Motilal Nehru National Institute of Technology Allahabad Teliyarganj, Prayagraj - 211004

TEQIP Cell contact No. 0532-2271030, 2271157 E-mail: officeteqip3@gmail.com

BID REFERENCE NO: TEQIP-III/mnni/12

NATIONAL COMPETITIVE BIDDING

FOR

Supply, Installation, Testing and Commissioning of Campus wide Wi-Fi Solution in the Institute

UNDER TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE III (TEQIP III)

(A WORLD BANK ASSISTED PROJECT) CREDIT NO. - CR. 4685-0 IN

NATIONAL COMPETITIVE BIDDING FOR

Supply, Installation, Testing and Commissioning of Campus wide Wi-Fi Solution in the Institute

BID REFERENCE : TEQIP-III/mnni/12

DATE OF COMMENCEMENT OF ONLINE SUBMISSION OF BIDS

DATE: 02/03/2019 TIME: 16:00 Hrs

Pre-Bid CONFERENCE : DATE 12/03/2019

TIME 15:00 Hrs

VENUE:

Room No. 203, Conference Hall (adjacent to Purchase Office) of Administrative Building, MNNIT Allahabad.

LAST DATE AND TIME FOR ONLINE SUBMISSION OF BIDS

DATE 02/04/2019 TIME 15:00 Hrs

DATE and TIME OF OPENING

OF ONLINE BIDS

DATE 03/04/2019 TIME 15:00 Hrs

PLACE OF OPENING OF BIDS : Room No. 203, Conference Hall (adjacent to Purchase

Office) of Administrative Building, MNNIT Allahabad.

ADDRESS FOR Submission of EMD and:

COMMUNICATION, if any

Coordinator, TEQIP-III

Office of the Technical Education Quality Improvement Programme [TEQIP] - III, (Administrative Building)

Motilal Nehru National Institute of Technology Allahabad,

Prayagraj - 211004 (Uttar Pradesh)

SECTION I: INVITATION FOR BIDS (IFB)

NATIONAL COMPETITIVE BIDDING FOR

Supply, Installation, Testing and Commissioning of Campus wide Wi-Fi Solution in the Institute

SECTION I. INVITATION FOR BIDS (IFB)

Date : 04.10.2018

Credit No. : Cr. 4685-0 IN

IFB No. : TEQIP-III/mnni/12

- 1. The Government of India has received a Credit (Cr. 4685-0 IN) from the International Development Association in various currencies towards the cost of project_Technical Education Quality Improvement Programme [TEQIP]—Phase III (TEQIP III) and it is intended that part of the proceeds of this credit will be applied to eligible payments under the contracts for which this Invitation for Bids is issued.
- 2. The Director, Motilal Nehru National Institute of Technology Allahabad, Teliyarganj, Prayagraj now invites sealed bids from eligible bidders for the Supply, Installation, Testing and Commissioning of Campus wide Wi-Fi Solution in the Institute listed below:

Sr. No	Item Name	Quantity
1	6U Rack mounting and installation	5
2	Access Point	250 No.
3	Access Point License (Total : Access Point + Access Point License = 500)	250 No.
4	CAT6 Cable	25000 Mtr.
5	I/O Box with complete set	250 No.
6	Installation of Casing-Capping with fixing, PVC (ISI Mark)	25000 Mtr. Or
	Conduit, Conducting cable pulling / termination, cable laying,	As per actual
	electric work complete in all respect.	
7	Network Switch Ethernet	5 No.
8	Network Switch POE	70 No.
9	Patch Cord 3 Mtr. UTP Cat6	250 No.
10	Patch Panel with proper ferruling	5 No.
11	RJ-45 Connector	5 Box
12	Wireless LAN Controller for Access Point Management	1 No.

- 3. Interested eligible Bidders may obtain further information from Office of the TEQIP-III, MNNIT Allahabad of the, India.
- **4.** A complete set of bidding documents may be downloaded from website of the Institute i.e www.mnnit.ac.in by any interested eligible bidder.
- 5. The provisions in the Instructions to Bidders and in the General Conditions of contract (GCC) are based on the provisions of the World Bank Standard Bidding Document Procurement of Goods.
- 6. The bid shall be submitted as per the schedule noted below:-

a. Date of commencement of Bid : Date 02/03/2019 Time: 16:00 Hrs.
b. Last date for Submission of Bid : Date 02/04/2019 Time: 15:00 Hrs.

- **7.** All bids must be accompanied by a bid security as specified in the bid document and must be delivered to the above office at the date and time indicated on page 02 of the Bid document.
- **8.** Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time.
- **9.** In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

SECTION II: INSTRUCTIONS TO BIDDER

SECTION II: INSTRUCTIONS TO BIDDERS

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A. Introduction

1. Source of Funds

- 1.1 The Government of India has received a credit from the International Development Association (Here-in-after called as Bank) in various currencies equivalent to USD 300 million towards the cost of **Technical Education Quality Improvement Programme [TEQIP]-Phase III** and intends to apply part of the proceeds of this credit to eligible payments under the contracts for which this invitation for Bid is issued.
- 1.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Credit Agreement, and will be subject in all respects to the terms and conditions of that agreement. The Credit Agreement prohibits a withdrawal from the Credit account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Credit Agreement or have any claim to the Credit proceeds.

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all suppliers from eligible source countries as defined in *Guidelines: Procurement under IDA Credits*, May 2004, revised October 2006 hereinafter referred as the *IDA Guidelines for Procurement*, except as provided hereinafter.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.
- 2.3 Government-owned enterprises in the Purchaser's country may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Purchaser.
- 2.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Bank in accordance with ITB Clause 36.1.
- 2.5 Bidder should provide Network Solution comprising of all active components from single OEM.
- 2.6 Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the bidder is an Authorized Partner or Service Provider a valid Agency-Ship/Dealership Certificate (MAF specific to this tender) to quote on behalf of OEM should also be enclosed along with the technical bid.
- 2.7 The Bidder must be a registered company in India under Companies Act 1956 or a registered firm. Registration certificate for the same must be submitted. Bidder must also have a registered office in India.
- 2.8 Bidder have to submit copy of GST and PAN No. allotted by the concerned authorities.

Criteria of Original Equipment Manufacturer (OEM)

- 2.9 The OEM should be in Gartner magic quadrant for LAN and WLAN in leaders quadrant in last 3 years. (Certificate to be enclosed)
- 2.10 Lan and wlan should be from the same OEM to have single TAC for Active components.
- 2.11 The OEM should have done at least 3 WLAN deployments with more than 1000 Aps. (Certificate to be enclosed)
- 2.12 OEM should have hardware spare depots more than 20 numbers in India covering major cities. (List to be attached)
- 2.13 OEM should have presence in India at least from last 10 years and making no losses in networking business in last 5 financial years. (Undertaking to be given)
- 2.14 OEM should not be ready for sale or under acquisition or acquired recently (as companies strategies/roadmap will be impacted). (Undertaking to be given)
- 2.15 OEM should offer portal based services via partner which will provide valuable information related to the collected network devices.

3. Eligible Goods and Services

- 3.1 All goods and ancillary services to be supplied under the Contract shall have their origin in eligible source countries, defined in the *IDA* Guidelines for Procurement and all expenditures made under the Contract will be limited to such goods and services.
- 3.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced or from which the ancillary services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of Bidding

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and **The Director**, **Motilal Nehru National Institute of Technology Allahabad**, hereinafter referred to as "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

- 5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:
 - (a) Instruction to Bidders (ITB);
 - (b) General Conditions of Contract (GCC);
 - (c) Special Conditions of Contract (SCC);
 - (d) Schedule of Requirements;
 - (e) Technical Specifications;
 - (f) Bid Form and Price Schedules;
 - (g) Bid Security Form;
 - (h) Contract Form;
 - (i) Performance Security Form;
 - (j) Performance Statement Form;
 - (k) Manufacturer's Authorization Form;
 - (l) Bank Guarantee for Advance Payment Form; and
 - (m) Equipment and Quality Control Form.
- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

6. Clarification of Bidding Documents

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing Purchaser's mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of the bidding documents which it receives no later than 15 days prior to the deadline for submission of bids prescribed by the Purchaser. Written copies of the Purchaser's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders which have received the bidding documents.

7. Amendment of Bidding Documents

- 7.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.
- 7.2 Amendment if any, will be notified on the website of the Institute i.e. www.mnnit.ac.in, and will be binding on them.
- 7.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid

8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.

9. Documents Comprising the Bid

- 9.1 The bid prepared by the Bidder shall comprise the following components:
 - (a) A Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11 and 12;
 - (b) Documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
 - (c) Documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
 - (d) Bid security furnished in accordance with ITB Clause 15.

10. Bid Form

10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity and prices.

11. Bid Prices

- 11.1 The Bidder shall indicate on the Price Schedule the unit prices and total bid prices of the goods it proposes to supply under the Contract. To this end, the Bidders are allowed the option to submit the bids for any one or more schedules specified in the 'Schedule of Requirements' and to offer discounts for combined schedules. However, Bidders shall quote for the complete requirement of goods and services specified under each schedule on a single responsibility basis, failing which such bids will not be taken into account for evaluation and will not be considered for award.
- 11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - (i) The price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable:
 - a. On components and raw material used in the manufacture or assembly of goods quoted ex-works or ex-factory; or
 - b. On the previously imported goods of foreign origin quoted ex-showroom, ex-warehouse or off-the-shelf.
 - (ii) Any Indian duties, sales and other taxes which will be payable on the goods if this Contract is awarded;
 - (iii) The price for inland transportation, insurance and other local costs incidental to delivery of the goods to their final destination; and
 - (iv) The price of other incidental services listed in Clause 8 of the Special Conditions of Contract.
- 11.3 The Bidder's separation of the price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of the terms offered.
- 11.4 Fixed Price. Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to ITB Clause 24.

12. Bid Currencies

12.1 Prices shall be quoted in Indian Rupees:

13. Documents Establishing Bidder's Eligibility and Qualifications

- Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the Contract if its bid is accepted.
- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.
- 13.3 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, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized (as per authorization form in Section XII) by the goods' Manufacturer or producer to supply the goods in India.

[Note: Supplies for any particular item in each schedule of the bid should be from one manufacturer only. Bids from agents offering supplies from different manufacturers for the same item of the schedule in the bid will be treated as non-responsive.]

- (b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract and meets the criteria outlined in the Qualification requirements specified in Section VI-A. To this end, all bids submitted shall include the following information:
 - (i) The legal status, place of registration and principal place of business of the company or firm or partnership, etc.;
 - (ii) Details of experience and past performance of the bidder on equipment offered and on those of similar nature within the past three years and details of current contracts in hand and other commitments (suggested proforma given in Section XI);

14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

- 14.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the goods and services eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.
- 14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings and data, and shall consist of:
 - (a) A detailed description of the essential technical and performance characteristics of the goods;
 - (b) 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 for a period of two years, following commencement of the use of the goods by the Purchaser; and
 - (c) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- 14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

- 15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security in the amount as specified in Section V Schedule of Requirements.
- 15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.
- 15.3 The bid security shall be denominated in Indian Rupees and shall:
 - (a) At the bidder's option, be in the form of either a Fixed Deposit Receipt (FDR), or a bank guarantee from a nationalized/Scheduled Bank located in India or by a reputable banking institution selected by the bidder and located abroad in any eligible country;
 - (b) Be substantially in accordance with one of the form of bid security included in Section VIII or other form approved by the Purchaser prior to bid submission;
 - (c) Be payable promptly upon written demand by the Purchaser in case any of the conditions listed in ITB Clause 15.7 are invoked;
 - (d) Be submitted in its original form; copies will not be accepted; and
 - (e) Remain valid for a period of 45 days beyond the original validity period of bids, or beyond any period of extension subsequently requested under ITB Clause 16.2.
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 above will be rejected by the Purchaser as non-responsive, pursuant to ITB Clause 24.
- 15.5 Unsuccessful bidder's bid securities will be discharged/returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the Purchaser, pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the Contract, pursuant to ITB Clause 34, and furnishing the performance security, pursuant to ITB Clause 35.
- 15.7 The bid security may be forfeited:
 - (a) If a Bidder (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or (ii) does not accept the correction of errors pursuant to ITB Clause 24.2; or
 - (b) In case of a successful Bidder, if the Bidder fails:
 - (i) To sign the Contract in accordance with ITB Clause 34; or
 - (ii) To furnish performance security in accordance with ITB Clause 35.

16. Period of Validity of Bids

- 16.1 Bids shall remain valid for **90** days after the deadline for submission of bids prescribed by the Purchaser, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 16.2.1 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in ITB Clause 16.3 hereinafter.
- 16.3 In the case of fixed prices contracts, in the event that the Purchaser requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows:
 - The price shall be increased by the **factor** (B = 10 % **per Annum**) for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful Bidder.
- 16.4 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

17. Format and Signing of Bid

- 17.1 The Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

18. Sealing and Marking of Bids

- 18.1 The Bidders shall seal the original bid and submit the same on CPPP viz. https://eprocure.gov.in/eprocure/app
- 18.2 Bid Security of ₹6,75,000 in the form of either Fixed Deposit Receipt or Bank Guarantee drawn in favour of Director MNNIT Allahabad as noted in clause 15 of the Bid document must be sent in a sealed envelope superscribed as "Bid Security for NCB" bearing bid reference no. and addressed to.

Coordinator, TEOIP-III

Office of the Technical Education Quality Improvement Programme [TEQIP] - III, (Administrative Building) Motilal Nehru National Institute of Technology Allahabad, Prayagraj - 211004 (Uttar Pradesh)

- (a) The above envelop shall also bear the Project Name, **Technical Education Quality Improvement Programme [TEQIP]-Phase III** the Invitation for Bids (IFB) title and number **TEQIP-III/mnni/12**, and a statement "Do not open before **15:00** Hrs on **03.04.2019."** EMD received before due date & time of opening of Bid shall only be considered.
- 18.3 Incomplete Bids or Bids without EMD shall be treated as invalid.
- 18.4 Offline Bid, Telex, cable or facsimile bids will be rejected. Online Bids submitted at CPPP viz. https://eprocure.gov.in/eprocure/app shall only be considered.
- 18.5 Corrigendum, if any, shall be published only on the website www.mnnit.ac.in and https://eprocure.gov.in/eprocure/app.

19. Deadline for Submission of Bids

- 19.1 Bids must be received by the Purchaser at the address specified under ITB Clause 18.2 (a) no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received upto the appointed time on the next working day.
- 19.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with ITB Clause 7, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to ITB Clause 19, will be rejected and/or returned unopened to the Bidder.

21. Modification and Withdrawal of Bids

- 21.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.
- 21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of ITB Clause 18. A withdrawal notice may also be sent by telex or cable or fax but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.
- 21.3 No bid may be modified subsequent to the deadline for submission of bids.
- 21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to ITB Clause 15.7.

E. Bid Opening and Evaluation of Bids

22. Opening of Bids by the Purchaser

22.1 The Purchaser will open all bids, in the presence of Bidders' representatives who choose to attend, at 15:30 Hrs on 23.11.2018 and in the following location:

Room No. 203, Conference Hall adjacent to Purchase Office Motilal Nehru National Institute of Technology Allahabad Teliyarganj, Prayagraj – 211004.

The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

- 22.2 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.
- 22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.
- 22.4 The Purchaser will prepare minutes of the bid opening.

23. Clarification of Bids

During evaluation of bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

24. Preliminary Examination

- 24.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from Agents, without proper authorization from the manufacturer as per Section XII, shall be treated as non-responsive.
- 24.1.1 Where the Bidder has quoted for more than one schedule, if the bid security furnished is inadequate for all the schedules, the Purchaser shall take the price bid into account only to the extent the bid is secured. For this purpose, the extent to which the bid is secured shall be determined by evaluating the requirement of bid security to be furnished for the schedule included in the bid (offer) in the serial order of the Schedule of Requirements of the Bidding document.

- 24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the supplier does not accept the correction of errors, its bid will be rejected and its bid security may be forfeited.
- 24.3 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder.
- 24.4 Prior to the detailed evaluation, pursuant to ITB Clause 26, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 7). Warranty (GCC Clause 15), Force Majeure (GCC Clause 25), Limitation of liability (GCC Clause 29), Applicable law (GCC Clause 31), and Taxes & Duties (GCC Clause 33) will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

25. Deleted

26. Evaluation and Comparison of Bids

- 26.1 The Purchaser will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24 for each schedule separately. No bid will be considered if the complete requirements covered in the schedule is not included in the bid. However, as stated in Para 11, Bidders are allowed the option to bid for any one or more schedules and to offer discounts for combined schedules. These discounts will be taken into account in the evaluation of the bids so as to determine the bid or combination of bids offering the lowest evaluated cost for the Purchaser in deciding award(s) for each schedule.
- 26.2 The Purchaser's evaluation of a bid will exclude and not take into account:
 - (a) In the case of goods manufactured in India or goods of foreign origin already located in India, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
 - (a) Any allowance for price adjustment during the period of execution of the Contract, if provided in the bid.
- 26.3 Deleted.
- 26.4 The Purchaser's evaluation of a bid will take into account, in addition to the bid price (Ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and Excise duty on the finished goods, if payable) and price of incidental services, the following factors, in the manner and to the extent indicated in ITB Clause 26.5 and in the Technical Specifications:
 - (a) Cost of inland transportation, insurance and other costs within India incidental to the delivery of the goods to their final destination;
 - (b) Delivery schedule offered in the bid;
 - (c) Deviations in payment schedule from that specified in the Special Conditions of Contract;
 - (d) The cost of components, mandatory spare parts and service;
 - (e) The availability in India of spare parts and after-sales services for the goods / equipment offered in the bid;
 - (f) The projected operating and maintenance costs during the life of the equipment; and
 - (g) The performance and productivity of the equipment offered.

- 26.5 Pursuant to ITB Clause 26.4, one or more of the following evaluation methods will be applied:
 - (a) Inland Transportation, Insurance and Incidentals:
 - (i) Inland transportation, insurance and other incidentals for delivery of goods to the final destination as stated in ITB Clause 11.2 (iii).

The above costs will be added to the bid price.

- (b) Delivery Schedule:
 - (i) The Purchaser requires that the goods under the Invitation for Bids shall be delivered at the time specified in the Schedule of Requirements. The estimated time of arrival of the goods at the project site should be calculated for each bid after allowing for reasonable transportation time. Treating the date as per schedule of requirements as the base, a delivery "adjustment" will be calculated for other bids at 2% of the ex-factory price including excise duty for each month of delay beyond the base and this will be added to the bid price for evaluation. No credit will be given to earlier deliveries and bids offering delivery beyond 01 months of stipulated delivery period will be treated as unresponsive.
- (c) Deviation in Payment Schedule:

Deleted

(d) Cost of Spare Parts:

Deleted

(e) Spare Parts and After Sales Service Facilities in India:

The cost to the Purchaser of establishing the minimum service facilities and parts inventories, as outlined elsewhere in the bidding documents, if quoted separately, shall be added to the bid price.

(f) Operating and Maintenance Costs:

Deleted

(g) Performance and Productivity of the Equipment:

Deleted

27. Deleted.

28. Contacting the Purchaser

- 28.1 Subject to ITB Clause 23, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the purchaser, it should do so in writing.
- Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

F. Award of Contract

29. Post qualification

- In the absence of prequalification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid meets the criteria specified in ITB Clause 13.3 (b) and is qualified to perform the contract satisfactorily.
- 29.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13, as well as such other information as the Purchaser deems necessary and appropriate.
- 29.3 An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform the contract satisfactorily.

30. Award Criteria

30.1 Subject to ITB Clause 32, the Purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

31. Purchaser's right to vary Quantities at Time of Award

The Purchaser reserves the right at the time of Contract award to increase or decrease by up to 15 percent of the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

32. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids

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 the affected Bidder or bidders.

33. Notification of Award

- 33.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable/telex or fax, e-mail to be confirmed in writing by registered letter, that its bid has been accepted.
- 33.2 The notification of award will constitute the formation of the Contract.
- 33.3 Upon the successful Bidder's furnishing of performance security pursuant to ITB Clause 35, the Purchaser will promptly notify the name of the winning bidder to each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.
- 33.4 If, after notification of award, a Bidder wishes to ascertain the grounds on which its bid was not selected, it should address it's request to the Purchaser. The Purchaser will promptly respond in writing to the unsuccessful Bidder.

34. Signing of Contract

- 34.1 At the same time as the Purchaser notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
- 34.2 Within 21 days of receipt of the Contract Form, the successful bidder shall sign and date the Contract and return it to the Purchaser.

35. Performance Security

- Within 21 days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents or in another form acceptable to the Purchaser.
- Failure of the successful bidder to comply with the requirement of ITB Clause 34.2 or ITB Clause 35.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated bidder or call for new bids.

36 Corrupt or Fraudulent Practices

- 36.1 It is the Bank's policy that Borrowers (including beneficiaries of Bank loans), as well as Bidders, Suppliers, and Contractors, and their agents (whether declared or not), personnel, subcontractors, sub-consultants, service providers and suppliers under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts¹. In pursuance of this policy, the Bank:
 - (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
 - (ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
 - (iii) "Collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the borrower, designed to establish bid prices at artificial, non competitive levels; and
 - (iv) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract:
 - (v) "Obstructive practice" is
 - (a) Deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank 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
 - (b) Acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub – clause 36.1 (e) 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 or coercive practices in competing for the Contract in question;

¹ In this context, any action taken by a bidder, supplier, contractor, or any of its personnel, agents, subcontractors, sub-consultants, service providers, suppliers and/or their employees to influence the procurement process or contract execution for undue advantage is improper.

² "Another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ "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.

^{4 &}quot;Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non-competitive levels.

⁵ "Party" refers to a participant in the procurement process or contract execution.

- Will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;
- (d) Will sanction a firm or an individual, at any time, in accordance with prevailing Bank's sanctions procedures⁶, including by publically declaring such firm or individual ineligible, either indefinitely or for a stated period of time, (i) to be awarded a Bank-financed contract; and (ii) to be a nominated ⁷ subcontractor, consultant, manufacturer or supplier, or service provider of and otherwise eligible firm being awarded a Bank-financed contract; and
- (e) Will have the right to require that a provision be included in Bidding Documents and in contracts financed by a Bank loan, requiring Bidders, Suppliers, and Contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.
- 36.2 Furthermore, Bidders shall be aware of the provision stated in sub-clause 24.1 (c) of the General Conditions of Contract.

⁶ A firm or an individual may be declared ineligible to be awarded a Bank-financed contract upon completion of the Bank's sanctions proceedings as per its sanctions procedures, including inter alia: (i) temporary suspension in connection with an ongoing sanctions proceeding; (ii) cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks; and (iii) the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption.

A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which either has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that are accounted for in the evaluation of the bidder's pre-qualification application or the bid; or (ii) appointed by the Borrower.

$\frac{\textbf{SECTION III: GENERAL CONDITIONS OF CONTRACT}}{\textbf{TABLE OF CLAUSES}}$

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General Conditions of Contract

1. Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
 - (c) "The Goods" means all the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
 - (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
 - (e) "GCC" means the General Conditions of Contract contained in this section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Purchaser" means the organization purchasing the Goods, as named in SCC.
 - (h) "The Purchaser's country" is the country named in SCC.
 - (i) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
 - (j) "The World Bank" means the International Bank for Reconstruction and Development (IBRD) or the international Development Association (IDA).
 - (k) "The Project Site", where applicable, means the place or places named in SCC.
 - (l) "Day" means calendar day.

2. Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Country of Origin

- 3.1 All Goods and Services supplied under the Contract shall have their origin in the member countries and territories eligible under the rules of the World Bank as further elaborated in SCC.
- 3.2 For purposes of this Clause "origin" means the place where the Goods are mined, grown or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.

4. Standards

4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

5. Use of Contract Documents and Information

- 5.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

6. Patent Rights

6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

7. Performance Security

- 7.1 Within 21 days of receipt of the notification of contract award, the Supplier shall furnish performance security in the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:
 - (a) A Bank guarantee or Fixed Deposit Receipt (FDR), issued by a nationalized/scheduled bank located in India or a bank located abroad acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser; or
- 7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 30 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC.

8. Inspections and Tests

- 8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. SCC and the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.
- 8.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

- 9.1 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. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size 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.
- 9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the Notification of Award. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11. Insurance

11.1 The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

12. Transportation

- 12.1 Deleted.
- 12.2 Deleted.
- 12.3 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.
- 12.4 Deleted

13. Incidental Services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
 - (a) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
 - (b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
 - (d) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) Training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, 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.

14. Spare Parts

- 14.1 As specified in the SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
 - (a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
 - (b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for **60** months after the Goods or any portion thereof as the case may be, have been delivered installed and accepted at the final destination indicated in the Contract. The warranty shall be on Complete Solution.
- 15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from ex-works or ex-factory or ex-showroom to the final destination.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the Purchaser may proceed to take 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. (5 Year warranty on complete solution)
- 15.6 Onsite support with Residential Engg./Technical person for 5 years.

16. Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in the SCC.
- 16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the Purchaser but in no case later than sixty (60) days after submission of the invoice or claim by the Supplier.
- 16.4 Payment shall be made in Indian Rupees.

17. Prices

17.1 Prices charged by the Supplier for Goods delivered and 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 SCC or in the Purchaser's request for bid validity extension, as the case may be.

18. Change Orders

- 18.1 The Purchaser may at any time, by written order given to the Supplier pursuant to GCC Clause 31, 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 shipping or packing;
 - (c) The place of delivery; and/or
 - (d) The Services to be provided by the Supplier.
- 18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery 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.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21. Subcontracts

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delays in the Supplier's Performance

- 22.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Schedule of Requirements.
- 22.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). 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 with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.
- 22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in 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 SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

- 24.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
 - (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
 - (b) If the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) If the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 34, in competing for or in executing the Contract.
- 24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions 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.

26. Termination for Insolvency

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

27. Termination for Convenience

27.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

- 27.2 The Goods that are complete and ready for shipment within 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:
 - (a) To have any portion completed and delivered at the Contract terms and prices; and/or
 - (b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

28. Settlement of Disputes

- 28.1 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.
- 28.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then 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, and no arbitration in respect of this matter may be commenced unless such notice is given.
 - 28.2.1 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.
 - 28.2.2 Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 28.3 Notwithstanding any reference to arbitration herein,
 - (a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
 - (f) The Purchaser shall pay the Supplier any monies due the Supplier.

29. Limitation of Liability

- 29.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6,
 - (a) The Supplier shall not be liable to the Purchaser, 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.

30. Governing Language

30.1 The contract shall be written in English language. Subject to GCC Clause 30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

31. Applicable Law

31.1 The Contract shall be interpreted in accordance with the laws of the Union of India.

32. Notices

- 32.1 Any notice given by one party to the other pursuant to this Contract shall be sent to other party in writing or by cable, telex or facsimile and confirmed in writing to the other Party's address specified in SCC.
- 32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes and Duties

- 33.1 Deleted.
- 33.2 Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

34. Fraud and Corruption

- 34.1 It is the Bank's policy that Borrowers (including beneficiaries of Bank loans), as well as Bidders, Suppliers, and Contractors, and their agents (whether declared or not), personnel, subcontractors, sub-consultants, service providers and suppliers under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts⁸. In pursuance of this policy, the Bank:
 - (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution:
 - (ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
 - (iii) "Collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the borrower, designed to establish bid prices at artificial, non competitive levels; and
 - (iv) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
 - (v) "Obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and /or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub clause 34.1 (e) 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 or coercive practices in competing for the Contract in question;

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⁸ In this context, any action taken by a bidder, supplier, contractor, or any of its personnel, agents, subcontractors, sub-consultants, service providers, suppliers and/or their employees to influence the procurement process or contract execution for undue advantage is improper.

⁹ "Another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

^{10 &}quot;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.

^{11 &}quot;Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non-competitive levels.

¹² "Party" refers to a participant in the procurement process or contract execution.

- (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;
- (d) will sanction a firm or an individual, at any time, in accordance with prevailing Bank's sanctions procedures 13, including by publically declaring such firm or individual ineligible, either indefinitely or for a stated period of time, (i) to be awarded a Bank-financed contract; and (ii) to be a nominated 14 subcontractor, consultant, manufacturer or supplier, or service provider of and otherwise eligible firm being awarded a Bank-financed contract; and
- (e) will have the right to require that a provision be included in Bidding Documents and in contracts financed by a Bank loan, requiring Bidders, Suppliers, and Contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.
- 34.2 Furthermore, Bidders shall be aware of the provision stated in sub-clause 24.1 (c) of the General Conditions of

¹³ A firm or an individual may be declared ineligible to be awarded a Bank-financed contract upon completion of the Bank's sanctions proceedings as per its sanctions procedures, including inter alia: (i) temporary suspension in connection with an ongoing sanctions proceeding; (ii) cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks; and (iii) the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption.

¹⁴ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which either has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that are accounted for in the evaluation of the bidder's pre-qualification application or the bid; or (ii) appointed by the Borrower.

SECTION IV: SPECIAL CONDITIONS OF CONTRACT

SECTION IV: SPECIAL CONDITIONS OF CONTRACT

TABLE OF CLAUSES

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Special Conditions of Contract

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1. Definitions (GCC Clause 1)

- (a) The Purchaser is: Motilal Nehru National Institute of Technology Allahabad.
- (b) The Supplier is:

2. Country of Origin (GCC Clause 3)

All countries and territories as indicated in Section XIV of the bidding documents, "Eligibility for the Provisions of Goods, Works, and Services in Bank-Financed Procurement".

3. Performance Security (GCC Clause 7)

3.1 Within 21 days after the Supplier's receipt of Notification of Award, the Supplier shall furnish Performance Security to the Purchaser for an amount of 5% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 12 months and the Performance Bank Guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.

3.2 Substitute Clause 7.3 (b) of the GCC by the following:

A cashier's cheque or banker's certified cheque or crossed demand draft or pay order drawn in favour of **Motilal Nehru National Institute of Technology, Teliyarganj, Allahabad** [Purchaser].

3.3 Substitute Clause 7.4 of the GCC by the following:

The Performance Security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligation, under the contract.

3.4 Add as Clause 7.5 to the GCC the following:

In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.

4. Inspection and Tests (GCC Clause 8)

The following inspection procedures and tests are required by the Purchaser:

- (i) The inspection of the Goods shall be carried out to check whether the Goods are in conformity with the technical specifications attached to the contract and shall be in line with the inspection/test procedures laid down in the Technical Specifications and the General Conditions of contract. Following broad test procedure will generally be followed for inspection and testing of machine.
- The supplier will dispatch the goods to the ultimate consignee after internal inspection testing along with the supplier's inspection report and manufacturer's warranty certificate.
- The purchase will test the equipment after completion of the installation and commissioning at the site of the installation.
- For site preparation, the supplier should furnish all details to the purchaser sufficiently in advance so as to get the works completed before receipt of the equipment.

- Complete items/ accessories as specified in Section V should be supplied, installed and commissioned properly by the supplier prior to commencement of performance test.
- (ii) The acceptance test will be conducted by the purchaser/their consultant or any other person nominated by the purchaser, at its option. There shall not be any additional charges for carrying out acceptance tests. The supplier shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the purchaser, the successful completion of the test specified.
- (iii) In the event of the equipments failing to pass the acceptance test, a period not exceeding four weeks will be given to rectify the defects and clear the acceptance test, failing which the purchaser reserves the rights to get the equipment replaced by the supplier at no extra cost to the purchaser.

5. Packing (GCC Clause 9)

Add as Clause 9.3 of the GCC the following:

Packing Instructions: The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink, the following:

i) Project ii) Contract No. iii) Country of Origin of Goods iv) Supplier's Name, and v) Packing list reference number.

6. Delivery and Documents (GCC Clause 10)

Upon delivery of the Goods, the supplier shall notify the purchaser and the insurance company by cable/telex/fax the full details of the shipment including contract number, railway receipt number and date, description of goods, quantity, name of the consignee etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- 4 Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
- (ii) Railway receipt/acknowledgment of receipt of goods from the consignee(s);
- (iii) 4 Copies of packing list identifying the contents of each package;
- (iv) Insurance Certificate;
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and
- (vii) Certificate of Origin.

The above documents shall be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

7. **Insurance (GCC Clause 11)**

For delivery of goods at site, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes.

8. Incidental Services (GCC Clause 13)

The following services covered under Clause 13 shall be furnished and the cost shall be included in the contract price:

- a. Performance of the onsite assembly, commissioning and start-up of the equipment.
- b. Furnishing the detailed operation and maintenance manuals for each items of the supply at each location.

- Training the purchaser personnel at the suppliers office or other facility, in the installation and operation of the equipment.
- d. Maintenance and repair of the equipment at each location during the warranty period including supply of all spares. This shall not relieve the supplier of any warranty obligation under this contract.
- e. Maintenance and/or repairs of the supplied goods for a period of three years after the end of warranty period. The bidder should indicate the spares and their costs, if any, which are not indicated in the maintenance contracts.

9. Spare Parts (GCC Clause 14)

Add as Clause 14.2 to the GCC the following:

Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

10. Warranty (GCC Clause 15)

(i) G.C.C. Clause 15.2:

In partial modification of the provisions, the warranty period shall behours of operation or **60** months from date of acceptance of Goods ormonths from the dates of Shipment, whichever occurs earlier. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion either:

- (a) Make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC 4;
 - (ii) Substitute Clause 15.4 of the GCC by the following:

"Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever, shall lie on the Purchaser for the replaced parts/goods thereafter.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 12 months."

(iii) GCC Clauses 15.4 and 15.5:

The period for correction of defects in the warranty period is 20 days.

11. Payment (GCC Clause 16)

Payment for Goods and Services shall be made in Indian Rupees as follows:

* Advance Payment 0

* On Delivery 90

* On Final Acceptance 10

* 0 percent of the Contract Price shall be paid on the successful completion and acceptance of

Advance Payment

* 90 percent of the Contract Price shall be paid on the successful completion and acceptance of On Delivery

* 10 percent of the Contract Price shall be paid on the successful completion and acceptance of On Final Acceptance

Edit the above Payment Terms as per below sample.

- (i) Advance Payment: No advance payment.
- (ii) On Delivery: Eighty percent of the contract price shall be paid on receipt of Goods and upon submission of the documents specified in SCC Clause 6 above; and
- (iii) On Final Acceptance: The remaining twenty percent of the Contract Price shall be paid to the supplier within 30 days after the date_of the acceptance certificate issued by the Purchaser's representative for the respective delivery.

12. Prices (GCC Clause 17)

17.1 Prices payable to the supplier as stated in the contract shall be firm during the performance of the contract.

13. Sub-contracts (GCC Clause 21)

Add at the end of GCC sub-clause 21.1 the following:

Sub-contract shall be only for bought-out items and sub-assemblies

14. Liquidated Damages (GCC Clause 23)

14.1 For delays:

GCC Clause 23.1 -- The applicable rate is 0.07% per week and the maximum deduction is 10% of the contract price.

15. Settlement of Disputes (Clause 28)

The dispute settlement mechanism to be applied pursuant to GCC Clause 28.2.2 shall be as follows:

- (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Indian Council of Arbitration.
- (b) In the case of a dispute with a Foreign Supplier, the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Indian Council of Arbitration.

- (c) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above, within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the Indian Council of Arbitration both in cases of the Foreign supplier as well as Indian supplier, shall appoint the arbitrator. A certified copy of the order of the Indian Council of Arbitration making such an appointment shall be furnished to each of the parties.
- (d) Arbitration proceedings shall be held at **Allahabad** India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (f) Where the value of the contract is Rs. 10 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority namely the Indian Council of Arbitration.

16. Notices (Clause 32)

For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

Purchaser: The Director, Motilal Nehru National Institute of Technology Allahabad Teliarganj, Prayagraj - 211004

Supplier: (To be filled in at the time of Contract signature

17. Supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- Quantity offered for inspection and date;
- Quantity accepted/rejected by inspecting agency and date;
- Quantity dispatched/delivered to consignees and date;
- Quantity where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed on receipt of any communication from;
 Consignee/Purchaser with date
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract

(in case of stage-wise inspection, details required may also be specified).

SECTION V: SCHEDULE OF REQUIREMENTS

SCHEDULE OF REQUIREMENTS

Brief Description	<u>Unit</u>	Quantity	Delivery	Bid Security
	Price		Schedule	In Rupees
Network Switch POE	45000	70		
Network Switch Ethernet	97810	5		
Access Point	22700	250		
Access Point License (Total : Access Point + Access Point License = 500)	6280	250		
Wireless LAN Controller for Access Point Management	844776	1		
Installation of Casing-Capping with fixing, PVC (ISI Mark) Conduit, Conducting cable pulling / termination, cable laying, electric work complete in all respect.	1771000	1		₹ 6,75,000.00
CAT6 Cable	0	1		
Patch Cord 3 Mtr. UTP Cat6	0	250		
I/O Box with complete set	0	250		
Patch Panel with proper ferruling	0	5		
RJ-45 Connector	0	5		
6U Rack mounting and installation	0	5		

SECTION VI: TECHNICAL SPECIFICATIONS

<u>SECTION VI - TECHNICAL SPECIFICATIONS</u>

<u>POE Switch</u> <u>Cisco or at least Equivalent</u>

SL.		<u>Specification</u>	Compliance (Yes/No)
1.	General Features	The switch should support a minimum of 8 x 10/100/1000 Gigabit	
		Ethernet PoE Ports with PoE budget of 124 Watts.	
2.		The switch should support a minimum of 2x1G copper and 2x1G	
	Performance and	SFP Uplinks Ports.	
3.	Scalability	The switch should support Forwarding bandwidth of 12 Gbps.	
4.		The switch should have Packet Forwarding Rate of 17 Mpps.	
5.		The switch should support 4000 VLAN IDs.	
6.	Standards	The switch should support IEEE 802.1D Spanning Tree Protocol.	
7.		The switch should support IEEE 802.1p.	
8.		The switch should support IEEE 802.1Q Trunking.	
9.		The switch should support IEEE 802.1s Multiple Spanning Tree (MSTP).	
10.		The switch should support IEEE 802.1w Rapid Spanning Tree (RSTP).	
11.		The switch should support IEEE 802.1x	
12.		The switch should support IEEE 802.1ab (LLDP).	
13.		The switch should support IEEE 802.3ad Link Aggregation Control Protocol (LACP).	
14.	Safety standards	UL 60950-1 CAN/CSA 22.2 No. 60950-1 EN 60950-1 IEC 60950-1 CE Marking GB 4943 IEC 60825	
15.	Electromagnetic emissions certifications	FCC Part 15, CFR 47, Class A, North America. EN 55022 (CISPR22) and EN 55024 (CISPR24), CE marking, European Union. AS/NZS, Class A, CISPR22:2004 or EN55022, Australia and New Zealand. VCCI Class A, V-3/2007.04, Japan. KCC (Formerly MIC, GB17625.1-1998) Class A, KN24/KN22, Korea ANAtel, Brazil. CCC, China. GOST, Russia.	
16.	Environmental	Reduction of Hazardous Substances (ROHS) 6.	
17.	Telco	Common Language Equipment Identifier (CLEI) code.	

Network Switch Cisco or at least Equivalent

1. General Features The switch should support a minimum of 24 nos. 10/100/1000 Ethernet Ports. The switch should support a minimum of 4 SFP Uplinks. The switch should support 4x1G SFP modules. The switch should support a total of 28 Ports. Performance and Scalability The switch should support Forwarding bandwidth of 108 Gbps. The switch should support Full-duplex switching bandwidth of 216 Gbps. The switch should support 64-Byte Packet Forwarding Rate of 71.4 Mbps. The switch should support 128 MB of Flash memory. The switch should support 512 MB of DRAM. The switch should support 1023 VLANs. The switch should support 4096 VLAN IDs. The switch should support Jumbo frames of 9216 bytes. The switch should support maximum transmission unit (MTU) of 9198 bytes. The switch should support 16000 Unicast MAC addresses. The switch should support Operating temperature up to 5000 ft (MTC) and the switch should support Operating temperature up to 5000 ft (MTC) and the switch should support Operating temperature up to 5000 ft (MTC) and the switch should support Operating temperature up to 5000 ft (MTC) and the switch should support Operating temperature up to 5000 ft (MTC)	
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9. The switch should support 512 MB of DRAM. 10. The switch should support 1023 VLANs. 11. The switch should support 4096 VLAN IDs. 12. The switch should support Jumbo frames of 9216 bytes. 13. The switch should support maximum transmission unit (MTU) of 9198 bytes. 14. The switch should support 16000 Unicast MAC addresses. 15. Dimension The switch should support Operating temperature up to 5000 ft.	
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The switch should support Operating temperature up to 5000 ft	
	-
$(1500 \text{ m}) - 5^{\circ} \text{ to } 45^{\circ}\text{C}.$	
The switch should support Operating relative humidity 10% to	
17. 95% noncondensing.	
18. Stacking The switch should support physical/dedicated stacking ports in addition to base ports with min. stacking bandwidth of 80Gbps.	
19. Stacking should enable all switches to function as a single unit.	
20. The switch should support an optional stacking port.	
21. Stacking module should be Hot-swappable.	
22. Stacking should support a minimum of 2 or more switches.	
23. Stacking should support a maximum of 8 switches.	
24. Stacking should support 80 Gbps of throughput.	
Stacking should support single IP address management for the	
25. group of switches.	
26. Stacking should support single configuration.	
27. Stacking should support simplified switch upgrade.	
Stacking should support automatic upgrade when the master	
switch receives a new software version.	
29. Stacking should support stacking cable length of 3m.	
Stacking should support QoS to be configured across the entire stack.	
Power Supply The switch should support an auto-ranging power supply with input voltage between 100 and 240V AC.	
32. The switch should support an External Redundant Power Supply.	
33. Standards The switch should support IEEE 802.1D Spanning Tree Protocol.	
34. The switch should support IEEE 802.1p.	
The switch should support IEEE 802.1Q Trunking.	
The switch should support IEEE 802 to Multiple Spanning Tree	
30. (MSTP).	
The switch should support IEEE 802.1s Rapid Spanning Tree (RSTP).	
38. The switch should support IEEE 802.1x	

SL No.		Specification	Compliance (Yes/No)
39.		The switch should support IEEE 802.1ab (LLDP)	
40.		The switch should support IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
41.		The switch should support RMON I and II standards	
42.		The switch should support SNMP v1, v2c, and v3	
		The switch should support Automatic Negotiation of Trunking	
43.	Layer-2 Features	Protocol, to help minimize the configuration & errors.	
44.		The switch should support IEEE 802.1Q VLAN encapsulation	
45.		The switch should support Centralized VLAN Management. VLANs created on the Core Switches should be propagated	
46.		automatically The switch should support Spanning-tree PortFast and PortFast guard for fast convergence	
47.		The switch should support UplinkFast & BackboneFast technologies to help ensure quick failover recovery, enhancing overall network stability and reliability	
48.		The switch should support Spanning-tree root guard to prevent other edge switches becoming the root bridge.	
49.		The switch should support IGMP filtering	
50.		The switch should support discovery of the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems.	
51.		The switch should support Per-port broadcaststorm control to prevent faulty end stations from degrading overall systems performance	
52.		The switch should support Per-port multicast storm control to prevent faulty end stations from degrading overall systems performance	
53.		The switch should support Per-port unicast storm control to prevent faulty end stations from degrading overall systems performance	
54.		The switch should support Voice VLAN to simplify IP telephony installations by keeping voice traffic on a separate VLAN	
55.		The switch should support Unidirectional Link Detection Protocol (UDLD) and Aggressive UDLD to allow for unidirectional links caused by incorrect fiber-optic wiring or port faults to be detected and disabled on fiber-optic interfaces.	
56.		The switch should support Local Proxy Address Resolution Protocol (ARP) working in conjunction with Private VLAN Edge to minimize broadcasts and maximize available bandwidth	
57.		The switch should support IGMP v1,v2 & v3 Snooping	
58.		The switch should support IGMP Snooping Timer	
59.		The switch should support support IGMP Throttling	
60.		The switch should support IGMP Querier	
61.		The switch should support Configurable IGMP Leave Timer	
62.		The switch should support MVR (Multicast VLAN Registration)	
63.	L3 Features	The switch should support Inter-VLAN routing	
64.		The switch should support IPv4 unicast Static Routing	
65.		The switch should support 16 IPv4 Static routes	
66.	Smart Operations	The switch should support configuration of the Software image and switch configuration without user intervention	
67.		The switch should support automatic configuration as devices connect to the switch port.	
68.		The switch should support diagnostic commands to debug issues	
69.		The switch should support system health checks within the switch	
70.		The switch should support Online Diagnostics	

SL No.	<u>Specification</u>		Compliance (Yes/No)
71.	Quality of Service (QoS) & Control	The switch should support 4 egress queues per port to enable differentiated management.	
72.		The switch should support rate limiting based on Layer 4 TCP and UDP information	
73.		The switch should support availability of up to 256 aggregate or individual polices per port	
74.	Management	The switch should support Command Line Interface (CLI) support for configuration & troubleshooting purposes	
75.		The switch should support four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis	
76.		The switch should support Layer 2 trace route to ease troubleshooting by identifying the physical path that a packet takes from source to destination	
77.		The switch should support Trivial File Transfer Protocol (TFTP) to reduce the cost of administering software upgrades by downloading from a centralized location	
78.		The switch should support SNMP v1, v2c and v3 of-band management	
79.		The switch should support Serial Console Port	
80.		The switch should support USB Console Port	
81.		The switch should support SNMPv1, SNMPv2c, and SNMPv3	
82.	Network security features	The switch should support IEEE 802.1x to allow dynamic, port-based security, providing user authentication	
83.		The switch should support Port-based ACLs for Layer 2 interfaces to allow application of security policies on individual switch ports.	
84.		The switch should support TACACS+ and RADIUS authentication enable centralized control of the switch and restrict unauthorized users from altering the configuration	
85.		The switch should support MAC address notification to allow administrators to be notified of users added to or removed from the network	
86.		The switch should support Port security to secure the access to an access or trunk port based on MAC address	
87.		The switch should support Multilevel security on console access to prevent unauthorized users from altering the switch configuration.	

Access Point Cisco or at least Equivalent

SL.	Specification	Compliance (Yes/No)
1.	Access Point proposed must include radios for 2.4 GHz and 5 GHz with 802.11ac Wave 2.	, ,
2.	An access point must include a standard OEM provided Mounting brackets for mounting on Ceiling or Roof top.	
3.	Access Point shall support console port that uses Standard Port (RJ-45) type connection.	
4.	Access point must have an 1X10/100/1000BASE-T (RJ-45) Ethernet port and additional USB 2.0 interface.	
5.	Must have -100 dB or better Receiver Sensitivity.	
5.	Must have atleast 3 dBi Antenna gain on each radios.	
7.	Must support 3x3 MIMO for both 802.11ac and 802.11n client.	
8.	Must support minimum data rate of 867 Mbps on 5Ghz with 80mhz channel.	
9.	Must support minimum of 22dbm of transmit power in both 2.4Ghz and 5Ghz radios and should follow the local regulatory Norms.	
10.	Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.	
11.	Must incorporate radio resource management for power, channel and performance optimization.	
12.	Must have 97 dB or better Receiver Sensitivity.	
13.	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.	
14.	Must support Management Frame Protection.	
15.	Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).	
16.	Access Points must support Hardware-based encrypted user data and management traffic between controller and Access point for better security.	
17.	Must support the ability to serve clients and monitor the RF environment concurrently.	
18.	Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.	
19.	Must be plenum-rated (UL2043).	
20.	Must support 16 WLANs per AP for SSID deployment flexibility.	
21.	Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.	
22.	Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.	
23.	Must support Power over Ethernet, local power (DC Power), and power injectors.	
24.	802.11e and WMM.	
25.	Must support Reliable Multicast to Unicast conversion to maintain video quality at AP level.	
26.	Must support QoS and Video Call Admission Control capabilities.	
27.	Access Point should 802.11 DFS certified.	
28.	Must continue serving clients when WAN link to controller is back up again, should not reboot before joining.	
29.	The APs must support centralized wireless mode with the use of a controller, but the APs must also support operation in autonomous mode without the presence of any controller, when needed.	
30.	When operated in remote AP mode, the AP must not disconnect any clients when the connection to the controller fails or in the case the failed connection has been restored again.	
31.	When operated in remote AP mode with local authentication available, the AP must be able to authenticate new users with local radius server directly at the AP itself in case of link failure to controller.	

Cisco or at least equivalent Wireless LAN Controller

SL.	Specification	Compliance (Yes/No)
	are Specifications	
A1	Must be compliant with IEEE CAPWAP or equivalent for controller-based WLANs.	
A2	Should have atleast 2 x 10 Gigabit Ethernet interface.	
A3	Should support both centralized as well as distributed traffic forwarding architecture	
	with L3 roaming support from day 1. Should have IPv6 ready from day one.	
A4	Controller should have hot-swappable internal redundant power supplies.	
A5	Controller should support minimum 20000 concurrent devices.	
A6	WLAN controller should have scalability to support 100 Access points from day 1 without any hardware change and scalble to upto 1500 access points.	
A7	Should be rack-mountable. Required accessories for rack mounting to be provided.	
A8	WLAN controller should provide Application visibility with both traffic forwarding mode i.e when traffic coming to controller and when traffic moving locally from Ap	
710	to connected access switch. Admin should have option to create policies to allow or deny access based on applications.	
A9	WLC should support AP License Migration from one WLC to another.	
A10	Should support minimum 4000 VLANs	
B. Wireles	ss Controller Features	
B1	Must support stateful switchover between active and standby controller in a sub second time frame.	
B2	WLC should support L2 and L3 roaming for Ipv4 and Ipv6 clients.	
B3	WLC should support guest-access functionality for Ipv6 clients.	
B4	Should support IEEE 8021p priority tag.	
B5	Should ensure WLAN reliability by proactively determining and adjusting to changing RF conditions.	
В6	Should provide real-time radio power adjustments based on changing environmental conditions and signal coverage adjustments.	
В7	Should support automatic radio channel adjustments for intelligent channel switching and real-time interference detection.	
В8	Should support client load balancing to balance the number of clients across multiple Aps to optimize AP and client throughput.	
В9	Should support policy based forwarding to classify data traffic based on ACLs.	
B10	WLC should support PMIPv6 and EoGRE tunnels on northbound interface.	
B11	Should support flexible DFS to prevent additional 20/40 Mhz channels from going unused.	
B12	Should support dynamic bandwidth selection among 20Mhz, 40Mhz and 80Mhz	
	channels connected on the same controller at same WLAN group.	
B13	Should support minimum 500 WLANs.	
B14	Should support dynamic VLAN assignment	
B15	Should support Hot Spot 2.0	
B16	To deliver optimal bandwidth usage, reliable multicast must use single session between AP and Wireless Controller.	
B17	Should able to do dynamic channel bonding based on interference detected on particular channel.	
B18	Must support coverage hole detection and correction that can be adjusted on a per WLAN basis.	
B19	Must support RF Management with 40 MHz and 80 MHz channels with 802.11n & 802.11ac.	
B20	Should provide visibility to network airtime in order to set the airtime policy enforcement.	
B21	Must support dynamic Airtime allocation on per WLAN, per AP, Per AP group basis.	
B22	Must be able to restrict the number of logins per user.	
B23	Should support flexible DFS to prevent additional 20/40/80 Mhz channels from going unused.	

SL.	Specification	Compliance (Yes/No)
C. Security		
C1	Should support web-based authentication to provide a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant.	
C2	WLC should support web based authenticating in different traffic forwarding modes i.e. central switching and Local switching when traffic move locally from AP to connected switch.	
C3	Should support port-based and SSID-based IEEE 802.1X authentication.	
C4	Should support MAC authentication to provide simple authentication based on a user's MAC address.	
C5	WLC should be able to exclude clients based on excessive/multiple authentication failure.	
C6	Shall support AES pr TKIP encryption to secure the data integrity of wireless traffic.	
C 7	Shall support the ability to classify over 20 different types of interference with in 5 to 30 seconds.	
C8	Shall able to provide an air quality index for ensuring the better performance.	
C9	Shall able to provide real time chart showing interference per access point on per radio and per-channel basis.	
C10	Should support AP location-based user access to control the locations where a wireless user can access the network.	
C11	Should support Public Key Infrastructure (PKI) to control access.	
C12	Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.	
C13	WLC shall support WIDS/WIPS, and spectral analysis from day 1.	
C14	WLC should detect if someone connect a Rogue Access Point in network and able to take appropriate action to contain rogue Access point.	
C15	In case of Access point connected in remote locations over WAN, containment should happen even if WAN is down.	
C16	WLC should detect and protect an Ad-hoc connection when a connected user forming a network with other system without an AP or try enabling bridging between two interface.	
C17	WLC should detect if a user try to impersonate a management frame.	
C18	WLC should detect and take appropriate containment action if a smartphone user using tethering to connect other device.	
C19	WLC should detect and protect if a user try to spoof mac address of valid client or AP for unauthorized access/authentication.	
C20	WLC should detect if a user trying to do internet sharing through a valid system to an unauthorized device.	
C21	The proposed WLAN controller must allow to connect non-802.11r devices, even if the 802.11r is enabled on SSID.	
C22	The proposed WLAN controller must support Adaptive 802.11r	
	ment & QoS	
D1	Should support SNMPv3, SSHv2, SSHv2 and SSL for secure management.	
D2	Should support encrypted mechanisum to securely upload/download software image to and from Wireless controller.	
D3	Should provide visibility between a wired and wireless network using IEEE 802.1AB Link Layer Discovery Protocol (LLDP) and sFlow/equivalent.	
D4	Should support AP Plug and Play (PnP) deployment with zero-configuration capability.	
D5	Should support AP grouping to enable administrator to easily apply AP-based or radio-based configurations to all the APs in the same group.	
D6	Should support selective firmware upgrade APs, typically to a group of APs minimize the impact of up-gradation.	
D7	Should have a suitable serial console port.	
D8	Should have Voice and Video Call Admission and Stream prioritization for preferential QOS.	
D9	Controller should support deep packet inspection for all user traffic across Layer 4-7 network to analyses information about applications usage, peak network usage times	

SL.	Specification	Compliance (Yes/No)
	for all access points from day one with different traffic forwarding modes i.e central switching with WLC and local switching when traffic move locally from AP to connected switch.	
D10	Should be able to do application visibility for application running behind HTTP proxy.	
D11	Support profiling of wireless devices based on known protocols like http and dhcp to identify clients.	
D12	Should support visibility and control based on the type of applications.	

Eligibility Criteria for Passive Items:

- 1. OEM should be a Company registered in India under the Indian Companies Act 1956 and should be in existence in India for past 20 years.
- 2. OEM should have direct service center/presence, OEM should have toll free Number and warehouse in India.
- 3. All copper products should have ROHS certificates.
- 4. The cabling should be certified to have application support warranty for next 25 years.
- 5. All passive components should be from the same OEM.
- 6. Bidder should be authorized Partner of OEM. Tender Specific MAF required by OEM.

Specifications for Passive Items Cable & Others <u>Category 6 UTP, 4 Pair</u>

<u>S/N</u>	Desired Specification/Qualitative Requirement	Compliance (Yes/No)	Remark
1	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801		
2	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.		
3	The 4 pair Unshielded Twisted Pair cable shall be UL® Listed. Cable should also be tested and verified by ERTL.		
4	Conductor Solid bare Copper and Jacket FR PVC and UL approved CM rated cable and Outer jacket sheath of the cable shall be LSZH.		
5	Insulation :High Density Polyethylene		
6	Dielectric Strength of cable should be 1.0KV dc		
7	Attenuation (< 17 db), Pair – to – pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR.		
8	Bending Radius should be < 25.4 mm at -20 °C \pm 1°C and Pulling Force: 11.5 Kg		
9	Nominal Outer Diameter of Cable should be 6.1 mm and Conductor Diameter 0.56 mm (23 AWG)		
10	Cable should support operating Temperature from -20° to +70°C		
11	Cable should come with printed sequential Length Counter on each meter		
12	Cable support Conductor Resistance < 9.38 Ω /100m		
13	Mutual Capacitance of cable should be < 5.6nF/100m		
14	Max Resistance Unbalance of cable should be 5% Max		
15	Capacitance Unbalance of cable should max 330pF/100m		
16	Cable support Delay Skew: < 45nS, Operating Voltage: 72V and NVP: 69%		
17	Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard and Operates at bandwidth of 600MHz.		

FACE PLATE

S/N	Desired Specification/Qualitative Requirement	Compliance (Yes/No)	Remark
1	Single & DUAL square plate (86*86mm) , Quad in Rectangular shape (146*86mm) (ABS, UL94-HB)		
2	Write on labels in transparent plastic window – supplied with plate PC (UL94V-2)		
3	Screw hole covers – to be supplied with plate M3.5 x L25mm		
4	It should have clear label for application identification and inbuilt shutters for protection against dust (ABS, UL94-HB)		
5	Should be able to support variety of jacks – UTP5e, UTP6, UTP6A and STP		

INFORMATION OUTLET

S/N	Desired Specification/Qualitative Requirement	Compliance (Yes/No)	Remark
1	INFORMATION OUTLET should support Category 6, ANSI/EIA/TIA568 C.2 and 568A/B configuration		
2	All information outlets for 100 Ω , 22-26 AWG copper cable shall: Use insulation displacement connectors (IDC)		
3	Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limits.		
4	Be constructed of high impact, flame-retardant thermoplastic with color and icon options for better visual identification.		
5	IDC Contact Plating: Phosphor bronze with tin plated and Housing PC + glass fiber (UL 94 V-2)		
6	Insertion force: 20N max (IEC 60603-7-4)		
7	Contact Plating: 50 µinches gold on plug contact area		
8	Information outlet (RJ45 jack) should be covered under ETL Verification program for compliance with TIA568.C.2		
9	Operation Temp: -10 C to 60 C		
10	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent		
11	Operating Life: Minimum 750 insertion cycles		
12	Contact Material: Copper alloy		

24 PORT JACK PANEL

S/N	Desired Specification/Qualitative Requirement	Compliance (Yes/No)	Remark
1	The Cat-6 transmission performance is in compliance with the Compliant with ANSI/TIA-568-C.2, ISO/IEC 11801 Ed.2 and EN 50173-1 specification with LED indicator at each Port.		
2	Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit and Fast-Location lighting cable identification technology for saving cost and time for cable identification		
3	Have port identification numbers on the front of the panel with writable and erasable marking surfaces for each port on the front panel.		
4	Should have self-adhesive, clear label holders and white labels with the panel should be of 1U height with 24 port pre-loaded IO.		
5	IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools.		
7	IDC cap: ABS, UL 94V -2 and Phosphor bronze with tin plated and Made of powder coated steel		
8	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent		
9	Dielectric Strength: 1000V RMS for 1min		
10	IDC Operating life: minimum 250 insertions and Jack Operating life: minimum 750 insertions		
11	Insulation Resistance: $10M \Omega$ min, Contact Resistance: $2m\Omega$ per contact		
12	Temperature Range: -10°C to 60°C max, Humidity :10%-65%		
13	PCB: FR-4,1.6mm thickness, Panel: SECC,1.5mm thickness		
14	Plug Retention Force: 15 lb and Jack Contact : phosphor bronze,50μ Inch thickness gold over nickel		
15	IDC Contact : 0.8mm thickness phosphor bronze, tin plating over nickel		

MOUNTING CORDS

S/N	Desired Specification/Qualitative Requirement	Compliance (Yes/No)	Remark
1	Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.		
2	The Patch cords shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C.2 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100Ω Category 6 Cabling.		
3	Should have 50 micro inches of gold plating over nickel contacts.		
4	Should be covered by ETL verification program for compliance with TIA 568.C.2		
5	Conductor size: 24 AWG stranded bare copper		
6	Cable flame property should follow VW-1 and FT-1 Standard		
7	Jacket: PVC UL-94V-O		
8	Temperature range: -10oC to +80oC		
9	Operating life: Minimum 750 insertion cycles		
10	Contact blade: Phosphor bronze		
11	Contact plating: 50µ" Gold		
12	Plug dimensions & tolerances compliant with FCC Part 68.500 and IEC 60603-7		
13	Approvals: UL 444 for copper conductor		
14	Dielectric with standing voltage : 500 V AC		
15	Insulation résistance : 35 M Ohm (Max)		
16	Length 3Mtrs		

6U RACK for Mounting Switch

<u>Specification</u>	Compliance (Yes/No)	<u>Remarks</u>
Conforms to DIN 41494 OR equivalent ISO Standards	_	-
Adjustable 19" equipment mounting verticals provide better mounting flexibility and maximizes the usable mounting space	-	-
Depth adjustable mounting slots	_	-
Precision engineering capabilities and best efficient software configuration product technology provide the best product quality and fastest delivery in the industry	-	-
Top and bottom Panel with ventilation and cable entry facility	_	-
Provision to mount cooling fans on the top panel	_	_
Powder coated finish with pretreatment process meeting all industry standards	-	-
Grounding and Bonding Options. 100% assured compatibility with all equipment conforming to DIN 41494 (General industrial standard for equipment)	-	-
Construction: Welded	-	-
Front Door : Lockable Toughened Glass Door	_	-
Basic Frame : Steel	_	-
Mounting Angle: 19" Mounting angles made of formed steel	-	-
Top and Bottom Cover: Welded to Frame, Vented and Field Cable entry exit cut outs	-	-
Standard Color : Grey	_	-
Static Load : 40 kgs	_	_
6U / Width 550 / Depth 450	_	-
Standard Accessories:	_	-
Power Distribution Units.	_	-
1U Horizontal Cable Manager.	_	-
FAN and one Hardware Packet	_	-

SECTION VI-A: QUALIFICATION CRITERIA

(Referred to in Clause 13.3(b) of ITB)

Qualification Criteria

Is Minimum Financial Turnover met in at least once of the last three years excluding current financial year?

Satisfactory delivery of similar goods/items of value not less than 80% of estimated contract value in less than

3 years.

GSTIN Number

SECTION VII: BID FORM AND PRICE SCHEDULE

SECTION VII: BID FORM

	Credit/Loan No):
TO: (Name and address of	purchaser)	
Gentlemen and/or Ladies:		
which is hereby deliverbidding documents for the	duly acknowledged, we, the(Description of Go	a Nos
We undertake, if our bid in the Schedule of Require	=	accordance with the delivery schedule specified
	e will obtain the guarantee of a bate performance of the Contract, in the	nk in a sum equivalent to percent of the form prescribed by the Purchaser.
		ified in Clause 16.1 of the Bid Data Sheet and it before the expiration of that period.
_	s, if any, paid or to be paid by us ed the contract, are listed below:	to agents relating to this Bid, and to contract
Amount Rupees	Name and Address of agent	Purpose of Commission or gratuity
(if none, state "none").		
	prepared and executed, this bid, to l, shall constitute a binding Contract	gether with your written acceptance thereof and between us.
		ade to us, in executing) the above contract, we force in India namely "Prevention of Corruption
We hereby certify that we in bribery.	have taken steps to ensure that no p	person acting for us or on our behalf will engage
We understand that you a	re not bound to accept the lowest or	any bid you may receive.
We clarify/confirm that documents.	we comply with the eligibility req	uirements as per ITB Clause 2 of the bidding
Dated this day of	19	
(signature)		(in the capacity of)
		()

PRICE SCHEDULE

SECTION VIII: BID SECURITY FORM

SECTION VIII: BID SECURITY FORM

	Whereas
	KNOW ALL PEOPLE by these presents that WE
1.	If the Bidder
	(a) with draws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
	(b) does not accept the correction of errors in accordance with the ITB; or
2.	If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:
	(a) fails or refuses to execute the Contract Form if required; or
	(b) fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders;
	we undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.
	This guarantee will remain in force up to and including forty five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.
	(Signature of the Bank)
	Name of Bidder

SECTION IX: CONTRACT FORM

SECTION IX: CONTRACT FORM

THIS	purchaser) of	(Country o _j Name of Supplie	f <i>Purchaser)</i> r) of	(hereinafter called	tween
WHI	(Brief Description	of Goods and Secretices in the su	ervices) and h	nas accepted a bid	by the Supplier for the supply of act Price in Words and Figures)
NOV	V THIS AGREEMEN	T WITNESSETI	H AS FOLLO	WS:	
1.	In this Agreement w them in the Condition	_		re the same meaning	gs as are respectively assigned to
2.		nents shall be de	emed to form	and be read and co	nstrued as part of this Agreement,
	viz.: (a) (b) (c) (d) (e) (f)	1	the Schedule of the Technical the General Co the Special Co	and the Price Scheof Requirements; Specifications; onditions of Contrapolitions of Contrapolitions of Contrapolitions of A	ct; and
3.		covenants with	the Purchaser	to provide the go	Supplier as hereinafter mentioned, bods and services and to remedy Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration services and the remedying of defects therein, the Contract Price of payable under the provisions of the Contract at the times and in the manner.		such other sum as may become			
	Brief particulars of under:	the goods and s	ervices which	shall be supplied	/provided by the Supplier are as
SL. NO.	-	NTITY TO BE SUPPLIE	UNIT PRICE	Total Price	DELIVERY TERMS GOODS & SERVICES
TOTAL VALUE: DELIVERY SCHEDULE:					

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IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their

respective laws the day and year first above written.

in the presence of:.....

SECTION X: PERFORMANCE SECURITY FORM

SECTION X. PERFORMANCE SECURITY FORM

To:	(Name of Purchaser)
WHEREAS	(Name of Supplier)
No	d "the Supplier" has undertaken , in pursuance of Contract (Notification of Award) dated,(Description
of Goods	and Services) hereinafter called "the Contract".
Bank Gua	S it has been stipulated by you in the said Contract that the Supplier shall furnish you with a arantee by a recognized bank for the sum specified therein as security for compliance with ier's performance obligations in accordance with the Contract.
THEREFORE W	S we have agreed to give the Supplier a Guarantee: 'E hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up of
Figures) a default u	and we undertake to pay you, upon your first written demand declaring the Supplier to be in nder the Contract and without cavil or argument, any sum or sums within the limit of (Amount of Guarantee) as aforesaid, without your needing to prove or to show or reasons for your demand or the sum specified therein.
This guarantee is	valid until theday of20
	Signature and Seal of Guarantors
	Date20
	Address:

SECTION XII (Please see Clause 13.3(a) of Instructions to Bidders) MANUFACTURERS' AUTHORIZATION FORM* No. ______ dated To Dear Sir: IFB No. We who are established and reputable manufacturers of (name and description of goods offered) having factories at (address of factory) do hereby authorize M/s (Name and address of Agent) to submit a bid, and sign the contract with you for the goods manufactured by us against the above IFB.

No company or firm or individual other than M/s are authorized to bid, and conclude the contract for the above goods manufactured by us, against this specific IFB. (*This para should be deleted in simple items where manufacturers sell the product through different stockists.*)

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and Clause 10 of the Special Conditions of Contract for the goods and services offered for supply by the above firm against this IFB.

Yours faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. It should be included by the Bidder in its bid.

* Modify this format suitably in case where manufacturer's warranty and guarantee are not applicable for the items for which bids are invited.

SECTION XIII

SAMPLE FORM

BANK GUARANTEE FOR ADVANCE PAYMENT

To:	(name of Purchaser)
	(address of Purchaser)
	(name of Contract)
Gent	men:
In ac	ordance with the provisions of the Special Conditions of Contract which amends Clause 16 of the General Conditions of Contract
We,	unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to
	(in words).
We i	rther agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between (name of Purchaser) and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.
This	uarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the contract until
	Yours truly, Signature and seal : Name of bank Financial institution: Address : Date :

^{*} An amount is to be inserted by the bank representing the amount of the Advance Payment.

SECTION XIV

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement.

As of March 2000¹

For the information of Borrowers and Bidders, and with reference to paragraph 1.6, footnote 9, of the *Guidelines: Procurement under IBRD Loans and IDA Credits*, dated January 1995 (revised January and August 1996 and September 1997, and January 1999), set forth below is a list of countries from which Bidders, Goods and Services are not eligible to participate in procurement financed by the World Bank or IDA².

- Andorra
- Cuba
- Democratic People's Republic of Korea (North Korea)
- Liechtenstein
- Monaco
- Nauru
- Tuvalu

In addition, Bidders, Goods and Services from other countries or territories may be declared ineligible by a provision in the Bidding. Documents if the borrower's country has excluded them by a law, an official regulation, or an act of compliance meeting the requirements of paragraph 1.8 (a) of the *Guidelines: Procurement under IBRD Loans and IDA Credits*.

The Loan/Credit Agreement also prohibits a withdrawal from the Loan / Credit Account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. At the present time, this prohibition applies to no country.

Notes:

- The most current listing of eligible countries can be viewed on the Public Information Center's Web page at: http://www.worldbank.org/html/pic/PROCURE.html. A list of firms debarred from participating in World Bank projects is available at: http://www.worldbank.org/html/opr/procure/debarr.html.
- Any questions regarding this list should be addressed to the Senior Manager, Procurement Policy and Services Group, Operational Core Services Network, The World Bank

ANNEXURE XV

PROFORMA FOR EQUIPMENT AND QUALITY CONTROL EMPLOYED BY THE MANUFACTURER

1	BID NO	DATE OF OPENING:		
1	NAME OF THE BIDDER :			
	(Note: All details should relate	to the manufacturer for the items offered for supply)		
1.	Name & full address of the Manufacturer			
2.	(a) Telephone & Fax No(b) Telex No.(c) Telegraphic address:	Office/Factory/Works Office/Factory/Works		
3.	Location of the manufacturing factory.			
4.	Details of Industrial License, wherever required as per statutory regulations.			
5.	Details of important Plant & Machinery functioning in each dept. (Monographs & description pamphlets be supplied if available).			
6.	Details of the process of manufacture in the	factory.		
7.	Details & stocks of raw materials held.			
8.	Production capacity of item(s) quoted for, v	vith the existing Plant & Machinery		
	8.1 Normal 8.2 Maximum			
9.	Details of arrangement for quality control o	f products such as laboratory, testing equipment etc.		
10.	Details of staff:			
	10.1Details of technical supervisory staff in	charge of production & quality control.		
	10.2 Skilled labour employed.			
	10.3 Unskilled labour employed.			
	10.4 Maximum No. of workers (skilled & uthe date of Tender.	unskilled) employed on any day during the 18 months preceding		
11.	Whether Goods are tested to any standard submitted in triplicate.	specification? If so, copies of original test certificates should be		
12.		neral of Supplies and Disposals, New Delhi 110 001, India? If n, period of currency etc. with a copy of the certificate of		
	Signature and seal of the Manufacturer			