2.

**33. Force Majeure**

33.1. The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.





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For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

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

#### **34. Change Orders and Contract Amendments**

The Purchaser may at any time order the Supplier through notice in accordance with GCC Clause 8 to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier’s performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within thirty (30) days from the date of the Supplier’s receipt of the Purchaser’s change order.

Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment by the parties.



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**35. Extensions of Time**

If at any time during performance of the Contract the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

Except in case of Force Majeure, as provided under GCC Clause 33, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 28, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 35.1.

**36. Termination****Termination for Default**

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
  - (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Sub-Clause 35.1; or
  - (ii) if the Supplier fails to perform any other obligation under the Contract; or
  - (iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 36.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

**Termination for Insolvency**

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



**Restriction**

- a. Termination for Convenience.
  - i. The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
  - ii. The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
    - 1. to have any portion completed and delivered at the Contract terms and prices; and/or
    - 2. to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.
  - iii. 37.1. Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to Bhutan, or to the use of the products/Goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/Goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/Goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 36.3.



## SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

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

|                    |   |
|--------------------|---|
| <b>1.1 (k)</b>     | The Project Site(s)/Final Destination(s) is/are; <b><i>Head Office, Bhutan Broadcasting Service Corporation Ltd., Chubachu, Thimphu; Bhutan</i></b>   |
| <b>1.1 (l)</b>     | The Purchaser is: <b><i>Bhutan Broadcasting Service Corporation Ltd.</i></b>  |
| <b>GCC 4.2 (a)</b> | The meaning of the trade terms shall be as prescribed by Incoterms.   |
| <b>GCC 4.2 (b)</b> | The version of Incoterms shall be: <b><i>Latest Edition</i></b>   |
| <b>GCC 5.1</b>     | The language shall be: <b><i>English</i></b>  |
| <b>GCC 8.1</b>     | For <b><u>notices</u></b> , the addresses shall be:<br><br>For the Purchaser:<br>Attention: <b><u>Project Manager</u></b><br>Address: <b><u>Bhutan Broadcasting Service Corporation Ltd., Chubachu, Thimphu, 01, Bhutan</u></b><br>Landline no.: <b><u>+975-2-322770</u></b><br>Facsimile number: <b><u>+975-2-323073</u></b><br>E-mail address: <b><u><a href="mailto:bbshdprojectmanager@gmail.com">bbshdprojectmanager@gmail.com</a></u></b>   |
| <b>GCC 9</b>       | The governing law shall be <u>the law of the Kingdom of Bhutan.</u>   |
| <b>GCC 10.2</b>    | <p>The rules of procedure for arbitration proceedings pursuant to GCC Sub-Clause 10.2 shall be as follows:</p> <p><i>[The Bidding Documents should contain one clause to be retained in the event of a Contract with a foreign Supplier and one clause to be retained in the event of a Contract with a Bhutanese Supplier. At the time of finalizing the Contract, the respective applicable clause should be retained in the Contract. The following explanatory note should therefore be inserted as a header to GCC Sub-Clause 10.2 in the Bidding Documents.</i></p> <p><i>“Clause 10.2 (a) shall be retained in the case of a Contract with a foreign Supplier and Clause 10.2 (b) shall be retained in the case of a Contract with a Bhutanese Supplier.”]</i></p> <p><b>(a) Contract with a foreign Supplier:</b> <i>[For Contracts entered into with foreign suppliers, international commercial arbitration may have practical advantages over other dispute settlement methods. Among the rules to govern the arbitration proceedings, the Purchaser may wish to consider the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976, <b><u>the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC)</u></b>, the Rules of the London Court of International Arbitration or the Rules of the Arbitration Institute of the Stockholm Chamber of Commerce.]</i></p> |



|                 |   |
|-----------------|---|
|                 | <p><i>If the Purchaser chooses the Rules of ICC, the following sample clause should be inserted:</i></p> <p>GCC 10.2 (a)—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.</p> <p><b>(b) Contract with a Bhutanese Supplier:</b></p> <p>In the case of a dispute between the Purchaser and a Bhutanese Supplier, the dispute shall be referred to adjudication or arbitration in accordance with the laws of Bhutan.</p>   |
| <b>GCC 13.1</b> | <p>Details of Shipping and other Documents to be furnished by the Supplier are:</p> <ul style="list-style-type: none"> <li><i>a) Copies of the supplier's invoice showing Goods' description, quantity, unit price, and total amount;</i></li> <li><i>b) Original and three copies of the bill of landing marked "freight prepaid";</i></li> <li><i>c) Copies of the packing list identifying contents of each package;</i></li> <li><i>d) Insurance Certificate</i></li> <li><i>e) Manufacturer's or Supplier's Warranty Certificate;</i></li> <li><i>f) inspection certificate issued by nominated inspection agency, and the Supplier's factory inspection report; and</i></li> <li><i>g) Certificate of Origin</i></li> <li><i>h) A descriptive printed/softcopy of technical documentation on system architecture and philosophy of design should accompany the drawing.</i></li> </ul> <p>The above documents shall be received by the Purchaser <u>at least two weeks</u> before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.</p> <p>Documents to be submitted along with equipment:</p> <ul style="list-style-type: none"> <li>- The successful bidder should provide two sets of operation and maintenance manual of all the equipment.</li> <li>- Need to submit the equipment performance test report along with the equipment.</li> </ul> |
| <b>GCC 16.2</b> | <p>The prices charged for the Goods supplied and the related Services performed "<b>shall not</b>" be adjustable.</p>   |
| <b>GCC 17.1</b> | <p>GCC 17.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <ul style="list-style-type: none"> <li>• <b>Payment for Goods supplied from abroad:</b></li> </ul> <p>Payment of the foreign currency portion shall be made in (<u>BTN</u>)</p> <p>(i) <b>Advance Payment:</b> Ten percent (10%) of the Contract Price shall be paid within thirty (30) days of signing of the Contract, and upon submission of a claim and an advance payment guarantee for the equivalent amount valid until the Goods are delivered and in the form provided in the Bidding Documents.</p>  |



|                 |  |
|-----------------|--|
|                 | <p>(ii) <b>On Shipment:</b> Sixty percent (60%) of the Contract Price of the Goods shipped shall be paid through an irrevocable confirmed letter of credit opened in favour of the Supplier in a bank in its country, upon submission of the documents specified in GCC Clause 13.</p> <p>(iii) <b>On Acceptance:</b> Thirty percent (30%) of the Contract Price of the Goods received shall be paid <i>within 30 days after the acceptance. The payment shall be made by the PURCHASER TO THE SUPPLIER after deducting 3% TDS on the total contract price.</i></p> <p>• <b>Payment for Goods and Services supplied from within Bhutan:</b><br/>Payment for Goods and Services supplied from within Bhutan shall be made in <b>BTN[Ngultrum]</b>, as follows:</p> <p>(i) <b>Advance Payment:</b> Ten percent (10%) of the Contract Price shall be paid within thirty (30) days of signing of the Contract against a simple receipt and an advance payment guarantee valid till the goods are received at BBS, Chubachu, Thimphu, Bhutan for the equivalent amount and in the form provided in the Bidding Documents.</p> <p>(ii) <b>On Shipment:</b> Sixty percent (60%) of the Contract Price shall be paid on receipt of the Goods and upon submission of the documents specified in GCC Clause 13.</p> <p>(iii) <b>On Acceptance:</b> Thirty percent (30%) of the Contract Price of the Goods received shall be paid <i>within 30 days after the acceptance. The payment shall be made by the PURCHASER TO THE SUPPLIER after deducting 2% TDS on the total contract price.</i></p> |
| <b>GCC 17.5</b> | <p>The payment delay period after which the Purchaser shall pay interest to the supplier shall be <b>[30]</b> days.</p> <p>The interest rate that shall be applied is: <b><i>at the prevailing rate of interest for overdraft facilities</i></b></p>   |
| <b>GCC 18</b>   | <p>The bidder should bear all and pay all applicable taxes, stamp duties, license fees and other similar levies imposed outside Bhutan.</p> <p>The Purchaser will facilitate import tax exemption within the country (Bhutan)</p>  |
| <b>GCC 19.1</b> | <p>The amount of the Performance Security shall be: <b><u>10% of the Contract Price</u></b></p> <p><b>* As per PRR (2019) Clause 5.4.5.5: If the procuring agency decides to accept the abnormally low bids after considering the detailed price analysis, the procuring Agency shall increase the performance security from ten percent (10%) up to maximum of thirty percent (30%) of the initial contract price.</b></p> <p><b>* Abnormally low quote should be considered when the price quoted is less than 20% below the estimated cost of the project.</b></p>  |
| <b>GCC 19.3</b> | <p>The types of acceptable <b><u>Performance Securities</u></b> are:</p> <p>(i) <b><u>Unconditional bank guarantee</u></b> issued by financial institution located in Bhutan and acceptable to the Purchaser, in the form provided for in the Contract or in any other form acceptable to the Purchaser, or if the institution issuing those instruments is located outside Bhutan, it shall have a correspondent financial institution located in Bhutan to make the financial instrument enforceable.</p> <p>(ii) <b><u>Banker's Certified Cheque/Cash warrant</u></b>, or</p> <p>(iii) <b><u>Demand draft</u></b>.</p>  |









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### Attachment: Price Adjustment Formula

If, in accordance with GCC 16.2, prices shall be adjustable, the following method shall be used to calculate the price adjustment:

Prices payable to the Supplier, as stated in the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of labor and material components in accordance with the formula:

$$P_1 = P_0 \left[ a + \frac{bL_1}{L_0} + \frac{cM_1}{M_0} \right] - P_0$$

$$a+b+c = 1$$

in which:

- $P_1$  = adjustment amount payable to the Supplier.  
 $P_0$  = Contract Price (base price).  
 $a$  = fixed element representing profits and overheads included in the Contract Price and generally in the range of five (5) to fifteen percent (15%).  
 $b$  = estimated percentage of labor component in the Contract Price.  
 $c$  = estimated percentage of material component in the Contract Price.  
 $L_0, L_1$  = labor indices applicable to the appropriate industry in the country of origin on the base date and date for adjustment, respectively.  
 $M_0, M_1$  = material indices for the major raw material on the base date and date for adjustment, respectively, in the country of origin.

The coefficients  $a$ ,  $b$ , and  $c$  as specified by the Purchaser are as follows:

- $a = [\text{insert value of coefficient}]$   
 $b = [\text{insert value of coefficient}]$   
 $c = [\text{insert value of coefficient}]$

The Bidder shall indicate the source of the indices and the base date indices in its bid. Base date = thirty (30) days prior to the deadline for submission of the bids.

Date of adjustment =  $[\text{insert number of weeks}]$  weeks prior to date of shipment (representing the mid-point of the period of manufacture).

The above price adjustment formula shall be invoked by either party subject to the following further conditions:

- (a) No price adjustment shall be allowed beyond the original delivery dates unless specifically stated in the extension letter. As a rule, no price adjustment shall be allowed for periods of delay for which the Supplier is entirely responsible. The Purchaser will, however, be entitled to any decrease in the prices of the Goods and Services subject to adjustment.
- (b) If the currency in which the Contract Price  $P_0$  is expressed is different from the currency of origin of the labor and material indices, a correction factor will be applied to avoid incorrect adjustments of the Contract Price. The correction factor shall correspond to



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the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.

- (c) No price adjustment shall be payable on the portion of the Contract Price paid to the supplier as advance payment.

**(\* Not Applicable)**



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## SECTION IX: CONTRACT FORMS

### TABLE OF FORMS

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| Performance Security               | 124 |
| Bank Guarantee for Advance Payment | 125 |
| Letter of Acceptance               | 126 |



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## CONTRACT AGREEMENT

*[The successful Bidder shall fill in this form in accordance with the instructions indicated]*

THIS CONTRACT AGREEMENT made the *[insert number]* day of *[insert month]*, *[insert year]*,

BETWEEN

1. *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of .... of the Government of Bhutan, or corporation incorporated under the laws of Bhutan]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called “the Purchaser”), and
2. *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency/ies]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract, viz.:
  - (a) This Contract Agreement;
  - (b) The Special Conditions of Contract;
  - (a) The General Conditions of Contract;
  - (b) Technical Requirements (including Schedule of Supply and Technical Specifications);
  - (c) The Supplier’s Bid and original Price Schedules;
  - (d) The Purchaser’s Notification of Award of Contract;
  - (e) The form of Performance Security;
  - (f) The form of Bank Guarantee for Advance Payment;
  - (g) *insert here any other document(s) forming part of the Contract*
3. 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.
4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.



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

For and on behalf of the Purchaser

Signed: *[insert signature]*  
in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert signature]*  
*[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*  
in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert signature]*  
*[insert identification of official witness]*



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## PERFORMANCE SECURITY

*[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]*

Date: *[insert date (as day, month, and year) of Bid submission]*  
IFB No. and title: *[insert no. and title of bidding process]*

Bank's Branch or Office: *[insert complete name of Guarantor]*

**Beneficiary:** *[insert complete name of Purchaser]*

**PERFORMANCE GUARANTEE No.:** *[insert Performance Guarantee number]*

We have been informed that *[insert complete name of Supplier]* (hereinafter called "the Supplier") has entered into Contract No. *[insert number]* dated *[insert day and month]*, *[insert year]* with you, for the supply of *[description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a Performance Guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert amount(s)<sup>22</sup> in figures and words]* upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee shall expire no later than the *[insert number]* day of *[insert month]* *[insert year]*,<sup>23</sup> and any demand for payment under it must be received by us at this office on or before that date. We agree to a one-time extension of this Guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee.

*[signatures of authorized representatives of the bank and the Supplier]*

<sup>22</sup> The Bank shall insert the amount(s) specified in the SCC and denominated, as specified in the SCC, either in the currency of the Contract or a freely convertible currency acceptable to the Purchaser.

<sup>23</sup> Date established in accordance with Clause 19.4 of the General Conditions of Contract ("GCC"). The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the Bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee.



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## BANK GUARANTEE FOR ADVANCE PAYMENT

*[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated.]*

*[bank's letterhead]*

Date: *[insert date (as day, month, and year) of Bid submission]*

IFB No. and title: *[insert number and title of bidding process]*

**Beneficiary:** *[insert legal name and address of Purchaser]*

**ADVANCE PAYMENT GUARANTEE No.:** *[insert Advance Payment Guarantee no.]*

We, *[insert legal name and address of bank]*, have been informed that *[insert complete name and address of Supplier]* (hereinafter called "the Supplier") has entered into Contract No. *[insert number]* dated *[insert date of Contract]* with you, for the supply of *[insert types of Goods to be delivered]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment is to be made against an advance payment guarantee.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount(s)<sup>24</sup> in figures and words]* upon receipt by us of your first demand in writing declaring that the Supplier is in breach of its obligation under the Contract because the Supplier used the advance payment for purposes other than toward delivery of the Goods.

It is a condition for any claim and payment under this Guarantee to be made that the advance payment referred to above must have been received by the Supplier in its account *[insert number and domicile of the account]*

This Guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until *[insert date<sup>25</sup>]*. We agree to a one-time extension of this Guarantee for a period not to exceed *[six months][one year]*, in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee.

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

24 The bank shall insert the amount(s) specified in the SCC and denominated, as specified in the SCC, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Purchaser.

25 Insert the Delivery date stipulated in the Contract Delivery Schedule. The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee.





## LETTER OF ACCEPTANCE

*[use letterhead paper of the Purchaser]*

[Date:]

To: *[name and address of the Supplier]*

Subject: *Notification of Award Contract No. ....*

This is to notify you that your Bid dated [insert date] for supply of the [insert name of the contract and identification number, as given in the SCC] for the Accepted Contract Amount of [insert amount in numbers and words and name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency or (for item-wise contract insert list of items price schedule as attachment)

You are requested to furnish the Performance Security within 15 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section X, Contract Forms, of the bidding document.

Authorized Signature: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Agency: \_\_\_\_\_

**Attachment: Contract Agreement**



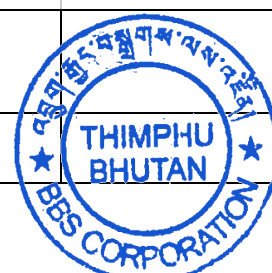
## Bill of Quantity for the Broadcast Equipment for BBSCL

**Note:**\* The table given below should be duly filled and enclosed in the **Technical Bid**.

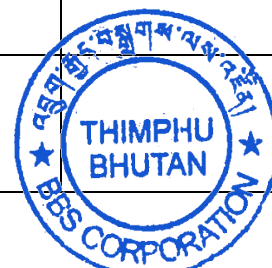
*\* The bidders should prepare additional Columnstitled ‘Rate per Unit (DDP)’ and ‘Amount (DDP)’for Financial Bid with respect to items, quantity and remarks given below.*

**LOT 1: HD OUTSIDE BROADCASTING VAN**

| SL. NO | DESCRIPTION  | MAKE AND MODEL                                  | QTY | Make and model offered by the firm | Qty offered by the firm | REMARKS |
|--------|--|---|-----|------------------------------------|-------------------------|---------|
| 1      | <b>OB VAN</b>  |   |     |                                    |                         |         |
| 1.1    | 4WD diesel engine (Turbo Engine), dimension (Lxwxh)in mm-6990x2080x2635, 6 cylinders   | Coaster bus/equivalent                          | 1   |                                    |                         |         |
| 2      | Fabrication of the coaster bus to house the equipment and modification as per the required design. It should include, a suitable rated DG set, AC & heating system, Room lamp, search lamp, rack lamp, spot lamp, CCTV, fire extinguisher, inbuilt power stabilizer, stabilizer jack, power cable duct, I/O wall box, slide sun shade, interior floor finish, roof stage, rear bumper, winch system, Rear ladder, paint & logo, assist battery, ground wire, ground rod, short power cable, rear maintenance door, Desk maintenance door, motorized CCU cable drum, multi cable drum, electric power cable with cable drum speed controller and also with all other necessary equipment and accessories. Mini Carrier on the top of Van. | TP  | 1   |                                    |                         |         |
| 2      | <b>HD CAMERA</b>   |   |     |                                    |                         |         |
| 2.1    | HD fiber-based camera with a LEMO connector and 3 CMOS sensors. broadcast quality with well-known brands, with the option of upgrading to a 4K. Includes individual camera head, CCU, RCP, 7'' full HD LCD camera viewfinder, camera plate, and other necessary equipment and accessories. It must include a hard carrying case for cameras.   | Sony/Panasonic/Ikegami/Gra ss valley/Equivalent | 4   |                                    |                         |         |
| 2.2    | High Frame Rate HD cameras with 3 CMOS sensors, support up to 6x and more super slow motion in 1080/50i and 1080/50p, option of upgrading to a 4K. The camera should include CCU, RCP, 7'' full HD LCD viewfinder, camera plates, and other necessary equipment and accessories. Include 3x slow motion license. It must include a hard carrying case for cameras.   | Sony/Panasonic/Ikegami/Gra ss valley/Equivalent | 2   |                                    |                         |         |
| 3      | <b>PROFESSIONAL LENS</b>   |   |     |                                    |                         |         |
| 3.1    | XA20sx8.5BRM 20x zoom lens + semi servo kit with hard carrying case and lens supporting plate and accessories.   | Canon/Fujinon                                   | 3   |                                    |                         |         |
| 3.2    | Zoom lens 40X+semi servo kit, equivalent to HJ 40e*10B IASE-V-H with and carrying case.  | Canon/Fujinon                                   | 2   |                                    |                         |         |



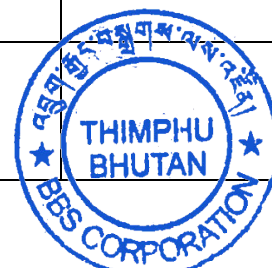
|     |   |  |   |  |  |  |
|-----|---|--|---|--|--|--|
| 3.3 | Zoom lens 10X+semi servo kit, equivalent to KJ 10e*4.5B IRSE A /IASE A with hard carrying case.   | Canon/Fujinon                          | 1 |  |  |  |
| 4   | <b>TRIPOD</b>   |  |   |  |  |  |
| 4.1 | Robust, light weight, stable and heavy-duty three-legged tripod for cameras, complete with matching handle, dolly and other necessary accessories. Pay load as per the weight of the high-speed camera and 40x lens. with protection case.  | Vinten vison 250/equivalent            | 2 |  |  |  |
| 4.2 | Robust, light weight, stable and heavy-duty three-legged tripod for cameras, complete with matching handle, dolly and other necessary accessories. Pay load as per the weight of the camera and 24x or 10x lens. with protection case.  | Vinten Vision Blue 5 /equivalent       | 4 |  |  |  |
| 5   | <b>CAMERA CABLE</b>   |  |   |  |  |  |
|     | Hybrid fiber optic cable with lemo connectors, 300m for one of the motorized drum mounted at the rear of the van.   | Canare/equivalent.                     | 1 |  |  |  |
| 5.1 | Hybrid fiber optic camera cable with lemo connectors, 100m for motorized drum mounted at the rear of the van.   | Canare/equivalent.                     | 5 |  |  |  |
| 5.2 | Hybrid fiber optic camera cable with lemo connector ,200m cable with drum   | Canare/equivalent.                     | 5 |  |  |  |
| 5.3 | Hybrid fiber optic camera cable with lemo connector,100m fibre cable with drum.   | Canare/equivalent.                     | 5 |  |  |  |
| 6   | <b>HEAD PHONE CAMERAMAN</b>   |  |   |  |  |  |
| 6.1 | Compatible double-sided headphone for cameraman. with complete sound proof with talk back mic system.   | Beyerdynamic/equivalent                | 6 |  |  |  |
| 7   | <b>HD VIDEO SWITCHER</b>  |  |   |  |  |  |
| 7.1 | 24 inputs, 2ME multiformat HD production switcher with redundant power supply, Multiformat, Tally, Multiview (Tally, audio level meter, control panels, GPS clock), clip player.  | Grass valley/Sony/Panasonic/equivalent | 1 |  |  |  |
| 8   | <b>ROUTER &amp; GLUES</b>   |  |   |  |  |  |
| 8.1 | 32x32 HD router with modular redundant power supplies. Modular I/O cards. Upgradable to UHD by license. Include two 32 button remote control panels.  | Ross/Imagine/GV/equivalent             | 1 |  |  |  |
| 8.2 | Frame with cooling and advanced networking with dual modular power supplies, with integral cooling, front panel display with fault indicator, IP info, web monitoring control of frame and associated cards The quantities given are estimated. The quantity depends on the design. | Ross/GV/Imagine/equivalent             | 2 |  |  |  |
| 8.3 | Dual 3G rellocking DA with rear module 1x4. Equalization and re-clocking for 3G / HD / SD SDI, two independent channels of SDI distribution, High performance 3G rellocking DA. Automatic detection of incoming data rate.  | Ross/GV/Imagine/equivalent             | 6 |  |  |  |
| 8.4 | Analog video DA 1x8 for frame sync. Modules should have passive loop throughout, Bi-level and Tri-level sync distribution.  | Ross/GV/Imagine/equivalent             | 2 |  |  |  |
| 8.5 | 4 channel 2K/HD/SD or 1 channel 4K/UHD/HD/SD up/down/Cross conversion, independent frame synchronizer, HDR conversion, standard conversion, frame rate  | Ross/GV/Imagine/equivalent             | 1 |  |  |  |



|      |  |                              |   |  |  |  |
|------|--|------------------------------|---|--|--|--|
|      | conversion, aspect ratio conversion, color correction, RGB color correctors/Proc Amps, Advanced motion-adaptive deinterlacing, Cadence detection   |                              |   |  |  |  |
| 8.6  | Analog audio multiplexer with rear i/o. Min 4 to 8 channel analogue audio embedding with 3G / HD / SD SDI, each input Audio proc amp control, independent channel sample rate conversion, audio delay, phase invert, summing function, channel re-mapping, redundant audio on audio input loss.                                | Ross/GV/Imagine/equivalent   | 2 |  |  |  |
| 8.7  | Analog audio de-multiplexer with rear i/o. De-embedding 4 analog audio channels from an 3G / HD / SD SDI, each input Audio proc amp control, independent channel, gain, invert and audio delay function, audio remap, it can be digital/analog audio.  | Ross/GV/Imagine/equivalent   | 2 |  |  |  |
| 8.9  | 3G/HD/SD frame synchronizer with at least 4 outputs  | Ross/GV/Imagine/equivalent   | 8 |  |  |  |
| 8.1  | Analog ADA 1x8   | Ross/GV/Imagine/equivalent   | 4 |  |  |  |
| 8.11 | AES DA 1x8   | Ross/GV/Imagine/equivalent   | 4 |  |  |  |
| 8.12 | 1+1 Master reference/Clock and test signal generator SPG. Tri and bi sync. Both should be equipped with GPS, LTC out, AES audio out, DARS, world clock, VITC. Include GPS receiver/antenna hardware kit with cable. Automatic Changeover System required.  | Ross/GV/Imagine/equivalent   | 1 |  |  |  |
| 8.13 | GPS driven Digital clock with 6-digit LED display in red. Display time in 12- or 24-hr format: hh:mm:ss, Display date in dd:mm:yy, mm:dd:yy, or yy:mm:dd, rectangular shape. Clock should be driven by the GPS output from SPG.  |                              | 1 |  |  |  |
| 8.14 | HDMI to 3G/HD/SD SDI converter   |                              | 2 |  |  |  |
| 8.15 | 3G/HD/SD SDI to HDMI converter   |                              | 2 |  |  |  |
| 9    | <b>AUDIO MIXER</b>   |                              |   |  |  |  |
| 9.1  | On Air broadcast quality digital mixing console with at least 16 microphones and 16-line inputs with Auxs, groups, talk back, PGMs and stage box. Motorized faders, Gate, Compression, EQ, delay. Redundant power supply.  | Soundcraft/AEQ/equivalent    | 1 |  |  |  |
| 9.2  | Audio monitoring dolby E. Full monitoring of up to 16 channels of embedded audio Includes 3G / HD / SD SDI Input and relocked output Features full-range stereo speakers and line-level output LKFS monitoring and metering. True Peak monitoring. Class D Stereo Audio Amplifier, Onboard 5.1 Surround sound Lt/Rt downmixer. | Ross/GV/Imagine/equivalent   | 1 |  |  |  |
| 9.3  | Control room monitoring speakers, 5" Active Two-Way Power Studio Monitor, 82w power rating, min 75dBA SNR, EQ signal processed, balanced XLR and TRS input, Class-D amplifier with wall mount kits and accessories.  | JBL/Yamaha/Tannoy/equivalent | 2 |  |  |  |
| 10   | <b>MICROPHONE</b>  |                              |   |  |  |  |
| 10.1 | Tabletop microphone stands should be an  | Sennheiser/equ               | 4 |  |  |  |



|      |   |                                |     |  |  |  |
|------|---|--------------------------------|-----|--|--|--|
|      | adjustable height 8.7-14.5 inches(220-369mm) like audio technica AT8652 with cables and necessary accessories.  | ivalent                        |     |  |  |  |
| 10.2 | Omni lavalier microphone system with bodypack transmitter and body pack receiver, frequency range equivalent to 566 to 608MHZ, EW 100G4-ME2   | Sennheiser/equivalent          | 4   |  |  |  |
| 10.3 | Short gun(boom mic) wired type mic with an operating voltage 48V±4v(Phantom power),sensitivity of 24dBV/Pa at 1Khz with 178mm length, similar like Sennheiser microphone(MKH8060). It should include multi core cable with portable stage box, modular windshield and all necessary accessories.  | Sennheiser/equivalent          | 4   |  |  |  |
| 10.4 | Commentator LIP microphone with low frequency roll off at 16 Hz and ribbon transducer (no external power required. Output connector should have a 3 pin XLR male.   | Cole/equivalent                | 6   |  |  |  |
| 10.5 | Analog slide fader box with output impedance of 600 for host/anchor. balance signal XLR Input/output. equivalent to Tomoca TCC-100ST.   | Tomoca TCC-100ST/equivalent    | 4   |  |  |  |
| 11   | <b>AUDIO CABLE</b>  |                                |     |  |  |  |
| 11.1 | 200m audio cable with portable drum and connectors at both the ends for mic   | Canare/equivalent.             | 2   |  |  |  |
| 11.2 | 100m audio cable with portable drum and connector at both the ends for mic  | Canare/equivalent.             | 4   |  |  |  |
| 12   | <b>SLOW MOTION</b>  |                                |     |  |  |  |
| 12.1 | HD/4K multi-channel replay server system, easy to use, incredible, file base operation and the perfect highlight. Must include all necessary software and hardware required for the professional sport live coverage.   |                                | 1   |  |  |  |
| 13   | <b>COMMUNICATION</b>  |                                |     |  |  |  |
| 13.1 | Main station with 18" gooseneck mic, remote station with 18" goose neck mic,4 wire interface (cam x6), Wireless communication must include, base station, 6 wireless belt packs for cameraman/producer, 2 more small portable wireless beltpack with ear piece for anchor,6 double sided headsets, battery, battery charger, 5 numbers of extra ear piece for the anchor with a hard carrying case for communication set and necessary accessories. Wireless communication systems should integrate with all CCU bases. | Clearcom/AEQ                   | lot |  |  |  |
| 14   | <b>RECORDER</b>   |                                |     |  |  |  |
| 14.1 | 12G-SDI 4K/UHD recorder and player multi-channel HD recorder. HDR supported. BNC I/O. 2TB SSD hard drive for multiformat simultaneous recording/redundancy, 4 channel ISO, multichannel recording with 4 SDI I/O interface, analog and digital audio AES/EBU I/O. Redundant power supply. Provide a rack mount kit or should be 19-inch rack mountable.   | Sony/GV/Black magic/equivalent | 2   |  |  |  |
| 15   | Professional Audio headphones, Over-ear, closed-back, foldable studio headphones, min 50mm driver, 114dB SPL min, 15-28k audio frequency. Include adapter and its accessories.  | Sennheiser/AKG/equivalent      | 1   |  |  |  |



|                    |  |                                 |     |  |  |  |
|--------------------|--|---------------------------------|-----|--|--|--|
| 16                 | Digital waveform monitor, with audio level measurement. Provide rack mount kits.   | Equivalent to Tektronix WFM5200 | 1   |  |  |  |
| 17                 | <b>MONITOR</b>   |                                 |     |  |  |  |
| 17.1               | 17-inch lightweight full HD high grade LCD professional monitor. Integrate with digital waveform monitors. Provide rack mount kits.  | Sony/equivalent                 | 1   |  |  |  |
| 17.2               | 42-inch 4K Ultra HD high dynamic range smart TV consumer monitor for the Multiview out from video switcher and router Multiview out. Provide wall mount kits.  | Sony/equivalent                 | 2   |  |  |  |
| 18                 | Essential installation materials such as rack, video patch panels, audio patch panels, patch code, fiber patch code, cables, connectors, feed through panels, convertors, 19" RU PDUs, power cords, etc. | As per the design               | Lot |  |  |  |
| 19                 | <b>TRAINING, INSTALLATION AND COMMISSION</b>   |                                 | Lot |  |  |  |
| <b>TOTAL LOT 1</b> |  |                                 |     |  |  |  |

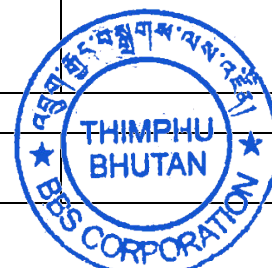
## LOT 2: ARCHIVE AND MAM SYSTEM

| SL. NO. | DESCRIPTION   | BRAND                            | QTY | Make and model offered by the firm | Qty offered by the firm | REMARKS |
|---------|---|----------------------------------|-----|------------------------------------|-------------------------|---------|
| 1       | <b>STORAGE</b>  |                                  |     |                                    |                         |         |
| 1.1     | Rack mountable, 256TB raw, 16 Bay x 16 TB 3.5" SAS 12GB /HDD 6Gbps hot swappable Drives, Raid6, 64GB memory, 2 x 1GbE RJ45 port, 4 x 10GbE-Base-T. HDMI, VGA, Serial, SAS 12G HBA for JBOD expansion, redundant Hot-plug power supply, Post production application supported (FCPX, Adobe Premier Pro, DaVinci)   | Promise/ Dell/ Equivalent        | 1   |                                    |                         |         |
| 2       | <b>ARCHIVAL MAM &amp; HSM SOFTWARE PACKAGE</b>  |                                  |     |                                    |                         |         |
| 2.1     | Professional Data management including cataloging for Media and Entertainment on Disk, Tape and the Cloud Archive, Backup and Cloning/ Replication management, Inbuilt database/external database server.<br>Mac, Windows, Linux, Synology, QNAP, NETGEAR, DDP etc.<br>RAID, SAN, XSAN, NAS and iSCSI storage supported.<br>MAM, Metadata entry and low-res image and video preview, inbuilt transcoding (Software application license) Backup, archive and Synchronize. Must have minimum 25 NLE lic support.<br>Maintenance & Support Pack - 3 Year | Aveco Gemini/Archware/Equivalent | 1   |                                    |                         |         |
| 2.2     | Minimum Server for Archive Application<br>Dual Intel Xeon Processor, 32GB memory, 4x600GB SSD Hot-plug in RAID Configuration, Dual, Hot-plug, Fully Redundant Power Supply (1+1). Windows Server/Linux  | Dell/HP/Equivalent               | 1   |                                    |                         |         |
| 3       | <b>KVM AND NETWORKING</b>   |                                  |     |                                    |                         |         |



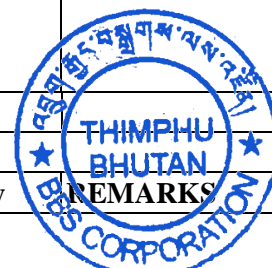


| 3.1                                   | Stackable Managed Switch with 24x1G and 4x10G ports Layer 3, redundant Hot-plug power supply  | Cisco/Netgear/Equivalent           | 1                 |                                    |                         |         |
|---------------------------------------|---|------------------------------------|-------------------|------------------------------------|-------------------------|---------|
| 3.2                                   | KVM over IP Switch. 8-Port Multi-Interface (DisplayPort, HDMI, DVI, VGA) Cat 5/6 KVM Switch. 4x PS2/USB VGA KVM Adapter. 4xUSB HDMI Virtual Media KVM Adapter and other cables.<br>Single Rail LCD Console.   | Aten/Equivalent                    | 1 set             |                                    |                         |         |
| 4                                     | <b>ODA ARCHIVE LIBRARY HARDWARE SYSTEM</b>  |                                    |                   |                                    |                         |         |
| 4.1                                   | ODS-L30M. PetaSite Optical. Disc Archive 30-slot master library unit. Include 2 dives.  | Sony                               | 1                 |                                    |                         |         |
| 4.2                                   | ODS-L60E. PetaSite Optical. Disc Archive library expansion unit (drive and cartridge). Include 2 drives.  | Sony                               | 1                 |                                    |                         |         |
| 4.3                                   | Optical Disc Archive Cartridge Generation 3. ODC5500R 5.5TB write-once cartridge.   | Sony                               | 200               |                                    |                         |         |
| 5                                     | <b>ESSENTIAL INSTALLATION MATERIALS</b>   |                                    |                   |                                    |                         |         |
| 5.1                                   | Cat6 network cable and connectors, binders, PDU, etc  | As per the design                  | As per the design |                                    |                         |         |
| 6                                     | <b>TRAINING INSTALLATION &amp; COMMISSIONING</b>  |                                    |                   |                                    |                         |         |
| 6.1                                   | Training, Installation & Commissioning  |                                    | Lot               |                                    |                         |         |
| <b>TOTAL LOT 2</b>                    |   |                                    |                   |                                    |                         |         |
| <b>LOT 3: RADIO AUTOMATION SYSTEM</b> |   |                                    |                   |                                    |                         |         |
| <b>A. RADIO STUDIO EQUIPMENT</b>      |   |                                    |                   |                                    |                         |         |
| SL. NO.                               | DISCRIPTION   | BRAND                              | QTY               | Make and model offered by the firm | Qty offered by the firm | REMARKS |
| 1                                     | <b>AUDIO CONSOLE</b>  |                                    |                   |                                    |                         |         |
| 1.1                                   | Audio Mixer/Console-"5 microphones inputs, 8 stereo inputs balanced, 7 stereo outputs balanced,1+4 telco interface with GPIO, Bluetooth audio interface, 1 digital In/Out (AES EBU), 2 USB audio interface, HDMI Out - Full HD connection for mixer monitor(Audio input source level,4+1 BUS output level, A/B sources assigned of 10 channels, Display ON-Air sources, Microphone On timer (control room & studio), Large Clock, Audio output level (Loudspeakers & Headphones), 5 band fully parametric EQ, 2 Timers (Ctrl-Room and Studio microphones timers on HDMI Monitor), Dyn Processor on microphone inputs, 4+1 busses (PGM, SUB, Aux1, Aux2, PFL), Inputs replicated from XLR to RJ45: 2-3-4-5, balanced with + 48V Phantom and GPIO, Redundant PSU.",7"Graphic IPS display with HDMI input. | Axel Oxygen 3000D Dante/equivalent | 2                 |                                    |                         |         |
| 2                                     | <b>TALK BOX</b>   |                                    |                   |                                    |                         |         |
| 2.1                                   | Talk Box for guest and presenter, headphone amplifier with two 6.3mm outputs. Offers direct   | Axel Oxygen 3000D/                 | 8                 |                                    |                         |         |

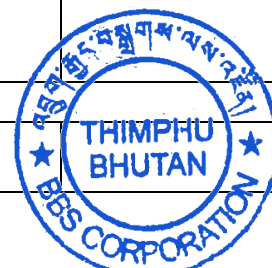




|                                  | connection of the microphone and the studio's On-Air Light, Microphone (On / Off / Cough) or enables Talk back to the console.  | Equivalent                          |                                |      |     |         |
|----------------------------------|---|-------------------------------------|--------------------------------|------|-----|---------|
| 3                                | <b>MICROPHONE</b>   |                                     |                                |      |     |         |
| 3.1                              | Dynamic, frequency response 50- 20,000Hz,   | Shure SM7B/<br>Equivalent           | 8                              |      |     |         |
| 4                                | <b>HEADPHONE</b>  |                                     |                                |      |     |         |
| 4.1                              | Stereo Headset, Wired, FR 20-20kHz, sensitivity -57dB impedance 65 ohms, type closed-back dynamic (headphone), cardioid dynamic (Mic)   | Audio-technica/Equivalent           | 3                              |      |     |         |
| 4.2                              | Headphone, 64 ohms, 8Hz -18Hz   | HD 300<br>Sennheiser/<br>Equivalent | 8                              |      |     |         |
| 5                                | <b>TELEPHONE HYBRID</b>   |                                     |                                |      |     |         |
| 5.1                              | 4 lines, High audio quality with balanced IN/OUT, ADJ SEND and RECEIVE level. IP based, Telephone set, Port to sip gateway and Redundant power supply. IP DANTE output, at least 4 digital outputs. Integrate with the audio console. | Telos/AEQ<br>brand/Equivalent       | 2                              |      |     |         |
| 6                                | <b>ACTIVE MONITOR SPEAKER</b>   |                                     |                                |      |     |         |
| 5.1                              | 2 pairs, LF Driver: 5", HF Driver: 1" (25 mm) silk dome, Frequency Response: 30Hz - 20 kHz, Crossover Frequency: RMS 50 Watts. Input analog 3 pole XLR, RCA, TRS jack.  | JBL/tannoy/Equivalent               | 2                              |      |     |         |
| 6                                | <b>MICROPHONE ARM</b>   |                                     |                                |      |     |         |
| 6.1                              | Professional microphone Arm that can be adjustable. Size:XL   | Yellowtec:mik<br>a/Equivalent       | 8                              |      |     |         |
| 7                                | <b>BROADCAST DESK</b>   |                                     |                                |      |     |         |
| 7.1                              | We will be having Anchor/RJ, a news reader and 3 guests. It will be a self-operated studio, all the racks, console table, patch bay should be placed in such a way that the studio beauty & cleanness is maintained.                  | As per the<br>Design                | 2                              |      |     |         |
| 8                                | <b>ON-AIR LIGHT</b>   |                                     |                                |      |     |         |
| 8.1                              | Led with low power consumption 12V DC power supply  | Led<br>mall/Equivalent              | 2                              |      |     |         |
| 9                                | <b>STEEL WALL PLATE WITH 2x XLR/JACK COMBO SOCKET</b>   |                                     |                                |      |     |         |
| 9.1                              | Steel Wall plate with 2x XLR/Jack Combo Socket, 2x XLR/Jack Socket Dimensions: 86 x 86 x 37mm   | Equivalent to<br>neutrik            | 8                              |      |     |         |
| 10                               | <b>SCREEN/TV ARMS</b>   |                                     |                                |      |     |         |
| 10.1                             | Professional Monitor Arm  | Yellowtec:m!k<br>a                  | 4                              |      |     |         |
| 11                               | <b>SCREEN AND MIC BUSHING MOUNT</b>   |                                     |                                |      |     |         |
| 11.1                             | m!ka Bushing, Washer, Spring washer, Corresponding nut for fixation   | Yellowtec:m!k<br>a                  | 12                             |      |     |         |
| 12                               | <b>ESSENTIAL INSTALLATION MATERIALS</b>   |                                     |                                |      |     |         |
| 18                               | Cat6 network cable and connectors<br>Audio cables and connectors; XLR male and female, RCA, TRS jack, Audio Patch bay, ADA, PDU....etc.,  | As per the<br>design                | As<br>per<br>the<br>desig<br>n |      |     |         |
| <b>TOTAL A</b>                   |   |                                     |                                |      |     |         |
| <b>B. MUSIC SUTDIO EQUIPMENT</b> |   |                                     |                                |      |     |         |
| SL.                              | DESCRIPTION   | BRAND                               | Qty                            | Make | Qty | REMARKS |



| NO.  |   |                                     |           | and<br>model<br>offered<br>by the<br>firm | offered<br>by the<br>firm |  |
|------|---|-------------------------------------|-----------|---|---------------------------|--|
| 1    | <b>AUDIO CONSOLE</b>  |                                     |           |   |                           |  |
| 1.1  | 24 motor fader, (24 channels + 1 master)<br>48 input mixing channels (40 mono + 2 stereo + 2 return.<br>20 Aux (8 mono + 6 stereo) + stereo + Sub buses.<br>34x34 digital record and play back via USB +<br>2x2 USB storage device<br>Include Dante and 16 inputs and 8 outputs Stage box.  | Yamaha<br>TF3/equivalent            | 1         |   |                           |  |
| 2    | <b>RECORDING MICROPHONE</b>   |                                     |           |   |                           |  |
| 2.1  | Condenser microphone used for music record<br>frequency response 50- 20,000Hz,  | Shure<br>SM7B/Equivalent            | 8         |   |                           |  |
| 3    | <b>INSTRUMENT MIC AND MOUNTING CLIP</b>   |                                     |           |   |                           |  |
| 3.1  | Dynamic microphone For delivering clean,<br>accurate sound for various music instruments like<br>Drums, flutes, Guitar etc. with wide variety of<br>mountings and position of ingenious mounting<br>option, like clamps and clips.  | Sennheiser e<br>604/equivalent      | 6         |   |                           |  |
| 4    | <b>MIC STAND AND HOLDER/TRAY</b>  |                                     |           |   |                           |  |
| 4.1  | Professional adjustable tablet holder that can<br>accommodate a tablet, music sheets etc.   | Quiklok/equivalent                  | 8         |   |                           |  |
| 5    | <b>POP FILTER &amp; ISOLATION SHIELD</b>  |                                     |           |   |                           |  |
| 5.1  | Professional music recording Mic Isolation<br>Shield, Pop Filter, High density absorbent foam<br>to filter vocal.   |                                     | 8         |   |                           |  |
| 6    | <b>HEADPHONE AMPLIFIER &amp; STAND</b>  |                                     |           |   |                           |  |
| 6.1  | Designed for musicians and performers who<br>demand mobility without compromising audio<br>quality.   | HP2 PreSonus/<br>Equivalent         | 8         |   |                           |  |
| 7    | <b>ACTIVE SPEAKER</b>   |                                     |           |   |                           |  |
| 7.1  | Clean overall sound, smooth high end, and a<br>wide sweet spot sound for sound engineer and<br>performers. LF Driver: 8", HF Driver: 1" (25<br>mm) silk dome, Frequency Response: 30Hz - 20<br>kHz, Crossover Frequency: RMS 85 Watts. Input<br>analog 3 pole XLR, RCA, TRS jack. (@ 1<br>meter): 100 dB, Input Impedance: 10 kOhms | JBL/Tannoy/E<br>quivalent           | 4         |   |                           |  |
| 8    | <b>HEADPHONES</b>   |                                     |           |   |                           |  |
| 8.1  | Headphones that provide studio-quality audio<br>performance with ANC (Active Noise Canceling)<br>that can cancel ambient sound.   | HD 300<br>Sennheiser/<br>Equivalent | 10        |   |                           |  |
| 9    | <b>MUSIC INSTRUMENTS</b>  |                                     |           |   |                           |  |
| 9.1  | Professional music instruments; at least 3<br>different Guitar types, Piano/Keyboard etc.   |                                     | 1<br>each |   |                           |  |
| 10   | <b>AUDIO RECORDER</b>   |                                     |           |   |                           |  |
| 10.1 | Ethernet Audio Network Recorder/Player,<br>Ethernet Audio network, 24-bit audio, WAV file<br>format   | 360<br>system/equivalent            | 2         |   |                           |  |
| 11   | <b>STUDIO FURNITURES</b>  |                                     |           |   |                           |  |
| 11.1 | Furniture to accommodate the consoles and the<br>music equipment.   | As per the<br>design                | 1         |   |                           |  |



| 12                                | <b>ESSENTIAL INSTALLATION MATERIALS</b>  |                              |     |                                    |                         |                                   |
|-----------------------------------|--|------------------------------|-----|------------------------------------|-------------------------|-----------------------------------|
| 12.1                              | Cat6 network cable and connectors, Audio cables and connectors; XLR male and female, RCA, TRS jack, Audio Patch bay, ADA, Binders, PDU....etc.,  | As per the design            | Lot |                                    |                         |                                   |
| <b>TOTAL B</b>                    |  |                              |     |                                    |                         |                                   |
| <b>C. RADIO AUTOMATION SYSTEM</b> |  |                              |     |                                    |                         |                                   |
| SL. NO.                           | DESCRIPTION  | BRAND                        | QTY | Make and model offered by the firm | Qty offered by the firm | REMARKS                           |
| 1                                 | <b>STORAGE</b>   |                              |     |                                    |                         |                                   |
| 1.1                               | Rack mountable:<br>48TB raw, 16 Bay x 3TB 3.5" SAS 12GB /HDD<br>6Gbps hot swappable Drives -Raid6, 64GB memory,<br>1 x Thunderbolt3, 2 x 1GbE RJ45 port, 4 x 10GbE-Base-T. HDMI, VGA, Serial, SAS 12G HBA for JBOD expansion,<br>Redundant Hot-plug power supply<br>Post production application supported (Adobe Audition) | Promise/ Dell/ HP/Equivalent | 1   |                                    |                         | Centralised Storage               |
| 1.2                               | MAM: Archiving & Cataloguing system for audio, video, images and documents. Single database users.<br>Designed for Internet/Intranet/LAN. Free WEB engine for browsing, preview, upload and download utility. Includes automatic format transcoding and import/export procedures.  | Aveco/Axel/ Equivalent       | 1   |                                    |                         | MAM for archiving and cataloguing |
| 1.3                               | Server for MAM Application: Dual Intel® Xeon 8 Core, 4 X 16GB RAM, 4 X 4TB Hard Drive SATA 6Gbps 7.2K 512n 3.5in Hot-Plug 1 X BOSS controller card + with 2 M.2 Sticks 480GB (RAID 1), LP Windows Server/Linux, Database software if needed.   | Dell/HP/Equivalent           | 1   |                                    |                         | Server for MAM application        |
| 1.4                               | Stackable Managed Switch with 24x1G and 4x10G ports Layer 3, redundant Hot-plug power supply   | Cisco/Netgear/ Equivalent    | 1   |                                    |                         | Network Switch                    |
| 1.5                               | KVM over IP Switch. 8-Port Multi-Interface (DisplayPort, HDMI, DVI, VGA) Cat 5/6 KVM Switch. 4x PS2/USB VGA KVM Adapter. 4xUSB HDMI Virtual Media KVM Adapter and other cables.<br>Single Rail LCD Console.  | Aten/ Equivalent             | 1   |                                    |                         | KVM                               |
| 1.6                               | Stereo IP Codec-Internet Streaming Server Mode   | Comrex/Equivalent            | 2   |                                    |                         | Streaming device                  |
| 2                                 | <b>STUDIO1 and STUDIO2 WORKSTATIONS</b>  |                              |     |                                    |                         |                                   |
| 2.1                               | Workstation: General Minimum Specifications<br>11th generation i7, 16GB memory, 512GB SSD + 1TB SATA HDD (non-boot), Internal speaker, Dual NIC interface, 24" monitor with HDMI or DP interface, Windows 10 64 bits Pro, Wired keyboard and Mouse. 24" Monitor 1920x1080 with HDMI, DP ports and cables                   | Dell/HP/Equivalent           | 4   |                                    |                         | Studio1 and Studio2 workstations  |
| 2.2                               | AUDIO INTERFACE AoIP hardware<br>LX-MADI Multichannel Sound Card - 64/64   | Digigram/Equivalent          | 4   |                                    |                         |                                   |



|                     |  |                              |                                |  |  |  |
|---------------------|--|------------------------------|--------------------------------|--|--|--|
|                     | inputs/outputs MADI on optical connectors, 1 Word Clock input/output OS (must include cables)  |                              |                                |  |  |  |
| 2.3                 | Radio Automation/Play-Out<br>Broadcast radio automation software, on air playout, jingle machine, recording, voice track, production tools, news, streaming. GPI. Remote application, Multi-cluster simultaneous Programming for Spots New Day and/or Hour Programming for Spots, XML import/export with customizable charts. Stand-alone, networked and multi-server operation; manual, live-assist and automation modes. Multiple on-air playout and advertisement management areas. Advanced scheduling of music and commercials. | Axel/<br>Equivalent          | 4                              |  |  | This software must have Playout, Record and News features.   |
| 2.4                 | Software or Software license for News manager  | Octopus/Axel/<br>Equivalent  | 4                              |  |  | Entering, managing and broadcasting news.  |
| 3                   | Recording and Music Studio workstations  |                              |                                |  |  |  |
| 3.1                 | Workstation: General Minimum Specifications 11th generation i7, 16GB memory, 512GB SSD + 1TB SATA HDD (non-boot), Internal speaker, Dual NIC interface, 24” monitor with HDMI or DP interface, Windows 10 64 bits Pro, Wired keyboard and Mouse. 24" Monitor 1920x1080 with HDMI, DP ports and cables  | Dell/HP/Equiv<br>alent       | 4                              |  |  | Must have feature to ingest audio files to centralised storage either using desktop client software or web browser with complete metadata. |
| 3.2                 | AUDIO INTERFACE AoIP hardware LX-MADI Multichannel Sound Card - 64/64 inputs/outputs MADI on optical connectors, 1 Word Clock input/output OS (must include cables)  | AEQ/Digigra<br>m/ Equivalent | 4                              |  |  |  |
| 4                   | Archive Workstations   |                              |                                |  |  |  |
| 4.1                 | Workstation: General Minimum Specifications 11th generation i7, 16GB memory, 512GB SSD + 1TB SATA HDD(non-boot), Internal speaker, Dual NIC interface, 24” monitor with HDMI or DP interface, Windows 10 64 bits Pro, Wired keyboard and Mouse. 24" Monitor 1920x1080 with HDMI, DP ports and cables   | Dell/HP/Equiv<br>alent       | 2                              |  |  | Must have feature to ingest audio files to centralised storage either using desktop client software or web browser with complete metadata. |
| 5                   | AUDIO EDITING CLIENTS  |                              |                                |  |  |  |
| 5.1                 | Client Desktop: General Minimum Specifications 11th generation i7, 16GB memory, 512GB SSD + 1TB SATA HDD(non-biit)<br>Internal speaker, Dual NIC interface, 24” monitor with HDMI or DP interface, Windows 10 64 bits Pro, Wired keyboard and Mouse. 24" Monitor 1920x1080 with HDMI, DP ports and cables  | Dell/HP/Equiv<br>alent       | 20                             |  |  | Must have feature to ingest audio files to centralised storage either using desktop client software or web browser with complete metadata. |
| 6                   | ESSENTIAL INSTALLATION MATERIALS   |                              |                                |  |  |  |
| 6.1                 | Cat6 network cable and connectors, binders, PDU, etc   | As per the<br>design         | As<br>per<br>the<br>desig<br>n |  |  |  |
| TOTAL C             |  |                              |                                |  |  |  |
| 7                   | INSTALLATION, COMMISIONING AND TESTING   |                              | LOT                            |  |  |  |
| TOTAL A+B+C (LOT 3) |  |                              |                                |  |  |  |

