

**Bidding Document
for
Supply & Installation of IT Equipment &
Accessories
At
Building No 09 State Life Insurance
Corporation of Pakistan SLICP**

July, 2025

**STATE LIFE INSURANCE CORPORATION OF PAKISTAN SLICP
BUILDING NO 09 SLICP DR ZIAUDDIN AHMAD ROAD
KARACHI**

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SECTION 1

Invitation for Bids

Procurement Ref No: PO/CPD/IT/31/2025

Last Date/Time for Submission:	11:00AM –	18.08.2025.
Pre-Bid Meeting Date/Time:	11:00AM –	11.08.2025.
Bid Opening Date/Time:	11:30AM –	18.08.2025.

Section-I: Invitation to Bids

State Life Insurance Corporation of Pakistan SLICP, (hereinafter referred to as the (Procuring Agency "PA"), invites the bids from Contractors / Firms / Companies / General Order Suppliers / Manufacturers / Authorized dealers having valid registration with PEC in Category C-4 with Specialization Code EE-07 (Telecommunication) with income tax and sales tax department & who are on Active Taxpayers list of FBR for the PROCUREMENT of Branded **IT Equipment / Machinery & Accessories**, on Supply delivery to Consignee's end , installation, testing & Commissioning. Detailed specifications along with tentative quantities of work cited above are given in the bidding documents.

- Interested bidders may download the bidding documents & detailed specifications PPRA/SLIC website or from EPADS system.
- Bidding mechanism will be "Single Stage – Two envelopes" and any bids which are incomplete and without bid security shall not be considered.
- Technical Proposal must contain bid Security in the form of CDR/Demand Draft/Pay Order or bank guarantee for an amount of 2,000,000 (TWO Million Rupees) in favor of "**State Life Insurance Corporation of Pakistan**". **Bid Security** must be uploaded on EPADS along with the Technical Proposal.
- The bidders shall provide company profile including Income Tax and General Sales Tax numbers updated with FBR, Professional Tax Certificate, and Affidavit regarding blacklisting & No litigation. All the above-mentioned certificates issued by the authorities in this regard if found fake at any stage, bidder / vender will be responsible and the Procuring Agency has right to take action against the vender in accordance with PPRA Rules, 2004 as amended and according to terms & conditions mentioned in Bidding Documents.
- The Bids (Technical & Financial) must be uploaded on **EPADS on 18/08/2025 at 11:00 A.M.** The Technical bids will be opened on the same day at **11:30 A.M** in presence of the bidder / bidder's representatives who choose to present.
- Only technically responsive bidder(s) will be qualified for opening of financial bid(s).
- The Procuring Agency will not be responsible for any cost or expenses incurred in connection with the preparation of bids / proposals.
- Tender Notice and Bidding Documents can be seen at website of PPRA (www.ppra.gov.pk)/ procuring agency (www.statelife.com.pk) and EPADS system.
- The Procuring agency may reject all bids at any time prior to acceptance of a bid, as provided under Rule-33 of PPRA Rules 2004 as amended.
- Conditional tender will not be accepted. In case of contradiction between submitted bid and this document then terms and conditions of this document will prevail.
- The procurement shall be governed by the PPRA Rules, 2004 as amended and according to terms & conditions mentioned in Bidding Documents.

Secretary CPC
Central Procurement Division,

10th Floor State life Insurance Corporation of Pakistan Building No 11
Abdullah Haroon Road, Karachi

Ph No. 021-99204521

SECTION II

Instructions to Bidders

Bidders are advised to read the contents of the Instruction to Bidders (ITB) carefully

Scope of Bid

1.1 Under the development project titled 'Renovation / Refurbishment of State Life Insurance Corporation of Pakistan Building No 09 at Dr. Ziauddin Ahmad Road Karachi , State Life Insurance Corporation of Pakistan invites sealed bids for "Supply and Installation, Testing, Commissioning & Maintenance upto Specified period as stated in Bidding Document of following lot wise IT Equipment and Accessories as specified in detail in the Schedule of Requirements / BOQ along with Technical Specifications.(Attached)

1.2 A pre-bid meeting will be held on 11.08.2025 at 11:00 hours in the Room of Divisional Head IT ,08th Floor, Building No .01 SLICP, I.I Chundrigar Road Karachi.

1.3 All further queries relating to Instructions for bidders (IFB) should be submitted through EPAD at least 7 days before the opening of the technical bids.

1.4 Adherence to Preamble instructions and scope.

2. Source of Funds

State Life Insurance Corporation of Pakistan has arranged its own fund

3. Eligible Bidders

3.1 This Invitation for Bids is open to all original manufacturers/their **authorized** agents/suppliers and in case of imported goods their **authorized** agents/ importers/suppliers in Pakistan for supply of Goods who must be registered by Pakistan Engineering Council PEC in Cat. C-4 with Specialization code EE -07 & NTN, GST, on Active Tax payers List of FBR etc. Requirements for eligibility of bidders are specified below: -

1. Bidder(s) must have **at-least five (05) years** of experience of similar nature as requisitioned in the bid;
2. The bidder(s) must provide copies of Work / Supply orders to establish the required experience;
3. Bidder(s) must provide complete List of Clientele including details of at least one (01) current clients along-with their contact information;
4. Bidder(s) shall provide National Tax No. and Sales Tax No. The bidder should be on Active Taxpayers List (ATL) of both Income Tax and General Sales Tax of FBR;

5. Bidder(s) must submit Original Manufacturer's Authorization/ Authorized Dealership Certificate of the offered brands by the Principal Manufacturer on the format provided in Bid Form-III of the bidding documents with his bid;
6. Bidder(s) must provide the leaflets/ brochures/ catalogs of the quoted brand with the bid;
7. The bidders are required to submit three years audited financial statements;
8. The bid and price schedule should be submitted on the prescribed format on company's letterhead. Both must be properly signed and stamped by the authorized person.
9. Earnest Money as mentioned at ITB clause 20.1 must be furnished from scheduled Bank of Pakistan;
10. Bidders must provide an Affidavit on judicial stamp paper of Rs. 100/- that bidder is not blacklisted by any Ministry/Division and public sector organization;
11. Bids shall remain valid for the period of 120 days as mentioned at ITB clause 14.1;
12. The bidder must have proper Business setup i.e. shop, outlet or branch office in Karachi and landline telephone facility, which should be mentioned on the bidder's letter head;
13. All the documents submitted with the bid must be signed and stamped by the designated authorized officer of the bidder.

13.2 Bidders under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal, Provincial or Local) or a public sector organization are NOT ELIGIBLE. Bidders blacklisted by any Government (Federal, Provincial or Local) or a public sector organization are also NOT ELIGIBLE.

4. **Corruption and Fraud**

4.1 The Government of Pakistan defines Corrupt and Fraudulent Practices as "corrupt and fraudulent practices" which includes the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or the supplier or contractor in the procurement process or in contract execution to the detriment of the procuring agencies; or misrepresentation of facts in order to influence a procurement process or the execution of a contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the procuring agencies of the benefits of free and open competition and any request for, or

solicitation of anything of value by any public official in the course of the exercise of his duty.

4.2 Indulgence in corrupt and fraudulent practices is liable to result in rejection of bids, cancellation of contracts, debarring and blacklisting of the bidder, for a stated or indefinite period of time.

5. **Eligible Goods and Services** All goods and related services to be supplied under the contract Shall conform to the policies of the Government of Pakistan in vogue. All expenditures made under the contract shall be limited to such goods and services. For purposes of this clause, (a) the term “Goods” includes any goods that are the subject of this Invitation for Bids and (b) the term “Services” includes related ancillary services such as transportation, insurance, installation, after sale service, support and trainings etc.
6. **Cost of Bidding** The Bidder shall bear all the costs associated with the preparation and submission of its bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
7. **Bidding for Selective Items** The bidder must bid for all items of a lot specified in the Schedule of Requirements / BOQ (**Section III**) and provide turnkey solution for if required. Bidding for a few/partial items within a Lot /floor is strictly prohibited and will result in the rejection of the bid.
8. **Pre- Bid Meeting**
 - 1.5 8.1 A Pre-bid Meeting will be held on,11.08.2025 at 11:00 hours in the Room of Divisional Head IT ,08th Floor, Building No .01 SLICP, I.I Chundrigar Road Karachi
 - 8.2 All the bidders are strongly encouraged to attend the Pre-bid meeting. (MoM) will be uploaded on the EPADS.
 - 8.3 Minutes of the pre-bid meeting will be uploaded on EPAD system. Any modification of the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by SLICP exclusively through the issuance of an Addendum.
 - 8.4 Nonattendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

The Bidding Procedure

9. **The Governing Rules** The Bidding procedure shall be governed by the Public Procurement Rules-2004 issued and amended from time to time, by the Public Procurement Regulatory Authority (PPRA).
10. **Applicable Bidding Procedure**
 - 10.1 All bids shall be submitted through EPADS only as per laid down procedure for single stage two-envelope (i.e. separate submission of Technical and Financial proposals). Original Bid security should be submitted physically to the PA on address mentioned in the bidding documents. BID should be submitted through EPADS system before closing date and time else bid will be rejected. Physical submission of Bid Security is mandatory requirement.
 - 10.2 Submission of bids through EPADS system is entire responsibility of the participating bidders. For assistance regarding submission through EPADS (and other EPADS related queries) bidders may contact EPADS help line 051-111-137-237.
 - 10.3 The Procuring Agency may, at its discretion and as per PPRA rules, extend this deadline for the submission of Bids by amending the Bidding documents in accordance with ITB Clause 2.2.2 & 2.2.3 in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

The Bidding Documents

11. **Contents of the Bidding Documents**
 - 11.1 The goods required, applicable bidding procedures, and Contract Terms are prescribed in this Bidding Documents. In addition to the Invitation for Bids, this Bidding Document includes:
 - a) Instructions to Bidders (ITB);
 - b) Schedule of Requirements;
 - c) Technical Specifications;
 - d) Evaluation Criteria;
 - e) Bid Forms (including technical forms and financial forms);
 - f) Draft Standard Contract including Special Conditions of Contract (with Annexures) and General Conditions of the Contract, and Integrity pact.
 - 11.2 The “**Invitation for Bids**” (IFB) Notice is not a formal part of the Bidding Documents and is included as a reference only. In case of discrepancies between the IFB Notice and the Bidding Documents listed in 11.1 above, the Bidding Documents shall take precedence.
 - 11.3 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 to submit a bid not substantially responsive to the Bidding Documents in every respect shall be at the Bidder’s risk and shall result in the rejection of its bid.

12. **Clarification(s)
on Bidding
Documents.**

12.1 All clarification shall be obtained through EPADS and will be responded through same medium. The Procuring Agency will respond in writing to any request for clarification of the Bidding documents which it receives no later than seven (7) days prior to the deadline for the submission of Bids prescribed in the Bid Data Sheet.

12.2 The Procuring Agency will within three (3) working days after receiving the request for clarification, respond to any request for clarification provided that such request is received not later than seven (7) days prior to the deadline for the submission of Bids. As prescribed in **ITB 2.2.2 (i), above**. However, this clause shall not apply in case of alternate methods of Procurement.

12.3 Should the Procuring Agency deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under **ITB 2.2.3**.

12.4 If indicated **in the BDS**, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned **in the BDS**. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding Documents.

12.5 Any modification to the Bidding Documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to ITB 2.2.3. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

13. **Amendment(s)
to the Bidding
Documents.**

13.1 At any time prior to the deadline for submission of bids, the Procuring Agency, for any reason, whether at its own initiative or in response to a clarification(s) requested by a prospective Bidder, may modify the Bidding Documents by amendment(s).

13.2 All prospective Bidders that have downloaded the Bidding Documents from PPRA/EPADS/SLIC shall download the amended bidding documents if (in case of amendment made in the light of above clause 13.1).

13.3 In order to allow prospective Bidders reasonable time for taking the amendment(s) into account in preparing their bids, the Procuring Agency, at its discretion, may extend the deadline for the submission of bids.

Preparation of Bids

14. **Language of Bids.** All correspondences, communications, associated with preparation of Bids, clarifications, amendments, submissions shall be written in English.
15. **Documents comprising the Bids.**
- 15.1 The Bid shall comprise of the Bid Forms of this Bidding Document and all that ancillary documentation that are prescribed for the eligibility of the bidders and goods and ancillary services that are found necessary and highlighted in the Bid Forms in **Section V**.
- 15.2 The Bidder shall complete the Bid Forms and an appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their general and specific characteristics, ancillary services that the bidder is willing or required to provide along with the proposed price.
16. **Bid Price**
- 16.1 The Bidder shall indicate on the appropriate form prescribed in this Bidding Document the unit prices and total bid price of the goods, he proposes to supply under the Contract in PKR.
- 16.2 Form prescribed for quoting of prices, should be typed and printed on the bidder's letterhead. Any alteration/correction must be initialed. Every page of the bid is to be signed and stamped at the bottom.
- 16.3 The Bidder should quote the prices of goods according to the technical specifications as provided in **Section III** of this document. The technical specifications of goods, different from the required specifications, shall straightway be rejected.
- 16.4 The Bidder is required to offer a competitive price. All prices must include all the taxes and duties, where applicable. If there is no mention of taxes, the offered/ quoted price shall be considered as inclusive of all prevailing taxes/ duties. The bidder shall be responsible for all new taxes, if any, levied by the Government until completion of the contract.
- 16.5 The benefit of exemption from or reduction in the taxes and duties shall be passed on to the Procuring Agency.
- 16.6 Prices offered should be for the entire quantity of an item demanded in the Schedule of Requirement; partial quantity offers shall straightaway be rejected. Conditional offer shall also be considered as non-responsive Bid.
- 16.7 While making a price quote, trend/ inflation in the rate of goods and services in the market should be kept in mind. No request for increase in price, due to market fluctuation and/or rupee depreciation, in the cost of goods and services shall be entertained.

17. **Bid Currencies** Prices shall be quoted in Pak Rupees.
18. **Supporting Documents to judge specification** The bidder shall provide the leaflets/brochures/catalogs of quoted products with the bid.
19. **Documentation on Eligibility of Bidders** Bidder shall furnish, as part of its bid (along-with Bid Forms & Price Schedule) following documentary evidence to establish their eligibility and qualifications to perform the Contract if his bid is to be accepted: -
- a) Minimum five (05) years of experience in supplying of quoted items having proper Outlet/Office,
 - b) Duly authorized by the Original Manufacturer/ Principal of Leading Brands (Authorization Letter addressed to Project Director State life Insurance Corporation of Pakistan SLICP shall be provided),
 - c) Registered with Income & Sales Tax Departments and on the Active Tax Payers List of FBR,
 - d) Affidavit duly attested by the Oath Commissioner/Notary Public to the effect that the respective bidder is not blacklisted by any Government (Federal, Provincial or Local) or a public sector organization.
 - e) Manufacturer's warranty (Three years) from date of commissioning of the equipment.
- Details are covered in the **Section IV** containing Evaluation criteria.
20. **Bid Security**
- 20.1 The Bidder shall furnish, as part of its bid, a Bid Security amount Rs. 2,000,000/- (Two Million) in Pak rupees. in the shape of pay order/demand draft/ call deposit in the name of State Life Insurance Corporation of Pakistan SLICP. The security bid shall be submitted through EPAD and original shall be delivered on given address of CPD before the timeline. Unsuccessful bidder's Bid Security shall be discharged or returned soon after announcement of the successful bids.
- 20.2 The successful Bidder's Bid Security shall be discharged upon signing of contract, furnishing of the performance/bank guarantee and confirmation of the performance/bank guarantee by the SLICP with the Bank of the successful bidder.
- 20.3 The bid Security may be forfeited:
- a) if a Bidder withdraws its bid during the period of bid validity;
 - b) In the case of a successful Bidder, if the Bidder fails to sign the Contract or fails to provide a performance security (if any).

21. **Bid Validity**
- 21.1 Bids shall remain valid for 120 days after the date of opening of technical bid prescribed by the Procuring Agency. A bid having validity for a shorter period shall be rejected by the Procuring Agency as nonresponsive.
- 21.2 The Procuring Agency shall ordinarily be under an obligation to process and evaluate the bid within the stipulated bid validity period. However, under exceptional circumstances and for reason to be recorded in writing, if an extension is considered necessary, all those who have submitted their bids shall be asked to extend their respective bid validity period. Such extension shall be for not more than the period equal to the period of the original bid validity.
- 21.3 Bidders who;
- a. agree to the Procuring Agency's request for extension of bid validity period shall not be permitted to change the substance of their bids; and
 - b. Do not agree to an extension of the bid validity period shall be allowed to withdraw their bids without forfeiture of their bid securities.

Submission of Bids

22. **Submission Through EPAD Only**

22.1 All bids shall be submitted through **EPADS** only as per laid down procedure for single stage two-envelope (i.e separate submission of Technical and Financial proposals). Original Bid security should be submitted physically to the PA on address mentioned in the bidding documents. BID should be submitted through **EPADS** system before closing date and time else bid will be rejected. Physical submission of Bid Security is mandatory requirement.

22.2 Furthermore, submission of bids through EPADS system is entire responsibility of the participating bidders. For assistance regarding submission through EPADS (and other EPADS related queries) bidders may contact EPADS help line 051-111-137-237.

23. **Deadline for Submission of Bids**

23.1 Bids shall be submitted through **EPADS** system before closing date and time as mentioned in Tender documents along with furnishing of physical bid security in original to PA.

23.2 The Procuring Agency may, in its discretion, extend the prescribed deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 13 above, in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

24. **Late Bids** Any bid received by the Procuring Agency after the deadline for submission of bids prescribed by the Procuring Agency pursuant to ITB Clause 23 shall be rejected and returned unopened to the Bidder.
25. **Withdrawal of Bids** 25.1 The Bidder may modify or withdraw its Bid after the Bid's submission if allowed by the EPADS system/ PPRA prior to the deadline prescribed for submission of Bids.
- 25.2 No bid may be withdrawn in the period between deadline for submission of bids and the expiration of the period of bid validity. Withdrawal of a bid during this period may result in forfeiture of the Bid Security submitted by the Bidder, pursuant to the ITB Clause 20 above.

Opening and Evaluation of Bids

26. **Opening & Evaluation of Technical & Financial Bid by the Procuring Agency** 26.1 The Procuring Agency will open/ download all Bids (from EPADS System) publicly in the presence of the Bidders or their representatives who may choose to be present **in the DH (CPD) room, 10th Floor, Building No-11, State Life Insurance Corporation of Pakistan Abdullah Haroon Road Karachi on 18.08.2025 at 11:30 a.m.**
- 26.2 All Bidders in attendance shall sign an attendance sheet.
- 26.3 Prior to the detailed evaluation, the Procuring Agency shall determine the substantial responsiveness of Technical Evaluation bid to the bidding documents. For purposes of this clause, a substantially responsive bid is one, which conforms to all the terms and conditions of the bidding documents without material deviations, specifically Clauses: 14, 15, 16, 19, 20, 21 & 22. Deviations from, or objections or reservations to critical provisions, such as those concerning Applicable Laws, delivery schedule, taxes & duties etc. shall be deemed to be a material deviation for technical Bids and Bid Security for Financial Bids. The Procuring Agency's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 26.4 The Technical Bids shall then be evaluated conforming compliance of the offered item's technical specifications with the demanded ones.
- 26.5 26.5 The Financial Bids of technically qualified (i.e. compliant to technical specifications and other terms & conditions) bidders shall be opened/uploaded publicly on a specified date, time and venue which shall be communicated to the bidders **through EPADS.**
- 26.6 The Procuring Agency shall open one Financial Bid at a time and read out aloud its contents which may include name of the Bidder, items bided for and unit prices and total amount of the

Bid (if applicable). The Procuring Agency may choose to announce any other details which it deems appropriate if not in conflict with the Public Procurement Rules 2004, specifically Rule 28 (**Opening of Bids**).

26.7 In the Financial Bids the arithmetical errors shall be rectified on. If there is a discrepancy between words and figures, the amount in words the following basic shall prevail:

- a If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected.
- b If the Bidder does not accept the correction of the errors, its bid shall be rejected, and its Bid Security may be forfeited.

27. **Rejection of Bids** 27.1 The Procuring Agency may reject any or all bids at any time prior to the acceptance of a bid under Public Procurement Rules (PPR) 2004. The Procuring Agency may upon request communicate to any Bidder who submitted a bid, the grounds for its rejection of any or all bids, but is not required to justify those grounds.

27.2 Bidder must not indicate directly or indirectly their financial bid anywhere in the technical bid. Any such disclosure shall result in summary rejection of entire bid of the concerned bidder.

27.3 Conditional or incomplete bid/bids shall be rejected.

27.4 The bid/bids received with over-writing, cutting and doubtful figure shall be rejected.

27.5 The Procuring Agency incurs no liability, solely by virtue of its invoking Rule 33 of PPR 2004, towards Bidders who have submitted bids.

27.6 Notice of the rejection of any or all bids shall be given promptly to the concerned Bidders that submitted bids.

28. **Re-Bidding**

28.1 If the Procuring Agency rejected all bids in pursuant to ITB Clause 27, it may call for a re-bidding.

28.2 The Procuring Agency before invitation for re-bidding shall assess the reasons for rejection and may revise specifications, evaluation criteria or any other condition for Bidders, as it may deem necessary.

29. **Announcement of Evaluation Report**

Announcement of Evaluation Report will be as per PPRA, 2004.

30. **Contacting the Procuring Agency** 30.1 Bidder shall contact the Procuring Agency. If a Bidder wishes to bring additional information to the notice of the Procuring Agency, it should do so in writing.
- 30.2 Any effort by a Bidder to influence the Procuring Agency in its decisions on bid evaluation, bid comparison, or Contract award may result in the rejection of the Bidder's bid. Canvassing by any Bidder at any stage of the bid evaluation is strictly prohibited. Any infringement shall lead to disqualification.

Award of Contract

31. **Acceptance of Bid and Award Criteria** The Bidder whose bid is found to be most closely conforming to the Evaluation Criteria prescribed in **Section IV** and having the most advantageous bid, if not in conflict with any other law, rules, regulations or policy of the Government of Pakistan, shall be awarded the Contract, within the original or extended period of bid validity.
32. **Procuring Agency's Right to vary quantities at the time of Award** The Procuring Agency reserves the right at/after the time of award of Contract to increase or decrease, the quantity of goods as per actually used in the project. Given quantities of different items are only for evaluation purposes.
33. **Notification of Award** 33.1 Prior to the expiration of the period of bid validity, the Procuring Agency shall notify to the successful Bidder in writing that his bid has been accepted.
- 33.2 The notification of award shall constitute the formation of the Contract between the Procuring Agency and the successful Bidder.
- 33.3 The enforcement of the Contract shall be governed by Rule 44 of the PPRA, 2004.
34. **Signing of Contract** 34.1 After the notification of award, the Procuring Agency shall send the successful Bidder the Contract Form provided in the bidding documents
- 34.2 The Contract shall become effective upon affixation of signature of the Procuring Agency and the selected Bidder on the Contract document.
- 34.3 If the successful Bidder, after completion of all codal formalities shows an inability to sign the Contract then its Bid Security shall stand forfeited and the firm may be blacklisted and de-barred from future participation, whether temporarily or permanently. In such situation the Procuring Agency may award the contract to the next lowest evaluated Bidder or call for new bids.

35. **Performance
Guarantee**

35.1 On the date of signing of Contract, the Bidder shall furnish a Performance Guarantee @ 10% of the total Contract Cost on the Form and in the manner prescribed by the Procuring Agency.

35.2 The Bid Security submitted by the successful bidder at the time of submitting its bid shall be returned to the Bidder upon signing of contract, successful, furnishing of the performance/bank guarantee and confirmation of the performance/bank guarantee by the SLICP with the Bank of the successful bidder.

35.3 Failure to provide a Performance Guarantee by the successful Bidder is a sufficient ground for annulment of the award and forfeiture of Bid Security. In such event the Procuring Agency may award the contract to the Next most advantageous bidder or call for new bid.

SECTION III

SCHEDULE OF REQUIREMENTS & TECHNICAL SPECIFICATIONS

Schedule of Requirements:

The equipment shall be delivered and installed in accordance with the following schedule of requirements: -

S. No	Milestone	Time Period
1	Supply/ Delivery of Equipment at Site	The site for delivery of Equipment and installation shall be handed over floor wise and Four to Six weeks shall be allowed to deliver equipment as per BOQ. These four to six weeks from the date of handing over of the floor of contract.
2	Installation of Equipment	Two weeks, from the date of delivery of the equipment at site
3	Successful testing and acceptance of fiber Optic cable and I/O Nodes.	Within one week from installation and configuration of hardware and networking
4	Configuration of Active equipment	One week after supply and installation of S.No. 2.

Details of Quantity:

AS PER BOQ ATTACHED

Technical Specifications

Note: All the quoted equipment should be recognized/renowned brands.

AS PER ATTACHED VOLUME -II

SECTION IV

EVALUATION C RITERIA

Evaluation Criteria:

Technical Bids shall be evaluated as per the following Evaluation Criteria.

A. Mandatory Criteria

Following are the mandatory criteria for selection of the vendor:

1. Valid registration with PEC in C-4 with Specialization code EE-07.
2. NTN Certificate.
3. GST Certificate.
4. On Active Tax Payers List of FBR. (I.T & GST)
5. Registration/Incorporation/Business Certificate and number of business years in Pakistan.
6. Complete Company profile with Technical Team/ Professionals.
7. The bidder should be a company/firm having lead operational office in Karachi.
8. Minimum five (5) years' experience in supply and installation of hardware/networking equipment.
9. Manufacturer's Authorization certificate from the original manufacturer of IT hardware and in case of networking for active networking components. The bidder should be authorized partner/ distributor/ seller from the Original Manufacturer. The bidder shall have to submit the certificate of authorization (in original) from the OEM addressed to Project Director SLICP.
10. A letter is required from the principal, saying that the quoted product will not reach End of Sale mark is still 3 years away and its End of Support will be at least 5 years away from the date of bid submission.
11. Affidavit on legal paper to the effect that not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public sector organization/Division/ Ministry.
12. **Manufacturer's standard warranty:** Three (03) year onsite warranty including parts and labour.
13. Compliance with Technical Specifications & scope of work in case of networking (Yes/No).
14. Technical brochures/ Data Sheets for the hardware and Licensed software to be provided.
15. Original Bidding Documents duly signed/stamped.

Additional Conditions for Eligibility of an I.T Networking Firm

16. List of successful completion of minimum three similar projects in size or above nodes. Value, Size and Nature of Projects completed, in tabular form to be provided.
17. In case of Joint Venture (JV)/ Consortium, evidence of relationship between the partners. Number of years of incorporation of the participating organization or participating organizations (if more than one) in IT business for at least three years. Scope of Business of Participating Organization (s) and scope of involvement of participating organizations in JV/consortium.

Evaluation Criteria

Evaluation Criteria shall be Based on Marks / Score

Aggregate Qualifying Score is **70%** but it is mandatory to obtain at least 40% in each category of the following sections: -

I. Company Profile

05 Marks

(a)	<p>Period since Firm/Company in supply and installation of hardware/networking equipment.</p> <p>5 years</p> <p>More than 5 & up to 8 years</p> <p>Above 8 years</p> <p>Attach your first PEC license for reference, as well as recent valid PEC license.</p>	<p>5 Marks</p> <p>2 Marks</p> <p>3 Marks</p> <p>5 Marks</p>
-----	---	--

II. Experience of The Firm Company

45 Marks

(a)	<p>WORK COMPLETED</p> <p>Project of Similar Nature i.e. Supply & Installation of IT Equipment & Accessories in <i>Government or Corporate / Private Sector of Project Worth PKR 50 million or above</i> during last 5 years.</p> <p>For one completed project 10-Marks.</p> <p>For more than one 20- Marks.</p> <p>(Documentary Evidence Photo graphs with complete address of the Project and Client be attached)</p>	<p>20 Marks</p>
(b)	<p>WORK IN HAND</p> <p>Project of Similar Nature i.e. Supply & Installation of IT Equipment & Accessories in <i>Government or Corporate / Private Sector of Project Worth PKR 50 million or above.</i></p> <p>One such project 15 Marks</p> <p>More than one 20marks</p> <p>Evidence is Mandatory</p>	<p>25 Marks</p>

III. Personnel Capabilities Required for This Project**30 Marks**

Employed Engineers must have valid registration with Pakistan Engineering Council (PEC). Also to be reflected in the company's license an employee of the company.

The key technical personnel required at site and factors for marking are as follows:

Sr.	Description / Position with Minimum Qualification & Experience	Marks Assigned	Remarks
1	Project Manager (01 No.) BE (IT /Computer/Electronic.) registered with Pakistan Engineer council (PEC) having experience of 05 years or above.	15	15 Marks Min. Post qualification Experience up to 5 Years Having relevant experience of supply & installation / Erection experience of IT Equipment & Accessories 10 Marks More than 5 years 15 Marks A complete CV of the proposed PM is Required
2	Site Engineer (01 No.) BE (IT /Computer /Electronic) having min. experience of 2 years or above of similar nature of job. Or DAE (IT/Computer/Electronic) having min. 5 Years experience or above.	10	10 Marks Minimum post qualification experience of 02Years for BE (IT/Computer/Electronic) 05 Years for DAE (IT/Computer/Electronic) (A complete CV of the proposed Site Engineer is Required).
3	Site Supervisors DAE (IT/Computer /Elect.) Having Min. 2 years' Experience 03 Marks More than 2 Years 05 Marks	05	5 Marks Minimum post qualification experience of 02Years for DAE (IT/Computer/Electronic) 3 Marks More than 2 Years 5 Marks (A complete CV of the proposed Site Engineer is Required).

iv Financial Soundness**(C) Financial Soundness****20 Marks**

For Financial Status assessment, the Applicants have to submit Income tax returns for the last three years and SRB monthly return. Further, the bidder will provide evidence from bank for verifying financial soundness of the bidder.

Turnover for last 03 Years**20 Marks**

Turnover for last 03 Years (Income Tax return / Audited financial report)

- i. Up to 50Million
- ii. Above 50Million

15 Marks
20 Marks

Any bidder obtaining "0" marks in any field be considered as Nonresponsive bidder/ technically disqualified.

Least Cost Based Selection (LCBS)

After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered highest ranked bid/most advantageous bid.

SECTION V

BID FORM

BID FORM 1 Letter of Intent

Bid Ref No. -----

Date of the Opening of Technical Bid

Name of the Contract: {Add name}

To: State Life Insurance Corporation of Pakistan

Dear Sir,

Having examined the bidding documents, including Addenda Nos. [insert numbers& Date of individual Addendum], the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the Goods under the above-named Contract in full conformity with the said bidding documents and at the rates/unit prices described in the price schedule provided in Financial Bid or such other sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

We undertake, if our Financial Bid is accepted, to deliver the Goods in accordance with the delivery schedule specified in the schedule of requirements.

If our Financial Bid is accepted, we undertake to provide a performance security/guarantee in the form, in the amounts, and within the time lines specified in the bidding documents.

We agree to abide by this bid, for the Bid Validity Period specified in the bidding documents and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Until the formal final Contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Financial Bid you may receive. We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in Pakistan.

We confirm that we comply with the eligibility requirements as per ITB clauses 18 &19 of the bidding documents and have duly provided bid security amount **Rs. 2,000,000/-** (Two Million) in Pak Rupees, in the shape of pay order/demand draft/ call deposit in the name of State Life Insurance Corporation of Pakistan with our Financial Bid.

*We also confirm that if our bid is accepted, that all partners of the joint venture shall be liable jointly and severally for the execution of the contract and the composition on the constitution of the joint venture shall not be altered without the prior consent of the State Life.

*[This clause does not apply if bidder is a single firm]

Dated this [insert: number] day of [insert: month], [insert: year].

Signed:

In the capacity of [insert: title or position]

Duly authorized to sign this bid for and on behalf of [insert: name of Bidder]

BID FORM 2

Name of the Firm

Bid Reference No:

Date of opening of Bid.

Documentary Evidence for Determining Eligibility of the Bidders & Evaluation of bids

Required Documentation (To Be Filled by the Procuring Agency)	Checklist (To be initialed by the Bidder against each document)	Relevant Page Number in the Bid (To be filled by the Bidder)	Supporting Documents (To be filled by the Bidder with name of the documents that are submitted to meet the requirement)
Column:1	Column:2	Column:3	Column:4
NTN Certificate			
GST Certificate			
On Active Tax Payers List of FBR (I.T & GST)			
Registration/Incorporation/Business Certificate			
Complete Company profile			
Operational Office in Karachi			
Firm's past performance i.e. Minimum five years' experience in supplying and installation of IT hardware and networking equipment			
Affidavit duly attested by the Oath Commissioner/Notary Public to the effect that the respective bidder is not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public sector organization.			
Letter of Original Manufacturer's authorization			
Bid Validity period of 120 days			
Compliance with schedule of requirements			
Submission of required amount of bid security with Financial Bid			

Compliance with Technical Specifications			
Manufacturer's warranty: Minimum 3years			
Technical brochures/data sheets			
Bidding Documents are duly signed/stamped.			
Additional requirements for Networking firm			
Compliance with scope of work for the networking equipment (Active and Passive)			
Evidence of successful completion of three networking projects of 150 nodes and above in the last 3-5 years			
Evidence of Joint Venture/consortium, in case Joint Venture/Consortium is formed for undertaking networking			
List of certified professionals			

Bidders should only initial against those requirements that they are attaching with the form. In case they do not have any document to attach the corresponding cell in column 2 should be left blank.

Bidders are required to mention the exact page number of relevant document(s) placed in the Bid. Bidders are advised to attach all Supporting documents with this form in the order of the requirement as mentioned in column 1.

BID FORM 3

MANUFACTURER'S AUTHORIZATION

To:

Central Procurement Division - State Life Insurance Corporation of Pakistan

WHEREAS *[name of the Manufacturer]* who are established and reputable Manufacturers of *[name and/or description of the goods]* having factories at *[address of factory]* do hereby authorize *[name and address of Supplier/ Agent]* to submit a bid, and subsequently sign the Contract with you against the Invitation for Bids (IFB) No. -----
-----for the goods manufactured by us.

We hereby extend our full guarantee and warranty as demanded for the goods offered for supply by the above firm against this Invitation for Bids.

Signature: -----

Designation: -----

Official Stamp: -----

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 bind the Manufacturer. It should be included by the Bidder in its bid.

BID FORM 4

Firm's Past Performance. Name of the Firm:

Bid Reference No: -----

Date of opening of Bid:

Assessment Period: (**Minimum Five Years** as per Evaluation Criteria)

Name of the Purchaser/Institution	Purchase Order No.	Description Of Order	Value of Order	Date of Completion	Purchaser's Certificate

Bidders may use additional Sheets if required.
All certificates are to be attached with this form.

FINANCIAL BID FORM 5

Price Schedule

User Note: This form is to be filled by the Bidder for each individual item and shall submit with Financial Bid.

Name of the Firm:

Bid Ref. No: -----

Date of opening of Bid.

S. #.	Name of the Item	Unit Price	Applicable Taxes (%)	Qty	Total Tax	Final Total Price (Inclusive of all applicable taxes)
1	2	3	4	5	6	7
						(3*5*6)
	Total Price (Inclusive of all applicable taxes)					

Note: The quoted price should include the delivery/installation charges.

*** Unit price in case of passive networking equipment should be provided based on per network node basis.**

For guidelines, please see 'Note' under Clause 6 of Special Conditions of Contract.

FINAL TOTAL PRICE (in words): ----- *

Signature: -----

Designation: -----

Date: -----

Official Stamp: -----

BID FORM 6

Performance Guarantee

To: Central Procurement Division - State Life Insurance Corporation of Pakistan

Whereas [*Name of Supplier*] (hereinafter called “the Supplier”) has undertaken, in pursuance of

Contract No. [*number*] dated [*date*] to supply [*description of goods*] (hereinafter called “the Contract”).

And whereas it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a scheduled bank for the sum of 10 % of the total Contract amount as a Security for compliance with the Supplier’s performance obligations in accordance with the Contract.

And whereas we have agreed to give the Supplier a Guarantee:

Therefore we hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [*Amount of the Guarantee in Words and Figures*] and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [*Amount of Guarantee*] as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____, 2025/2027

Signature and Seal of the Guarantors/ Bank

Address

Date

SECTION VI

**DRAFT STANDARD
CONTRACT**

CONTRACT

THIS AGREEMENT is made on _____ day of _____, 2025 between

- a. The State Life Insurance Corporation of Pakistan SLICP (hereinafter called the “**Purchaser**”), having its office at Building No 9 State Life Insurance Corporation of Pakistan SLICP and (b) _____ (hereinafter called the “**Supplier**”), having its registered office at _____.
(Both individually referred to as ‘**Party**’ and collectively as the “**Parties**”)

WHEREAS the Purchaser invited bids for Supply and Installation of----- equipment and ancillary services under the development Project titled ‘State Life Corporation of Pakistan’ viz. through an advertisement and has accepted a bid by the Contractor for the supply and installation of following goods and services in the sum of Rs ----- (Rupees
_____) (herein after called “the Contract Price”)

S. No	Item/ Product	Qty	Applicable Taxes (%)	Unit Price (Rs)	Total Price (Rs)
Total (Rs) <i>(Inclusive of all applicable taxes)</i>					

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The Following Documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - a) Annex-I: The Bid Form and the Price Schedule submitted by the Supplier;
 - b) Annex-II: The Schedule of Requirements;
 - c) Annex-III: The Technical Specifications;
 - d) Annex-IV: The Purchaser's Notification of Award;
 - e) Annex-V: Purchase Order issued by the Purchaser;
 - f) Annex-VI: The Special Conditions of Contract;
 - g) Annex-VII: The General Conditions of Contract; and
 - h) Annex-VIII: Integrity Pact [In case contract is of Rs 10.0 million and above]
3. The Supplier shall provide to the Purchaser the items mentioned on the agreed cost more specifically described in the Price Schedule submitted by the Supplier. The Unit Cost in the Price Schedule, is inclusive of all taxation and costs associated with transportation and other incidental

charges, licenses, testing, commissioning and maintenance up to defect liability period as given in bidding document.

4. The Supplier shall provide to the Purchaser a Performance Guarantee equivalent to 10% of the total Contract Price in the format prescribed in the bidding document. This Performance Guarantee shall be released to the Supplier upon successful completion of Three-year warranty period. Supplier's Bid Security (Fixed Earnest money as per Special Stipulations of Contract) submitted with the Bid shall be released upon satisfactory submission of a Performance Guarantee. Failure to submit a satisfactory Performance Guarantee shall result in forfeiture of Bid Security and Cancellation of Contract.
5. The Supplier hereby covenants with the Purchaser to provide the Goods and to remedy defects therein, in conformity in all respects with the provision of the Contract.
6. The Purchaser hereby covenants that 100% payment to the Supplier will be made upon satisfactory completion of delivery, installation, testing, commissioning and submission of invoice by the Supplier and issuance of acceptance certificate from the Purchaser.
7. This contract shall remain valid till completion of Three-years from date of commissioning of the equipment. In WITNESS whereof the parties here to have caused this Agreement to be executed on the day and year written above.

For & on behalf of the Purchaser

In the Presence of

Name:

Name:

Title:

Title:

For & on behalf of the Supplier

In the Presence of

Name:

Name:

Title:

Title:

Schedule of Requirements

Detail of schedule of requirement is given in Section III.

Technical Specifications and Ancillary Services

a). **Product Specifications.**

(Detailed technical specifications, given in Section III, will be followed)

Price Schedule submitted by the Bidder.

(The approved price schedule submitted by the Bidder will be attached)

Purchaser's Notification of Award*(Copy of the final letter will be attached)***Purchase Order.***(Specimen Sample of PO)*

1	Purchase Order No	
	Date	
2	Supplier/Firm Name	
3	Supplier/Firm's Address	
4	Firm Contact No	
5	Conditions of the Contract:	As already communicated in the Bidding Document & Contract
6	Particulars of Stores:	As per detail given below

Item No.	Item Name	Approved Specifications	Unit Price in PKR (As per contract)	Quantity	Total Cost (PKR)

Additional instructions:

- 1.
- 2.
- 3.

Signature: -----

Designation: -----

Date: -----

Official Stamp: -----

Integrity Pact

(For Projects more than 10.00 Million)

Contract No:

Dated:

Contract Value:

Contract Title:

[Supplier/firm], hereby declares that it has not obtained or induced the procurement of any Contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

2. Without limiting the generality of the foregoing, **[Supplier/firm]**, represents and warrants that it has fully declared the brokerage, commission, fees etc., paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

3. **[Supplier/firm]**, certifies that it has made and shall make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or shall not take any action to circumvent the above declaration, representation or warranty.

4. **[Supplier/firm]**, accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any Contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to Procuring Agency under any law, contract or other instrument, be voidable at the option of Procuring Agency.

5. Notwithstanding any rights and remedies exercised by Procuring Agency in this regard, **[Supplier/firm]**, agrees to indemnify Procuring Agency for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to Procuring Agency in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by **[Supplier/firm]**, as aforesaid for the purpose of obtaining or inducing the procurement of any Contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Name:
Designation:
[For Purchaser]

Name:
Designation:
[For Supplier]

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 GCC is indicated in parentheses.

1. Definitions (GCC Clause 1)

GCC 1.1 (g)-The Purchaser is: State Life Insurance Corporation of Pakistan SLICP

GCC 1.1 (i)-The Project Site is: Building No 09 State life Insurance Corporation of Pakistan

SLICP Dr. Ziauddin Ahmad Road Karachi Pakistan **(GCC Clause 4)**

- i. After delivery of goods at the Purchaser's premises, the Purchaser shall inspect the quantity, quality, specifications of goods.
- ii. The Consultant M/S MESA & Inspection Committee of the Purchaser will carry out detailed physical examination of stocks and can reject, any item if found not according to the approved technical specifications etc. Moreover, the Supplier will also be responsible to replace the same without any further charges.

3. Packing (GCC Clause 5)

GCC 5.2 - **Packing & accessories:** All the items to be provided in proper company packing with brochures and CDs / Operating Manuals.

4. Transportation and delivery requirements (GCC Clauses 6 & 7)

- i. The bidder shall deliver the supplies at the destination in scratch-less condition with all the manufacturer supplied accessories.
- ii. The Supplier shall arrange such transportation of the Goods as is required to prevent their damage or deterioration during transit to their final destination and in accordance with the terms and manner prescribed in the Schedule of Requirement.
- iii. All costs associated with the transportation including loading/unloading and road taxes shall be borne by the Supplier.

5. Warranty (GCC Clause 8)

The warranty period of the supplied goods (IT hardware and software) shall be Three years from date of commissioning of the equipment.

GCC 8.4 & 8.5 Onsite support services will be provided and defects will be corrected within 24 hours.

6. Payments (GCC Clause 9)

Payment to the successful bidder/Supplier will be made subject to:

- Satisfactory delivery, inspection, installation testing and configuration of Items (Floor wise).
- The Schedule of delivery must be communicated and agreed with consultant as per the actual site condition before being called to the site.
- Completion of Scope of Work for Networking (Active and Passive equipment).
- Upon submission of required documents.
- On submission of invoice for payment after fulfilling codal formalities.

Note:

Payment for passive work/ equipment (UTP CAT-6 copper Cable, Patch Panels, Faceplate, I/O, Back box, Patch Cord Cat-6 Gigabit cables machine punched from Faceplate to PC/Equipment and Fiber Cables between switches etc.) **will be based on Actual Network Nodes**

7. Prices (GCC Clause 10)

GCC 10.1 - Prices shall be: Fixed.

8. Liquidated Damages (GCC Clause 15)

GCC .15.1 - Applicable rate: Penalties for delayed delivery of IT hardware shall be as under:

Mode of Penalty	100% Quantity as per Purchase Order	Total delivery period
Without penalty	18 months	18 months
With penalty @ 0.5 % per day after 18months from date of issuance of Purchase Order up to maximum of 10% of the total Contract Price	90 days	90 days

9. Resolution of Disputes (GCC Clause 18)

CCC 18.2 - The dispute resolution mechanism to be applied pursuant to GCC Clause 18.2 shall be as follows:

In the case of any dispute concerning the interpretation and/or application of this contract shall be settled through arbitration as per Arbitration act.

11. Notices (GCC Clause 21)

CCC 21.1 - Purchaser's address for notice purposes:

CPD - State Life Insurance Corporation of Pakistan Bldg. No 9 & 11, Karachi

Supplier's address for notice purposes:

Phone#

General Conditions of Contract (GCC)

1. Definitions	<p>1.1 In this Contract, the following terms shall be interpreted as indicated:</p> <ul style="list-style-type: none"> (a) "The Contract" means the agreement entered into between the Purchaser State Life Insurance Corporation of Pakistan and the Supplier, as recorded in the Agreement/ Contract signed by the Parties, including all 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 those equipment, machinery and/or other materials which the Supplier is required to supply to the Purchaser under the Contract. (d) "The Services" means those services ancillary to the supply of the goods, such as transportation of goods up to the desired destinations, insurance and any other incidental services such as installation, commissioning, provision of technical assistance, training and other such obligations of the Supplier covered under the Contract. (e) "GCC" means the General Conditions of Contract contained in this section. (f) "SCC" means Special Conditions of the Contract. (g) "The Purchaser" means the organization purchasing the Goods, as named in the SCC. (h) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract. (i) "The Project Site", where applicable, mean the place or places named in the SCC. (j) "Day" means calendar day.
2. Application	<p>2. These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.</p>
3. Standards	<p>3. The Goods supplied under this Contract against the "Purchase Order", shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the concerned institution.</p>

4. Inspections and Tests	<p>4.1 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</p>
	<p>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 samples (representatives) retained for these purposes.</p> <p>4.2 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 physical and intellectual facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.</p> <p>4.3 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.</p> <p>4.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at the Purchaser's delivery point 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 from the factory/warehouse.</p> <p>4.5 Nothing in GCC Clause 4 shall in any way release the Supplier from any warranty or other obligations under this Contract.</p>
5. Packing	<p>5.1 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 shall be 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.</p> <p>5.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Purchaser.</p>
6. Delivery and Documents	<p>6.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements.</p>

	6.2	For purposes of the Contract, DDP trade term is used to describe the obligations of the parties which means price inclusive of applicable taxes, transportation & delivery charges, insurances & warranties, if any, etc.
7. Transportation	7.1	The Supplier is required under the Contract to transport the Goods to a specified place of destination within the Purchaser's country, transport to such place of destination in the Purchaser's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.
8. Warranty	8.1	The Supplier warrants that the Goods supplied under the Contract are original, 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.
	8.2	This warranty shall remain valid for minimum Three years after the Commissioning of goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract.
	8.3	The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
	8.4	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 costs to the Purchaser.
	8.5	If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, 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.
9. Payment	9.1	The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.
	9.2	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 Services performed and upon fulfillment of other obligations stipulated in the Contract.
	9.3	Payments shall be made promptly by the Purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the Supplier.
	9.4	The currency of payment is Pak. Rupees.

10. Prices	10 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.
11. Change Orders	<p>11.1 The Purchaser may at any time, by a written order given to the Supplier pursuant to GCC Clause 21, make changes within the general scope of the Contract in any one or more of the following:</p> <ul style="list-style-type: none"> (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 packing; (c) the place of delivery.

	<p>11.2 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 delivery schedule. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) working days from the date of the Supplier's receipt of the Purchaser's change order.</p>
12. Contract Amendments	12.1 No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
13. Assignment	13 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract.
14. Delays in the Supplier's Performance	<p>14.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Schedule of Requirements.</p> <p>14.2 If at any time during performance of the Contract, the Supplier or its subcontractor(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 Contract.</p> <p>14.3 Except as provided under GCC Clause 17, 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</p>

	15, unless an extension of time is agreed upon pursuant to GCC Clause 14.2 without the application of liquidated damages.
15.Liquidated Damages	15.1 Subject to GCC Clause 17, 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 16.
16.Termination for Default	<p>16.1 The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:</p> <ul style="list-style-type: none"> (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the respective "Supply Order" which shall be issued from to time to time under this Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 14.2; or (b) if the Supplier fails to perform any other obligation(s) under the Contract.
	<p>(c) if the Supplier, in the judgment of the Purchaser has engaged in corrupt and fraudulent practices in competing for or in executing the Contract.</p> <p>For the purpose of this clause:</p> <p>"corrupt and fraudulent practices" includes the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or the supplier or contractor in the procurement process or in contract execution to the detriment of the procuring agencies; or misrepresentation of facts in order to influence a procurement process or the execution of a contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the procuring agencies of the benefits of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty.</p> <p>16.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 16.1, the performance guarantee shall be forfeited</p>

17. Force Majeure	<p>17.1 Notwithstanding the provisions of GCC Clauses 14, 15, and 16, the Supplier shall not be liable for forfeiture of its bid 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.</p> <p>17.2 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 restricted to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.</p> <p>17.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.</p>
18. Resolution of Disputes	<p>18.1 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.</p> <p>18.2 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in SCC.</p>
19. Governing Language	<p>19 The Contract shall be written in the language specified in SCC. Subject to GCC Clause 20, the version of the Contract written in the specified language 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.</p>
20. Applicable Law	<p>20 The Contract shall be interpreted in accordance with the laws of the country.</p>
21. Notices	<p>21.1 Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's address specified in SCC.</p> <p>21.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.</p>
22. Taxes and Duties	<p>22 Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.</p>

End of the Contract

BIDDING DATA

Bid Data Sheet The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB): Section I. Whenever there is a conflict, the provisions herein shall prevail over those in ITB

A. Introduction		
ITB 1.1	Name of Contract & IFB No.	Procurement of Office IT Equipment No. PO/CPD/IT/31/2025
	Name of Employer	State Life Insurance Corporation of Pakistan SLICP
	Employer's Address	State Life Insurance Corporation of Pakistan Building No 11, Abdullah Haroon Road Karachi
B. The Bidding Document		
ITB 12	Clarification of Bidding Documents	Requests for clarification shall be received by the Employer no Later than 11.08.2025 at 05:00 PM
C. Preparation of Bids		
ITB 14	Language of the Bid	English
ITB 16	Bid Price	The price quoted shall be Delivered Duty Paid (DDP) at the location mentioned in the Schedule of Requirements i.e. prices inclusive of all applicable indirect taxes (GST), duties, freight (transportation) charges, insurances & warranties if any, including installation, testing, commissioning, maintenance etc. complete as per drawing, design and direction of Engineer.
ITB 19	Qualification requirements.	<p>MANDATORY REQUIREMENTS: “Eligibility & Responsiveness” requirements are as follows: - (Please attach valid & readable copies of all certificates / relevant Documents)</p> <ol style="list-style-type: none"> 1. Bidder must provide details of year of incorporation and PEC registration in C-4 with relevant specified code EE-07 and details of NTN/STRN registrations, Active Taxpayer List (ATL) certificate 2. Bidder(s) must have at-least Five (05) years of experience of similar nature as requisitioned in the bid (Documentary evidences like completion certificates is required). 3. Bidder(s) shall provide Complete List of Client including along with their contact nos. 4. A certificate from the bidder that all spare parts of the items to be supplied are easily available in Pakistan in the local market or from company owned outlets. 5. The bid and price schedule should be submitted on the prescribed format on company's letterhead. Both must be properly signed and stamped by the authorized person. 6. Earnest Money as mentioned at following

		<p>ITB clause 13.1 must be furnished from scheduled Bank of Pakistan along with financial bid.</p> <p>7. Bids shall remain valid for the period of 120 days as mentioned at ITB clause 14.1.</p> <p>8. Bidder must provide an Affidavit on Non-judicial stamp paper of Rs. 100/- stating that the bidder is not-blacklisted by any public sector organization in Pakistan.</p> <p>9. Bidder must provide an Affidavit on Non-judicial stamp paper of Rs. 100/- that bidder has never been Blacklisted for offence related to fraud, under-invoicing, tax evasion, concealment, money laundering etc. (Bids from any bidder who is found or purported to be engaged in these offenses shall be rejected without assigning any reason)</p>
ITB 20	Amount of bid security	<p>The bid security as per the value given in the following schedule:</p> <p>Bid Security amount Rs. 2,000,000/- (Two Million) Pak Rupees in the Form of Pay Order/ Bank Draft drawn in Favor of State Life Insurance Corporation of Pakistan SLICP issued by any Schedule Bank of Pakistan.</p> <p>A Bid Security must be uploaded through the EPAD system, and the original must be delivered to the address provided before the submission deadline. Failure to submit within the specified timeline shall result in rejection of the bid.</p> <p>The bid security to the unsuccessful bidders shall be returned immediately after award of the contract to the most suitable bidder and in case of successful bidder(s), earnest money will be released on submission of performance security @ 10% of contract cost.</p>
ITB 21	Bid validity period.	Bid should remain valid for 120 days after the date of opening of bid. Whereas, the rates of the successful lowest evaluated responsive bidder(s) shall be fixed till expiry of the contract(s).
ITB 20.1	Format of Bid	The bid shall be uploaded on EPADS and one hard copy shall be submitted to Purchaser office.
D. Submission of Bid Security		
ITB 20.1	Address for bid security submission.	Central Procurement Department SLICP Building No 11, Abdullah Haroon Road, Karachi
ITB 23.1	Deadline for bid Security submission.	18.08.2025 at 1100 hours
E. Opening and Evaluation of Bids		
ITB 26.1	Time, date, and place for bid opening.	18.08.2025 at 1130 hours. 10 th Floor SLICP Building 11, Abdullah Haroon Road, Karachi

SPECIAL STIPULATIONS

1.	Law applicable	The law to be applied is the Law of Islamic Republic of Pakistan
2.	Amount of Performance Security	10% of Contract Price stated in the Letter of Acceptance in the form of (a) bank guarantee from any Scheduled Bank in Pakistan or (b) bank guarantee from a bank located outside Pakistan duly counter-guaranteed by a Scheduled Bank in Pakistan or (c) Bank Draft/Pay Order in favour of Employer.
3.	Time for Work Program	Within 10 days from the date of receipt of Letter of Acceptance.
4.	Minimum amount of Third-Party Insurance	Rupees one million (Rs. 1,000,000) per occurrence with number of occurrences unlimited.
5.	Time for Commencement	Within SEVEN (07) days from the date of receipt of Engineers Letter to commence which shall be issued within SEVEN (07) days after signing of Contract Agreement
6.	Time for Completion	Eighteen (18) Months from the date of receipt of Engineer's Notice to Commence
7.	Amount of Liquidated Damages	0.5 % of contract price for each day of delay in completion of works subject to a maximum of 10% of contract price stated in the Letter of Acceptance
8.	Defects Liability Period	The Defect Liability Period is 364 days.
9.	Percentage of Retention Money	Fixed at Two million to be deducted as per quantum of work from Interim Payment Certificates.
10.	Limit of Retention Money	Two Million PKR Fixed retention money deducted under the Contract.
11.	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Employer.	30 days
12.	Mobilization Advance (Interest Free)	No mobilization advance shall be paid under this Contract.

Initials of Signatory of Bid _____

State Life Insurance Corporation of Pakistan (SLICP)

Building No. 9, Dr. Ziauddin Ahmad Road, Karachi, Pakistan.



PREAMBLE – TECHNICAL SPECIFICATIONS IT & ALLIED WORKS



MUKHTAR ENTERPRISES STUDIO FOR ARCHITECTURE

Office No. 302, 32-C, Third Floor, Lane- 01, Al Murtaza Commercial, Phase 8, DHA Karachi

Phone: 0213 7297002 email: info@mesa.com.pk

URL: www.mesa.com.pk

LIST OF APPROVED MANUFACTURERS & SUPPLIERS OR EQUIVALENT

01	LV Distribution Boards	A to Zee Switchgear/ Karimi Electro Mechanical Universal Engineering/ United Switchgears/ ICONIC Professionals Power Engineers/ Unique Engineering
02	MV & LV Circuit Breakers & Components	ABB (Europe/France) Preferred/Schneider (Europe/France)
03	Wires & Cables (HT/LT/ELV/FRC)	Pakistan Cables
04	Switches & Sockets	Schneider Electric- France/Vietnam
05	PVC/UPVC Pipes & Cable Containment (Conduits, Flexible & Accessories)	Galco/Jeddah Polymer/Civic/Dadex/Adamjee/Pak Arab
06	Cable Trays/Ladders & Trunking	3D Engineering/ Power Engineers/ Prime Engineering Unitech
07	GI Back Boxes/Floor Outlets Boxes & Pull Boxes	ICONIC Professionals/Clipsal by Davis 3D Engineering/Power Engineers Unitech/Ezzi Engineering Tesla Engineering
08	Cable Lugs/Connectors/Accessories/ Cable Labeling/Tagging & Lineup Terminals	Cambre (Italy)/Hellermannntyton (UK)/Hawke International/3M Kleman-Turkey/T Bloc-Turkey/ICONIC Professionals/Yaslee (Taiwan)
09	Earthing & Lightning Protection	Vital Engineering / AA Enterprises ICONIC Professionals Prime Engineering
10	Voice/Data/CCTV/Fiber Optic/Communication Cables/Systems & Multimedia Boxes	Corning/ Schneider/H3C Junon (GPON Multimedia Boxes)/Toten (Cabinets/Racks) Routers (CISCO/UNIFI/Fortinet/Grandstream)
11	VOIP Solutions VOIP Telephone Sets	NEC/Fortinet/CISCO/Avaya/Grandstream Yealink/Samsung/Grandstream
12	Coaxial Cables	Pakistan Cables /Schneider Amphanol (USA)/Pony/WISI/Pak Security & Safety Systems
13	Load Break/Changeover/ Selector Switches & Isolators	Socomec (France)/Lovato (Italian)/Himel (China) Gave (Spain)/ABB (Spain)/Westinghouse (Malaysia)
14	Busbars & Supports	Imported & Tinned Coated Copper
15	Current Transformer (CT's)	Hobut-UK/EFEN-Hungry/Germany/Sezgin-Turkey Fico/Lovato
16	Digital Smart Energy Meter (Single/Double Source)	Klemsan-Turkey/Westinghouse (Malaysia)
17	Energy Analyzer	Klemsan-Turkey/Lumel-Poland/Westinghouse (Malaysia)
18	Digital Ampere/Volts Meters	Autonics/Emzed F&G/Togami/Entes/Westinghouse (Malaysia)
19	PFI Capacitor/Relays/Timers/EVR/Auxiliaries	Finder/Samwha/Emirel/Schneider/Nias/Autnics/Nias/Westinghouse
20	Surge Arrestors/Protectors	Westinghouse (Malaysia)/ABB/Schneider/Dehn

21	PABX & IP Intercom Systems	Panasonic/Siemens/Hyundai Telecom/ITC/Samsung Secure Vision/ MA Technologies Mega Plus/ Pak Security & Safety Systems
22	Sound/Public Address/HDMI/VGA/USB & ELV Equipment Cables/Devices/Splitters	Extron/QED/LibertyPure Link/Black Copper/Firekas/Cavice AA Enterprises/ Secure Vision MA Technologies/ Clipsal
23	AV/Sound Systems	Extron/Eaton/Clipsal Pakistan (Pvt.) Ltd
24	Fire Resistant Cable (FRC)	Belden/Pyrimian/Cavice/Draka/Oran (Turkey)/Shield (UK) Naffco/ Secure Vision MA Technologies/ Clipsal
25	Fire Suppression Systems	Vultan/ Avtech/ Shield (UK)/ Naffco
26	Conduits Sealing Gum	Zahabiya Chemical Industries
27	PPE/PPRC/PPRCT/PP/CPVC/UPVC Pipes/Fittings/ Valves/Gully Traps/Clean Outs & Floor Drains	Dadex/ Kalde/ GF Hakan Turkey/ Kitz Aqua Therm Germany/ Cosmoplast UAE/ Maxi Flow
28	Supports & Anchors	Fisher (Germany)/Hilti (Germany)/Norm (Turkey)/Index (Spain)
29	Building Automation Systems (BAS) & Guest Room Management System (GRMS)	Schneider Electric (Germany/Latvia/USA/Sweden)/KNX GRMS (Spain)/Interel (Italy)/VDA (Italy)
30	Lighting Control Systems & KNX Cables	Schneider/ KNX Belden/ Ramco Clipsal Pakistan (Pvt.) Ltd
31	Fire Suppression System for IT Room Water Leakage Detection System Environmental Monitoring System	Naffco/Pemall/Saffeeeco/SGS/Netix/Honeywell/Britsole/Sovec
32	Multimedia Projector & Screen	Epson (Clipsal Pakistan (Pvt.) Ltd.
33	Smart Touch Interactive Display Screen	H3C/Samsung/Clipsal Pakistan (Pvt.) Ltd.
34	Others/Not Mentioned	in Line with the Specifications/BOQ/Recommendation & Approval of MEP Consultant.

Note: -

Consultant holds the right to discard or add any supplier/manufacturer/Brand, keeping in view the past record and quality of their product. Consultant have right to ask to submit Quotation, Delivery Challans & Invoices for Verifications.

Technical submittal/samples of all materials/equipment shall be approved by consultant. Contractor shall responsible to get the written approval from consultant prior to procurement of materials and installations.

Contractor shall bound to procure all materials from authorized distributor Only.

All equipment shall supply only from the approved sources indicated above. However, in all the case the contractor shall submit the complete technical details of the equipment, material and obtain consultant's approval prior to delivery on site. Where "Approved Equivalent" is indicated, it shall be the sole discretion of the consultant to accept or reject the alternate proposal submitted by the contractor.

INSTRUCTION TO TENDERERS

1 Tendering Stage

Bidders must be having similar projects experience and also having a Valid Required Certifications/Authorizations Letters (Mandatory).

Bidders shall submit the complete profile specially in hand jobs details related to similar type of Projects.

2 Mobilization On Site:

Bidders shall submit the shop drawings of the project (as required by consultant) and get written approval from Client/Architect & Consultant prior to start working on site. As built drawings shall be considered as approval drawings at this stage.

Bidder shall submit the Materials/Technical Submittals (as per List of Approved Manufacturers) to Consultant's Office for approval prior to procurement of materials. Bidders shall bound to procure all materials from approved main authorized distributor Only (Mandatory). All means of travel, lodging, food expenses to be covered for physical inspection by consultant or its team members during execution and approvals.

Bidders shall coordinate with Consultant's Site Engineer for performing of Tests and signed off the documents and submit it to Client/Architect/Consultants Office prior to closure of access/ceilings/floorings/wall plastering for review and onward approvals (Mandatory).

Bidders shall responsible to coordinate with Client/Architect/Consultant for mockup inspections and approvals. All Active equipment to be approved vide factory acceptance test.

Bidder shall develop the Shop of Project as per Instruction of Consultant's and submit it to Consultant's Office for approval prior to execution of works (Mandatory).

Bidders shall responsible to start and develop the as-built drawings process from day one of project and prior to closure of ceiling/walls plastering/slab pours and flooring for record purpose and shall submit the same with Bills along with pictorial references.

Bidders shall submit his bill along with detailed measurement sheets, as-built drawings, all test reports of Works as per below stated, Factory Test Certificates, Reports, Directory, fluke test reports of all IT & ELV cables, commissioning certification from vendor, warranty/guaranty and performance certificates of all systems and equipment. All tests to be a part of contractor's scope of work. Liaison with civil contractor to ensure complete authenticity of works being handed over to IT Contractor

Billing and handing taking over process shall be as per consultant instructions. In case of non-compliance to above, bill and handing taking over process may not be entertained.

3 Standard Billing & Documentation Protocol:

All documents shall be on Main Bidder Letter heads duly signed, stamped along with witness by Client Site Engineer. 01 –

Covering Page (duly mentioned rebate and taxes) as per LOA.

02 – Copy of LOA/LOI

03 – Bill Subtracts along with Detailed Measurement

Sheets 04 – Megger Test Reports along with Pictorial

References 05 – Shop Drawings

06 – Test Reports

07 – Directory

08 – System Commissioning Report of Vendors/Suppliers

09 – Warranty, Guaranty and Performance Certifications

10 – Fluke Test Reports, Cross Connect Reports, Connecting Hardware Reports with Vendor Authorization Letter

11 – Approved Technical Submittals

12 - PTA Approvals for complete quoted products (as per Consultant/Client Requirements)

13 – GD Copies and Legal Import Documents

14 – 4 Technical Trained Resources from Manufacturer/OEM

15 - MAF from Direct Principal

16 - 5 Clients of offered models of the system (List clients must be attached with technical BOQ)

17 - PBX must have the type approval from PTA (Certificate of PTA must be provided with technical Bid)

18 - Physical Office on Karachi

19 - Certified Technical Resources

20 – Handing & Taking Over Document (Duly Signed by Client/Authorized Representative)

21 – Bidder shall responsible to take the approval from Client in written against the any additional items, cost variations, increase of quantiles on prior to execution.

4 General

Tenderer is required to check that Tender documents issued are complete in all respect related to Conditions of Contract, Specifications, BOQ and Drawings. In the event that Bidder finds that Tender documents have any missing page/drawing or defaced page/un-printed page, he is required to inform immediately through EPAD system and obtain the above, as the case may be. In the event that this is not done, it will be assumed that the Bidder has received the documents complete and correct in all respect and it shall be Contractually binding on the Bidder.

Bidder should examine carefully the Conditions of Contract, Bills of Quantities, Drawings, etc. They should visit and inspect the site and obtain all necessary information prior to submitting their Tender. Any detail/Specifications/quantities

missing in the document should also be obtained through EPAD System. Once the Tender is submitted, it will be assumed that no further clarification was required.

The rates to be inserted in the Bills of Quantities shall be deemed to include all costs of whatsoever description and expenses necessary for the Completion and Maintenance of the Works together with all risks, taxes/duties, liabilities and obligations, specific, or implied, in the Tender Documents. Arithmetical errors, if any shall be corrected accordingly.

Any clarification, revision, addition or deletion to the Tender documents may be made by the Consultant before the submission and opening of Tender. This will be made only by formal addenda issued by the Architect/Client. Such addenda will become part of the Contract documents. Each addendum shall be signed by the Bidder and returned with other Tender documents.

No unauthorized alteration may be made in the Tender documents. If any such alteration is made, tender may be liable for rejection.

The Client/Architect/Consultant reserves the right to reject any Tender without assigning any reason and does not bind himself to accept the lowest or any Tender. The Client/Architect/Consultants will not reimburse any loss or expense incurred by the Tenderer in submitting their Tender.

All manufactured and other items should be used in the work in accordance with the Consultant's instructions, Specifications and also in accordance with generally accepted norms of good workmanship.

Bidder shall maintain a Record Book at site on which any instruction/comment issued by the Architect/Consultant or their representative shall be noted. A copy of this should be sent to the Architect/Consultant for their record. Changes in Specifications if any type of material or any other specification is changed, the net difference in cost shall be deducted, at actual without taking into account any overheads, profits, etc.

The works/areas shall be measured in accordance to any general or local custom except where otherwise specifically described or prescribed in the Contract.

The Bidder at his own cost shall take all necessary precautions to avoid damage to any existing wires, cables, drains and others services which may be encountered in carrying out the works and shall adequately protect, support and maintain such existing services.

The Bidder shall conform and comply in all respects with the provision of all laws, rules, regulations, bye-laws or orders of any Government or other authority whether Federal, Provincial, Municipal or Local from time to time in force which may be applicable to the Works and shall give all notices and pay all fees including Social Securities required thereby and shall indemnify and keep the Owner indemnified against all liabilities and penalties arising there under. Provided always that the Bidder shall not be responsible for obtaining any planning permission, which may be necessary in relation to the works.

The Bidder shall not sublet part or whole of the works, except where otherwise provided for in the Contract. The Bidder shall not sublet any part of the works without the prior written consent of the Architect/Consultant and such consent, if given, shall not relieve the Bidder from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any sub-Bidder, his agent's employees or workmen.

If the Bidder proposes to appoint sub-Bidders for portions of the work, he should submit a list of sub-Bidders with full particulars of the firms to whom he proposes to sublet such work. No work will be allowed to be carried out by the Sub-Bidders unless the sub-Bidders have been pre-qualified by the Consultant.

Only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work, they are required to supervise; and such skilled and Semi-skilled labor as is necessary for the proper and timely execution and maintenance of the works.

The Bidder shall be responsible for all acts and omissions of his technical assistants, foremen, leading hands, labor and other employees, agents and personnel engaged by him and for remunerating them, who shall always be considered as the employees/representatives/agents of the Bidder and shall have no privacy of Contract with the Owner/Consultant. Prior to mobilization on site, Bidder will be required to submit detailed Work Schedule and Site-Organogram to be approved by consultant, which will be part of the Contract. The Bidder shall give or provide all necessary

superintendence during the execution of the Works and as long thereafter as the Owner/Consultant may consider necessary for the proper fulfillment of the Bidder's obligations under the Contract.

The Bidder shall appoint competent and authorized Site Agent who shall have full authority to act for and bind the Bidder and who shall be constantly at the Site and shall give his whole time to the superintendence of the Works. Such authorized Site Agent of the Bidder shall receive on behalf of the Bidder and comply with the directions of the Consultant, and shall supervise the work of the workmen or others responsible to the Bidder. He shall also work in harmony with the other Bidders at the site. The Site Agent shall not be transferred from his operation without the consent of the Owner/Consultant.

The Site Agent shall carefully examine the drawings and the Specifications and inform the Consultant with any inconsistency or discrepancy which may appear. The Bidder shall be required to adopt all necessary measures of precaution for safety at site for personnel and materials. The precaution and safety regulations are to be followed from time to time and as directed by consultant.

The Bidder shall provide and maintain, at his own cost, all lights, security, safety measures, etc. for the security and protection of the works, property, persons etc. or for safety and convenience of the public or others. The lighting must be adequate enough for true supervision and inspection of works. Watchman for owner supplied materials shall be employed and paid by the owner.

Bidder shall be responsible for the provision of adequate first aid facilities at the work site for all personnel employed or retained by Bidder or by any of its sub-Bidders in the performance of the work. In the event any of Bidder's personnel or the personnel of a sub-Bidder requires the services of an ambulance, hospital or physician, Bidder or its sub-Bidder will promptly pay all charges therefore directly to the providers of such services.

Bidder shall attend and shall cause his sub-Bidder to attend meetings when called by the Owner/Architect/Consultant/Project Manager to discuss progress of work and other related matters to the works and Contract. Bidder shall be required to coordinate with all trade Bidders in order to make "Master Construction Schedule" which mean comprehensive construction schedule to be prepared by civil Bidder taking lead incorporating and executing a comprehensive schedule inclusive of Civil, Electrical, HVAC, Plumbing Works etc., to be reviewed and approved by the Project Manager/Architect/Consultant.

Master Construction Schedule will identify critical path showing sequence of works. Bidder is responsible to ensure flawless coordination with civil Bidder to regularly update Master Construction Schedule as and when required and seek approval from Project Manager/Architect/Consultant.

During the execution of works the Bidder, at his own cost, shall be responsible for clearing and clearance of all debris, rubbish, surplus material, etc. to the satisfaction of Engineer. All wall, floor, trenches, hand holes & man holes etc. cutting including basic repair and civil works is Bidder responsibility.

On the completion of the works Bidder, at his own cost, shall clear away and remove from the site all constructional plants, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the engineer. The rubbish shall be disposed off in the manner as directed by the site supervisor.

Any items of Bills of Quantities can be taken added or deleted, if Consultant desire so, it shall not affect price etc. structure of remaining part of Contract. Any material, if not found in accordance with Tender/Additional/Contractual Drawings/Documents/Bills of Quantities/Specifications/Consultant Instruction during or after installation or after completion, even in use and paid for, shall be replaced by Bidder, at no extra cost of Client.

The Bidder will place the order for all the material to be used at site and in his scope of works well in time so that delivery of these materials should not affect the schedule of completion of works. No excuse for the late delivery of the materials by other manufacturers shall be accepted in this regard. Bidders are advised to contact consultant for clarification of each and every query before filling BOQ. No alteration in the rates will be entertained after submission / approval of tender documents.

SCOPE OF WORKS

1 Scope of Work

The Bidder shall provide all materials and equipment except owner supplied item mentioned in BOQ to perform all the works necessary for the execution and completion including testing and commissioning of all systems as shown on drawings, specified herein, BOQ and to the satisfaction of the engineer in charge of the Consultant. The bidder shall borne all travel, lodging, food expenses for inspections of consultant and his team in city and out of city.

The following works are included in the Scope of Work:

Supply (Except OFM), Installations, Testing & Commissioning of Entire Works including Approvals of Shop Drawings, Material Technical Submittals, Test Reports, As built Drawings, Documents, Handing & Taking Over Process.

2 General

The entire electrical installation/work shall be carried out by Licensed Electrical Bidder, authorized to undertake such work under the provision of the, Electricity rules 1937 as adopted and modified up to date by the Government of Pakistan.

All works shall be carried out in accordance with the latest edition of the Regulations of the Electrical Equipment of Building issued by the Institute of Electrical Engineers-London, the contract Documents, The Electricity rule 1937 and bye- laws that are in force from time to time. Any discrepancy between these specifications and any other rules and regulations shall be brought to the notice of Engineer for his instructions and the discussion of the accepting/controlling shall be final and conclusive.

The Bidder shall be responsible for completing all formalities and submitting the test certificates as per prevailing rules and regulations, and shall have the installation passed by the Government Electric Inspector of that region. All requirements of the Electric Inspector and the K-Electric (KE)/WAPDA/HESCO/LESCO shall be complied with.

ACTIVE EQUIPMENT:

Proposed OEM Vendor should have registered office in Pakistan. Proposed OEM Vendor should be registered with SECP, all equipment should be from a single OEM, multiple OEM will lead to disqualification. OEM terms of existence in Pakistan should be at least 20 years, Vendor must be OEM Authorize Partner, OEM must authorize and issue MAF against this project to their Vendor, OEM should have local office in Pakistan, OEM should have direct replacement facilities of faulty parts for same day (24x7x4) in major cities of Pakistan specially in Karachi, Local warehouse details should be shared. The supplier is required to include a comprehensive network structural layout as part of the technical proposal. This layout should clearly outline the proposed network design and connectivity framework to ensure alignment with project requirements.

3 Ambient Conditions

All material and equipment supplied and installed shall be designed, manufactured and tested to meet the following ambient conditions unless specifically stated otherwise for any material/equipment.

Minimum Indoor ambient temperature	:	45-Degree Celsius
Maximum Indoor ambient temperature	:	Zero Degrees Celsius
Minimum Outdoor ambient temperature	:	50-Degree Celsius
Maximum Outdoor ambient temperature	:	Zero Degrees Celsius
Maximum Relative humidity	:	90 Percent
Maximum Altitude of project	:	15 Meters above the mean sea level

The atmospheric conditions are tropical, highly humid and corrosive.

4 Standards

The latest standards and codes of reputable organization shall be applicable for the material and equipment specified herein and for installation work. Such organization to be, NEC, IEE, BSS, VDE, etc. In case the specification and laid down herein differ from those given in the standards, then the equivalent or better specifications shall govern. Wherever applicable the equipment shall also conform to the requirements of Pakistan Standard Institution (PSI).

The entire installation shall be free from improper grounds, open and short circuit faults. Tests shall be made in accordance with section "E" of I.E.E. Regulation for the Electrical Equipment of Building "1966" Edition in presence of a representative of the Employer / Consultant. Each panel shall be tested with mains connected to the riser, branches connected lamps removed or omitted sockets and wall switches closed. Each individual power line shall be tested with the power equipment connected for proper and intended operation. In no case shall the insulation resistance be less than that allowed by the Regulations for electrical equipment of buildings. Failure shall be corrected in a manner satisfactory to the Employer/Consultant.

It shall be the responsibility of the Bidder to test all system of the entire electrical installations as well as those installations where sequence operation is required. The Electrical Bidder shall test for proper sequence and he shall leave the entire electrical installation in satisfactory working condition.

The Bidder shall guarantee that the electrical systems, including all components and accessories used therein are free of all grounds, shorts and open circuit faults, defective workmanship and materials, any electrical as well as mechanical defects, non-compliance of specification in any respect and will remain so, for the period of maintenance after the date of acceptance of the work. Any defects, appearing within the aforesaid period, shall be remedied by the Bidder at his own expense.

All electrical installations in "Explosion Hazardous Zones" should comply with the Institute of Petroleum Code of Safe Practice Part-I Electrical. In general, the electrical color coding of switchgear cubicles, control panels, desks etc., shall be in accordance with the respective IEC Recommendations.

Live parts of electrical connections shall be color coded according to IEC 446 as follows:

	Conductor Designation	Coding Alphanumeric	Colour
A.C Network	Phase 1	L1	Red
	Phase 2	L2	Yellow
	Phase 3	L3	Blue
	Neutral	N	Black
D.C Network	Positive	L +	White
	Negative	L -	Black
Earthing	Protective Earth	PE	Green/Yellow
	Earth	E	Green/Yellow

5 Intent

It is the intent of the Electrical & Allied Works Drawings, Specifications & BOQ that all work, equipment, conduits, wiring, piping work and accessories shall be provided/installed complete, commissioned, tested, adjusted and ready for operation. The drawings, specifications, BOQ shall be taken as whole and not separately since they are intended to explain and illustrate each other. Any apparatus, appliance, material or work which in BOQ or in drawing not shown but mentioned in the Specifications, or Vice Versa, complete in all respects and ready for operation, even if not particularly specified, shall be provided by the Bidder without additional expense to the Principal.

6 Coordination

The Contract documents have been carefully coordinated to avoid overlapping or conflicts. However, should any discrepancies be noted between Contract documents within a trade or between trades, they shall be immediately reported to the Consultant/Engineer so that the required revisions or work directives may issue to all parties concerned, at the earliest possible date and no claim to be made to the principal for any such discrepancy.

7 Tests

The Bidder shall employ experienced personnel and at least one graduate electrical engineer to supervise and undertake electrical works on full time basis with prior approval of consultant. No electrical work shall be allowed unless such competent person has been employed for execution of the entire Electrical work. The work and as far as possible keeping the same engineer foremen and workmen on the work from commencement to the completion.

The workmanship of the entire job must be in every way first class and only experienced and competent workmen should be allowed on the job.

8 Approval of Material & Equipment

The Material (except owner supplied items), workmanship, design and arrangement of all work installed under the Contract shall be subjected to approval of the Consultant/Engineer.

Approval of material (except owner furnished items) and equipment by the Consultant/Engineer shall not be considered as a guarantee of measurements or building conditions. The approval does not in any way relieve the Bidder from his responsibility, or necessity, of furnishing material or reforming work as required in the Contract Documents.

The Bidder shall be responsible for his work until the completion and final acceptance and shall replace any of the same which may be damaged, lost or stolen without any additional cost.

Wherever applicable the material is to comply with the relevant British Standard Specifications.

9 Accuracy of Data

The layout of light fixtures, switches, conduits wire, cables etc. shown on the drawings is generally diagrammatic unless specifically dimensioned.

The layout, which shall finally include all approved materials to be used on the job should be checked for interference with work of other trades and with existing conditions before installation. The right is reserved by the Consultant/Engineer to make any reasonable change during the construction in location of light fixture switches, conduits, equipment etc. and its size as shown on the drawings in order to conform to the building conditions at no additional cost.

The general layout of conduits is to be provided by the Bidder on his shop drawings. The lines in between switches & light fixtures are switch lines showing the control of fixtures in Contract drawings.

All dimensions of doors, partitions walls etc., for the location of light fixture, Sockets, telephone, switches, DB etc. and equipment should be taken from the Architectural Drawings.

10 As-Built Drawings

Keep an accurate record of all deviations in work as actually installed from work indicated on drawings, paying particular attention to dimensioning the underground utility lines, their offsets, conduit & cable runs and hand holes.

Bidder shall, before any work is started, procure, at his own expenses, an extra complete set of Contract drawings for his trade. Keep this set at the job site and use for "marking up" to suit the works as actually installed.

Record on this "AS BUILT" set each change, not later than 24 hours after such respective change in work is complete. Make changes neatly using sharp colored pencils, straight edges and drawing instruments.

Keep this "AS BUILT" set available for inspection at all time and at job completion, deliver it to the Consultant/Engineer for submission to the Principal, complete and unsoiled.

Upon completion of the work all changes should be incorporated on the reproducible drawings in Auto Cad format and one set of reproducible and five sets of prints should be submitted to the Consultant/Engineer, upon failure to provide such drawings after one month of provisional acceptance by the Bidder, the principal may deduct a sufficient amount from the security of Bidder to compensate loss with the consent/approval of Consultant.

11 Guarantee

The Bidder shall furnish written guarantee with respect to satisfactory performance of each of the equipment (except owner supplied items). Guarantee shall be given for replacement and repair of part or whole of the equipment which may be found defective in material or workman-ship. The guarantee shall cover a minimum period of 6 months, after commissioning of the system and issuance of completion certificate.

12 Equipment Protection

Unless otherwise noted, all equipment supplied shall conform, as a minimum, to the following protection classes, in accordance with BS 5490:

Indoor	IP 42
Indoor Damp Areas	IP 54
Outdoor Areas	IP 65

With the exception of material specified to be hot-dip galvanized (after fabrication), all metal work (steel conduit and accessories, outlet and pull boxes, trunking, straps, brackets, hangers, frames, etc.) shall be given a protective treatment consisting of degreasing, derusting, two coats of zinc-chromate/red lead primer, and two coats of enamel during manufacture. After installation on site, any damaged metal work shall be given another coat of paint. Painting of steel conduits shall be to BS 1710 for color-coding purposes.

If properly rated equipment is not available, the Bidder shall provide field enclosures to attain the required IP degree of protection. If necessary, cooling/exhaust fans and/or anti condensate heaters shall also be provided. No separate payment shall be made to attain the required IP degree of protection.

13 Site Conditions

The Bidder shall familiarize himself with the existing conditions and limitations at site. No claim due to site conditions will be acceptable.

14 Installation Instructions General

The Bidder shall furnish all labor and materials, tools and equipment required to install, connect, test and commission all electrical equipment specified herein, whether or not such equipment is furnished by him or others. For all equipment to be installed by the Bidder, the Bidder shall supply and install all installation materials such as foundation bolts, leveling steel, shims, clamps, cable sockets, lugs, solder, wall plugs, steel rowel bolts, washers, nuts, etc. as required and without any additional costs. In general, the manufacturer's instructions for installation shall be followed. For any major departures from the working drawings that are deemed necessary by the Bidder due to site conditions, he shall submit the details and obtain the Consultants approval at least time one or two weeks before starting such works.

No Chiseling and Cutting of Structures is to be carried out without prior written permissions obtained from the Architect/Structural Engineer/Consultant. Bidder shall be carefully coordinate risers and downs with wall positions and shall have the same confirmed with the Civil Bidder.

15 Field Tests

Upon completion of the installation, the Bidder shall perform field tests on all equipment, materials and systems. All tests shall be conducted in the presence of the Consultant for the purpose of demonstrating equipment or system compliance with Specifications.

All tests shall be made with proper regard for the protection of the equipment and the Bidder shall be responsible for adequate protection to all personnel during such tests. The Bidder shall record values of the tests made on all equipment. Three copies of all test data shall be given to the Consultant for record purpose. The witness of any tests by the Consultant does not relieve the Bidder of his guarantees for materials/equipment or any defects.

16 Measurements

The quantities set out in the BOQ are the estimated quantities, and they shall not be taken as the actual and correct quantities of work to be executed by the Bidder. The Bidder shall carry out actual measurements of works at site. All measurement shall be properly recorded in the measurement book and verified by Site Supervisor as per Electrical Consultant Instructions.

17 Precedence

The detail & other notes written or shown on the drawings shall have precedence on the Specifications and BOQ's, whereas the contents of BOQ shall have precedence on the Specifications, but the judgment of Consultant shall be final.

IP/VOIP TELEPHONE SYSTEM (GENERAL SPECIFICATIONS)**1 GENERAL**

The purpose of this project system is to provide, installation, maintenance, operations, testing, commissioning, handing over and trainings of a new voice telephone system and new telephones. This specification covers the requirements for all Voice over Internet Protocol Telephony and faxing systems as per Client requirements.

The scope includes the design, development, supply, delivery, installation, testing, commissioning, training, handing over of systems, particularly software applications, hardware and network communication hardware and software, and the cabling thereof. The Voice over Internet Protocol (VOIP) scope deals with the use of electronic computers, computer software, analogue and digital telecommunication services to allow internal and external voice and fax call capabilities within the scope of this project. where the Contractor submits documentation to the Engineer for approval, the Contractor's still remains responsible to fully comply with the Scope of Work and Contractual Timeframes as well as the specifications, recommendations and best practices listed below.

System shall be non-blocking and open standard. It should support Active-Active Redundant Servers, in load sharing architecture, able to switchover to other server in case of failure of one server as required. The installation shall comprise the supply, setting-up, connection and commissioning of a system with as per Client Requirement and Industry Standards. All the modules shall be accessible from the front so that they can be replaced without moving the entire system. The system shall be approved and conform to EC standards also.

The tenders must be presented in the requested format and include all the documents necessary so as to enable the Consultant/Client evaluation board to properly assess them. Failure to respect these requirements will constitute a formal incompliance and may result in the rejection of the tender.

ACTIVE EQUIPMENT:

Proposed OEM Vendor should have registered office in Pakistan. Proposed OEM Vendor should be registered with SECP, all equipment should be from a single OEM, multiple OEM will lead to disqualification. OEM terms of existence in Pakistan should be at least 20 years, Vendor must be OEM Authorize Partner, OEM must authorize and issue MAF against this project to their Vendor, OEM should have local office in Pakistan, OEM should have direct replacement facilities of faulty parts for same day (24x7x4) in major cities of Pakistan specially in karachi, Local warehouse details should be shared, OEM should be in the leader magic quadrant for Enterprise Wired and Wireless LAN Infrastructure for the past 05 years. The supplier is required to include a comprehensive network structural layout as part of the technical proposal. This layout should clearly outline the proposed network design and connectivity framework to ensure alignment with project requirements.

2 TECHNICAL AND PROFESSIONAL CAPACITY

Tenderers are required to prove that they have sufficient technical and professional capacity to perform the project. To that end, they are requested to present the following documentation:

A detailed account of the main current activities of the tenderer

A description of a minimum of two similar experiences of support in type of activities covered under specifications

A brief presentation of the structure of the company and, where it is proposed to present a joint offer or subcontract part of the tasks, the structure of the extended group, ideally by means of charts which clearly show the tasks to be undertaken by each company. Evidence of the tenderer's expertise and experience delivering similar services (e.g. list of main contracts achieved in the past three years, specifying the value, dates, recipients of the supplies and/or services of the type required in these tender specifications.

3 CONNECTIONS AND STANDARDS:

The system shall be in conformity with international standards as regards to the connection of peripherals and links with system applications. It should be possible if deemed necessary, to make use of other equipment and applications not specific to the contractor, through the use of standardized interfaces and protocols. The tenderer shall describe which interfaces the system supports for (i.e. IP, ISDN Terminals).

4 CONNECTIONS OF DIGITAL SUBSCRIBERS:

The system should offer ISDN internal subscriber. For connecting its own equipment to the system, the tenderer may use his own particular protocol (to be specified). It shall be possible to jointly use one of his own protocols and any other protocol (if needed in the future) on the same physical line, for connecting a PC with an ISDN card, an ISDN fax, etc.

5 CONNECTIONS OF ANALOGUE SUBSCRIBERS

It shall always be possible to directly connect traditional analogue telephones. Analogue connections shall automatically recognize whether a multi-frequency (DTMF) or pulse dialing telephone is involved. Specific connection for data transmission equipment. The proposed system shall internally support both BRI (S0) and PRI (S2) interfaces to allow the connection of ISDN data equipment such as an ISDN router or a videoconferencing system also. BRI connection shall be possible on the same physical line as the digital system telephone to ensure a temporary or definitive flexible connection. They shall have a minimum final capacity of 5,000+ subscriber connections, regardless of whether the subscribers are IP, analogue or digital.

6 SAFETY MEASURES, PROTECTION AGAINST FAILURES:

The proposed system shall be delivered with a backup battery providing autonomous operation of at least 4 hours. Switching to the backup battery shall be indicated by a warning message generated both on the local service terminal and at the supplier's service center. The operating systems present in the telephone system which are prone to power failures (e.g. Unix), shall automatically be shut down before the battery is completely exhausted to prevent the corruption of opened files. The tenderer shall describe any additional redundancies of the power supply and the possible warnings available in the proposed equipment.

7 SOFTWARE AND DATA BANK (IF REQUIRED)

The system shall be loaded from a hard disk. This hard disk shall also store the customer's data. In addition to the hard disk, the equipment proposed shall have a removable and system able backup facility (type to be described). It shall be possible to make a backup copy on an information storage medium which can be kept in a separate place in order to safeguard data in the event of serious problems (e. g. fire). Similarly, in the event of failure of the main storage unit (hard disk, etc.), the system shall be able to work from a backup tool, even in the case of the complete restarting of the system.

8 ALLIED SETTINGS/OPTIONS

The system major error messages should be directly and automatically transferred to the supplier for diagnosis and remote trouble-shooting. However, the individual transmission of less important error messages shall be avoided so as not to give rise to needless communication costs.

Processing outgoing calls Classes of Services, It shall be possible to assign a class of service to each subscriber. At least the following classes of service shall be included: Restricted access to internal traffic, solely inter-zone calls, National calls, international calls.

Routing criteria It shall be possible to route calls according to at least the following criteria: Recipient's number, Time of day, Subscriber's class of service, Communication service used: different routes for speech and ISDN data traffic. It shall be possible to prevent the routing of data traffic by non-ISDN links. The choice of link (private network, access supplier 1 or 2) shall always be made according to the least expensive route. If this route is saturated, it shall be possible to choose an alternate route automatically.

Selection of different access suppliers, In case several access suppliers are connected directly to the system, it shall be possible to select the most advantageous access supplier via the choice of physical network line. If the least expensive access supplier is accessible via a second access supplier (e.g. MCI Worldcom or Belgacom), it shall be possible to make the selection automatically via the 'carrier selection' (prefix) function or via least-cost routing in three stages: First, the number of the access supplier selected shall be automatically called and the dialling tone is then awaited, After receiving the tone, there is a change-over to DTMF Q.23 frequencies and a personal identification code shall be sent to the access supplier, After receiving a new acknowledgement tone (identification OK), the complete, number of the recipient shall be sent.

The system shall offer the possibility to have direct GSM access for 4 simultaneous calls or via a PRA direct line so that calls to mobile subscribers are sent directly to the GSM network without making use of the fixed telephone network, in order to benefit from the most advantageous mobile-to-mobile tariff. If all the channels are engaged, the call shall be automatically routed via the normal network.

There will be no receptionist but the phones should allow 10 administrative staff to intercept calls when necessary. Therefore, 10 telephones shall have the following specifications and/or functionality: Standard PC based with flat screen, One wireless head set per user (optional), Different ringing for internal and external calls, Set up of volume and tone of the ring, Pop up window (on computer screen) coming as soon as an incoming call is present, Quick directory search in the operator program, Display the status of the selected extension (free or busy), Transfer the call by clicking to a

button, Allow at least 4 simultaneous lines, Minimum 50 programmable fields per position (E.G. to call taxi ...), Display the name of the internal caller and of an external caller if the number is in the directory, Display the number of the external caller if available, Straight voice mail deposit to an extension, Switch to announcement during night time (the time and the message are changeable).

Direct inward dialing shall be possible to reach all the telephones from the outside without the intervention of the switchboard operator. For certain telephones, it shall be possible to block this direct dialling.

Restricted access shall be possible to program the system in such a way that specific telephones or groups of telephones cannot call other telephones directly, call outside the site, call other zones or make international calls. This restriction shall only apply in one direction, whereas access shall remain unlimited in the other direction.

Music for callers on hold shall play music while callers are on hold. This music should be stored in digital form and it shall be possible to change it by the user.

In addition, the system shall offer the possibility of interrupting the music with spoken messages at set intervals. It shall be possible to activate automatically and manually a second message indicating a number to contact outside office hours. ü Individual abbreviated dialing All users shall have a minimum of 10 abbreviated personal numbers, programmable by the users themselves. Each number should comprise up to 22 digits. This abbreviated numbering shall be retained following a power failure or in the event of disconnection/replacement of a telephone. Centralized abbreviated dialing memory for the abbreviated numbering shall be sized to handle a minimum of 5,000 numbers, which shall be able to be divided into a minimum of 24 groups. Digital buttons shall be possible to program the digital buttons in the case of digital telephones. When this type of button is pressed, the stored number shall be automatically dialed. Any call in progress shall be automatically put on hold.

VIP line indicator shall offer the facility of programming digital buttons with a light indicating that subscribers dialled are engaged. The purpose is not only to have an overview of the status of telephones, but also to be able to reach them direct without rerouting. On telephones, it shall be possible to have an overview of 24 telephones (provided that the telephones have a sufficient number of buttons), By pressing this button, the programmed number shall be called directly without taking into account the recipient's call diversion, The call shall be signalled on this telephone by means of a special tone, If the telephone dialled is engaged, a visual or audible call-waiting signal shall be emitted, When this button is pressed, any call in progress shall automatically be put on hold.

Call on loudspeaker should be possible for persons called to speak directly to their caller via the loudspeaker of their digital telephone (intercom). The person called in this way shall be able to reply without having to press a button if he/she has a hands-free telephone. In all cases, he/she shall hear a warning tone at the beginning of the intercom call. The subscriber called shall clear this function on his/her telephone, otherwise intercom calls will occur on his/her telephone as the default mode. Time-delayed hotline (emergency calls) When the handset of a telephone equipped with this function is unhooked but no number is dialled within a set time, the programmed number shall be automatically called, so that the operator's telephone, an internal number or external number may be reached.

Number redial If a call is not connected (engaged or no reply), it shall be possible for the caller to directly repeat the number or to store it in memory. The caller shall have the choice between automatic storage of the last number dialled and storage of a number on the user's initiative. Number redial following an incoming call When the caller's number is indicated (internal or external call), the user shall have the possibility of storing it and automatically redialling it to call back later the person that telephoned. The system shall ensure that this number is always correct irrespective of the area of origin. Automatic ring-back when engaged If, after dialling an internal number, a subscriber discovers that the telephone is engaged, he/she shall be able to book a call. As soon as the person called hangs up, the caller's telephone shall ring and the call can be connected. This ring-back facility shall be provided on the telephone which initiated the call, even if it has been diverted in the meantime.

Automatic ring-back in the event of absence When a subscriber receives no reply from a person that has been phoned internally (on the network), he/she shall be able to book a call. As soon as the person called, on return to his/her post, completes his/her first call, the telephone which booked the call shall start to ring. When the person called hangs up, his/her telephone also rings and the call can take place. This ring-back facility shall be provided on the telephone which initiated the call, even if it has been diverted in the meantime. Subscribers who have booked several calls shall be able to check the calls booked and specify a ring-back order. Subscribers shall be able to review the calls that they have booked and to erase them selectively.

Call transfer It shall be possible to transfer a call by dialling the person's number and simply hanging up the handset. In the absence of a reply from the person called, it shall be possible to redirect the call after a time-out back to the telephone which transferred it originally. In addition, it shall be possible to transfer an outside call to an external recipient. Call diversion system shall make it possible to divert calls as follows: Divert all calls, Divert call if telephone is engaged, divert call if no reply, Calls shall be diverted to a pre-programmed number. Alternatively, the subscriber shall be able to enter another destination number. In the case of a call being diverted to a subscriber in the network, the name of the recipient shall be displayed on the screen of telephones while the function is activated.

When a call made to a telephone is diverted, it shall be possible for a user of a telephone with a screen to see the name of the person rung originally and the name of the recipient of the diversion.

On the other hand, when one receives a diverted call on one's telephone, the screen of the telephone shall display the name of the person who diverted the call from his/her telephone and the original caller (provided the name and respective number have been stored). For selected telephones, call diversion to external destinations shall be possible, but only to numbers for which the telephone has access authorization. Call diversion to other services shall also be possible for non-voice services such as fax and ISDN data videoconferencing, etc.). It shall be possible to activate this diversion from another telephone without the intervention of the system administrator. Remote activation of call diversion It shall be possible, from a telephone with the appropriate class of service, to intercept the call diversion of another telephone (or of one's own telephone from another location) and to change it to any other number. However, this function shall be protected by a personal password for each telephone to be diverted. This shall be possible without any preparations on the telephone to be diverted.

"Follow-me" option Certain subscribers shall have the possibility of making their calls follow them on any telephone of the system by entering a personal code. This shall be possible without any preparations on one's own telephone. This function shall work with the DECT system and the Voice Mail.

identification code Subscribers who have a personal identification code shall be able to identify themselves on any telephone of the system. After identification they shall have the same access, via the telephone used, to the network as that which is provided in their normal class of service. In addition, the telephone charges shall be applied to their own telephone number. After identification on this temporary telephone, they shall have at their disposal the same abbreviated numbers, both general and personal, as on their own work telephone. The tenderer supplier shall describe any additional possibilities for the mobile identification of subscribers.

Private and business calls system shall allow all users (to be defined) to call any number independently of their access and class of service after having dial the prefix for private calls followed by their personal PIN code. These calls shall be recorded in the call logging system as private calls. The same method shall be available for business calls but using a different prefix.

Telephone conference system should make it possible to set up a conference with up to 24 internal and/or external participants. A simple conference with 3 participants including 12 external participants shall be possible for all subscribers. The following facilities shall be provided: Setting up the conference call shall be menu-driven

The initiator or 'master' of the conference shall at any time be able to selectively eliminate participants from the conference. Preferably, this shall be done after checking the subscribers' names and not via an encrypted numerical code. It shall be possible to set up the conference by an assistant (e.g. a secretary) who will transfer the call to another subscriber of the system when all the participants are present. This facility shall be provided for a minimum of 3 simultaneous conferences without the participants being known in advance in the system. Locking of telephones Each subscriber shall have the possibility of locking his/her telephone for external outgoing calls by entering a personal code.

Alternatively, it shall be possible to lock all the telephones of a specific group, from a given time, for outgoing international traffic. This time shall be adjustable on a daily basis. In the morning, the telephones shall be automatically released. By entering their personal identification code, any users still present shall nevertheless be able to make outgoing communications to zones to which they normally have access during the day. Calls signals Internal and external calls shall be indicated by different tones.

Handset off the hook When a subscriber fails to properly replace the handset of his/her telephone, the telephone shall be automatically released by the system after a time-out in order to ensure accessibility. Vocal guide stating the procedure to be followed shall be connected to the system. These messages shall be available in French, Dutch and in English. Provision of fax server system, A fax server shall be connected to the new PABX. The tenderer supplier shall describe how he will connect the fax server (cable, length, interface) or whether it is integrated.

Unified messaging system proposed shall be able to support the unified messaging solution, this mean the integration of voice mail with outlook, and the integration of a fax server with outlook. It shall be possible to listen, save and delete voice mail from outlook. The tenderer supplier shall describe the functions proposed. Alarm server shall be possible to connect the building management system to an alarm server, this server shall send SMS message to GSM or message to phones depending on the alarm, the date and time and a predefined table. It shall be possible to differentiate between different alarms.

The connection between the building management system and the alarm server should be realised through dry contact or by using a database shared by the systems (in MS Access). The tenderer supplier shall describe the functions proposed on a maximum level.

Call monitoring shall be possible to have a call monitoring on the system proposed. The call monitoring proposed shall show at least the following statistics: Total number of calls, Number of calls abandoned + cause and time before hanging. Mean time to answer, mean time to abandon. Occupation means time of the call centre (all agent busy). Real time monitoring on PC. The observation period is changeable, programmable, and the statistics can be produced and sent automatically via E-mail to some persons. It shall be possible to have at least the following statistics per agent in the call centre: Number of answered calls. Number of calls initiated. Logging time in the call centre. Off hook time. Mean time per call. The observation period is changeable, programmable, and the statistics can be produced and sent automatically via E-mail to some persons. The tenderer supplier shall describe the solution proposed.

The solution proposed shall offer a solution for tele-working. It shall be possible to re-route calls for the tele-worker home, on a GSM or to another number following user information and logging information. The system shall enable a VPN connection. The tenderer supplier shall describe the solution proposed. The function shall be possible on the proposed system but will be subject of a further case by case study (option).

The tenderer supplier shall describe the basic CTI functionality's offered by the proposed system.

The system shall allow the connection of IP, analogue and digital telephone systems. It shall be possible to adapt the system in a modular fashion to the desired configuration. The IP/analogue/digital ratio shall be freely determinable, without reducing the final capacity of the system. All systems shall be able to be connected to the system via a standard CAT-6 cable. The quantity of telephones to be supplied is the basis of IP phones, analogue phones and 4 digital phones (for corridors, emergency) as per BOQ & Requirements.

The tenderer supplier shall describe the possibilities of all functions, integrations, features, failures, errors, and missing items.

All material/equipment/work shall comply with the relevant current SABS, BSI and/or IEC standards. The latest edition at time of tender of the following National and International Standard, Publication and Codes shall be read in conjunction with these specifications. Materials, Equipment, Software and Work specified herein shall comply with:

TIA/EIA-568-B	:	Commercial Building Telecommunications Cabling Standard
TIA/EIA-569-B	:	Commercial Building Standards for Telecommunications Pathways and Spaces
TIA/EIA-606-A	:	Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
TIA/EIA-942	:	Telecommunications Standards for Data Centres
IEEE 802.3	:	Ethernet LAN
IEEE 802.11	:	Wireless LAN & Mesh
IETF Network Working Group RFC3261	:	Session Initiation Protocol (SIP)
IETF Network Working Group RFC3550	:	Real-time Transport Protocol (RTP)
ITU-T Recommendation Q.700	:	Signalling System No. 7 (SS7)

The Independent Communications Authority of South Africa Act 13 of 2000
National Electronic Communications and Transactions Act 25 of 2002
National Electronic Communications Act 36 of 2005; and
National State Information Technology Agency Act 88 of 1998.

All Active/Passive Equipment/Copper Cabling/Optical Fiber Cabling, Accessories, Components & Connecting Hardware shall be in accordance with the latest revision of the following standards:

ISO/IEC 11801, ISO/IEC/TR3 8802-1, ISO/IEC/8802-3, ISO/IEC 61935-1, IEC 60364-1, IEC 60950, EN50173, EN50174-1, EN50174-2, ANSI/TIA/EIA-568-568B, ANSI/TIA/EIA-569, TIA/EIA TSB-72, TIA/EIA TSB-75, BICSI, EN 60794-1-1 (DIN VDE 0888-100-1), IEC 60794-1-2 F5, DIN VDE 0888-3, RoHS 2011/65/EU, TIA/EIA 492-CAAB IEC 60793-2-50 Type B1.3, ITU-

TG.652 D, ISO/IEC 11801 Ed.2.2, IEEE 802.3bt, IEEE 802.3 1GBASE-T, IEEE 802.3at ISO/IEC 11801 Edition 2. Arm 1-2, EN 50173-1: 2011, ANSI/TIA/EIA-568-C.2-2009, ISO 60512-99-01, IEC 61156-5; EN 50288-6-1, ISO/IEC 11801 Ed. 2.2; EN 50173-1, ANSI/TIA-568-C-2; IEC 60304, PoE/PoE++ IEEE 802.3af, IEEE 802.3at, IEEE 802.3at, IEEE 802.3 1000 Base-T, Racks shall minimum comply with ANSI/EIA, RS-310-D, IEC297-2, DIN41494; PART1, DIN41494; PART7, ETSI Standard

9 VOICE & DATA COMMUNICATION SYSTEMS

Work in this section includes supply, installation/laying, termination, fluke testing, tagging/labeling, certification and commissioning of a high quality Voice & Data Communication Cabling as per BOQ, drawings, technical specifications and Consultant instructions.

This shall include the telephone exchange, telephone instruments, laying of conduit, outlet boxes, and telephone distribution boards and other facilities as required for completion of system. The Contractor shall be required to pull in 18SWG galvanized steel wire wherever empty telephone conduits are required. The Contractor is to co-ordinate and comply with the requirements local Telegraph & Telephone Department in all respect.

Telephone & Data Cables CAT-6 UTP (un-shielded twisted pair) cables or specified in Bills of Quantities for Voice & Data communication system from JB/Rack to each outlet for voice and data communication system, different colors for voice and data cables shall be used.

The specification for conduits conduit accessories shall be same as contained in section conduits & pipes of these specifications. The telephone outlet boxes shall be 63mm x 63mm deep made of 16 SWG (1.63mm) sheet steel and provided with earth terminal and 3mm white plastic front plate.

This shall comprise 16 SWG (1.63mm) sheet steel box with hinged cover to be fixed flushed with the wall. The copper terminal strips shall be installed on insulated material sheet inside the sheet steel box and the number of terminals shall be as contained in the Bill of Quantities.

All complete telephone system, i.e. telephone exchange, conduits, outlet boxes, telephone junction boxes etc., shall be installed in complete conformity with the drawings and recommendations details in relevant section of these specifications of equipment manufacturer.

Identification marking shall be given on the free end of conduit both by color or suitable approved tag.

The telephone socket outlet back boxes shall have appropriate dimensions made of 16 SWG (1.63mm) sheet steel and suitable arrangements for termination of conduits or of teak wood for installation in dry partitions.

The telephone outlet shall be type RJ45 single/dual ports as required. The outlet shall be as approved make by Architect/Consultant.

The Horizontal cabling is the portion of the telecommunications cabling system that extends from the work station telecommunications outlet to the floor distributor/communication rack in the Communication rooms. It consists of the telecommunications outlet/connector, the horizontal cables, and that portion of the cross-connect in the telecommunications closet serving the horizontal cable. Each floor of a building should be served by its own Horizontal Cabling system.

All UTP and fiber optic cables shall conform to ANSI/TIA/EIA-568-B Commercial Building Telecommunications Cabling Standard and ISO/IEC 11801 CLASS EDITION 2: 2002 CLASS E, AS/NZS 3080:2003 CLASS E(International) Generic Cabling for Customer Premises standard.

The following cable specifications shall also be met by the cable manufacturer for 4-pair UTP Category 6 cables:

CATEGORY 6 UTP CABLES

UTP cables must: Be provided by the connecting hardware manufacturer.

Be 100 ohms 4-pair, Category 6 CM for horizontal and CMR rated for vertical backbone.

Cable tested to 250 MHz and exceeds TIA/EIA 568-B Category 6, ISO/IEC 11801 Cable.

Attenuation and Cross-talk at 100 MHz must be 19.8 db maximum and 44.3db minimum respectively.

Average results not required.

Attenuation and Cross-talk at 100 MHz must be 32.8 db maximum and 38.3db minimum respectively.

Average results not required.

Availability of a central cross filler made of PE for improved pair to pair noise isolation.

Be appropriate for the environment in which it is installed.

Meet the following mechanical specifications.

No. Pairs	04
Conductor	23/24AWG solid copper.
Insulation Thickness	0.22mm
External Sheath	Flame Retardant PVC
Sheath Color	Different for voice and data cables.
Sheathed Cable Diameter	6.0mm
Operational Temperature Range	20o C to 60oC
Characteristic Impedance	100ohms + 5 ohms
Minimum Phase Velocity of Propagation	69%
Max. Conductor DC Resistance	20oC 73.2 ohms/km
Delay Skew	< 45 nanoseconds

All horizontal cables, regardless of media type, shall not exceed 90m (295 ft) from the telecommunications outlet in the designated Work to the floor distributor. The combined length of jumpers, or patch cords and equipment cables in the telecommunications closet and in the Designated Work Area should not exceed 10m (33 ft).

Horizontal pathways shall be installed or selected such that the minimum bend radius of horizontal cables is kept within manufacturer specifications both during and after installation.

Telecommunications pathways, spaces and metallic cables which run parallel with electric power or lighting shall be installed with a minimum clearance of 50 mm (02 inches).

For voice or data applications, UTP or fiber optic cables shall be run using a star topology from the designated telecommunications closet on the respective specified floor to the respective individual information outlet. All cable routes shall be approved by the consultant prior to installation of the cabling.

The Contractor shall observe the bending radius and pulling strength requirements of the 4-pair UTP/multi pairs and fiber optic cable during handling and installation.

Each run of UTP cable between horizontal portions of the cross-connect in the telecommunication closet and the information outlet shall not contain splices.

In the telecommunications closet where cable trays or cable racks are used, the contractor shall provide appropriate means of cable management such as reusable color coded cable managers (ties) to create a neat appearing and practical installation.

Continuous conduit runs installed by the contractor should not exceed 30.5 m (100 ft) or contain more than two (2) 90 degree bends without utilizing appropriately-sized pull boxes.

Category 6 modular equipment cords shall be round, and consist of eight insulated 23/24 AWG, stranded copper conductors shall be arranged in four color-coded twisted-pairs within a CMR rated flame-retardant jacket shall be equipped with modular 8-position (RJ45 style) plugs on both ends, wired straight through with standards compliant wiring having anti-sag feature provides maximum protection from snagging during moves and rearrangements.

Use modular plugs which exceed FCC CFR 47 part 68 subpart F and IEC 60603-7 specifications and have 50 micro inches of gold plating over 100 micro inches of nickel contacts.

Modular cords should include a strain relief boots shall be available in any custom length and standard lengths of 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 5.0 meters.

Electrical Specifications shall be 100% transmission tested with laboratory grade network analyzers for proper performance up to 250 MHz. Vendor shall guarantee cords are compatible with Category 6 links, UL VERIFIED for TIA/EIA Category 6 electrical performance shall be UL LISTED.

The RJ45 outlets shall be mounted on a double outlet wall plate in the color specified in the following section. The RJ-45 outlets shall be independently tested and verified to TIA/EIA 568-B.2-1 Category 6 performance as shown below.

Transmission Specifications (worst case – all pairs)

Frequency (MHz)	Insertion Loss dB	Pair-to-Pair NEXT dB	Pair-to-Pair FEXT dB	Return Loss dB
1.0	0.1	- 75	- 75	- 30
4.0	0.1	- 75	- 71.1	- 30
10	0.1	- 74	- 63.1	- 30
16	0.1	- 69.9	- 59	- 30
20	0.1	- 68	- 57.1	- 30
25	0.1	- 66	- 55.1	- 30
31.25	0.11	- 64.1	- 53.2	- 30
62.5	0.16	- 58.1	- 47.2	- 28.1
100	0.2	- 54	- 43.1	- 24
200	0.28	- 48	- 37.1	- 18
250	0.32	- 46	-35.4	- 16

All information outlets for 100 ohms, 22-24 AWG copper cable must comply the following:

Must utilize compliant pin technology 110-style insulation displacement connectors (IDC) which allows the use of a 4-pair impact tool. Must allow for a minimum of 200 re-terminations without signal degradation. Must allow for a minimum of 1000 re-insertions without signal degradation.

Provide universal application / multi-vendor support. Support both industry standards for T568A or T568B wiring options. RJ-45 must have a flush face, zero footprint shutter mechanism to prevent dust ingress, insect infestation for areas having excessive airborne contaminants. Be constructed of high impact, flame-retardant thermoplastic, UL 94V-O rated. RJ-45 Jacks be available in White Electric, Soft Grey, Black, Green, Red, Yellow, Blue and Black Color. Be ANSI/TIA/EIA-568-B and ISO/IEC 11801 CLASS EDITION 2: 2002 CLASS E, AS/NZS 3080:2003 CLASS E Category 6 compliant.

Flush-faced, zero footprints, shutter mechanism. All faceplates shall:

Accommodate either one/ two 8-conductor modular jacks. Be applicable to both fiber and copper applications. Have a swing cradle option pivoted on a grid assembly. Swing cradle shall be rotate up to 90 degree and provide multiple angles for reducing cable bending. Have write on designation labels for circuit identification together with a clear plastic cover. Accept up to 4 channel application identification icons per outlet. Must have option of faceplate surround offering all seven colors of the EIA/TIA 606 specifications to facilitate color coding. Faceplate be made of flame retardant polycarbonate material.

All complete telephone and data systems, i.e. telephone exchange, communication racks, cabling, conduits, outlet boxes, telephone junction boxes etc., shall be installed in complete conformity with the drawings and recommendations details in relevant section of these specifications of equipment manufacturer. Identification marking shall be given on the free end of conduit both by color or suitable approved tag. The telephone and data systems with accessories shall also comply with the general specifications and with other relevant provisions of the Tender Documents. The works shall be undertaken in accordance with applicable rules and regulations of Pakistan Telecomm Corporation Limited (PTCL). Any approval/NOC required from PTCL shall be contractor's responsibility.

Prior to placing any cable, the contractor shall survey the site to determine job conditions will not impose any obstructions that would interfere with the safe and satisfactory placement of the cables, and to arrange the removal of any obstructions with the Project Manager accordingly. Pathways shall be designed and installed to meet (state applicable local and national building and electrical codes or regulations). Grounding/Earthing and bonding of pathways shall comply with (state applicable codes and regulations).

Pathways shall not have exposed sharp edges that may come into contact with telecommunications cables. The number of cables placed in a pathway shall not exceed manufacture specifications, nor, will the geometric shape of a cable be affected. Pathways shall not be located in elevator shafts. Horizontal distribution cables shall not be exposed in the work area or other locations with public access. Cables routed in a suspended ceiling shall not be draped across the ceiling tiles. Cable supports shall be mounted a minimum of 75 mm (3 in) above the ceiling grid supporting the tiles. Cable supports in a suspended ceiling shall be structurally independent of the suspended ceiling, its framework, or supports, and not be spaced more than 1.5 m (5 ft) apart.

The installation of telecommunications cabling shall maintain a minimum clearance of 3 m (10 ft) from power cables in excess of 480 Vrms. No telecommunications cross-connects shall be physically located within 6 m (20 ft) of electrical distribution panels, step down devices or transformers which carry voltages in excess of 480 Vrms. Minimum separation of 50 mm (2 in) shall be provided in areas where power or electric light circuits which are equal to or less than 480 Vrms

and telecommunications cabling coexist. All UTP cables wired to the telecommunications outlet/connector shall have 4-pairs terminated in eight-position, non-keyed modular outlets in the work area. All pairs shall be terminated.

The telecommunications outlet/connector shall be securely mounted at planned locations. The height of the telecommunications faceplates shall be to applicable codes and regulations. The maximum cable pulling tensions shall not exceed manufacturer's specifications. The maximum cable bend radii shall not exceed manufacturer's specifications. In spaces with UTP cable terminations, the maximum bend radius for 4-pair cable shall not exceed four times the outside diameter of the cable and ten times for multi-pair cable. This shall be done unless this violates manufacturer specifications. During the actual installation, bend radius on 4-pair cable shall not exceed eight times the outside diameter of the cable and ten times for multi-pair cable. This shall be done unless this violates manufacturer specifications. In the work area, a minimum of 300 mm (12 in) should be left for UTP/ScTP, while 1 m (3 ft) be left for fiber cables. In telecommunications closets a minimum of 3 m (10 ft) of slack should be left for all cable types. This slack must be neatly managed on trays or other support types.

Hook and loop fastener Wraps shall be used at appropriate intervals to secure cable and to provide strain relief at termination points. These wraps shall not be over tightened to the point of deforming or crimping the cable sheath. Hook and loop fastener Wraps should be used in the closet where reconfiguration of cables and termination's may be frequent. Properly installed fire stop systems shall be installed to prevent or retard the spread of fire, smoke, water, and gases through the building. This requirement applies to openings designed for telecommunications use that may or may not be penetrated by cables, wires, or raceways.

The local fire safety code must be observed. All work shall be done in a workman like fashion of the highest standards in the telecommunications industry. All equipment and materials are to be installed in a neat and secure manner, while cables are to be properly dressed. Workers must clean any debris and trash at the close of each workday.

After the award of work prior to supply/installation of any equipment the Contractor shall submit comprehensive System Documentation with shop drawings (in duplicate) of cable layout plan of each floor, after studying cable trunking plans (issued in the tender document), for the approval of the Engineer before executing the work.

The documentation package shall include:

The marked-up floor plans/shop drawings showing outlet locations, associated numbering, DF locations, and major run paths and risers, schematics. A synopsis of the numbering scheme. The cross connect log in hard copy and software based. A list of major components and their place in the network. Any ancillary supporting documentation

An intelligent numbering scheme is to be used in the cable plant for identification of the cable. The numbering scheme may be based on the cable plant itself and not any technological or physical aspect of the building it supports. The numbering scheme breaks into three areas:

Horizontal Cabling
Backbone Cabling
System equipment

Label each cable, user outlet, and patch panel (or punch block) with a designation developed to the following formula at each end of the run: DF# - Group # - Channel

Where DF# is the terminating distribution frame the cable connects to ("00" typically designated the Building Distributor / MDF). Group # is sequential in each DF and typically represents a patch panel or punch block and Channel # is sequential within the group, as indicated by the logical or physical channel numbering on the components.

Label each riser cable; user outlet and patch panel (or punch block) with a designation developed to the following formula each end of the run: ODF# - TDF# - Cable# - Channel

Where ODF# is the distribution frame from which the cable originates, TDF# is the distribution frame in which the cable terminates, Cable # is sequential between each DF and Channel # is sequential within the cable, as indicated by the logical or physical channel numbering on the components. It is not required where the cable represents a single physical channel of communications.

Use the following designation formula for each piece of network equipment that is represented directly or through some type of patch panel: Device# - Group# - Port#

Where Device# is sequential for each device in a DF, Group # is sequential in each device and represents a chassis card or other logical group and Port# is sequential within the group is indicated by the logical or physical channel numbering on the group components.

As the final procedure in any network installation, the certified installer should provide a set of cross connect logs for each DF in the system. A cross connect log shall be simple hard copy and software-based log documenting the cross connections of rack and wall mounted termination components (i.e., patch cables or cross wires). It follows a simple "from-to" format utilizing the numbering scheme to identify interconnecting ports. A numbering/labeling scheme different from suggested above may be submitted.

Cables shall be laid in already laid GI trunks/pvc conduits. The Contractor's staff undertaking installation & termination shall be certified installers trained & certified by the manufacturer of structured cabling equipment. Cabling shall be routed and installed at a sufficient distance from equipment and power cabling that may generate high levels of electromagnetic interference. Cables shall be laid without joints or splices (except where approved), stress-free with a minimum bend radius of at least 10 times the cable diameter, and shall be tied at regular intervals and dressed neatly. The twist of all cable shall be maintained as closely as possible to the point of mechanical terminations.

The following data must be submitted with the bid:

Detailed technical literature and specifications with Make & model numbers of equipment offered (including all accessories) with BOQ item numbers clearly marked against each item. Contractor, where appropriate, will require to demonstrate the items detailed in the proposal. All these demonstrations/presentations shall simulate actual environment. Contractor shall bear all cost of said presentations/demonstrations. A detailed list of compliance/deviations from contract conditions and technical specifications shall be submitted. If none is submitted it shall be assumed that there are no deviations.

Any proposed changed in design/equipment shall be offered separately. Authorization certificate of the contractor as an agent to backup specified minimum 25 years system performance warranty from manufacturer. Certificates of authorized installers from manufacturer certifying that contractor's personnel have been trained & certified for system installation.

Testing of cable channels shall be performed prior to system hand-over. 100 % Copper testing of the UTP horizontal cables and backbone cables whose length does not exceed 90 m (295 ft) in accordance to ANSI/TIA/EIA-TSB-67 for wire map, attenuation, length, NEXT (Near end crosstalk loss). Labeling of Horizontal and backbone cables shall be labeled at each end. The cable or its label shall be marked with its identifier. A unique identifier shall be marked on each faceplate to identify it as connecting hardware. Each port in the faceplate shall be labeled with its identifier. A unique identifier shall be marked on each piece of connecting hardware to identify it as connecting hardware. Each port on the connecting hardware shall be labeled with its identifier.

System Warranty at least 25 years Systems Warranty for Structured Cabling System shall be provided for an end-to-end Channel or Permanent Link Warranty which covers applications and components on all passive telecommunications equipment and cable.

The manufacturer of passive telecommunications equipment used in a manner not associated with the Systems Warranty must have a minimum 20-year Component Warranty on all its product. The Products Warranty covers the components against defects in material or workmanship under normal and proper use.

Applications supported include those approved by the Institute of Electronic and Electrical Engineers (IEEE), the Asynchronous Transfer Mode (ATM), the American National Standards Institute (ANSI) or the International Standards Organization (ISO) as of the date of registration. This would include but not limited to IEEE Std 802.3u-1995 100Base-T or IEEE Std 802.12-1995, Demand Priority or ATM Forum AF-PHY-0015.000 155 Mb/s over twisted-pair. Additional applications that are covered by this warranty include those under development on Gigabit Ethernet (IEEE 802.3z) and 622 Mb/s ATM that specify compatibility with the type of cabling installed.

The latest editions of the following standards/codes shall be applicable for the materials covered within the scope of this section. All Copper/Optical fiber cabling, components & connecting hardware shall be in accordance with the latest revision of the following standards:

DIN 47614	Terminal Strips
DIN 40040	Class and Reliability of units in Telecommunication
DIN 57800	Regulation for installation and operation of

	Telecommunication.
DIN 57804	Telecommunications, Manufacture and test of apparatus.
	CCIT recommendations for ISDN system and local PTCL/PTA regulations.
BICSI	Telecommunication Method Manual
ISO 9000-Series Certified	Manufacturer for quality control

ISO/IEC/11801, ISO/IEC/TR3 8802-1, ISO/IEC/8802-3, ISO/IEC 61935-1, IEC 60364-1, IEC 60950, EN50173, EN50174-1, EN50174-2, ANSI/TIA/EIA-568 – 568B, ANSI/TIA/EIA – 569, TIA/EIA TSB-72, TIA/EIA TSB-75, IEEE 802.3

Category 6 components shall be able to support frequency upto 250 MHz, speeds upto 100 Mbps, 155 Mbps and gigabit applications.

DISTRUBUTION SWITCH FOR IT ROOM TECHNICAL REQUIREMENTS:

24 Port 1/10/25G LAYER 3 Fiber based port with the option to have additional module that incorporate 8 x 1/10/25G SFP+ Ports or 4 x 40/100G QFP Ports, Each port with Single 10G SR Type Transceiver, with redundant 715W Power Supply, stacking should be supported using dedicated 1Tbps Dedicated Stacking Ports, power stacking should also be supported to support redundancy of other switch in case of power failure to other switches, data stacking cable included with 1 meter length and power stacking with 30cm length. Each switch with 20 x 10G SR Type Transceiver and 4 x 1G Copper Transceiver. optional M.2 SATA SSD storage (240GB/480GB/960GB) for compute-intensive applications, enabling them to host containers and run third-party applications and scripts natively within the switch for monitoring and observability. Backed by OEM 3 Years Warranty which include 24x7x4 support and 4 Hours Replacement.

ACCESS SWITCHES / FLOOR SWITCHES TECHNICAL REQUIREMENTS:

48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement.

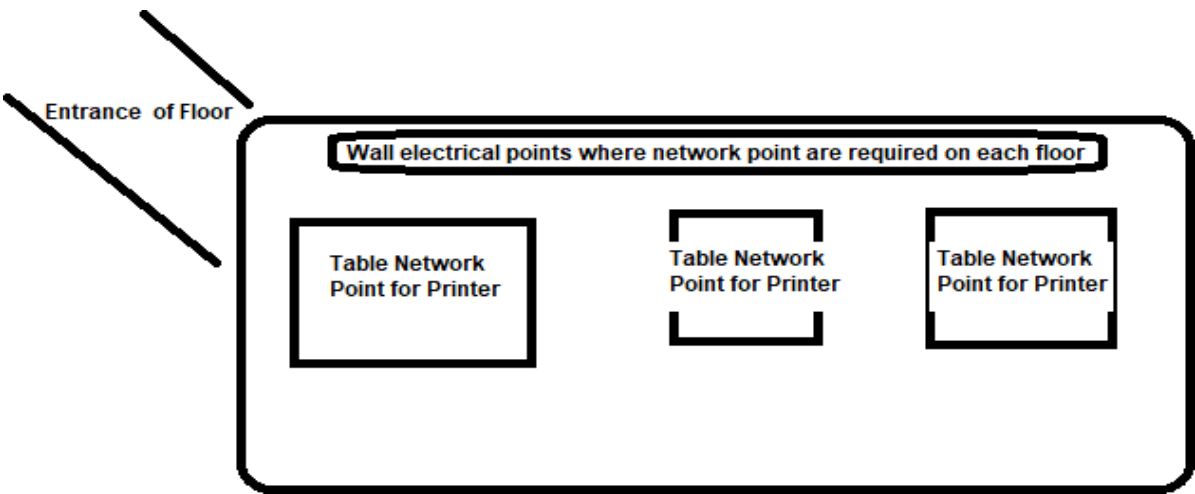
WIRELESS TECHNICAL REQUIREMENTS:

Wifi7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement.

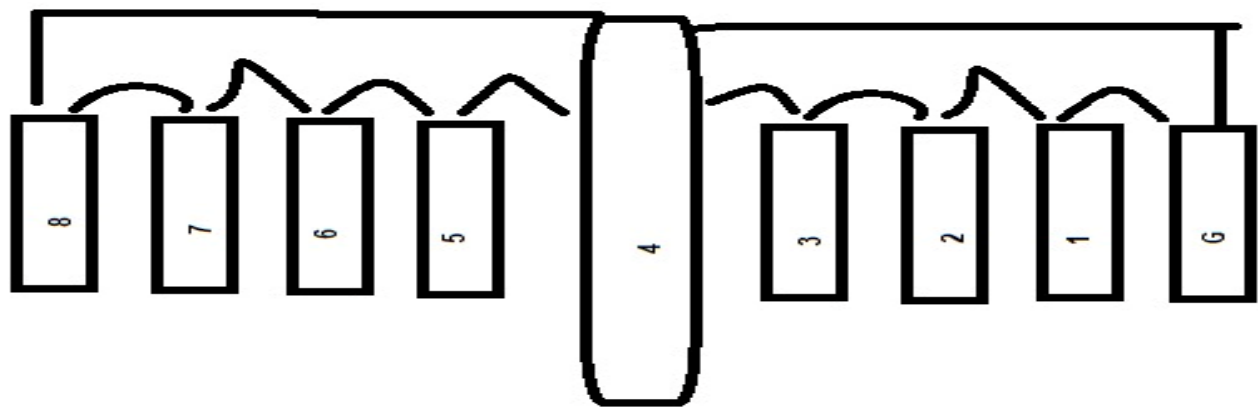
NOTES FOR TENDERER:

Rack 42U i-e 600mm x 600mm for each floor. For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided.

For printers, provide network points on the wall side where electrical points are provided. For printers, on the tables provide one network point (sample diagram given below);



Redundancy between the switches of each floor to be connect with IT Room, make the RING topology for laying the fibers (sample diagram given below);



To ensure seamless interconnectivity across floors and reliable connectivity with the IT Room, a 24-core Multimode Optical Fiber should be deployed from each floor to the fourth floor, where the data center is located. For every connection leading to the IT Room, Multimode SFPs will be utilized to maintain optimal performance and compatibility.

S.No	DESCRIPTION	AMOUNT RS.
	Total Cost of Ground Floor IT Works	PKR
	Single Floor Total Cost of First to Fifth Floor IT Works PKR	Multiplied by 5 (x5) - PKR
	Total Cost of Sixth Floor IT Works	PKR
	Total Cost of Seventh Floor IT Works	PKR
	Total Cost of Eighth Floor IT Works	PKR
	Total Cost of VOIP Systems Deployment	PKR
	Total Cost of FS & WLD Systems Deployment	PKR
	Total Cost of Project <i>(Inclusive All Applicable Taxes)</i>	PKR -

STATE LIFE INSURANCE CORPORATION
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BOQ GROUND FLOOR
IT WORKS

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

DESCRIPTION		QTY	UNIT	RATE (RS)	AMOUNT (RS)
NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT (ACTIVE) TO PROVIDE AND INSTALL.					
46.	TELEPHONE SETS				-
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF TELEPHONE SETS OF SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
i.	FOR STAFF	50	No.		
ii.	FOR EXECUTIVE SPACES / MEETING ROOMS WITH 2 x DIRECT LINE OPTION	10	No.		
iii.	COMPLETE DOCUMENTATION TESTING COMMISSIONING INCLUSIVE COST OF LICENSE , SOFTWARE AND PROGRAMMING OF THE TELEPHONE SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
47	NETWORKING				
B.	NOTE: ALL NETWORK ACCESSORIES ARE TO BE A PART OF THIS ITEM, INCLUDING SUPPLY, INSTALLATIONS, TESTING, TAGGING, COMMISSIONING. FLUKE, RACKS, MOUNTING SCREWS, RAWL BOLTS, ANCHORS, MOUNTING BRACKETS PATCH PANNEL, PDU, CABLE MANAGER, I/O , BACK BOX, FACE PLATE AND ETC (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND). (CORNING)				
i.	PATCH CORD CAT 6 (1 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	120	No.		
ii.	DROP CORD CAT 6 (2 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	120	No.		
iii.	DROP CORD CAT 6 (3 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	120	No.		
48.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	3	No.		

49.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF MULTI MODE SFP FIBRE OPTIC CONVERTER with all termination, fixing accessories including connectors, complete in all respects (MAKE: CORNING OR EQUIVALENT BRAND)	2	No.		
50.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 42U FLOOR STANDING COMMUNICATION RACK HEIGHT 24" WIDTH AND 24" DEPTH, SUITABLE FOR INSTALLATION OF SERVERS/SWITCHES, RELATED EQUIPMENT, ETC, COMPLETE WITH FLOOR BASE, VERTICAL AND HORIZONTAL CABLE MANAGERS, 2 NOS X 6-OUTLET DEFENDING THUNDERMODULE PDU, COMPLETE IN ALL RESPECTS (MAKE: CORNING/TOTEN OR EQUIVALENT)	1	No.		
51.	SUPPLY, INSTALLATION, TESTING, TAGGING, DRESSING OF HIGH SPEED HDMI CABLE, DESIGNED TO HANDLE VR OF 4K (TYPE-1). CABLE MUST BE LLC CERTIFIED, COMPLETE IN ALL RESPECTS IN DIFFERENT SIZES & DIFFERENT LENGTHS AS PER SPECIFICATIONS OF ARCHITECT/ ENGINEER (IMPORTED EUROPEAN)	100	RFT.		
52	CEILING MOUNTED WIFI-7 ROUTERS				
i.	Supply, installation, testing and commissioning of Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE: CISCO OR EQUIVALENT BRAND)	3	NO.		
53.	COMPLETE DOCUMENTATION TESTING COMMISSIONING OF THE NETWORKING SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
TOTAL COST OF GROUND FLOOR ELECTRICAL WORKS <i>(Inclusive All Applicable Taxes)</i>					

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BOQ 5th FLOOR
IT WORKS

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

DESCRIPTION		QTY	UNIT	RATE (RS)	AMOUNT (RS)
NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT (ACTIVE) TO PROVIDE AND INSTALL.					
46.	TELEPHONE SETS				-
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF TELEPHONE SETS OF SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
i.	FOR STAFF	110	No.		
ii.	FOR EXECUTIVE SPACES / MEETING ROOMS WITH 2 x DIRECT LINE OPTION	20	No.		
iii.	COMPLETE DOCUMENTATION TESTING COMMISSIONING INCLUSIVE COST OF LICENSE , SOFTWARE AND PROGRAMMING OF THE TELEPHONE SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
47	NETWORKING				
B.	NOTE: ALL NETWORK ACCESSORIES ARE TO BE A PART OF THIS ITEM, INCLUDING SUPPLY, INSTALLATIONS, TESTING, TAGGING, COMMISSIONING. FLUKE, RACKS, MOUNTING SCREWS, RAWL BOLTS, ANCHORS, MOUNTING BRACKETS PATCH PANNEL, PDU, CABLE MANAGER, I/O , BACK BOX, FACE PLATE AND ETC (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND). (CORNING)				
i.	PATCH CORD CAT 6 (1 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	260	No.		
ii.	DROP CORD CAT 6 (2 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	260	No.		
iii.	DROP CORD CAT 6 (3 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	260	No.		
48.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	3	No.		

49.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF MULTI MODE SFP FIBRE OPTIC CONVERTER with all termination, fixing accessories including connectors, complete in all respects (MAKE: CORNING OR EQUIVALENT BRAND)	3	No.		
50.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 42U FLOOR STANDING COMMUNICATION RACK HEIGHT 24" WIDTH AND 24" DEPTH, SUITABLE FOR INSTALLATION OF SERVERS/SWITCHES, RELATED EQUIPMENT, ETC, COMPLETE WITH FLOOR BASE, VERTICAL AND HORIZONTAL CABLE MANAGERS, 2 NOS X 6-OUTLET DEFENDING THUNDERMODULE PDU, COMPLETE IN ALL RESPECTS (MAKE: CORNING/TOTEN OR EQUIVALENT)	1	No.		
51.	SUPPLY, INSTALLATION, TESTING, TAGGING, DRESSING OF HIGH SPEED HDMI CABLE, DESIGNED TO HANDLE VR OF 4K (TYPE-1). CABLE MUST BE LLC CERTIFIED, COMPLETE IN ALL RESPECTS IN DIFFERENT SIZES & DIFFERENT LENGTHS AS PER SPECIFICATIONS OF ARCHITECT/ ENGINEER (IMPORTED EUROPEAN)	250	RFT.		
52	CEILING MOUNTED WIFI-7 ROUTERS				
i.	Supply, installation, testing and commissioning of Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE: CISCO OR EQUIVALENT BRAND)	5	NO.		
53.	COMPLETE DOCUMENTATION TESTING COMMISSIONING OF THE NETWORKING SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
TOTAL COST OF 5th Floor ELECTRICAL WORKS <i>(Inclusive All Applicable Taxes)</i>					

STATE LIFE INSURANCE CORPORATION

BUILDING No. 9

BOQ 6th FLOOR

IT WORKS

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

DESCRIPTION		QTY	UNIT	RATE (RS)	AMOUNT (RS)
	NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT (ACTIVE) TO PROVIDE AND INSTALL.				
46.	TELEPHONE SETS				-
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF TELEPHONE SETS OF SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
i.	FOR STAFF	105	No.		
ii.	FOR EXECUTIVE SPACES / MEETING ROOMS WITH 2 x DIRECT LINE OPTION	22	No.		
iii.	COMPLETE DOCUMENTATION TESTING COMMISSIONING INCLUSIVE COST OF LICENSE , SOFTWARE AND PROGRAMMING OF THE TELEPHONE SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
47	NETWORKING				
B.	NOTE: ALL NETWORK ACCESSORIES ARE TO BE A PART OF THIS ITEM, INCLUDING SUPPLY, INSTALLATIONS, TESTING, TAGGING, COMMISSIONING. FLUKE, RACKS, MOUNTING SCREWS, RAWL BOLTS, ANCHORS, MOUNTING BRACKETS PATCH PANNEL, PDU, CABLE MANAGER, I/O , BACK BOX, FACE PLATE AND ETC (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND). (CORNING)				
i.	PATCH CORD CAT 6 (1 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	254	No.		
ii.	DROP CORD CAT 6 (2 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	254	No.		
iii.	DROP CORD CAT 6 (3 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	254	No.		
48.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	3	No.		

49.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF MULTI MODE SFP FIBRE OPTIC CONVERTER with all termination, fixing accessories including connectors, complete in all respects (MAKE: CORNING OR EQUIVALENT BRAND)	3	No.		
50.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 42U FLOOR STANDING COMMUNICATION RACK HEIGHT 24" WIDTH AND 24" DEPTH, SUITABLE FOR INSTALLATION OF SERVERS/SWTICHES, RELATED EQUIPMENT, ETC, COMPLETE WITH FLOOR BASE, VERTICAL AND HORIZONTAL CABLE MANAGERS, 2 NOS X 6-OUTLET DEFENDING THUNDERMODULE PDU, COMPLETE IN ALL RESPECTS (MAKE: CORNING/TOTEN OR EQUIVALENT)	1	No.		
51.	SUPPLY, INSTALLATION, TESTING, TAGGING, DRESSING OF HIGH SPEED HDMI CABLE, DESIGNED TO HANDLE VR OF 4K (TYPE-1). CABLE MUST BE LLC CERTIFIED, COMPLETE IN ALL RESPECTS IN DIFFERENT SIZES & DIFFERENT LENGTHS AS PER SPECIFICATIONS OF ARCHITECT/ ENGINEER (IMPORTED EUROPEAN)	300	RFT.		
52	CEILING MOUNTED WIFI-7 ROUTERS				
i.	Supply, installation, testing and commissioning of Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE: CISCO OR EQUIVALENT BRAND)	5	NO.		
53.	COMPLETE DOCUMENTATION TESTING COMMISSIONING OF THE NETWORKING SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
TOTAL COST OF 6th Floor ELECTRICAL WORKS <i>(Inclusive All Applicable Taxes)</i>					

STATE LIFE INSURANCE CORPORATION

BUILDING No. 9

BOQ 7th FLOOR

IT WORKS

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

DESCRIPTION		QTY	UNIT	RATE (RS)	AMOUNT (RS)
NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT (ACTIVE) TO PROVIDE AND INSTALL.					
46.	TELEPHONE SETS				-
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF TELEPHONE SETS OF SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
i.	FOR STAFF	36	No.		
ii.	FOR EXECUTIVE SPACES / MEETING ROOMS WITH 2 x DIRECT LINE OPTION	18	No.		
iii.	COMPLETE DOCUMENTATION TESTING COMMISSIONING INCLUSIVE COST OF LICENSE , SOFTWARE AND PROGRAMMING OF THE TELEPHONE SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
47	NETWORKING				
B.	NOTE: ALL NETWORK ACCESSORIES ARE TO BE A PART OF THIS ITEM, INCLUDING SUPPLY, INSTALLATIONS, TESTING, TAGGING, COMMISSIONING. FLUKE, RACKS, MOUNTING SCREWS, RAWL BOLTS, ANCHORS, MOUNTING BRACKETS PATCH PANNEL, PDU, CABLE MANAGER, I/O , BACK BOX, FACE PLATE AND ETC (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND). (CORNING)				
i.	PATCH CORD CAT 6 (1 METER) FACTORY TESTED. (BRANDED) (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND)	108	No.		
ii.	DROP CORD CAT 6 (2 METER) FACTORY TESTED. (BRANDED) (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND)	108	No.		
iii.	DROP CORD CAT 6 (3 METER) FACTORY TESTED. (BRANDED) (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND)	108	No.		
48.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE: CISCO OR EQUIVALENT BRAND)	3	No.		

49.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF MULTI MODE SFP FIBRE OPTIC CONVERTER with all termination, fixing accessories including connectors, complete in all respects (MAKE:CORNING OR EQUIVALENT BRAND)	3	No.		
50.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 42U FLOOR STANDING COMMUNICATION RACK HEIGHT 24" WIDTH AND 24" DEPTH, SUITABLE FOR INSTALLATION OF SERVERS/SWTICHES, RELATED EQUIPMENT, ETC, COMPLETE WITH FLOOR BASE, VERTICAL AND HORIZONTAL CABLE MANAGERS, 2 NOS X 6-OUTLET DEFENDING THUNDERMODULE PDU, COMPLETE IN ALL RESPECTS (MAKE: CORNING/TOTEN OR EQUIVALENT)	1	No.		
51.	SUPPLY, INSTALLATION, TESTING, TAGGING, DRESSING OF HIGH SPEED HDMI CABLE, DESIGNED TO HANDLE VR OF 4K (TYPE-1). CABLE MUST BE LLC CERTIFIED, COMPLETE IN ALL RESPECTS IN DIFFERENT SIZES & DIFFERENT LENGTHS AS PER SPECIFICATIONS OF ARCHITECT/ ENGINEER (IMPORTED EUROPEAN)	300	RFT.		
52	CEILING MOUNTED WIFI-7 ROUTERS				
i.	Supply, installation, testing and commissioning of Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE:CISCO OR EQUIVALENT BRAND)	5	NO.		
53.	COMPLETE DOCUMENTATION TESTING COMMISSIONING OF THE NETWORKING SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
	TOTAL COST OF 7th Floor ELECTRICAL WORKS <i>(Inclusive All Applicable Taxes)</i>				

STATE LIFE INSURANCE CORPORATION

BUILDING No. 9

BOQ 8th FLOOR

IT WORKS

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

DESCRIPTION		QTY	UNIT	RATE (RS)	AMOUNT (RS)
NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT (ACTIVE) TO PROVIDE AND INSTALL.					
46.	TELEPHONE SETS				-
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF TELEPHONE SETS OF SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
i.	FOR STAFF	46	No.		
ii.	FOR EXECUTIVE SPACES / MEETING ROOMS WITH 2 x DIRECT LINE OPTION	10	No.		
iii.	COMPLETE DOCUMENTATION TESTING COMMISSIONING INCLUSIVE COST OF LICENSE , SOFTWARE AND PROGRAMMING OF THE TELEPHONE SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
47	NETWORKING				
B.	NOTE: ALL NETWORK ACCESSORIES ARE TO BE A PART OF THIS ITEM, INCLUDING SUPPLY, INSTALLATIONS, TESTING, TAGGING, COMMISSIONING. FLUKE, RACKS, MOUNTING SCREWS, RAWL BOLTS, ANCHORS, MOUNTING BRACKETS PATCH PANNEL, PDU, CABLE MANAGER, I/O , BACK BOX, FACE PLATE AND ETC (MAKE: CORNING / SCHNEIDER OR EQUIVALENT BRAND). (CORNING)				
i.	PATCH CORD CAT 6 (1 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	112	No.		
ii.	DROP CORD CAT 6 (2 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	112	No.		
iii.	DROP CORD CAT 6 (3 METER) FACTORY TESTED. (BRANDED) (MAKE:CORNING / SCHNEIDER OR EQUIVALENT BRAND)	112	No.		
48.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	2	No.		
49.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF MULTI MODE SFP FIBRE OPTIC CONVERTER with all termination, fixing accessories including connectors, complete in all respects (MAKE:CORNING OR EQUIVALENT BRAND)	2	No.		
50.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 42U FLOOR STANDING COMMUNICATION RACK HEIGHT 24" WIDTH AND 24" DEPTH, SUITABLE FOR INSTALLATION OF SERVERS/SWTICHES, RELATED EQUIPMENT, ETC, COMPLETE WITH FLOOR BASE, VERTICAL AND HORIZONTAL CABLE MANAGERS, 2 NOS X 6-OUTLET DEFENDING THUNDERMODULE PDU, COMPLETE IN ALL RESPECTS (MAKE: CORNING/TOTEN OR EQUIVALENT)	1	No.		
51.	SUPPLY, INSTALLATION, TESTING, TAGGING, DRESSING OF HIGH SPEED HDMI CABLE, DESIGNED TO HANDLE VR OF 4K (TYPE-1). CABLE MUST BE LLC CERTIFIED, COMPLETE IN ALL RESPECTS IN DIFFERENT SIZES & DIFFERENT LENGTHS AS PER SPECIFICATIONS OF ARCHITECT/ ENGINEER (IMPORTED EUROPEAN)	400	RFT.		

51.	SUPPLY, INSTALLATION, TAGGING AND COMMISSIONING OF 24 Port 1/10/25G LAYER 3 Fiber based port with the option to have additional module that incorporate 8 x 1/10/25G SFP+ Ports or 4 x 40/100G QFP Ports, Each port with Single 10G SR Type Transceiver, with redundant 715W Power Supply, stacking should be supported using dedicated 1Tbps Dedicated Stacking Ports, power stacking should also be supported to support redundancy of other switch in case of power failure to other switches, data stacking cable included with 1 meter length and power stacking with 30cm length. Each switch with 20 x 10G SR Type Transceiver and 4 x 1G Copper Transceiver. optional M.2 SATA SSD storage (240GB/480GB/960GB) for compute-intensive applications, enabling them to host containers and run third-party applications and scripts natively within the switch for monitoring and observability. Backed by OEM 3 Years Warranty which include 24x7x4 support and 4 Hours Replacement. DEPLOYED ON 4TH FLOOR DATA CENTER AS PER CLIENT IT INSTRUCTIONS with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	1	No.		
52	CEILING MOUNTED WIFI-7 ROUTERS				
i.	Supply, installation, testing and commissioning of Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE:CISCO OR EQUIVALENT BRAND)	5	NO.		
53.	COMPLETE DOCUMENTATION TESTING COMMISSIONING OF THE NETWORKING SYSTEM ALONG WITH A LEDGER FORMAT DOCUMENT FOR ALL THE COMPONENTS USED AND ACCESSORIES INSTALLED MARKING THE ROUTES AND OTHER NECESSARY ITEMS.	1	JOB		
TOTAL COST OF 8th Floor ELECTRICAL WORKS <i>(Inclusive All Applicable Taxes)</i>					

STATE LIFE INSURANCE CORPORATION
BUILDING No. 9

BOQ
IP Telephone System

	DESCRIPTION	QTY	UNIT	RATE (RS)	AMOUNT (RS)
	NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT TO PROVIDE AND INSTALL.				
	IP TELEPHONE SYSTEM				
A.	P/F, CONNECTING, TESTING & COMMISSIONING OF ENTIRE SYSTEMS AS PER SPECIFIED REQUIREMENTS. NEC/CISCO/FORTINET/GRANDSTREAM/AVAYA OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
	ALL SYSTEMS, EQUIPMENT, COPPER/FIBER CABLING, COMPONENTS AND CONNECTING HARDWARE SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE FOLLOWING STANDARDS: ISO/IEC 11801, ISO/IEC/TR3 8802-1, ISO/IEC/8802-3, ISO/IEC 61935-1, IEC 60364-1, IEC 60950, EN50173, EN50174-1, EN50174-2, ANSI/TIA/EIA-568 – 568B, ANSI/TIA/EIA - 569, TIA/EIA TSB-72, TIA/EIA TSB-75, BICSI, IEEE 802.3				
1	NEC SV9100 BE112031 SWA License Server	100	Nos.		
2	Rack Mount Kit, Chassis for Main or Expansion, Chassis for Main or Expansion, Type 4 front to back cooling Fan	6	Nos.		
3	Expansion Shelf Link Card, Digital Extensions Card, VOIP (DSP) Card	3	Nos.		
4	Main Processor Board for SV9100	3	Nos.		
5	Expansion Shelf Card, SD Card on GCD-CP20 (4GB)	3	Nos.		
6	4 Analog Trunks Cars, 4L Analog Trunk Expansion Board	12	Nos.		
7	License for System Port Capacity	1,000	Nos.		
8	License Proprietary or 3rd Party IP Phone	1,000	Nos.		
9	License for FAT UC Client (PC Console)	4	Nos.		
10	License for Stack Link	1	Nos.		
11	License for IP Trunks	250	Nos.		
12	License for Calls Logging, Proprietary Digital Phone	12	Nos.		
13	PDU 12-Port-N Intelligent Type, 150 Pin frame, 10 pin korona strips-N (CORNING/TOTEN/OR EQUIVALENT)	4	Nos.		
14	PATCH CORD different sizes, Cage Nut, Cable Manager (CORNING/TOTEN/OR EQUIVALENT)	1	Job.		
15	Operator Console with upto 48 Lines, 6 SIP Accounts, PoE + GigE Color Screen	2	Nos.		
16	LCD Extension Module for Operator use only (40 Programmable Keys)	3	Nos.		
17	IP Video Phone with Android 11 w/ 5.0" LCD Touchscreen + Hardkeys (YEALINK/SAMSUNG/OR EQUIVALENT)	3	Nos.		
18	IP Video Phone with Android 11 w/ 8.0" LCD Touchscreen Landscape (YEALINK/SAMSUNG/OR EQUIVALENT)	3	Nos.		
19	40GBASE Active Optical Cable 5meter, 10GBASE-SR SFP Module, Enterprise-Class, Network Plug-n-Play Connect for zero-touch device deployment, 10GBASE-SR SFP Module, Enterprise-Class, 24-port GE, Full PoE, 4x10G SFP+SNTC	1	Job.		
20	42U RACK FREE STANDING FLOOR MOUNTED CABINET TYPE COMPLETE WITH SOLID SIDE PANELS PERFORATED FRONT AND BACK HINGED PANELS AS REQUIRED WITH ALL ACCESSORIES, INCLUDING BACK BOARDS, FRAME, VERTICAL AND HORIZONTAL CABLE MANAGERMENTS, LABELS, LABEL HOLDERS, CABLE GUIDE, ETC, WITH LOCKABLE GLASS DOORS OF SUFFICIENT SIZES TO ACCOMMODATE PATCH PANELS, ACTIVE NETWORKING EQUIPMENT, 2 NOSX6-OUTLET DEFENDING THUNDERMODULE PDU, 2 NOS EXHAUST FANS. SIZE OF CABINET/RACK SHALL BE MINIMUM 36.5" DEPTH, 24" WIDTH & 73.5" HEIGHT (COMPLY WITH ANSI/EIA, RS-310-D, IEC297-2, DIN41494; PART1, DIN41494;PART7, ETSI STANDARD) (CORNING/TOTEN/OR EQUIVALENT)	1	Nos.		

21	48 PORT FIBER OPTIC SPLICE BOX INCLUDING ALL REQUIRED TERMINATIONS (CORNING/TOTEN/OR EQUIVALENT)	8	Nos.		
23	24 Core, Multi Mode, Outdoor armoured, OS2 Fiber Optic Cable as per standard specifications with all termination accessories including termination and tagging at both ends, up to entire satisfaction of IT Engineer, to be laid in already installed cable tray / ladder. Complete in all respects. (CORNING)	300	Mtrs.		
24	24 Core, Multi Mode OS2 Fiber Optic Cable for External building connectivity as per standard specifications with all termination accessories including termination and tagging at both ends, up to entire satisfaction of IT Engineer, to be laid in already installed cable tray / ladder. Complete in all respects. (CORNING)	300	Mtrs.		
25	24 Core, Multi Mode OM3 Fiber Optic Cable as per standard specifications with all termination accessories including termination and tagging at both ends, up to entire satisfaction of IT Engineer, to be laid in already installed cable tray / ladder. Complete in all respects. (CORNING)	300	Mtrs.		
25	12 Core, Multi Mode OM3 Fiber Optic Cable as per standard specifications with all termination accessories including termination and tagging at both ends, up to entire satisfaction of IT Engineer, to be laid in already installed cable tray / ladder. Complete in all respects. (CORNING)	100	Mtrs.		
26	06 Core, Multi Mode OM3 Fiber Optic Cable as per standard specifications with all termination accessories including termination and tagging at both ends, up to entire satisfaction of IT Engineer, to be laid in already installed cable tray / ladder. Complete in all respects. (CORNING)	100	Mtrs.		
27	Fiber Patch Panel SM OS2 LC 24 Core (Including Coupler, Pigtails And Slice Tray) including termination and splicing, complete in all respects (CORNING)	1	Job.		
28	Cable Management Panel Front 19" 1U Plastic Body with complete labeling and dressing for incoming and outgoing cables management (CORNING)	9	Nos.		
29	Supply, installation of Cat 6 Patch Cord UTP PVC RJ45 BL 3Meters complete in all respects as per the specifications and requirements (Factory made) (CORNING)	1,000	Nos.		
30	ELECTRICAL PANEL WITH VOLTAGE, PHASES SAFTIES INCLUDING THE ALL TYPE NETWORK AND POWER CABLING FROM THE PANEL TO EQUIPMENT/RACK/SYSTEMS (ICONIC/UNITED/UNIVERSAL/AAE)	1	Job.		
31	Supply, installation of Cat-6 Data Outlet plate including RJ-45 tool less IOS (CORNING)	10	Nos.		
32	Fiber Patch Panel MM OM3/OM4 LC 24 Core (Including Couplers, Pigtails And Splice Tray) Loaded (L3) with all required accessories (CORNING)	10	Nos.		
33	48 ports 1G PoE with 4 x 10G SFP+ Ports, LAYER 3 with single Power Supply, stacking should be supported using 10G SFP+ Ports available as uplink, stacking cable included with 1 meter length. Each switch with Single 10G SR Type Transceiver Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement (For single floor switches inter connectivity, LC-LC Optical Fiber Patch Cord Multimode 50/125um OM3-10G LSZH Duplex 01M must be provided) with all termination, fixing accessories including connectors, complete in all respects (MAKE:CISCO OR EQUIVALENT BRAND)	2	Nos.		
34	Ceiling Mounted POE Based Wi-Fi -7 Access Point, 9Gbps throughput, 2x2MIMO atleast, with 1x100M/1000M/2.5G Multigigabit Ethernet (RJ-45) Uplink, Internal Antenna with omnidirectional in azimuth. Backed by OEM 3 Years Warranty which include 24x7x4 support and NBD Replacement. Complete in all respects with operational readiness (MAKE:CISCO OR EQUIVALENT BRAND)	1	Nos.		
35	DEDICATED EARTHING SYSTEM: Supply, installation, testing and commissioning of Active green earth using 38 mm dia copper pipe filled with soil conditioning material including 6" dia, 50' deep boring and back filled chemical to enhance conductivity, complete with termination clamps, Copper to stranded bare Cu conductor thermo weld & 12" dia heavy duty tin plated round cover including all material, boring, labor, tools, transportation, accessories test reports, as per consultant instructions, Earth Connecting Point (ECP) or equipotential bar made with 300mm wide, 75mm high and 05mm thick tin plated copper, ECP shall be enclosed in appropriate size of powder coated weather proof metal enclosure with front accessible cover, with 1x1Cx25mm² cu/pvc ECC (Green/Yellow) cable (200 Rft) cable in appropriate size of consults, complete in all respects (ICONIC/UNITED/UNIVERSAL/AAE/PRIME/VITAL)	1	Nos.		
36	Allow for any other item or labour required for completion of system not covered in BOQ or specifications / drawings in accordance with the same standards and brands shown and approved by consultant. All such items shall be covered in this item but complete description, item rates, quantity required and brands shall be mentioned separately and to be attached with the BOQ. (Details are required)	1	Job.		
TOTAL COST OF IP TELEPHONE SYSTEM WORKS <i>(Inclusive All Applicable Taxes)</i>					

STATE LIFE INSURANCE CORPORATION

BUILDING No. 9

BOQ

**FIRE SUPPRESSION & WATER LEAKAGE DETECTION
SYSTEMS**

The BOQ document shall be read in conjunction with the Compliance/Preambles/General Condition sheets. The rates of all the items quoted should be done considering specifications and special conditions and including the following nature of the project and as directed by the Engineer/ Architect to the entire satisfaction of the Architect / Engineer/ Architect-in-Charge.

	DESCRIPTION	QTY	UNIT	RATE (RS)	AMOUNT (RS)
	NOTE: ALL SAMPLES/TECHNICAL SPECIFICATIONS ARE TO BE APPROVED BY THE ARCHITECT/CONSULTANT PRIOR TO THE EXECUTION OF WORKS. BIDDER IS ADVISED TO CONFIRM THE RUNNING LENGTHS, QUANTITIES, MISSING ITEMS IN BOQ, TERMINATIONS AS PER SITE CONDITIONS, REQUIREMENTS OF CLIENT BEFORE COMMENCEMENT OF WORK, BIDDER SHALL PROVIDE THE COMPLETE TECHNICAL SPECIFICATIONS, PROPOSED SYSTEM SCHEMATICS, SUPPLY AND EXECUTION TIMELINES FOR THE SYSTEM OFFERED. ENTIRE SYSTEM TESTING AND COMMISSIONING OF THE ALL ITEMS TERMINATIONS, TESTING AND COMMISSIONING AT BOTH ENDS, INCLUDING SUBMISSION OF SHOP DRAWINGS, ASBUILT DRAWINGS, DETAILED TEST REPORTS FROM THE PRINCIPALS AND AS PER SITE PERFORM TEST REPORTS ARE REQUIRED. CLIENT SHALL HAVE RIGHTS TO ADD OR DELETE ANY ITEMS FROM THE VENDOR SCOPE AFTER AWARD OF WORK. ALL ACTIVE EQUIPMENT SHALL BE SAME MAKE OF APPROVED BRAND AND SHALL BE BASED ON LATEST AVAILABLE MODEL AND SERIES. CLIENT HAVE RIGHTS TO ASK AND DELIVER THE SAME MAKE OF EQUIPMENT TO PROVIDE AND INSTALL.				
	FIRE SUPPRESSION & WATER LEAKAGE DETECTION SYSTEMS FOR SINGLE IT ROOM				
	P/F, CONNECTING, TESTING & COMMISSIONING OF ENTIRE SYSTEMS AS PER SPECIFIED REQUIREMENTS. NAFCO/SAFEICO/SGS/NETIX/HONEYWELL/BRITSOLE/SOVEC OR EQUIVALENT WITH ALL NECESSARY CONNECTIONS, COMPLETE IN ALL RESPECTS.				
1	N1230 - Novec (lbs.) 36LbsCV140078-500-4 65 lb Cylinder/Valve Assembly 1ST10100 - Cylinder Strap for 38 lb & 65 lb. Capacity Cylinders 1SOL-EA45s - Electric Solenoid 24 VDC - Stackable 1MA3033T - Mechanical Acuator 1N360-1.0-A - 360 Nozzle 1" 1PS37 - Discharge Pressure Switch 1. USACaution Label-"When alarm sounds..." 1Caution Label-"Do not enter / Vacate Room..." 1Caution Label-"Operation of Manual Pull..." 1	1	No.		
2	Discharge Hose, Manual Release Button, Abort Switch, Temperature & Humidity Sensor, Water Leakage Detector with 10Ft Standard Cable	1	No.		
3	Combined Fire & Extinguishing Control Panel with Battery Backup Features: Integral PSU (2.0 Amp), 4 x 20 LCD Display, Extinguishing Delay Timer (0-60 seconds), Flooding Time Programming, Optional 8 Way Relay, Alarm/Fault log (100 Events), Optional 8 Way Relay Output	1	No.		
4	Smoke Detectors compatible with above system as per Client requirements	9	No.		
5	MS Sch-40 Piping with Fittings, Paint & Labor	1	Job.		
6	Fire Resistant Cables 1.5mm, 2Core in PVC conduit and accessories, complete in all respects (Prysmian/Cavice!)	300	Rft.		
7	Allow for any other item or labour required for completion of system not covered in BOQ or specifications / drawings in accordance with the same standards and brands shown and approved by consultant. All such items shall be covered in this item but complete description, item rates, quantity required and brands shall be mentioned separately and to be attached with the BOQ. (Details are required)				
	TOTAL COST OF FIRE SUPPRESSION & WATER LEAKAGE DETECTION SYSTEMS FOR SINGLE IT ROOM (Inclusive All Applicable Taxes)				