

#### STANDARD BIDDING DOCUMENT INTERNATIONAL COMPETITIVE BIDDING

#### INVITATION FOR SUBMISSION OF BIDS FOR THE

#### PROVISIONING OF LOCAL IT NETWORK INFRASTRUCTURE SERVICES

**FOR** 

**SRILANKAN AIRLINES** 

IFB REFERENCE NO: CPIT/NCB 01/2020

CHAIRMAN,
STANDING CABINET APPOINTED PROCUREMENT COMMITTEE,
SRILANKAN AIRLINES LIMITED,
COMMERCIAL PROCUREEMNT DEPARTMENT (IT PROCUREMENT),
AIRLINE CENTRE, BANDARANAIKE INTERNATIONAL AIRPORT,
KATUNAYAKE,
SRI LANKA.

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Dear Sir/Madam,

IFB NO: CPIT/NCB 01/2020

# INVITATION FOR BIDS FOR THE PROVISIONING OF LOCAL IT NETWORK INFRASTRUCTURE SERVICES FOR SRILANKAN AIRLINES.

SriLankan Airlines hereby invites tenders for the Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines. The bid document is attached herewith.

Bid should be submitted in a sealed envelope with the IFB number clearly marked on the top left corner of each envelope addressed to Senior Manager Commercial Procurement, SriLankan Airlines Limited, Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka by 11.00a.m. (Sri Lankan time: GMT +0530) on 13 October 2020.

The Bid Acknowledgement form attached to the document must be completed and returned by fax to +94 (0) 19733 5218 or e-mail to <a href="mailto:tharaka.hindurangalage@srilankan.com">tharaka.hindurangalage@srilankan.com</a> and <a href="mailto:sarath.jayathunga@srilankan.com">sarath.jayathunga@srilankan.com</a>

A pre-Bid meeting will be organized on 04 September 2020 at 9.00a.m. Sri Lankan time (GMT +5:30 Time Zone) at SriLankan premises, Katunayake, to provide the prospective Bidders with the necessary information related to the project. Proposals of Bidders who do not take part in this pre-Bid will not be accepted, hence participation in the pre-Bid meeting is mandatory for all Bidders. Please provide the following details of the participants for the pre-Bid meeting through email: <a href="mailto:tharaka.hindurangalage@srilankan.com">tharaka.hindurangalage@srilankan.com</a> by 11.00a.m. on 03 September Sri Lankan time GMT +5:30 Time Zone) in order to organize the Security passes to enter SriLankan premises:

- 1) Company Name:
- 2) Name/NIC No of the participants: (Maximum 02 participants)
- 3) Driver's Name / NIC No (if any):
- 4) Details of the vehicle (if any):
- 5) Details of Brand/Model, Serial number of any electronic equipment such as Laptops etc.

Any inquiry/clarification about the Tender should be e-mailed <u>to</u> <u>tharaka.hindurangalage@srilankan.com</u> and <u>sarath.jayathunga@srilankan.com</u> to reach on or before 25 September 2020.

Bids will be opened at 11.15a.m. (Sri Lankan time: GMT +0530) on 13 October 2020 at SriLankan Airlines, Airline Centre, BIA, Katunayake, Sri Lanka. Kindly note that 01 representative per bidding company is permitted to be present at the tender opening. Please contact any of the above, well in advance for the arrangement of Security clearance.

Yours Faithfully,

Chairman of Standing Cabinet Appointed Procurement Committee, Ministry of Tourism. On behalf of SriLankan Airlines Limited

# BID ACKNOWLEDGEMENT FORM

ALL BIDDERS SHALL COMPLETE AND RETURN THIS FORM AFTER DOWNLOADING OF THE BID DOCS

#### IFB NO: CPIT/NCB 01/2020

INVITATION FOR BIDS FOR THE PROVISIONING OF PROVISIONING OF LOCAL IT NETWORK INFRASTRUCTURE SERVICES FOR SRILANKAN AIRLINES.

Dow	nload of your is hereby acknowledged
befo	may expect to receive our proposal on or ore
☐ We d	do not intend to submit a proposal because
•••••	
Signed	:
Title	:
Company	:
Date	·

# Section I. Instructions to Bidders (ITB)

ITB shall be read in conjunction with the section II, Bidding Data Sheet (BDS), which shall take precedence over ITB.

#### General

#### 1. Scope of Bid

- 1.1. SriLankan Airlines issues these Bidding Documents for a Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines as specified in Section V, Schedule of Requirements. The name and identification number of this procurement are specified in the BDS. The name, identification, and number of lots (individual contracts), if any, are provided in the BDS.
- 1.2. Throughout these Bidding Documents:
  - (a) The term "in writing" means communicated in written form by e-mail, fax post or hand delivered with proof of receipt;
  - (b) If the context so requires, "singular" means "plural" and vice versa; and
  - (c) "Day" means calendar day.
  - (d) "SLAL" means SriLankan Airlines Ltd.
- 2. Ethics, Fraud and Corruption
- 2.1. The attention of the bidders is drawn to the following guidelines published by the National Procurement Commission of Sri Lanka:
  - Parties associated with Procurement Actions, namely, suppliers/contractors and officials shall ensure that they maintain strict confidentiality throughout the process;
  - Officials shall refrain from receiving any personal gain from any Procurement Action. No gifts or inducement shall be accepted. Suppliers/contractors are liable to be disqualified from the bidding process if found offering any gift or inducement which may have an effect of influencing a decision or impairing the objectivity of an official.
- 2.2. SriLankan Airlines requires the bidders, suppliers, contractors, and consultants to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy:

- (a) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (b) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (c) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of SriLankan Airlines to establish bid prices at artificial, noncompetitive levels; and
- (d) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons of their property to influence their participation in the procurement process or affect the execution of a contract.
- 2.3. If SriLankan Airlines find any unethical practices as stipulated under ITB Clause 2.2, SriLankan Airlines will reject a bid, if it is found that a Bidder directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question.

#### 3. Eligible Bidders

- 3.1 All bidders shall possess legal rights to supply the services under this contract.
- 3.2 A Bidder shall not have a conflict of interest. All bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have conflict of interest with one or more parties in this bidding process, if they:
  - (a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by SriLankan Airlines to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods/services to be purchased under these Bidding Documents; or
  - (b) submit more than one bid in this bidding process. However, this does not limit the participation of subcontractors in more than one bid.
  - (c) Interested Foreign bidders should submit their bids through an accredited local partner registered in Sri Lanka, with at least 05 years of industrial experience within Sri Lanka in terms of provisioning of IP based network infrastructure services and relevant expertise.
- 3.3 A Bidder that is under a declaration of ineligibility by the National Procurement Commission (NPC), at the date of submission of bids or at the date of contract award, shall be disqualified. The list of debarred firms is available at the website of NPC, www.nprocom.gov.lk

- 4. Eligible Goods and Related Services
- 4.1 All the Goods and Services rendered under this contract shall be complied with applicable standards stipulated by SriLankan Airlines stipulated in Section V, Schedule of Requirements.

# **Contents of Bidding Documents**

- 5. Sections of Bidding Documents
- 5.1 The Bidding Documents consists of all the sections indicated below and should be read in conjunction with any addendum issued in accordance with ITB Clause 7.
  - Invitation for Bids
  - Bid Acknowledgement Form
  - Section I Instructions to Bidders (ITB)
  - Section II Bidding Data Sheet (BDS)
  - Section III Evaluation and Qualification Criteria
  - Section IV Bidding Forms
  - Section V Schedule of Requirements
  - Section VI Technical Specifications & Compliance Sheet
  - Section VII Draft Contract and Performance Security
  - Section VIII Vendor Information Form
- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.
- 6. Clarification of Bidding Documents
- 6.1 A prospective Bidder requiring any clarification of the Bidding Documents including the restrictiveness of specifications shall contact SriLankan Airlines in writing at the SriLankan Airlines' e-mail address specified in the BDS. SriLankan Airlines will respond in writing to any request for clarification, provided that such request is received no later than ten (10) days prior to the deadline for submission of bids. Should SriLankan Airlines deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 7.
- 7. Amendment of Bidding Documents
- 7.1 At any time prior to the deadline for submission of bids, SriLankan Airlines may amend the Bidding Documents by issuing addendum.

- 7.2 Any addendum issued shall be part of the Bidding Documents and shall be published in newspapers, uploaded to SriLankan Airlines website and will be communicated to prospective bidders who have forwarded the Bid acknowledgement form.
- 7.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, SriLankan Airlines may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB Sub-Clause 22.2

# **Preparation of Bids**

- 8. Cost of Bidding
- 8.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and SriLankan Airlines shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 9. Language of Bid
- 9.1 The Bid, as well as all correspondence and documents relating to the bid (including supporting documents and printed literature) exchanged by the Bidder and SriLankan Airlines, shall be written in English language.
- 10. Documents Comprising the Bid
- 10.1 The Bid shall comprise the following:
  - (a) Bid Submission Form and the applicable Price Schedules, in accordance with ITB Clauses 11,13 and 14;
  - (b) Bid Security, in accordance with ITB Clause 19;
  - (c) documentary evidence in accordance with ITB Clauses 17 and 28, that Goods and Related Services conform to the Bidding Documents;
  - (d) documentary evidence in accordance with ITB Clause 17 establishing the Bidder's qualifications to perform the contract if its bid is accepted; and
  - (e) any other document required in the BDS.

- 11. Bid Submission Form and Price Schedules
- 11.1 The Bidder shall submit the Bid Submission Form using the form furnished in Section IV, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
- 12. Alternative Bids
- 12.1 Alternative bids shall not be considered.
- 13. Bid Prices and Discounts
- 13.1 The Bidder shall indicate on the Price Schedule (Annex B) the unit prices of the goods/services it proposes to supply under the Contract.
- 13.2 Any discount offered against any single item in the price schedule shall be included in the unit price of the item. However, a Bidder wishes to offer discount as a lot the bidder may do so by indicating such amounts appropriately.
- 13.3 If so, indicated in ITB Sub-Clause 1.1, bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Unless otherwise indicated in the BDS, prices quoted shall correspond to 100% of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer any price reduction (discount) for the award more than one Contract shall specify the applicable price reduction separately.
- 13.4 Prices indicated on the Price Schedule shall include all duties and sales and other taxes already paid or payable by the Supplier:
  - (a) on components and raw material used in the manufacture or assembly of goods quoted; or
  - (b) on the previously imported goods of foreign origin
    - (I) However, VAT shall not be included in the price but shall be indicated separately;
    - (ii) the price for inland transportation, insurance and other related services to deliver the goods to their destination;
    - (iii) the price of other incidental services
- 13.5 The Prices quoted by the bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to ITB Clause 30.

- 13.6 All lots, if any, and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items.
- Currencies of Bid
- 14.1 The Bidders shall quote in USD or in Sri Lanka Rupees.
- 15. Documents Establishing the Eligibility of the Bidder
- 15.1 To establish their eligibility in accordance with ITB Clause 3, Bidders shall complete the Bid Submission Form, included in Section IV, Bidding Forms.
- 16. Documents Establishing the Conformity of the Goods and Related Services
- 16.1 To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods confirm to the technical specifications and standards specified in Section V, Schedule of Requirements and in Section VI, Technical Specifications.
- 16.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of samples, a detailed item by item description (given in Section V, Schedule of Requirements an in Section VI, Technical Specifications) of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Schedule of Requirements.
- 17. Documents Establishing the Qualifications of the Bidder
- 17.1 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to SriLankan Airlines' satisfaction:
  - (a) A Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods;
  - (b) and, that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

#### 18. Period of Validity of Bids

- 18.1 Bids shall remain valid until the date specified in the BDS. A bid valid for a shorter date shall be rejected by SriLankan Airlines as non-responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity date, SriLankan Airlines may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid Security is requested in accordance with ITB Clause 19, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid.

#### 19. Bid Declaration

- 19.1 The bidder shall furnish as a part of its bid, a Bid-securing Declaration, using the Bid-securing Declaration form included in Annex C.
- 19.2 Any bid not accompanied by a substantially responsive Bid securing Declaration in accordance with 1TB Sub-clause 19.1, Shall be rejected by Sri Lankan Airlines as non-responsive.
- 19.3 Bid Securing Declaration may be executed:
  - (a) If a Bidder withdraw its bids during the period of Bid validity specified by the Bidder on the Bid Submission from, except as provided in 1TS Sub-Clause 24.1 or
  - (b) If a Bidder does not agree to correctable of arithmetical errors in pursuant to 1TS Sub-Clause 27.1
  - (c) If the successful Bidder fails to:
    - (i) Sign the contract in accordance security with 1TB Sub-Clause 40;
    - (ii) Furnish a performance Security in accordance with 1TB Clause 41;

#### 20. Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB Clause 10 and clearly mark it as "ORIGINAL". In addition, the Bidder shall submit a copy of the bid and clearly mark it as "COPY". In the event of any discrepancy between the original and the copy, the original shall prevail.
- 20.2 The original & copy of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder.
- 20.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

# Submission and Opening of Bids

- 21. Submission, Sealing and Marking of Bids
- 21.1 Bidders may always submit their bids by post/ courier or by hand.
  - (a) Bidders submitting bids by post/ courier or by hand, shall enclose the original and the copy of the Bid in separate sealed envelopes, duly marking the envelope as "ORIGINAL" and "COPY". These envelopes containing the original and the copy shall then be enclosed in one single envelope.
  - (b) Completed Technical (un-priced) and Financial (priced) proposal should be submitted in two separate sealed envelopes with the IFB reference no. CPIT/NCB 01/2020 and the Bidding Company's name and the type of proposal (Technical or Financial) clearly marked on the top left corner of the envelope. The Bid Submission Form (Section IV Annex A) and the Bid Securing Declaration (Section IV Annex C) should be submitted in a separate envelope along with the Financial proposal.
  - (c) The bidder shall submit the proposals for the following two financial options separately in the price schedule forms attached at Annexure B-I & B-II.
    - 1) Financial Option I Fully Managed Service model including Installation, Commissioning, Warranty, Maintenance with end to end Support services for 5 years through a Service Level Agreement (SLA). Price schedule form attached at Annexure B-I.
    - 2) Financial Option II Outright purchase model including Installation, Commissioning, Warranty, Maintenance with end to end Support services for 5 years through a Service Level Agreement (SLA). Price Schedule form attached at Annexure B-II.

The bidders have the option to submit their proposal either for both options or for a Single option. Sri Lankan Airlines has the sole authority to select the most responsive option based on the proposals submitted by the Bidders.

- 21.2 The inner and outer envelopes shall:
  - (a) Bear the name and the address of the Bidder;
  - (b) Be addressed to SriLankan Airlines in accordance with ITB Sub-Clause 22.1;
  - (c) bear the specific identification of this bidding process as indicated in the BDS; and
  - (d) bear a warning not to open before the time and date for bid opening, in accordance with ITB Sub-Clause 25.1.

If all envelopes are not sealed and marked as required, SriLankan Airlines will assume no responsibility for the misplacement or premature opening of the bid.

#### 22. Deadline for Submission of Bids

- 22.1 Bids must be received by SriLankan Airlines at the address and no later than the date and time specified in the BDS.
- 22.2 SriLankan Airlines may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 7, in which case all rights and obligations of SriLankan Airlines and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 23. Late Bids

23.1 SriLankan Airlines shall not consider any bid that arrives after the deadline for the submission of bids, in accordance with ITB Clause 22. Any Bid received by SriLankan Airlines after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.

#### 24. Withdrawal, and Modification of Bids

- 24.1 A Bidder may withdraw, or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 21, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 20.2, (except that no copies of the withdrawal notice are required). The corresponding substitution or modification of the bid must accompany the respective written notice, All notices must be:
  - (a) submitted in accordance with ITB Clauses 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL", or "MODIFICATION", and
  - (b) received by SriLankan Airlines prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 22.
- 24.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 24.1 shall be returned to the Bidders only upon notification of contract award to the successful bidder in accordance with sub clause 39.1.
- 24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission From or any extension thereof.

#### 25. Bid Opening

- 25.1 SriLankan Airlines shall conduct the bid opening in public at the address, date and time specified in the BDS.
- 25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid may be opened at the discretion of SriLankan Airlines. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening, Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.
- 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the Bid Prices, including any discounts and alternative offers; the presence of a Bid Security or Bid-Securing Declaration, if required; and any other details as SriLankan Airlines may consider appropriate. Only discounts and alternative offers read out at Bid opening shall be considered for evaluation. No Bid shall be rejected at Bid opening except for late bids, in accordance with ITB Sub Clause 23.1.
- 25.4 SriLankan Airlines shall prepare a record of the Bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, or modification; the Bid price, per lot if applicable, including any discounts, and the presence or absence of a Bid Security. The Bidders' representatives who are present shall be requested to sign the attendance sheet.

# **Evaluation and Comparison of Bids**

### 26. Confidentiality

- 26.1 Information relating to the examination, evaluation, comparison, and post-qualification (if applicable) of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.
- 26.2 Any effort by a Bidder to influence SriLankan Airlines in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB Sub-Clause 26.2, if any Bidder wishes to contact SriLankan Airlines on any matter related to the bidding process, from the time of bid opening to the time of Contract Award, it should do so in writing.

#### 27. Clarification of Bids

27.1 To assist in the examination, evaluation, comparison and post-qualification of the bids, SriLankan Airlines may, at its discretion, request any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to request by SriLankan Airlines shall not be considered for purpose of evaluation. SriLankan Airlines' request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by SriLankan Airlines in the Evaluation of the bids, in accordance with ITB Clause 29.

#### 28. Responsiveness of Bids

- 28.1 SriLankan Airlines' determination of a bid's responsiveness is to be based on the contents of the bid itself.
- 28.2 A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
  - (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
  - (b) limits in any substantial way, inconsistent with the Bidding Documents, SriLankan Airlines' rights or the Bidder's obligations under the Contract; or
  - (c) if rectified would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

- 28.3 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by SriLankan Airlines and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
- 29. Non-conformities, Errors, and Omissions
- 29.1 Provided that a Bid is substantially responsive, SriLankan Airlines may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.
- 29.2 Provided that a bid is substantially responsive, SriLankan Airlines may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 29.3 Provided that the Bid is substantially responsive, SriLankan Airlines shall correct arithmetical errors on the following basis:
  - (a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of SriLankan Airlines there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
  - (b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected; and
  - (c) If there is discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 29.4 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified, and its Bid Security shall be forfeited, or its Bid-Securing Declaration shall be executed.
- 30. Preliminary Examination of Bids
- 30.1 SriLankan Airlines shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 10 have been provided, and to determine the completeness of each document submitted.
- 30.2 SriLankan Airlines shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the Bid shall be rejected.
  - (a) Bid Submission Form, in accordance with ITB Sub-Clause 11.1;
  - (b) Price Schedules, in accordance with ITB Sub-Clause 11;
  - (c) Bid Security Declaration in accordance with ITB Clause 19.

- 31. Examination of terms and Conditions; Technical Evaluation
- 31.1 SriLankan Airlines shall examine the Bid submitted to confirm that all terms and conditions specified in schedule of requirement have been accepted by the Bidder without any material deviation or reservation.
- 31.2 SriLankan Airlines shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 16, to confirm that all requirements specified in section V, Schedule of Requirements of the Bidding Documents have been met without any material deviation or reservation.
- 31.3 If, after the examination of the terms and conditions and the technical evaluation, SriLankan Airlines determines that the Bid is not substantially responsive in accordance with ITB Clause 28, SriLankan Airlines shall reject the Bid.
- 32. Conversion to Single Currency (if applicable)
- 32.1 For evaluation and comparison proposes, SriLankan Airlines shall convert all bid prices expressed in foreign currencies in to Sri Lankan Rupees using the selling rates prevailed at the date of closing of bids as published by the Central Bank of Sri Lanka. If this date falls on a public holiday the earliest working day prior to the date shall be applicable.

#### 33. Evaluation of Bids

- 33.1 SriLankan Airlines shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.
- 33.2 To evaluate a Bid, SriLankan Airlines shall only use all the factors, methodologies and criteria defined in this ITB Clause 33.
- 33.3 To evaluate a Bid, SriLankan Airlines shall consider the following:
  - (a) the Bid Price as quoted in accordance with clause 13;
  - (b) price adjustment for correction of arithmetic errors in accordance with ITB Sub-Clause 29.3;
  - (c) price adjustments due to discounts offered in accordance with ITB Sub-Clause 13.2; and 13.3
- 33.4 SriLankan Airlines' evaluation of a bid may require the consideration of other factors, in addition to the factors stated in ITB Sub-Clause 33.3, if specified in BDS. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and related Services.

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

#### 34. Comparison of Bids

34.1 SriLankan Airlines shall compare all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB Clause 33.

SriLankan Airlines reserves rights to negotiate with the lowest evaluated Bidder(s), in the unlikely event of tie, even after negotiation with the lowest Bidder(s), SriLankan Airlines reserves rights to request the tied Bidders to jointly supply, giving preference to the lower quoted Bidder

### 35. Post qualification of the Bidder

- 35.1 SriLankan Airlines shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid is qualified to perform the Contract satisfactorily.
- 35.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 17.
- 35.3 An affirmative determination shall be prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event SriLankan Airlines shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.
- 36 SriLankan Airlines' Right to accept Any Bid, and to reject any or all Bids
- 36.1 SriLankan Airlines reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders.

#### Award of Contract

#### 37 Award Criteria

- 37.1 SriLankan Airlines shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 38 SriLankan Airlines' Right to Vary Quantities at Time of Award
- 38.1 At the time the Contract is awarded, SriLankan Airlines reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section V, Schedule of Requirements, provided this does not exceed twenty five percent (25%) or one unit whichever is higher and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.

#### 39 Notification of Award

- 39.1 Prior to the expiration of the period of bid validity, SriLankan Airlines shall notify the successful Bidder, in writing, that its Bid has been accepted.
- 39.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 39.3 Upon the successful Bidder's furnishing of the signed Contract Form and performance security pursuant to ITB Clause 41, SriLankan Airlines will promptly notify each unsuccessful Bidder.

#### 40 Signing of Contract

- 40.1 After notification, SriLankan Airlines shall complete the Agreement, and inform the successful Bidder to sign it.
- 40.2 Upon receipt of such information, the successful Bidder shall sign the Agreement.

### 41 Performance Security

41.1 Within fourteen (14) days of the receipt of notification of award from SriLankan Airlines, the successful Bidder, if required by SriLankan Airlines, may furnish the Performance Security amounting to a minimum amount of 10% of the agreement, using the form included in Section VII - Annex H. SriLankan Airlines reserves the rights to request for a higher valued Performance Security If required.

41.2 Failure of the successful Bidder to submit the above-mentioned Performance Security when requested or sign the Contract may continue sufficient grounds for the annulment of the award and execution of the Bid- Securing Declaration. In that event, SriLankan Airlines may award the Contract to the next lowest evaluated Bidder, whose offer is substantially responsive and is determined by SriLankan Airlines to be qualified to perform the Contract satisfactorily.

# Section II. Bidding Data Sheet (BDS)

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

ITB Clause	A. General
Reference	
ITD 4 4	The control of the Co
ITB 1.1	The name and identification number of the Contract are - Provisioning of
	Local IT Network Infrastructure Services for SriLankan Airlines.
	(IFB No. CPIT/NCB 01/2020)
	B. Contents of Bidding Documents
ITB 6.1	For <u>Clarification of bid purposes</u> only:
	SriLankan Airlines contact details
	Mailing address: SriLankan Airlines Limited Commercial Procurement Department (IT Procurement) Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka
	Tel : +94 (0) 197331845
	Fax : +94 (0) 197335218
	A prospective Bidder requiring any clarification of the Bidding Documents shall contact SriLankan Airlines in writing at the e-mail address specified below:
	E-mail : sarath.jayathunga@srilankan.com
	tharaka.hindurangalage@srilankan.com
	C. Preparation of Bids
ITB 10.1 (e)	The Bidder shall submit the following additional documents:
	Company profile
	Client references - Section VI - Annex G Audited financial statements for the last 03 years
ITB 11.1 (e)	·
(0)	The Bidder shall fill and submit the following <u>Compulsory Forms</u> in Section IV.
	1. Bid Submission Form - Annex A
	2. Price Schedule - Annex B (B-I, B-II, B-III, B-IV)
	3. Bid Security Declaration - Section IV - Annex C
ITB 18.1	The bid shall be valid up to 13 April 2020

ITB 19.1	Bid shall include Bid Security using the Bid Security Declaration form included in Section IV - Annex C.
	D. Submission and Opening of Bids
ITB 21.2(c)	The inner and outer envelopes shall bear the following identification marks: - Provisioning of Local IT Network Infrastructure Services a for SriLankan Airlines.  IFB No. CPIT/NCB 01/2020
ITB 22.1	For bid submission purposes, SriLankan Airlines' address is: Attention: Senior Manager Commercial Procurement Address: Commercial Procurement Department, SriLankan Airlines Ltd, Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka.
	The following details of the bidder who wishes to hand deliver bids or participate for bid opening should be submitted to the e-mail address: <a href="mailto:tharaka.hindurangalage@srilankan.com">tharaka.hindurangalage@srilankan.com</a> one day in advance to arrange security clearance:  1) Company Name:  2) Name/NIC No of the participants: (Maximum 01 participant)  3) Driver's Name /NIC No (if any):  4) Details of the vehicle (if any):  5) Details of Brand/Model, Serial number of any electronic equipment such as Laptops etc.
	The deadline for the submission of bids is: Date: 13 October 2020 Time: 11.00 a.m. Sri Lankan time (GMT +5:30 Time Zone)
ITB 25.1	The bid opening shall take place at: Address: SriLankan Airlines ltd, Airline Centre, BIA, Katunayake, Sri Lanka Date: 13 October 2020 Time: 11.15 a.m. Sri Lankan time (GMT +5:30 Time Zone) E. Evaluation and Comparison of Bids
ITB 33.4	The following factors and methodology will be used for evaluation: Minimum Eligibility Criteria and Evaluation criteria stipulated in Section III.

#### Section III. Evaluation and Qualification Criteria

#### Minimum Eligibility Criteria

- I. The Bidders should propose an entirely Internet Protocol (IP) based solution using modern WAN/LAN technologies specifically designed to cater SLA requirements.
- II. The Bidder should have at least 05 years of industrial experience in terms of provisioning of IP based network infrastructure services and relevant expertise.
- III. The Bidder should have experience in implementing & serving at least 03 projects in similar capacity with end to end services.
- IV. Bidder should be an authorized partner of the proposed product or Internet service providers (ISPs) authorized by the Principle/Original Equipment Manufacturer (OEM). In case of authorized partner of an OEM the Bidder should submit Manufacturer Authorization Letter conforming the authorize partnership.
- V. The Bidder should comply with requirements of ISO/IEC 27001:2013, Payment Card Industry Data Security Standard (PCI DSS), Data retention policies, General Data Protection Regulation (GDPR) and other applicable legislative and regulatory requirements.
- VI. The Bidder should be able to meet the mandatory technical requirements under Part 3, 4, 5, 6, 7, 8 in Section VI of the RFP.

#### **Evaluation Criteria**

- I. The Bidder's point-by-point compliance with general, technical & functional requirements under Part 3, 4, 5, 6, 7, 8 in Section VI of the RFP. It is essential that the Bidder clearly indicates any limitations and/or deviations.
- II. System awareness, Strength of Technical support, service levels and service credit scheme requirements under Part 3.16, 3.18 in Section VI of the RFP.
- III. Ability to integrate with SriLankan IT systems requested under Part 3.12 in Section VI of the RFP.
- IV. The Bidder's capability of carrying out on-site Product demonstrations, site visits. Proof of Concept (POC) & business user cases to verify RFP specifications & performance.
- V. User awareness & Technical Training requested under Part 3.17 in Section VI of the RFP.
- VI. Customer feedback on at least 03 existing projects of similar systems implemented at enterprise level during past 03 years. Full Clientele of the solution provider in the field of Internet Protocol (IP) based solutions deployed during past 05 years.
- VII. Preferred Implementation lead time is 05 months or less. Maximum implementation lead time is 06 months. Length of the implementation period will be considered as an evaluation factor.
- VIII. Future enhancements and roadmap. Usefulness/quality of User Interfaces (UI) and User Experiences (UX).
- IX. Total final cost of the project for 05 years period
- X. Credit terms specified in the price schedules at Annex B or better. Length of the credit granted, and payment terms will be considered as an evaluation factor.

# Section IV. Bidding Forms

# Table of Forms

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Price Schedule/Rate Sheet - Annex B (B-I, B-II, B-III, BIV)	.Page 2	26
Bid Security Declaration Form - Annex C	Page 4	16

#### Section IV - Annex A

# THIS IS A COMPULSORY FORM. NON-SUBMISSION OF DULY FILLED/SIGNED FORM SHALL RESULT IN REJECTING THE BID.

#### **Bid Submission Form**

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

Date: [Insert date (as day, month and year) of Bid Submission]

*No: [insert number of bidding process]* 

To: SriLankan Airlines Ltd

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: [insert the number and issuing date of each Addenda];
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the Goods and Related Services.
- (c) The total price of our Bid without Tax, including any discounts offered for 05 years is: Option 1 [insert the All-inclusive total project cost without Tax for 5 years in words and figures];
  - Option 2 [insert the All-inclusive total project cost without Tax for 5 years in words and figures];

Note: Please note that the prices indicated in this Bid submission form should be same as the All-inclusive total project cost for 5 years indicated in the Price schedule forms referred as Annex B-I & B-II in Section IV below.

- (d) The total price of our Bid including Tax, and any discounts offered for 05 years is:

  Option 1 [insert the All-inclusive total project cost with Tax for 5 years in words and figures];
  - Option 2 [insert the All-inclusive total project cost with Tax for 5 years in words and figures];
- (e) Our bid shall be valid for the period specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 22.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 41 for the due performance of the Contract;
- (g) We have no conflict of interest in accordance with ITB Sub-Clause 3.2;

- (h) Our firm, its affiliates or subsidiaries-including any subcontractors or suppliers for any part of the contract-has not been declared blacklisted by the National Procurement Agency;
- (i) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (j) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: [insert si	ignature of person whose name and o	capacity are shown]
In the capacity o	f [insert legal capacity of person sig	ning the Bid submission Form]
Name: [insert co	mplete name of person signing the E	Bid Submission Form]
Duly authorized t	o sign the bid for and on behalf of:	[insert complete name of bidder]
Dated on	day of ,_	[insert the date of

# Section IV - Annex B-I: Price Schedule Form for Option I

Reference No: CPIT/NCB 01/2020

Proposals for Provisioning of Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines.

Fully Managed Service model including Installation, Commissioning, Warranty, Maintenance & Support and insurance cover with end to end support for 5 years through a Service Level Agreement.

Name of the Bidder	:
Name of the Principal	:
Name of the Manufacturer	:

Line Item N°	Description of items	Brand/ Model	Unit of Measure	Minimum Qty	Rental cost per month	Total Rental for 60 months	Remarks
1	Data & Voice Solution (Excluding HIA)						
1.1	Network Devices						
1.1.1	Core Network						
1.1.1.1	Admin Building (UL Datacenter) - ADM		Units	2			
1.1.1.2	Airport (Katunayake) - APT		Units	2			
1.1.2	<u>Distribution Network</u>						
1.1.2.1	Cargo Building		Units	2			
1.1.2.2	Engineering Building		Units	2			
1.1.2.3	Unit3 Building		Units	2			
1.1.2.4	WTC (Branch Office)		Units	2			
1.1.2.5	Regional (Branch Office)		Units	2			
1.1.2.6	Regional NCC (Branch Office)		Units	2			
1.1.2.7	Spares		Units		1		
1.1.3	Access Network						
1.1.3.1	Access POE ports (As per section 3.4.6)		Ports	2800			

1.1.3.2	Access Non-POE ports (As per section 3.4.6)	Ports	560	
1.1.3.3	Spares	Units		
1.1.4	Routers			
1.1.4.1	Branch Offices	Units	13	
1.1.4.2	3rd Party Integrations	Units	12	
1.1.4.3	Internet Edges	Units	7	
1.1.4.4	Other	Units		
1.1.4.5	Spares			
1.1.5	<u>Firewalls</u>			
1.1.5.1	Branch Offices	Units	14	
1.1.5.2	3rd Party Integrations	Units	6	
1.1.5.3	VPN services	Units	2	
1.1.5.4	Datacenter	Units	2	
1.1.5.5	Other	Units		
1.1.5.6	Spares	Units		
1.1.6	IP Phone Devices			
1.1.6.1	Basic Phones	Units	318	
1.1.6.2	Executive Phones	Units	712	
1.1.6.3	Executive Color Phones	Units	150	
1.1.6.4	Video Phones	Units	25	
1.1.6.5	IP Phones with key expansion module	Units	35	
1.1.6.6	Wireless Phones	Units	7	
1.1.6.7	Multiparty Conferencing Stations	Units	5	
1.1.6.8	VPN Phones to Overseas Offices	Units	67	
1.1.6.9	Analog lines	Units	200	
1.1.6.10	Analog Phones	Units	50	
1.1.6.11	Operator Console	Units	3	
1.1.6.12	Spares	Units		

1.1.7	Datacenter Services (As per section 3.9)			
1.1.7.1	DR - 100Mbps/1G Ports	Ports	15	
1.1.7.2	DR - 10G Ports	Ports	15	
1.1.7.3	10 Mbps/100Mbps/1G Ports	Ports	140	
1.1.7.4	1G/10G Ports (DMZ)	Ports	80	
1.1.7.5	1G/10G Ports (Local LAN) - Server Network	Ports	240	
1.1.7.6	1G/10G Ports (Local LAN) - Backup Network	Ports	50	
1.1.7.7	10G Ports	Ports	40	
1.1.7.8	Spares	Units		
1.1.7.9	Other Cost			
1.2	IP Phone System			
1.2.1	To continue with existing 019733XXXX number level.			
1.2.2	IP Phone System Cost (As per Section 3.6)	Extensions	2500	
1.2.3	Call Center Agents	Units	25	
1.2.4	voice mail	Units	100	
1.2.5	Call Recording	Units	50	
1.2.6	Contact Center/IVR	Units	30	
1.2.7	Soft Client IPhone/IPad	Units	50	
1.2.8	Soft Client Android	Units	100	
1.2.9	Soft Client desktop	Units	40	
1.2.10	Connectivity for external PABX systems	Sites	3	
1.3	Wi-Fi Solution Cost (As per section 3.8)			
1.3.1	Solution Cost(22Locations)			
1.3.2	Access Points cost	Units	100	
1.3.3	Access Points Spares	Units		
1.3.4	Wi-Fi Zones	Zones	3	
1.4	VPN Services (As per section 3.10)			
1.5	Load balancing and traffic optimization solution (As per section 3.11)			

1.6	Third Party Service Integrations (As per section 3.12)				
	36611011 3. 12)				
1.7	Security Services Cost (As per section 3.13)				
1.7.1	AAA authentication solution				
1.7.2	Network Access Control (NAC)				
1.7.3	Datacenter Firewall				
1.7.4	Other				
1.8	Reporting/Monitoring/Logs/Network  Management/Billing/Inventory solution (As per section 3.15)				
1.9	Links				
1.9.1	Data Links				
1.9.1.1	CAK - Admin	Mbps	150 Mbps		
1.9.1.2	CAK - Airport	Mbps	150 Mbps		
1.9.1.3	World Trade Centre (WTC)	Mbps	2x50 Mbps		
1.9.1.4	Regional (Branch Office)	Mbps	2x45Mbps		
1.9.1.5	City Cargo (Branch Office)	Mbps	2x50Mbps		
1.9.1.6	Regional NCC (Branch Office)	Mbps	2x30Mbps		
1.9.1.7	Iceland (Branch Office)	Mbps	2x10Mbps		
1.9.1.8	Kandy (Branch Office)	Mbps	1x2Mbps		
1.9.1.9	Galle (Branch Office)	Mbps	1x2Mbps		
1.9.1.10	New Bulk Stores - Optional	Mbps	1x2Mbps		
1.9.2	Voice Links				
1.9.2.1	CAK - Admin to ISP SIP lines (minimum)	SIP Lines	150		
1.9.2.2	CAK - Airport to ISP SIP lines (minimum)	SIP Lines	150		
1.9.2.3	CAK - Admin	Mbps	15Mbps		
1.9.2.4	CAK - Airport	Mbps	15Mbps		
1.9.2.5	World Trade Centre (WTC)(minimum)	Mbps	2x8Mbps		
1.9.2.6	Regional (Branch Office)	Mbps	2x4Mbps		

1.9.2.7	City Cargo (Branch Office)	Mbps	2x5Mbps	
1.9.2.8	Regional NCC (Branch Office)	kbps	256kbps	
1.9.2.9	Iceland (Branch Office)	Mbps	2x2Mbps	
1.9.2.10	Kandy (Branch Office)	kbps	512kbps	
1.9.2.11	Galle (Branch Office)	kbps	512kbps	
1.9.2.12	New Bulk Stores	kbps	512kbps	
1.9.2.13	Alternative Remote Site Telephony Solution	Locations	Admin, Airport and All branch offices	
1.9.3	Internet Links			
1.9.3.1	SLT Links			
1.9.3.1.1	Internet Links for web, Email and application access with current public IP block	Mbps	57Mbps	
1.9.3.1.2	Other Internet Links	Mbps	143Mbps	
1.9.3.2	Dialog Links	Mbps	26Mbps	
1.9.3.3	TATA Links			
1.9.3.3.1	Internet Links for Wi-Fi and VPN services with current public IP block	Mbps	30Mbps	
1.9.3.3.2	Social Media Internet Link	Mbps	4Mbps	
2	Data & Voice Solution for HIA			
2.1	Network Devices			
2.1.1	<u>Distribution Network</u>	11.5		
2.1.1.1	HIA	Units	2	
2.1.2	Access Network			
2.1.2.1	Access POE ports (As per section 3.4.6)	Ports	125	
2.1.2.2	Access Non-POE ports (As per section 3.4.6)	Ports	50	
2.1.2.3	Spare access network switches (As per section 3.4.3)	lot		

	T			
2.1.3	Routers			
2.1.3.1	Branch office connectivity	Units	2	
2.1.3.1	Internet edge	Units	1	
2.1.3.2	internet edge	Offics	'	
2.1.4	Firewalls			
2.1.4.1	Firewalls branch office connectivity	Units	2	
2.1.4.2	Secure internet edge	Units	1	
2.1.5	IP Phone Devices			
2.1.5.1	Basic Phones	Units	11	
2.1.5.2	Executive Phones	Units	15	
2.2	Links			
2.2.1	<u>Data Links</u>			
2.2.1.1	HIA	Mbps	2x3 Mbps	
2.2.1.2	CUTE connectivity to HIA from CAK(HIIA, Admin & Airport)	Mbps	3x5Mbps	
2.2.2	<u>Voice Links</u>			
2.2.2.1	HIA	Mbps	2x2Mbps	
2.2.2.2	Alternative Remote Site Telephony Solution			
2.2.3	Internet Links		2.11	
2.2.3.1	HIA	Mbps	2Mbps BB	
2.2.3.2	Backup link		Connection	
3	Onsite Support Services			
3.1	Onsite Support Service (Excluding HIA)			
3.2	Onsite Support Service (HIA)			
4	Other Cost			

4.1	Passive Infrastructure (As per section 3.14)					
4.2	Insurance (As per Section 7)					
4.3	Implementation cost (if applicable)					
4.4	License cost					
4.5	Project management cost					
4.6	Product Customization (if applicable)					
4.7	Any other requirements - Please specify					
5	Call Charges					
5.1	Local					
5.1.1	From SLAL to SLAL corporate mobile	per Call		Free	Free	
5.1.2	Off-Net calls	per Call				
5.1.3	On-Net Calls	per Call				
5.2	IDD (country wise rates)	per Call				
5.3	Incoming Calls	per Call		Free	Free	
5.4	Other					
			•••••			
6	Any other requirements to provision the Solution which covers the mandatory requirements (To be included by the Bidder)					
6.1	Other requirements (to be included by Bidder)	To be included by the Bidder				
6.2			•••••			
6.3			•••••			
	All-inclusive total project cost for 60 months (5 years)					

Note: The minimum quantities mentioned above are indications only. Supplier may increase the quantities in order to meet the Service Levels with adequate redundancies. Spare device requirement should be complied with the section 3.16.11

Note: Please submit your financial proposal on your Company Letter Head based on the above price format & complete all the required information. Please submit your Best and Final Offer (BAFO) for evaluation.

Payment term: Option I - Managed Service model for a period of 5 years - Quarterly in arrears over the 5-year period. Please review & confirm same.

Advance payment is <u>not</u> acceptable. All invoices paid with 45 days credit from the date of the receipt of the invoice.

-	A bank guarantee (unconditional, irrevocable and on first written demand) of 10% of the total order value shall provide anty period and contract period)
Bid Validity:	<b></b>
Bid Security declaration	n: Yes/ No (to be attached with Financial bid)
Acceptance on 10% per	formance security:
Implementation lead ti	me:
Available locations for	inspection of the proposed solution/service
Method of payment	:
Bank details	:
Head Office	:
Account Name	:
Period of Agreement	: years commencing from until
Price shall be fixed for	the Term of the Agreement
	[signature of person signing the Bid]
	[designation of person signing the Bid with frank]
Date : [	insert date]

# Section IV - Annex B-II: Price Schedule Form for Option II

Reference No: CPIT/NCB 01/2020

Proposals for Provisioning of Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines.

Outright purchase model including Installation, Commissioning, Warranty, Maintenance & Support and insurance cover with end to end support for 5 years through a Service Level Agreement.

Name of the Bidder	:
Name of the Principal	:
Name of the Manufacturer	:

Line Item N°	Description of items	Brand/ Model	Unit of Measure	Qty	Unit Price with 5- year warranty	Total Price with 5-year warranty	Remarks
1	Data & Voice Solution (Excluding HIA)						
1.1	Network Devices						
1.1.1	Core Network						
1.1.1.1	Admin Building (UL Datacenter) - ADM		Units	2			
1.1.1.2	Airport (Katunayake) - APT		Units	2			
1.1.2	<u>Distribution Network</u>						
1.1.2.1	Cargo Building		Units	2			
1.1.2.2	Engineering Building		Units	2			
1.1.2.3	Unit3 Building		Units	2			
1.1.2.4	WTC (Branch Office)		Units	2			
1.1.2.5	Regional (Branch Office)		Units	2			
1.1.2.6	Regional NCC (Branch Office)		Units	2			
1.1.2.7	Spares		Units				
1.1.3	Access Network						

1.1.3.1	Access POE ports (As per section 3.4.6)	Ports	2800	
1.1.3.2	Access Non-POE ports (As per section 3.4.6)	Ports	560	
1.1.3.3	Spares	Units		
1.1.4	<u>Routers</u>			
1.1.4.1	Branch Offices	Units	13	
1.1.4.2	3rd Party Integrations	Units	12	
1.1.4.3	Internet Edges	Units	7	
1.1.4.4	Other	Units		
1.1.4.5	Spares			
1.1.5	<u>Firewalls</u>			
1.1.5.1	Branch Offices	Units	14	
1.1.5.2	3rd Party Integrations	Units	6	
1.1.5.3	VPN services	Units	2	
1.1.5.4	Datacenter	Units	2	
1.1.5.5	Other	Units		
1.1.5.6	Spares	Units		
1.1.6	IP Phone Devices			
1.1.6.1	Basic Phones	Units	318	
1.1.6.2	Executive Phones	Units	712	
1.1.6.3	Executive Color Phones	Units	150	
1.1.6.4	Video Phones	Units	25	
1.1.6.5	IP Phones with key expansion module	Units	35	
1.1.6.6	Wireless Phones	Units	7	
1.1.6.7	Multiparty Conferencing Stations	Units	5	
1.1.6.8	VPN Phones to Overseas Offices	Units	67	
1.1.6.9	Analog lines	Units	200	
1.1.6.10	Analog Phones	Units	50	
1.1.6.11	Operator Console	Units	3	
1.1.6.12	Spares	Units	-	

1.1.7	Datacenter Services (As per section 3.9)				
1.1.7.1	DR - 100Mbps/1G Ports	Ports	15		
1.1.7.2	DR - 10G Ports	Ports	15		
1.1.7.3	10 Mbps/100Mbps/1G Ports	Ports	140		
1.1.7.4	1G/10G Ports (DMZ)	Ports	80		
1.1.7.5	1G/10G Ports (Local LAN) - Server Network	Ports	240		
1.1.7.6	1G/10G Ports (Local LAN) - Backup Network	Ports	50		
1.1.7.7	10G Ports	Ports	40		
1.1.7.8	Spares	Units			
1.1.7.9	Other Cost				
1.2	IP Phone System				
1.2.1	To continue with existing 019733XXXX number level.				
1.2.2	IP Phone System Cost (As per Section 3.6)	Extensions	2500		
1.2.3	Call Center Agents	Units	25		
1.2.4	voice mail	Units	100		
1.2.5	Call Recording	Units	50		
1.2.6	Contact Center/IVR	Units	30		
1.2.7	Soft Client IPhone/IPad	Units	50		
1.2.8	Soft Client Android	Units	100		
1.2.9	Soft Client desktop	Units	40		
1.2.10	Connectivity for external PABX systems	Sites	3		
1.3	Wi-Fi Solution Cost (As per section 3.8)				
1.3.1	Solution Cost(22Locations)				
1.3.2	Access Points cost	Units	100		
1.3.3	Access Points Spares	Units			
1.3.4	Wi-Fi Zones	Zones	3		
1.4	VPN Services (As per section 3.10)				

1.5	Load balancing and traffic optimization solution (As per section 3.11)						
1.6	Third Party Service Integrations (As per section 3.12)						
	30011011 3.12)						
1.7	Security Services Cost (As per section 3.13)						
1.7.1	AAA authentication solution						
1.7.2	Network Access Control (NAC)						
1.7.3	Datacenter Firewall						
1.7.4	Other						
1.8	Reporting/Monitoring/Logs/Network Management/Billing/Inventory solution (As per section 3.15)						
Line Item N°	Description of items	Brand/ Model	Unit of Measure	Minimum Qty	Rental cost per month	Total Rental for 60 months	Remarks
1.9	<u>Links</u>						
1.9.1	<u>Data Links</u>						
1.9.1.1	CAK - Admin		Mbps	150 Mbps			
1.9.1.2	CAK - Airport		Mbps	150 Mbps			
1.9.1.3	World Trade Centre (WTC)		Mbps	2x50 Mbps			
1.9.1.4	Regional (Branch Office)		Mbps	2x45Mbps			
1.9.1.5	City Cargo (Branch Office)		Mbps	2x50Mbps			
1.9.1.6	Regional NCC (Branch Office)		Mbps	2x30Mbps			
1.9.1.7	Iceland (Branch Office)		Mbps	2x10Mbps			
1.9.1.8	Kandy (Branch Office)		Mbps	1x2Mbps			
1.9.1.9	Galle (Branch Office)		Mbps	1x2Mbps			
1.9.1.10	New Bulk Stores - Optional		Mbps	1x2Mbps			
1.9.2	<u>Voice Links</u>						
1.9.2.1	CAL Admin to ICD CID lines (minimum)		SIP Lines	150			
1.9.2.1	CAK - Admin to ISP SIP lines (minimum)  CAK - Airport to ISP SIP lines (minimum)		SIP Lines	150			

1.9.2.3	CAK - Admin		Mbps	15Mbps			
1.9.2.4	CAK - Airport		Mbps	15Mbps			
1.9.2.5	World Trade Centre (WTC)(minimum)		Mbps	2x8Mbps			
1.9.2.6	Regional (Branch Office)		Mbps	2x4Mbps			
1.9.2.7	City Cargo (Branch Office)		Mbps	2x5Mbps			
1.9.2.8	Regional NCC (Branch Office)		kbps	256kbps			
1.9.2.9	Iceland (Branch Office)		Mbps	2x2Mbps			
1.9.2.10	Kandy (Branch Office)		kbps	512kbps			
1.9.2.11	Galle (Branch Office)		kbps	512kbps			
1.9.2.12	New Bulk Stores		kbps	512kbps			
1.9.2.13	Alternative Remote Site Telephony Solution		Locations	Admin, Airport and All branch offices			
1.9.3	Internet Links						
1.9.3.1	<u>SLT Links</u>						
1.9.3.1.1	Internet Links for web, Email and application access with current public IP block		Mbps	57Mbps			
1.9.3.1.2	Other Internet Links		Mbps	143Mbps			
1.9.3.2	<u>Dialog Links</u>		Mbps	26Mbps			
1.9.3.3	TATA Links						
1.9.3.3.1	Internet Links for Wi-Fi and VPN services with current public IP block		Mbps	30Mbps			
1.9.3.3.2	Social Media Internet Link		Mbps	4Mbps			
Line Item Nº	Description of items	Brand/ Model	Unit of Measure	Qty	Unit Price with 5- year warranty	Total Price with 5-year warranty	Remarks
2	Data & Voice Solution for HIA						
2.1	Network Devices						

2.1.1	<u>Distribution Network</u>						
2.1.1.1	HIA		Units	2			
	_						
2.1.2	Access Network						
2.1.2.1	Access POE ports (As per section 3.4.6)		Ports	125			
2.1.2.2	Access Non-POE ports (As per section 3.4.6)		Ports	50			
2.1.2.3	Spare access network switches (As per section 3.4.3)		lot				
2.1.3	Routers						
2.1.3.1	Branch office connectivity		Units	2			
2.1.3.2	Internet edge		Units	1			
2.1.4	<u>Firewalls</u>						
2.1.4.1	Firewalls branch office connectivity		Units	2			
2.1.4.2	Secure internet edge		Units	1			
2.1.5	IP Phone Devices						
2.1.5.1	Basic Phones		Units	11			
2.1.5.2	Executive Phones		Units	15			
Line Item N°	Description of items	Brand/ Model	Unit of Measure	Minimum Qty	Rental cost per month	Total Rental for 60 months	Remarks
2.2	<u>Links</u>						
2.2.1	<u>Data Links</u>	_					
2.2.1.1	HIA		Mbps	2x3 Mbps			
2.2.1.2	CUTE connectivity to HIA from CAK(HIA, Admin & Airport)		Mbps	3x5Mbps			
2.2.2	Voice Links						
2.2.2.1	HIA		Mbps	2x2Mbps			
2.2.2.2	Alternative Remote Site Telephony Solution		Moha	ΣΛΣΙΝΙΟΡΌ			

2.2.3	Internet Links					
2.2.3.1	HIA	Mbps	2Mbps			
2.2.3.2	Backup link		BB Connection			
3	Onsite Support Services					
3.1	Onsite Support Service (Excluding HIA)					
3.2	Onsite Support Service (HIA)					
4	Other Cost					
4.1	Passive Infrastructure (As per section 3.14)					
4.2	Insurance (As per Section 7)					
4.3	Implementation cost (if applicable)					
4.4	License cost					
4.5	Project management cost					
4.6	Product Customization (if applicable)					
4.7	Any other requirements - Please specify					
5	Call Charges					
5.1	Local					
5.1.1	From SLAL to SLAL corporate mobile	per Call		Free	Free	
5.1.2	Off-Net calls	per Call				
5.1.3	On-Net Calls	per Call				
5.2	IDD (country wise rates)	per Call				
5.3	Incoming Calls	per Call		Free	Free	
5.4	Other					
6	Any other requirements to provision the Solution which covers the mandatory requirements					
6.1	Other requirements (to be included by Bidder)	To be includ Bidder	To be included by the Bidder			
6.2						
	All-inclusive total project cost for 60 months (5 years)					

Note: The minimum quantities mentioned above are indications only. Supplier may increase the quantities in order to meet the Service Levels with adequate redundancies. Spare device requirement should be complied with the section 3.16.11

Note: Please submit your financial proposal on your Company Letter Head based on the above price format & complete all the required information. Please submit your Best and Final Offer (BAFO) for evaluation.

If the items are to be imported from your foreign principal / manufacture / agent, please quote the best possible CFR - Colombo port price or Duty-Free price to clear the shipment through SL Customs under the BOI - Duty Free facility. This will ensure that your proposal is more competitive since Sri Lankan Airlines could clear the shipment through SL Customs under the BOI - Duty Free facility.

Payment terms for Option II: Outright purchase model. Please review & confirm below payment terms.

Outright purchase with 5-year warranty extension and end to end support with Service Level Agreement for 5 years Hardware: 40% on successful delivery of Hardware & 60% on system installation, commissioning & UAT (If the items are to be imported from your foreign principal / manufacture / agent please specify the payment mode with credit terms)

Software, Licenses, Link charges & call charges: Quarterly in arrears

Installation & Commissioning: on successful system installation & commissioning, Maintenance Support & other charges: Quarterly in arrears

Advance payment is <u>not</u> acceptable. All invoices paid with 45 days credit from the date of the receipt of the invoice.

Performance security: A bank guarantee (unconditional, irrevocable and on first written demand) of 10% of the total order value shall provide to cover both the warranty period and contract period)

Bid Validity:	······································
Bid Security declaration	on: Yes/ No (to be attached with Financial bid)
Acceptance on 10% pe	rformance security:
Implementation lead t	ime:
Available locations for	inspection of the proposed solution/service
Method of payment	:
Bank details	:
Head Office	:
Account Name	:
Period of Agreement	: years commencing from until
	Price shall be fixed for the Term of the Agreement

••••••	[signature of person signing the Bid]
	[designation of person signing the Bid with frank]
Date :	sert datel

# Section IV - Annex B-III - Optional Items

(The below prices are for future reference only. These cost components will not be considered for the final evaluation of the proposals)

Proposals for Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines.

Reference No: CPIT/NCB 01/2020

Line Item N°	Description of Item	Unit of Measure	Qty	Rental price per month	Total cost	Remarks
1	Data Encryption					
2	Voice Encryption					
3	IP Phone System - To introduce a new number plan					
4	Behavioral Analysis Solution					
5	Other					
	<pre><include any="" appropriate="" as="" items="" other=""></include></pre>					

### Section IV - Annex B- IV - Additional Services

(The below prices are for future reference only. These cost components will not be considered for the final evaluation of the proposals)

Proposals for Provisioning of Local IT Network Infrastructure Services for SriLankan Airlines.

Reference No: CPIT/NCB 04/2019

Line Item N°	Additional Services	Unit price	Remarks
1.1	<u>IP Phone</u>		
1.1.1	Basic IP Phone		
1.1.2	Executive Phone		
1.1.3	Executive Color Phone		
1.1.4	Video Phone		
1.1.5	IP Phones with operator console		
1.1.6	Wireless Phone		
1.1.7	VPN Phones to Overseas Office		
1.1.8	Analog Phone		
1.1.9	Analog line		
1.1.10	Operator Console		
1.1.11	Soft Client		
1.2	POE switch port		
1.3	Voice mail		
1.4	<u>Call Recording</u>		
1.5	Call Accounting		
1.6	Contact Center/IVR		
1.7	Multi party SD conferencing		
1.8	Call Center Agent		
1.9	<u>Distribution switch</u>		
1.10	<u>Data Center Switch</u>		

POE Access switch
Non-POE Access switch
Router
Wireless Access Point
Wireless LAN controller
Firewall
Internet Link
Voice Link
WAN Link
New Office Model
5 user Office
15 user Office
25 user Office
50 user Office
100 user Office
Other Services
<include any="" appropriate="" as="" items="" other=""></include>

#### Section IV - Annex C

# THIS IS A COMPULSORY FORM. NON-SUBMISSION OF DULY FILLED/SIGNED FORM SHALL RESULT IN REJECTING THE BID.

**Bid-Securing Declaration** 

[The Bidder	shall fil	l in thi	s form i	n accordanc	e with	the instru	ıctions
indicated in	bracket	s]					

Date: -----[insert date by bidder]

\*Name of contract -- [insert name]

\*Invitation for Bid No.: ----- insert number]

To: SriLankan Airlines Limited. We, the undersigned, declare that:

- 1. We understand that, according to instructions to bidders (hereinafter "the ITB"), bids must be supported by a bid-securing declaration;
- 2. We accept that we shall be suspended from being eligible for contract award in any contract where bids have being invited by any of the Procuring Entity as defined in the Procurement Guidelines published by National Procurement Commission of Sri Lanka, for the period of time of ................................. years starting on the latest date set for closing of bids of this bid, if we:
  - (a) withdraw our Bid during the period of bid validity period specified; or
  - (b) do not accept the correction of errors in accordance with the Instructions to Bidders of the Bidding Documents; or
  - (c) having been notified of the acceptance of our Bid by you, during the period of bid validity, (i) fail or refuse to execute the Contract Form, if required, or (ii) fail or refuse to furnish the performance security, in accordance with the ITB.
- 3. We understand this bid securing shall expire if we are not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the bidder was unsuccessful; or (ii) twenty-eight days after the expiration of our bid.
- 4. We understand that if we are a JV, the Bid Securing Declaration must be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed [insert signature(s) of authorized representative] In the Capacity of [insert title]

Name [insert printed or typed name]

Duly authorized to sign the bid for and on behalf of [insert authorizing entity]

Dated on [insert day] day of [insert month], [insert year]

# Section V - Schedule of Requirements

Line Item Nº	Description of items	Unit of Measure	Minimum Qty	Final Destinati on	Delivery Date (Based on the project implementati on time lines)
1	Data & Voice Solution (Excluding HIA)				
1.1	Network Devices				
1.1.1	Core Network				
1.1.1.1	Admin Building (UL Datacenter) - ADM	Units	2		
1.1.1.2	Airport (Katunayake) - APT	Units	2		
1.1.2	<u>Distribution Network</u>				
1.1.2.1	Cargo Building	Units	2		
1.1.2.2	Engineering Building	Units	2		
1.1.2.3	Unit3 Building	Units	2		
1.1.2.4	WTC (Branch Office)	Units	2		
1.1.2.5	Regional (Branch Office)	Units	2		
1.1.2.6	Regional NCC (Branch Office)	Units	2		
1.1.2.7	Spares	Units			
1.1.3	Access Network				
1.1.3.1	Access POE ports (As per section 3.4.6)	Ports	2800		
1.1.3.2	Access Non-POE ports (As per section 3.4.6)	Ports	560	IT Division	
1.1.3.3	Spares	Units		of SLAL	
1.1.4	Routers				
1.1.4.1	Branch Offices	Units	13		
1.1.4.2	3rd Party Integrations	Units	12		
1.1.4.3	Internet Edges	Units	7		
1.1.4.4	Other	Units		ļ	
1.1.4.5	Spares				
	"				
1.1.5	<u>Firewalls</u>				
1.1.5.1	Branch Offices	Units	14		
1.1.5.2	3rd Party Integrations	Units	6		
1.1.5.3	VPN services	Units	2		
1.1.5.4	Datacenter	Units	2		
1.1.5.5	Other	Units			
1.1.5.6	Spares	Units			
1.1.6	IP Phone Devices			}	
1.1.6.1	Basic Phones	Units	318		
1.1.6.2	Executive Phones	Units	712		
1.1.0.2	EXECUTIVE LIMITES	UIIICS	/12		

Line Item	Description of items	Unit of Measure	Minimum Qty	Final Destinati on	Delivery Date (Based on the project implementati on time lines)
1.1.6.3	Executive Color Phones	Units	150		,
1.1.6.4	Video Phones	Units	25		
1.1.6.5	IP Phones with key expansion module	Units	35		
1.1.6.6	Wireless Phones	Units	7		
1.1.6.7	Multiparty Conferencing Stations	Units	5		
1.1.6.8	VPN Phones to Overseas Offices	Units	67		
1.1.6.9	Analog lines	Units	200		
1.1.6.10	Analog Phones	Units	50		
1.1.6.11	Operator Console	Units	3		
1.1.6.12	Spares	Units			
1.1.7	Datacenter Services (As per section 3.9)				
1.1.7.1	DR - 100Mbps/1G Ports	Ports	15		
1.1.7.2	DR - 10G Ports	Ports	15		
1.1.7.3	10 Mbps/100Mbps/1G Ports	Ports	140		
1.1.7.4	1G/10G Ports (DMZ)	Ports	80		
1.1.7.5	1G/10G Ports (Local LAN) - Server Network	Ports	250		
1.1.7.6	1G/10G Ports (Local LAN) - Backup Network	Ports	50		
1.1.7.7	10G Ports	Ports	40		
1.1.7.8	Spares	Units			
1.1.7.9	Other Cost				
1.2	IP Phone System				
1.2.1	To continue with existing 019733XXXX number level.				
1.2.2	IP Phone System Cost (As per Section 3.6)	Extensions	2500		
1.2.3	Call Center Agents	Units	25		
1.2.4	voice mail	Units	100		
1.2.5	Call Recording	Units	50		
1.2.6	Contact Center/IVR	Units	30		
1.2.7	Soft Client IPhone/IPad	Units	50		
1.2.8	Soft Client Android	Units	100		
1.2.9	Soft Client desktop	Units	40		
1.2.10	Connectivity for external PABX systems	Sites	3		
1.3	Wi-Fi Solution Cost (As per section 3.8)				
1.3.1	Solution Cost(22Locations)				
1.3.2	Access Points cost	Units	100		
1.3.3	Access Points Spares	Units			
1.3.4	Wi-Fi Zones	Zones	3		
1.4	VPN Services (As per section 3.10)				

Line Item Nº	Description of items	Unit of Measure	Minimum Qty	Final Destinati on	Delivery Date (Based on the project implementati on time lines)
1.5	Load balancing and traffic optimization solution (As per section 3.11)				
1.6	Third Party Service Integrations (As per section 3.12)				
1.7	Security Services Cost (As per section 3.13)				
1.7.1	AAA authentication solution				
1.7.2	Network Access Control (NAC)				
1.7.3	Datacenter Firewall				
1.7.4	Other				
1.8	Reporting/Monitoring/Logs/Network Management/Billing/Inventory solution (As per section 3.15)				
1.9	Links				
1.9.1	Data Links				
1.9.1.1	CAK - Admin	Mbps	150 Mbps		
1.9.1.2	CAK - Airport	Mbps	150 Mbps		
1.9.1.3	World Trade Centre (WTC)	Mbps	2x50Mbps		
1.9.1.4	Regional (Branch Office)	Mbps	2x45Mbps		
1.9.1.5	City Cargo (Branch Office)	Mbps	2x50Mbps		
1.9.1.6	Regional NCC (Branch Office)	Mbps	2x30Mbps		
1.9.1.7	Iceland (Branch Office)	Mbps	2x10Mbps		
1.9.1.8	Kandy (Branch Office)	Mbps	1x2Mbps		
1.9.1.9	Galle (Branch Office)	Mbps	1x2Mbps		
1.9.1.10	New Bulk Stores - Optional	Mbps	1x2Mbps		
1.9.2	<u>Voice Links</u>				
1.9.2.1	CAK - Admin to ISP SIP lines (minimum)	SIP Lines	150		
1.9.2.2	CAK - Airport to ISP SIP lines (minimum)	SIP Lines	150		
1.9.2.3	CAK - Admin	Mbps	15Mbps		
1.9.2.4	CAK - Airport	Mbps	15Mbps		
1.9.2.5	World Trade Centre (WTC)(minimum)	Mbps	2x8Mbps		
1.9.2.6	Regional (Branch Office)	Mbps	2x4Mbps		
1.9.2.7	City Cargo (Branch Office)	Mbps	2x5Mbps		
1.9.2.8	Regional NCC (Branch Office)	Kbps	256kbps		
1.9.2.9	Iceland (Branch Office)	Mbps	2x2Mbps		
1.9.2.10	Kandy (Branch Office)	Kbps	512kbps		
1.9.2.11	Galle (Branch Office)  New Bulk Stores	Kbps	512kbps		
1.9.2.12	New Bulk Stores	Kbps	512kbps		
1.9.2.13	Alternative Remote Site Telephony Solution	Locations	Admin, Airport and All branch offices		

Line Item N°	Description of items	Unit of Measure	Minimum Qty	Final Destinati on	Delivery Date (Based on the project implementati on time lines)
1.9.3	Internet Links				
1.9.3.1	SLT Links				
1.9.3.1.1	Internet Links for web, Email and application access with current public IP block	Mbps	57Mbps		
1.9.3.1.2	Other Internet Links	Mbps	143Mbps		
1.9.3.2	Dialog Links	Mbps	26Mbps		
1.7.3.2	Didlog Liliks	Mobs	ZOMDPS		
1.9.3.3	TATA Links				
	Internet Links for Wi-Fi and VPN		2011		
1.9.3.3.1	services with current public IP block	Mbps	30Mbps		
1.9.3.3.2	Social Media Internet Link	Mbps	4Mbps		
2	Data & Voice Solution for HIA				
2.1	Network Devices				
2.1.1	<u>Distribution Network</u>				
2.1.1.1	HIA	Units	2		
2.1.2	Access Material				
	Access Network	Dowto	125		
2.1.2.1	Access POE ports (As per section 3.4.6) Access Non-POE ports (As per section	Ports			
2.1.2.2	3.4.6)	Ports	50		
2.1.2.3	Spare access network switches (As per section 3.4.3)	Lot			
2.1.3	Routers				
2.1.3.1	Branch office connectivity	Units	2		
2.1.3.2	Internet edge	Units	1		
	3				
2.1.4	<u>Firewalls</u>				
2.1.4.1	Firewalls branch office connectivity	Units	2		
2.1.4.2	Secure internet edge	Units	1		
2.1.5	IP Phone Devices				
2.1.5.1	Basic Phones	Units	11		
2.1.5.2	Executive Phones	Units	15		
2.2	Links				
2.2.1	<u>Links</u> Data Links		+		
2.2.1.1	HIA	Mbps	2x3 Mbps		
	CUTE connectivity to HIA from		ZV2 IAINh2		
2.2.1.2	CAK(HIIA, Admin & Airport)	Mbps	3x5Mbps		
2.2.2	Voice Links		+	}	
2.2.2.1	HIA	Mbps	2x2Mbps		
2.2.2.2	Alternative Remote Site Telephony Solution	1 -			

Line Item	Description of items	Unit of Measure	Minimum Qty	Final Destinati on	Delivery Date (Based on the project implementati on time lines)
2.2.3	Internet Links				
2.2.3.1	HIA	Mbps	2Mbps		
2.2.3.2	Backup link		BB Connectio n		
3	Onsite Support Services				
3.1	Onsite Support Service (Excluding HIA)				
3.2	Onsite Support Service (HIA)				
4	Other Cost				
4.1	Passive Infrastructure (As per section 3.14)				
4.2	Insurance (As per Section 7)				
4.3	Implementation cost (if applicable)				
4.4	License cost				
4.5	Project management cost				
4.6	Product Customization (if applicable)				
4.7	Any other requirements - Please specify				
5	Call Charges				
5.1	Local				
5.1.1	From SLAL to SLAL corporate mobile	per Call			
5.1.2	Off-Net calls	per Call			
5.1.3	On-Net Calls	per Call			
5.2	IDD (country wise rates)	per Call			
5.3	Incoming Calls	per Call			
5.4	Other	PO: Out.			
	Ctrior			}	
6	Any other requirements to provision the Solution which covers the mandatory requirements (To be included by the Bidder)				
6.1	Other requirements (to be included by Bidder)	To be included by the Bidder			
6.2					
6.3				]	

# Section VI - Technical Specifications & Compliance Sheet

Name of the Bidder	•
Name of the Principal	•
Name of the Manufacturer	
Brand	
Model	

#### **Definitions and Abbreviations**

Following are explanations of terms and abbreviations appearing throughout this RFP.

Acceptance	The designated period following completion of		
Acceptance			
	installation and related training activities. During the		
	acceptance period, the Srilankan Airlines will evaluate		
	all features and performance.		
AMC	Annual Maintenance Contract		
BoM	Bill of Materials		
Contract	The RFP, The Vendor's Response to the RFP and any		
	other mutually executed written instruments between		
	the Srilankan Airlines and the Vendor.		
Equipment	All components proposed by the Vendor in response to		
	this RFP.		
NAC	Network Admission Control		
RFP	Request for Proposal (this document).		
SLA	Service Level Agreement		
Successful	Any successful Vendor selected as a result of the		
Vendor	procurement process to deliver the products and		
	services requested by this RFP.		
UL	SriLankan Airlines Limited		
Vendor/Supplier	Any organization which responds to the RFP with a		
	proposal for the requested equipment and services.		
SLAL	SriLankan Airlines		
LAN	Local Area Network		
WAN	Wide Area Network		
СМВ	Colombo, Sri Lanka - Katunayake International (Airport		
	Code)		
MRI/HIA	Mattala Rajapaksa International Airport		
BIA	Bandaranaike International Airport		

#### 1. Introduction & Background

SriLankan Airlines Limited the National carrier of Sri Lanka, flying over 105 destinations in 47 countries in Europe, Middle East, South Asia, Southeast Asia, the Far East, North America, Australia and Africa is an award-winning carrier with a firm reputation since its inception in 1979. The airline's hubs are located at Bandaranaike International Airport in Colombo and Mattala Rajapaksa International Airport, Hambantota providing convenient connections to its global route.

SriLankan IT Systems being a key driving force behind 7000+ employees with the ultimate vision of "Enabling the Success of SriLankan Airlines through Information Technology Services ", performs a crucial part to ensure efficient business operations while maintaining confidentiality, integrity and availability of information. From everyday active support to the Airlines' vast and critical business processes, SriLankan IT Systems plays a vital role in every endeavor to deliver the competitive edge to SriLankan Airlines.

Wide Area Network Solution for SriLankan Airline is a key requirement to enable the above vision through providing users with digital environment with rich user experience that also improve compliance & governance while mitigating security risks.

SriLankan Airline current network infrastructure is mainly consist of Cisco devices and the connectivity extends to branch offices as well. The airline main Data Center is located in SriLankan Airlines headquarters in Katunayake, Sri Lanka. Network is protected with enterprise class firewalls and IPS services to secure the edge. Also there is 24x7 operational staff for monitoring and network maintenance.

The Sri Lankan Airlines Metropolitan Area Network (MAN) is mainly located within the Katunayake premises. Additionally the infrastructure is also extended to cover World Trade Center (WTC), Regional (Baron Jayatillake Mw), Bambalapitiya, Iceland Building, Galle, Kandy and HIA. The main sub-locations within the Katunayake site are;

- Airline Center
- Airport
- Unit 3
- Engineering
- Cargo

Sri Lankan Airline network includes the Core, Distribution and Access networking infrastructure.

Srilankan Airlines Ltd is seeking qualified candidates (referred to as 'Suppliers' hereafter) to submit proposals for design and delivery of in state of the art secure, robust and reliable network solution for SriLankan Airlines.

#### 2. Project Scope

Suppliers are hereby invited for Voice & Data Network implementation of SriLankan Airlines with the specifications issued. The proposed system shall be state of the art, fully-fledged, secure, reliable, scalable for future requirements and interoperable with other systems. This system shall have the capability of running many services such as Voice, Data, Video, Security & Surveillance, Wi-Fi etc. Suppliers shall provide their proposals with relevant equipment's and materials to meet SLAL's expectation mentioned herein. The equipment offered should be in enterprise grade, robust, secure, reliable and quality products.

The project scope includes following areas

- Fully managed Data solution to Local/Branch offices
- Fully managed Data solution to SLAL Datacenter
- Fully managed Voice solution to Local/Branch offices
- Fully managed Secure Wireless solution to Local/Branch offices
- Fully managed Board Room Video Conferencing solution to Local/Branch offices
- Fully managed passive infrastructure (Fiber and UTP Cat 6)

The solution should be deployed to following locations.

- BIA SriLankan Airlines Limited.
   Airline Centre
   Airport terminal
   Engineering Building
   Unit3
   Cargo Complex
   SL Catering & bulk stores
- Kandy Office SriLankan Airlines Limited. No.117, Temple Street, Kandy.
- Galle Office SriLankan Airlines Limited. No 141, Colombo RD, Kaluwella, Galle.
- WTC Office SriLankan Airlines Limited. Level 03, East Tower, World Trade Center, Colombo-01
- Regional Building SriLankan Airlines Limited. Regional Building, 10-12 Sir Baron Jayathilake Mw, Colombo-01
- City Cargo SriLankan Airlines Limited. DeVos Avenue, Colombo 04
- Iceland Building SriLankan Airlines Limited, Iceland Business Centre, No 30, Sri Uttarananda Mawatha, Colombo -03
- HRI SriLankan Airlines Limited. Hambantota International Airport Complex, Mattala.
- New Bulk Stores SriLankan Airlines Limited. BIA (near SriLankan Airlines Catering)

With the proposed managed network solution the supplier need to manage data and voice networks, devices, including onsite staff and IT professionals 24 hours a day, 365 days a year. Proposed service scope should cover a comprehensive design, implementation and management of Local Area Network and Wide

Area Network for both Data and Voice services of SriLankan Airlines.

#### 3. Technical Requirements

- 3.1. General Requirements
- 3.1.1 The proposed solution for SLAL must be a purely IP based converged network infrastructure solution and the supplier may adapt modern WAN/LAN technologies to interconnect SLAL sites to provide unified IT services to the end users.
- 3.1.2 The proposed solution should be feature-rich, fully managed and cost effective solution which is capable of serving the SLAL requirements for the next five years.
- 3.1.3 The solution itself must be scalable, flexible and futuristic to SLAL's requirements. Also it should have the flexibility of adding new sites or removal of existing sites in compliance to SLAL's corporate strategy.
- 3.1.4 The proposed solution should contain fully redundant hardware and communication links to ensure high availability and reliability for mission critical applications where necessary.
- 3.1.5 All communication links must be provided with guaranteed bandwidth with Class of Service (CoS). These links must be dedicated purely for SLAL requirements only.
- 3.1.6 Cyber security related measures must have been taken into consideration when designing the total solution and it should contain firewalls, IPS/IDS, etc. where necessary to mitigate potential threats that arise internally and externally.
- 3.1.7 The supplier should be responsible to manage all components of the network including software, hardware, network equipment etc. with latest software updates, patch releases etc. to avoid potential risks and vulnerabilities ensuring overall health of the network.
- 3.1.8 All devices should be available with principle's warranty and 24x7 support throughout the contract period.
- 3.1.9 SLAL should have the flexibility to add/remove devices based on the business requirement and financials to be adjusted accordingly.
- 3.1.10 Supplier should conduct annual passive infrastructure audits & the diagrams should be kept up-to-date.
- 3.1.11 SLAL expects the supplier to perform a full network assessment to determine the viability of installing the proposed solution and integrating with third party network solution providers (SITA, ISPs, Amadeus, SCICOM, etc.) meeting the requirements mentioned herein. The supplier must provide a comprehensive report including all results of the assessment which consists necessary network maps, performance thresholds, specific problematic areas and the recommendations with all applicable cost for each where appropriate. However, any additional costs should be included to the proposed solution itself.
- 3.1.12 A dedicated account manager should be appointed as a single point of contact to handle SLAL requirements and to carry out services reviews regularly.
- 3.1.13 The supplier should manage and maintain all IT infrastructure devices, hardware and software on behalf of SLAL and do the relevant configuration changes to meet SLAL requirements.

- 3.1.14 Identification and recommendation of an appropriate Solutions(s), which fits the SLAL requirement herein and allows for future growth. Interested Parties shall perform their own comprehensive sizing assessment.
- 3.1.15 As required, on demand execution of comprehensive technical proof of concept (POC) on technologies proposed during technical evaluation. All suppliers should provide a comprehensive POC proposal and should agree with the scope of the POC with SriLankan Airlines. Once requested by SriLankan airlines supplier should carry out complete POC to demonstrate the viability of the solution for Sri Lankan requirements. Supplier should ensure all agreed requirements are demonstrated in the POC and it's completed within 6 weeks. The total POC cost should be borne by the supplier. SriLankan Technical Evaluation Teams will evaluate the POC and provide recommendations for further evaluations in other aspects. Supplier has to provide monitoring capabilities at POC and access for these monitoring tools to SriLankan Airlines. Supplier should provide detailed report based on POC which should include required capacity planning and should assure higher or similar system performance if the contract is awarded.
- 3.1.16 The Solution shall fully integrate into existing architecture and functions to cater SLAL requirements.
- 3.1.17 Supplier shall intervene and coordinate directly with other peering entities to facilitate the requirements on behalf of the customer (SLAL) In case of new service provisioning, maintenance and troubleshooting/investigating requirements which lies beyond the supplier's network.
- 3.1.18 The supplier should conduct monthly service reviews and present the performance of each service category against the agreed service levels.
- 3.1.19 The supplier should monitor the performance of the network using industry standard tools and provide necessary suggestions to improve the service levels of each service category provided where applicable. Relevant suggestions must be presented during monthly service reviews for further proceedings.
- 3.1.20 For any kind of service degradation, slowness issues or any other unpredictable behavior of the network setup, the supplier should carry out necessary investigations to find out possible root causes and submit a comprehensive report to SLAL to take necessary actions to overcome the situation. This type of exercises is required to be done without any cost escalations.
- 3.1.21 Bandwidth requirements mentioned in this RFP are minimum requirements and supplier shall propose the best mix of bandwidth requirement based on the information gather during the design stage.
- 3.1.22 Supplier should have experience in providing managed network solutions with proven track record with implementing similar projects.
- 3.1.23 The Solution as a whole or components of the Solution including products used to provision the solution must be recognized and evaluated by independent market research organizations / bodies in their most recent publication as of proposal submission date and recognized as

- "Leaders" in respective field (Gartner Magic Quadrant®, IDC, Forrester etc.). Failure to do so will disqualify the proposal for further evaluations.
- 3.1.24 Should enable administrators to centrally configure and manage all network devices to greatly simplify administration by providing consistency in managing all these services.
- 3.1.25 The supplier must provide a complete system design showing the integration of the voice, data & Wi-Fi networks and further providing methodology for assuring voice & data quality throughout the system.
- 3.1.26 The supplier must provide recommendations and drawing showing the placement of equipment in the appropriate network racks or cabinets.
- 3.1.27 The proposal must include in-built failover capability to handle system failures and to have an acceptable level of redundancy to provide 24x7x365 availability for all services mentioned hereunder in case of power failure or any incident.
- 3.1.28 SLAL expects the supplier to perform a full network assessment to determine the viability of integrating and installing the proposed solution meeting the requirements mentioned herein. The supplier must provide a comprehensive report including all results of the assessment which consists necessary network maps, specification thresholds, specific problematic areas and the recommendations with all applicable cost for each where appropriate.
- 3.1.29 The supplier must manage the system end-to-end as a managed service and all equipment additions, removals, configuration changes, modifications etc. must strictly follow the SLAL IT Division's governance structure including policies defined under change management, incident management, request management, asset management etc.
- 3.1.30 The Supplier should have all necessary licenses, permissions, consents, no objections, approvals as required under law for carrying out its business.
- 3.1.31 The Supplier should provide professional, objective and impartial advice at all times and hold the SriLankan Airlines's interest and observe the highest standards of ethics, values, code of conduct, honesty and integrity while implementation of the data & voice solution and during contract period.
- 3.1.32 The selected Supplier shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required of the vendor under the contract without the prior written consent of SriLankan Airlines.
- 3.1.33 The supplier need to provide on-site, comprehensive, back-to-back warranty from Original Equipment Manufacturer (OEM) for the contract period from the UAT sign off date. This should also include all software subscriptions (critical hot fixes, service packs and upgrades)
- 3.1.34 During the contract period any defective items shall be replaced onsite within a minimum time period as per the given SLA to ensure uninterrupted operation of the system. All items replaced during the contract period shall be free of charge to SriLankan Airlines.
- 3.1.35 Any capacity or system features/functions limitation due to system design fault, the vendor should provide the necessary capacity or system features/functions on Free of Charge (FOC) basis. SLAL will have the right to reject the solution if such requirements are not met at

- implementation stage and no further payment will be carried out until whole requirement is
- 3.1.36 The Solution shall fully integrate into existing architecture and functions to cater SLAL requirements.
- 3.1.37 The supplier shall sign an NDA with SriLankan Airlines prior to requesting any additional information. The terms and conditions in the NDA (Annex E) are not negotiable.
- 3.1.38 The supplier shall clearly detail the dependencies, such as any additional hardware, software, licenses and efforts for the implementation/integrations which are not covered by the scope of work.
- 3.1.39 The supplier is required to sign a Support & Maintenance Contract for a period of Five (05) year. Additionally, schedule for extension of Support & Maintenance Contract preferably for further 2 years (year on year basis), shall be included to the proposal with all applicable pricing as an annexure.
- 3.1.40 The Supplier SHALL be able to demonstrate previous experience implementing similar solutions in similar scale within last 5 years period (please indicate relevant clientele and project descriptions).
- 3.1.41 The supplier shall indicate the adequate Skilled Human Resource availability to successfully complete the project within agreed time line.
- 3.1.42 The supplier shall obtain written consent to change designated resources during implementation phase and replacement shall be in same or above skill level.
- 3.1.43 Bids are liable to be rejected if; they are not conforming the terms, conditions and specifications stipulated in this RFP.
- 3.1.44 The specifications provided in this RFP are the minimum requirements of SriLankan Airlines. The supplier shall meet or exceed these specifications to meet the actual requirements.
- 3.1.45 Solution SHALL be "Off-the-Shelf", meaning that the Solution is commercially available and requires no further research or development and is part of an existing product line with a field-proven operational history (that is, it has not simply been tested in a laboratory or experimental environment).
- 3.1.46 Only authorized partners/system integrators can participate for the solution delivery to SriLankan Airlines (documentary proof is mandatory from principle).
- 3.1.47 SriLankan Airlines reserves the right to accept/reject wholly or partially any proposal without assigning any reason at any stage of the procurement process.
- 3.1.48 The bidder should not be currently blacklisted by any Central/State Govt. dept. /Public Sector Unit.
- 3.1.49 Supplier should be in the business for a minimum 5 years of existence and support corporates for solution design and delivery.
- 3.1.50 The supplier should be Original Equipment Manufacturer [OEM] or authorized partner of OEM. In case of authorized partner of OEM, the vendor should submit Manufacturer Authorization Letter conforming the authorize partnership.

- 3.1.51 The supplier must submit a list of equipment, which will be provided for the installation in the SriLankan Airlines Office, along with space, environment and power requirements.
- 3.1.52 All Service Levels shall be met in providing the Services on 24x7x365 basis unless otherwise explicitly mentioned.
- 3.1.53 Single Point of Contact (SPOC) operating on 24x7x365 basis shall be provided with proper procedures and processes in place to meet set Service Levels.
- 3.1.54 Dedicated Service Manager for SLAL shall be provided by the supplier for Managed Data and Voice solution and such person shall hold necessary qualifications to perform his obligations.
- 3.1.55 Adequate on-site spares required shall be maintained by the supplier, at its cost, to maintain set Service Levels.
- 3.1.56 The supplier shall, at its cost, provide a professionally qualified technical team with relevant experience on-site, dedicated to provide services to SLAL. SLAL shall have the right to request to remove any personnel in the technical team. The supplier shall replace such removed personnel with a suitably qualified personnel who is capable of providing the Services.
- 3.1.57 The supplier shall provide read and write access to all the devices of SLAL's technical staff and all the device configurations (hardware / Software including IOS).
- 3.1.58 The supplier shall maintain all device configurations to meet the industry security standards, including ISO27001, during the contract period.
- 3.1.59 The supplier shall ensure that all devices and its running configurations would be readily available for inspection at any time by SLAL's technical staff and its representatives.
- 3.1.60 The supplier shall ensure that any device that is connected to the Solution provided by the supplier on permanent or temporary basis (including PCs, laptops etc.) and any items used to provide the Service shall comply with the security standards set by SLAL.
- 3.1.61 The supplier shall be responsible with limited liability for the security of the information in transit of data network (excluding any breach of security by SLAL or any contractor, agent, or any party acting on behalf of SLAL) and shall not permit any unauthorized access to the devices and data in transit.
- 3.1.62 The supplier shall inform SLAL prior to carrying out any change or scheduled maintenance work on any change that is being carried out on the data network and should receive written approval.
- 3.1.63 The supplier shall provide Service Level Reports on monthly basis and organize service review meetings on monthly basis.
- 3.1.64 In the event of termination or expiration of the contact, the supplier shall provide the necessary assistance to SLAL or any other third party selected by SLAL to ensure the solution is transferred to be managed by SLAL and such third party.
- 3.1.65 SLAL has the right to keep alternative measures for data and voice services to meet the business continuity requirements.
- 3.1.66 The solution should support seamless and unified communication for both wired and wireless networks.

- 3.1.67 Core, Distribution and Access networks should be on the same fabric and it should have central management capability. However data and control planes must be separated.
- 3.1.68 The solution should have Software Define Network (SDN) capabilities.
- 3.1.69 The solution should be scalable both on vertically and horizontally based on SLAL requirements.
- 3.1.70 The network should provide agility for faster convergence and it should have intelligence to cater network services based on user profiles and predefined network policies configured irrespective of user location.
- 3.1.71 The proposed solution should adapt modern state-of-the-art software-driven network architectural components that support centralized management and adding more feature-rich capabilities such as simplification of network administration, faster service provision capabilities, faster response for fault identification and rectification, increasing the visibility of the entire network, enhancing the network security features etc.
- 3.1.72 The solution should provide and support for a wider range of APIs to streamline and automate the operational processes such as incident handling, network monitoring, inventory management etc.
- 3.1.73 The solution should be capable of end to end segmentation of users, applications and devices with identity based policies, regardless of location.
- 3.1.74 Sizing and Design of the Solution:
  - The supplier should ensure integration of proposed solution with existing environment seamlessly and the coexistence of the proposed solution with present environment at SriLankan Airlines. A network strategy for proposed solutions should be given with the proposal.
  - The supplier shall thoroughly study and understand related parameters, functional relationships in-between, platform dependencies, network segments, traffic flow rates etc. before responding to this RFP. The supplier should validate, clarify and/or obtain additional relevant information, if any, from SriLankan Airlines so that supplier can extensively identify technical requirements to be delivered with supplier's solution. As required, the proposer may request additional information within the first 2 weeks after receiving this RFP.
  - The supplier holds the explicit responsibility to perform an independent and accurate sizing assessment. The result of such assessment shall be shared with SLAL.
  - Design should be done taking the latest available technologies and using brand-new infrastructure. SriLankan Airline has the full right to disqualify the vendor in case of any deviations.
- 3.1.75 The proposer shall clearly detail the dependencies, such as licenses and efforts for the implementation/integrations which are not covered in the RFP.
- 3.1.76 The supplier should provide details of support infrastructure which are accommodating the requirement. This might include storage, Hosting Servers, Cloud Components, Switches, Tape

- Libraries, UPS, Load balancers and other hardware components not mentioned in other sections of the proposal.
- 3.1.77 The short listed suppliers should arrange a site visit for minimum of four (04) SLAL technical representatives to test and evaluate deployments and performance of the solution and the products offered. The supplier should bear all expenses including air fares, food, accommodation, hotel transfers/transport etc. Final selection will be based on the evaluation of the overall solution offered by short listed suppliers and SLAL cannot guarantee the vendor selection only from the site visit.
- 3.1.78 Support from manufacturer or supplier directly for proposed Infrastructure is a must and should have service level agreement for each service component.
- 3.1.79 The supplier may propose an innovative solution with their own architecture and product mix considering the total requirement mentioned within RFP. Supplier shall clearly detail out the advantages in terms of cost and service delivery of such a solution with supporting documents from industry and principles. Acceptance of such a solution for further evaluation is at the sole discretion of the technical evaluation committee of SriLankan Airlines.
- 3.1.80 Proposal should address the specified requirements for a minimum period of five (5 years) years. Draft of Contract should be attached in the Proposal. Additionally, Schedule for extension of Support & Maintenance Contract for next 3 years term in yearly step should be included to the proposal.
- 3.1.81 Comprehensive and elaborative proposal with relevant technical documentation with explicit reference to compliance statement should be submitted. The proposal should clearly explain the solution & its architecture addressing each point mentioned in this RFP document
- 3.1.82 User Acceptance Test (UAT) will be carried out by vendor and SriLankan Airlines and it can be started soon after fully or successful deployment of each service Component. Implementation is considered as completed only after receiving User Acceptance after proper completion of User Acceptance Test.
- 3.1.83 The supplier need to provide network racks with relevant accessories for the devices/equipment's placed at UL Datacenter premises (Admin) and Airport Core location.
- 3.1.84 The solution should have network automation tool for zero touch provisioning, building network and host inventory, topology, creating network segments, network access policies, software image updates, troubleshooting end to end connectivity, getting OEM update on security update/advisory and end of sale/end of life update etc.
- 3.1.85 Device quantities may vary 10% to 15% on the discretion of SLAL and final payment will be for the actual number delivered.
- 3.1.86 SLAL have minimized the device quantities for scale down operations and the proposal should separately include all unit prices for any increase of devices in the future.

#### 3.2. Core Network

- 3.2.1. The proposed Managed LAN and WAN solution should provide Local Area Network infrastructure with fully redundant core network with 40G connectivity between core devices (Admin, Airport). Also core to distribution connectivity should be minimum of 25G and scalable up to 40G.
- 3.2.2. All core devices should have duel power supplies for redundancy.
- 3.2.3. Core switches should be chassis based switches and should have modular uplink slot to support 1Gig, 10Gig and 25Gig/40Gig ports. Also they should be possible to connect in virtual stack to increase performance and active-active performance.
- 3.2.4. Core network should have layer 2 and layer 3 capabilities.
- 3.2.5. Virtual Route Forwarding (VRF), Policy Based Routing (PBT), Network Address Translation (NAT), Port Address Translation (PAT) should be supported on core network.
- 3.2.6. Expected core network device distribution

Core Network	Devices
Admin Building (UL Datacenter) - ADM	2
Airport (Katunayake) - APT	2
Total	4

3.2.7. Following minimum interfaces should be available on each core switch. The supplier should quote for more than the provided minimum interface requirement.

Core Network	Interface Counts per Core Switch
Admin Building (UL Datacenter) - ADM	24 Port SFP (1G/10G), 16 Port SFP (25G/40G), 48 Port Ethernet (1G/10G)
Airport (Katunayake) - APT	24 Port SFP (1G/10G), 16 Port SFP (25G/40G), 12 Port Ethernet (1G/10G)

3.2.8. Following features need to be available on core switches

Feature	Remarks
Routing Protocols	Static & Dynamic Routing Protocols (RIP, OSPF, etc.)
VRF support	More than 1000 and More than 200,000 routes per system
Inter VRF routing	Required
Access Lists (ACL)	Standard, Extended, Named at least 15K hardware based ACL VLAN ACL, Port based ACL, Time based ACL
Clustering	VRRP, etc.
Prefix Lists	Required
Route Maps	Required

AAA Authentication	Required
SNMP	V2 and V3
Syslog	Required
Port & VLAN Mirroring	Required
NAT/PAT	Required (Hardware-assisted)
VLANs	More than 3000
Layer 3 routing with SVIs	More than 1000
Mac entries	More than 80K (ADM Cores)
	More than 55K (APT Cores)
Routing entries	More than 200K (ADM Cores) More than 200K (APT Cores)
IPv4 Routing performance	More than 450 Mpps (ADM
	Cores)
	More than 250 Mpps (APT Cores)
IPv6 Routing performance	More than 225 Mpps (ADM
	Cores)
	More than 125 Mpps (APT Cores)
Layer 2 Bridging	More than 450 Mpps (ADM
	Cores)
	More than 250 Mpps (APT Cores)
Throughput	More than 700 Gbps (ADM
	Cores)
	More than 320 Gbps (APT
Spanning Tree Protocol instances	Cores) More than 10,000
QoS	IPv4 and IPv6 QoS classification
203	and policing
	priority queuing, traffic
	shaping
Security	support IEEE 1588  IP Source guard, Dynamic ARP
Security	inspection, DHCP Snooping
	802.1x for user authentication
	and authorization, Dynamic
	vlan assignment, Guest VLAN
	assignment, MAC based authentication
	addientication
	support AES 256 for link
	encryption
Switching bandwidth	More than 900Gbps
High availability	Required
Port Channels	both layer 2 and layer 3
Management and Troubleshooting	telnet, ssh, https, SNMPv3, configuration rollback feature
	API Driven configuration
	software upgrade without any downtime to network

	SNMP notification for dynamic change in MAC table
Ethernet standards	IEEE802.1p, IEEE802.1Q, Flow control, Jumbo frame, 802.1D, 802.1w, 802.1s, Jumbo frames, 802.3ad, private vlan
Multicast Routing support	Required
Power and Fan redundancy	Dual redundant, modular power supplies and fans

#### 3.3. Distribution Network

- 3.3.1. The proposed Managed LAN and WAN solution should provide Local Area Network infrastructure with fully redundant, high available distribution network with connectivity of 25G and scalable up to 40G for Katunayaka premises (Engineering, Cargo and Unit 3)
- 3.3.2. Branch offices (HIA, WTC, Regional and Regional NCC) should also have redundant and high available distribution network with respective WAN capacities (Section 3.7).
- 3.3.3. All distribution network devices should have duel power supplies for redundancy.
- 3.3.4. All distribution network devices should be high available and link redundancy should be in place. Distribution switches should be stackable.
- 3.3.5. At least 30% of spare device stock, out of deployed count need to be maintained on site for distribution network maintenance.
- 3.3.6. Distribution network should have layer 2 and layer 3 capabilities.
- 3.3.7. Virtual Route Forwarding (VRF), Policy Based Routing (PBT), Network Address Translation (NAT), Port Address Translation (PAT) should be supported on core network.
- 3.3.8. Expected distribution network device distribution.

Distribution Network	Devices
Cargo Building	2
Engineering Building	2
Unit3 Building	2
HIA	2
WTC (Branch Office)	2
Regional (Branch Office)	2
Regional NCC (Branch Office)	2
Total	14

3.3.9. Following minimum interfaces should be available on each distribution switch. The supplier should quote for more than the provided minimum interface requirement.

Distribution Network	Interface Counts
Cargo Building	12 Port SFP (1G/10G), 8 Port SFP (25G/40G)
Engineering Building	12 Port SFP (1G/10G), 8 Port SFP (25G/40G)

Unit3 Building	12 Port SFP (1G/10G), 8
	Port SFP (25G/40G)
HIA	12 Port SFP (1G/10G), 8
	Port SFP (25G/40G)
WTC (Branch Office)	24 Port Ethernet
	(1G/10G), 4 Port SFP
	(1G/10G)
Regional (Branch Office)	24 Port Ethernet
	(1G/10G), 4 Port SFP
	(1G/10G)
Regional NCC (Branch Office)	24 Port Ethernet
,	(1G/10G), 4 Port SFP
	(1G/10G)

### 3.3.10. Following features need to be available on distribution switches

Feature	Remarks
Routing Protocols	Static & Dynamic Routing
	Protocols (RIP, OSPF, etc.)
VRF support	More than 100
Inter VRF routing	Required
Access Lists (ACL)	Standard, Extended, Named
Prefix Lists	Required
Route Maps	Required
AAA Authentication	Required
SSH	SSHv2
SNMP	SNMPv1, SNMPv2c, and SNMPv3
Syslog	Required
Port & VLAN Mirroring	Required
High Availability	Active/Active
	Or
	Active/Standby
Switching bandwidth	More than 200Gbps in a single switch
64-Byte Packet Forwarding Rate	More than 180Mpps
Clustering	Stackable (dedicated stacking
	ports other than using uplink
	ports)
	support stack power
Stacking performance	More than 450Gbps
No of stack members	More than 5
Features	support multi gigabit Ethernet
	switches to support higher
	bandwidth
	Support Distributed forwarding
	Architecture
	Arcintecture
	Support Stateful Switchover
	(SSO) when switching over
	from Active to Standby switch
	in a Stack

	1
	Stack architecture should be Plug & Play for attaching or removing any switch from the stack without any downtime
Unicast MAC addresses	More than 30000
SVI	More than 1500
NAT/PAT	Required
Jumbo frames	9216 bytes
VLANs	More than 4000
Layer 3 routing with SVIs	More than 500
Mac entries	More than 8K
	1 1 1 1 1
Routing entries (IPv4)	More than 30K
Standards	IEEE 802.1D IEEE 802.1p IEEE 802.1Q IEEE 802.1s IEEE 802.1w IEEE 802.1ab IEEE 802.3ad
Encapsulation	IEEE 802.1Q VLAN
	encapsulation
Protocols	IPv4 & IPv6
Clustering	VRRPv3
QoS	802.1p CoS field classification
	Rate Limiting function to guarantee bandwidth
	QoS based on application
Management	Software image and switch configuration without user intervention
	built in RFID tag for asset tracking and inventory management
	diagnostic commands to debug issues
	system health checks within the switch
	Online Diagnostics
	Layer 2 trace route
	Telnet and ssh interface support
	Command Line Interface (CLI) support for configuration & troubleshooting

Security	support IEEE 802.1x providing user authentication, authorization and CoA
Spanning Tree Protocol instances	More than 10,000
High availability	Required
Port Channels	both layer 2 and layer 3
Multicast Routing support	Required
Power and Fan redundancy	Dual redundant, modular power supplies and fans

#### 3.4. Access Network

- 3.4.1. Access switches need to be managed switches with Layer 2 & Layer 3 capabilities.
- 3.4.2. Uplink redundancy should be in place for all access network devices.
- 3.4.3. At least 10% of spare device stock out of deployed count need to be maintained on site for access network maintenance.
- 3.4.4. All access switches need to have at least 4 uplinks with SFP interfaces (10G).
- 3.4.5. All access ports should support both 100Mbps and 1G.
- 3.4.6. All access switches need to have at least 4 uplinks with SFP interfaces (1G/10G).
- 3.4.7. POE access ports should be capable of using as data port or voice port or for both data & voice.
- 3.4.8. Following minimum network port distribution should be available on each location. The supplier should quote for more than the provided minimum interface requirement. Please note that there could be +/- 10% variance on actual port requirement at each location.

Access Network	No o	f Ports	Current Switch Distribution
	POE	Non-POE	
Admin Area Total	894	319	
Revenue	114	82	48 Port POE - 3, 48 Port Non POE - 4
Admin Office	114	33	48 Port POE - 4, 48 Port Non POE - 3
ITBS	114	57	48 Port POE - 4, 48 Port Non POE - 2, 24 Port Non POE - 1
PABX	138	45	48 Port POE - 5, 24 Port Non POE - 1, 48 Port Non POE - 1
IT27	65	0	48 Port POE - 2
IAA 1st Floor	57	41	48 Port POE - 2, 48 Port Non POE - 2
IAA Ground Floor	37	0	48 Port POE - 1
IAA 2nd Floor	21	0	48 Port POE - 1
Flight OPS	180	61	48 Port POE - 5, 48 Port Non POE - 2
Grooming	7	0	24 Port POE - 1
NOC	13	0	48 Port POE - 1
Pass Office	5	0	24 Port POE - 1
Simulator	29	0	24 Port POE - 2
Airport Area Total	442	80	

103 Room	32	33	48 Port POE - 2, 48 Port Non POE - 2, 24 Port Non POE - 1
FD-30	10	0	24 Port POE - 2
R41	33	33	48 Port POE - 1, 48 Port Non POE - 1
APT-Catering	0	7	24 Port Non POE - 1
APT-Serandib	17	0	48 Port POE - 1
APT-Serandiva	9	0	48 Port POE - 1
Transfer Desk	18	0	48 Port POE - 1
Ticket Office	13	0	24 Port POE - 1
LDC	49	0	48 Port POE - 2
GFG	21	0	48 Port POE - 1
C40	41	0	48 Port POE - 2
C15	94	0	48 Port POE - 3
BRS	25	0	48 Port POE - 1
BGA	29	0	48 Port POE - 1
New-Belt	0	7	48 Port Non POE - 1
AE- 1	9	0	24 Port POE - 1
AE- 2	8	0	24 Port POE - 1
AE- 3	13	0	24 Port POE - 1
AE- 4	4	0	24 Port POE - 1
AE- 5	17	0	24 Port POE - 1
Cargo Area Total	308	31	
DR	5	0	48 Port POE - 1
DRC	0	18	48 Port Non POE - 1
ECR	25	0	48 Port POE - 1
EPW	33	0	48 Port POE - 1
CORE PABX	51	13	48 Port POE - 2, 48 Port Non POE - 1
EGS	1	0	24 Port POE - 1
EWB	9	0	24 Port POE - 1
ICA	31	0	48 Port POE - 1
IHB	9	0	48 Port POE - 1
IIO	15	0	48 Port POE - 1
D4-ULD controller	32	0	48 Port POE - 1
PEO MAIL	12	0	48 Port POE - 1
T5	85		48 Port POE - 2, 24 Port POE - 1
Engineering Area Total	480	51	
CEO	82	0	48 Port POE - 3
IT STORES	49	0	48 Port POE - 1, 24 Port POE - 1
Switchroom B	114	28	48 Port POE - 3, 48 Port Non POE - 1
Switchroom E	90	0	48 Port POE - 2, 24 Port POE - 1
ENG Canteen	1	0	24 Port POE - 1
Com Building	54	23	48 Port POE - 3, 48 Port Non POE - 1
Switchroom D	47	0	48 Port POE - 2
Pass Office	7	0	24 Port POE - 1
Uni Stores	18	0	24 Port POE - 1
Oxygen Room	18	0	24 Port POE - 1

Unit3 Area Total	304	51	
Fuel Farm	9	0	24 Port POE - 1
320 Hanger	25	0	48 Port POE - 1
Line Maintain	41	36	48 Port POE - 1, 48 Port Non POE - 1
Medical	22	0	24 Port POE - 1
Modular Shop	25	0	48 Port POE - 1
New Transport	9	0	48 Port POE - 1
P&E	17	0	24 Port POE - 1
PRO	5	0	48 Port POE - 1
RAMP	53	0	48 Port POE - 2
Union Office	8	0	48 Port POE - 1
Sec Duty Room	14	0	48 Port POE - 1
Sec Admin	40	0	48 Port POE - 1
Technical Training	22	15	48 Port POE - 1, 48 Port Non POE - 1
Core Room	14	0	48 Port POE - 1
HIA Total	123	40	
Core Room	50	35	48 Port POE - 2, 24 Port Non POE - 2
GSB Switch Room	40	0	
Ticket Office	0	5	24 Port Non POE - 1
Baggage Services	5	0	24 Port POE - 1
Transfer Desk	8	0	24 Port POE - 1
Cargo T1	10	0	24 Port POE - 1
Cargo T2	10	0	24 Port POE - 1
WTC (Branch Office) Total	86		
3rd Floor	86	0	48 Port POE - 3
Regional (Branch Office)	106		48 Port POE - 4
Colpity Cargo (Branch Office)	65	18	48 Port POE - 2, 48 Port Non POE - 1
Galle (Branch Office)	13		24 Port POE - 1
Kandy (Branch Office)	13		24 Port POE - 1
Iceland (Branch Office)	41	6	48 Port POE - 1, 24 Port POE - 1, 24 Port Non POE - 1
Regional NCC (Branch Office)	12		48 Port POE - 1
Bulk Stores (Branch Office)	12		48 Port POE - 1
Total	2899	596	

### 3.4.7. Following features need to be available on access switches

Feature	Remarks
Access Lists (ACL)	Required
AAA Authentication	Required

SSH	SSHv2
SNMP	SNMPv1, SNMPv2c, and SNMPv3
Syslog	Required
VLANs	More than 3000
SVIs	More than 1000
Mac entries	More than 16K
64-Byte Packet Forwarding Rate	More than 100Mpps
Switching bandwidth	More than 150Gbps
Throughput	More than 64Gbps
Jumbo frames	9216 bytes
VLAN encapsulation	Required
Voice VLAN	voice traffic on a separate VLAN
Port Channels	Required
Multicast	Required
Class of Service (CoS)	Required
Dynamic Trunking Protocol	Required
IPv6 support	Required
IPv4 support	Required
MAC Address Notification	Required
Multicast Storm Control	Required
Port Security	Required
Quality of Service (QoS)	Required
	802.1p CoS field classification  Rate Limiting function to guarantee bandwidth
	QoS based on application
Remote Switch Port Analyzer (RSPAN)	Required
Encapsulation	IEEE 802.1Q VLAN
	encapsulation
Unicast Storm Control	Required
Security	support IEEE 802.1x providing user authentication,
	authorization and CoA
IPv4 Routes	More than 25K
Management	Software image and switch configuration without user intervention
	built in RFID tag for asset tracking and inventory management
	diagnostic commands to debug issues
	system health checks within the switch

	Online Diagnostics
	Layer 2 trace route
	Telnet and ssh interface
	support
	Command Line Interface (CLI)
	support for configuration &
	troubleshooting
Standards	IEEE 802.1D
	IEEE 802.1p
	IEEE 802.1Q
	IEEE 802.1s
	IEEE 802.1w
	IEEE 802.1ab
	IEEE 802.3ad
Routing Protocols	Static & Dynamic Routing
	Protocols (RIP, OSPF, etc.)
IPv6 & IPv4 Policy Based Routing (PBR)	Required
auto-negotiation	Required
Dynamic IP address assignment	Required
layer 2 switching	Required
load balancing	Required

#### 3.5. Branch Offices

- 3.5.1. Branch offices (Colpity Cargo, Kandy, Galle, Iceland, HIA, WTC, Regional and Regional NCC) should have redundant WAN connectivity to both Airline center (Admin) and BIA.
- 3.5.2. Expected minimum data WAN links, voice WAN links and internet links capacities are described under section 3.7.
- 3.5.3. Alternative Remote Site Telephony Solution need to be provided to all branch offices and this service need to be automatically activated when voice links are down.
- 3.5.4. Supplier need to provide additional broad band connection to HIA as a backup internet connection.
- 3.5.5. Supplier need to extent CUTE services to HIA through layer 2 connectivity (VLL) with respective bandwidth of 5 Mbps. For redundancy CUTE connectivity to HIA should be extended from both Airline center (Admin) and BIA.
- 3.5.6. High available WAN edges should be available at all branch locations.
- 3.5.7. WAN traffic should be filtered with firewall and IPS/IDS at all locations.
- 3.5.8. All circuits need to be aggregated at Airport and Admin at Airline center (Admin).
- 3.5.9. Dual WAN edges need to be available at all branch locations and dual data & voice links need to be terminated at these duel WAN edge devices.
- 3.5.10. Virtual Route Forwarding (VRF), Policy Based Routing (PBT), Network Address Translation (NAT), Port Address Translation (PAT), VLANs and dynamic routing protocols should be supported on branch networks.

- 3.5.11. Supplier should provide branch office connectivity solution overview diagrams.
- 3.5.12. All branch offices should be capable of SD-WAN and internet offloading securely as per SLAL security policy.

## 3.6. IP Phone System

- 3.6.1. Fully managed voice solution should provide, IP extensions with enhanced features for Sri Lankan Airline users with an extensive range of IP phones to cater different user requirements.
- 3.6.2.SLAL is in possession of its own number level (i.e. 019733XXXX) and hence has interconnection with other service providers. The supplier should maintain SLAL own number level 019733XXXX.
- 3.6.3. The supplier may also provide optional pricing to introduce a new number plan from a different service provider and SLAL will have the exclusive right to select a suitable service provider. This cost need to be provided separately.
- 3.6.4. IP based telephony solution should be a fully redundant and high available solution. Geographically separated redundancy should be available for both Admin & Airport locations.
- 3.6.5. All critical devices should have dual power supply redundancy.
- 3.6.6. IP based telephony services should run as Active/Active configurations at Airline Center (Admin) and BIA. Also each location should be capable of running the full IP based telephony system independently.
- 3.6.7. Proposed solution should be capable of call routing with different telco providers with optimized cost.
- 3.6.8. Call billing system need to be included and it should support extension, user, department and division wise billing. Please submit sample invoices along with the proposals.
- 3.6.9. Soft Fax/Fax Server services need to be included in the solution.
- 3.6.10. The PABX solution should seamless integration with other collaborative applications such as Skype for business, CTI, Social media, messaging platform,
- 3.6.11. Phones/Soft phones should be user friendly and should be able to connect through internet with active directory/local database user login.
- 3.6.12. Voice gateway should be available for PSTN connectivity.
- 3.6.13. Four categories of IP Phones models need to be proposed. The breakdown of phone categories are as follows: Please note there could be +/- 10% variance on the actual device counts.

Phones	Devices
Basic Phones	318
Executive Phones	712
Executive Color Phones	150
Video Phones	25

Phones	Devices
IP Phones with key expansion module	35
Wireless Phones	7
Multiparty Conferencing Stations	5
VPN Phones to Overseas Offices	67
Analog lines	200
Analog Phones	50
Operator Console	3

- 3.6.14. Supplier need to maintain minimum of 15% from each category as spares on site.
- 3.6.15.Basic/Executive Phones: For all other staff (Contract/Graded/Executives in Grade 8.1/8.2/9)
  - Must allow for an extension number and rollover key to allow a second line to come in
  - Message waiting key
  - Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
  - The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold
  - Minimum of 5 programmable keys: for features such as line appearances of other users,
     Call Park, Call Pickup, Last Number Redial, Do not Disturb with status.
  - The phone must have a full duplex, two-way speakerphone and mute key.
  - Volume control
  - Should operate completely on Power over Ethernet (PoE)
  - Must support gigabit standard and support two switch ports (one for access switch, one to computer).
- 3.6.16. Executive Color Phones: For Departmental Managers/ Senior Managers
  - Must allow for an extension number and rollover key to allow a second line to come in
  - Message waiting key
  - Color display with a customizable wallpaper
  - Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
  - The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold
  - Minimum of 10 programmable keys: for features such as line appearances of other users, Call Park, Call Pickup, Last Number Redial, Do not Disturb with status.
  - The phone must have a full duplex, two-way speakerphone and mute key.
  - Volume control
  - Should operate completely on Power over Ethernet (PoE)
  - Must support gigabit standard and support two switch ports (one for access switch, one to computer).

#### 3.6.17. Video Phones: For Chief/Head Level Positions

- Color display with a customizable wallpaper
- Inbuilt/attachable camera for video calls
- Bluetooth handset with automatic charging capability when on-hook
- All features listed in Executive Color Phones

## 3.6.18. IP Phones with operator consoles: For all secretaries, operators and admin staff

- Must allow for an extension number and rollover key to allow a second line to come in
- Message waiting key
- Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
- The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold
- Minimum of 15 programmable keys: for features such as line appearances of other users, Call Park, Call Pickup, Last Number Redial, Do not Disturb with status.
- The phone must have a full duplex, two-way speakerphone and mute key.
- Volume control
- Should operate completely on Power over Ethernet (PoE)
- Must support gigabit standard and support two switch ports (one for access switch, one to computer).

#### 3.6.19. Wireless Phones:

- Must function throughout the building, or identify range from base
- Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
- Battery life to support for use for at least 8 hours
- Features immediately available to all users on fixed or programmable feature keys: Transfer, Conference, Hold

## 3.6.20. Multiparty Conferencing Stations:

- Must be full duplex and designed for use in a conference room with 20 25 people present.
- Must have ability to connect additional microphones whenever required
- The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold

## 3.6.21. VPN Phones to Overseas Offices: For Overseas Offices

- Must support Voice over VPN to extend voice services through internet for overseas offices
- Must allow for an extension number and rollover key to allow a second line to come in
- · Message waiting key

- Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
- The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold
- The phone must have a full duplex, two-way speakerphone and mute key.
- Volume control
- Should be able to operate either on Power over Ethernet (PoE) or direct power
- Must support gigabit standard and support two switch ports (one for access switch, one to computer).

# 3.6.22. Analog Phones:

There are 70+ analog lines operational on Cat 3 cables due to difficulties in laying new cables. The supplier should design a solution for such requirements either by using current Cat 3 infrastructure or replacing with any other option. In any case supplier should be able to maintain the system including the wiring. The solution should include following requirements.

- Must allow for an extension number
- Display must allow caller ID/ANI of both internal and external callers including Name and Number wherever possible
- The following features, at a minimum, must be available on fixed or programmable keys for all users: Transfer, Conference, Hold
- The phone must have a full duplex, two-way speakerphone and mute key.
- Volume control

#### 3.6.23. PC/Smart phone Based Soft Phone:

- A full-featured soft phone client that can be used instead of a telephone
- Should support for both PC operating systems (Widows 10 or higher, MAC Operating system) and most prevalent smart phone/tablet operating systems including android, iOS etc.
- Should require a USB headset or speakers for the PC or speakers and microphone in smart phone for audio

## 3.6.24. Supplier need to provide following IP based telephony services to SLAL.

Telephone Services	Users	
IP PABX System	2500	
Call Center Agents	25	
voice mail	100	
Call Recording	50	
Call Accounting	2500	
Contact Center/IVR	30	
Soft Client IPhone	50	
Soft Client IPad	50	
Soft Client Android	100	

Telephone Services	Users
Soft Client desktop	40
Extension Mobility	2500
Single Number Reach(SNR)	2500
Call Waiting	2500
Video Conferencing Solution	1
Group Pickup	All Users
Call Pickup	All Users
Call Forwarding	All Users
Call Back	All Users
Conferencing	All Users
Speed Dial	All Users
Security PIN (lock/unlock phone, DOD/IDD)	All Users
Call barging	All Users
Hold	All Users
Call Transfer	All Users
Ring-down operation (Hotline)	30
Speed Dial	All Users
Last Number Redial	All Users
Call Forward on busy, no answer	All Users
Call Park	All Users
Call Pickup	All Users
Call Back	All Users
Call Log	All Users
Do Not Disturb (DND)	All Users
Music on Hold	All Users
Hunt groups	All Users
Mute key for speakerphone	All Users
Direct Inward Dial (DID)	All Users
Independent volume adjustment	All Users
Short Code Dialing	All Users
Conference	All Users (minimum of 6 parties)
Cooperate/Personal Directory	All Extension
Hot lines	20
Hunting Groups	30

- 3.6.25. IP based telephony solution should be capable of integrating with AD (Active Directory) and its services.
- 3.6.26. Extension Mobility should be available to all users log in to a phone and have the phone configuration available to user. Line appearances, speed dials, services, and message waiting indicator (MWI) information need to be present on the phone upon log in.
- 3.6.27. The Single Number Reach (SNR) feature need to be available to all users to answer incoming calls to their extension on either their desktop IP phone or at a remote destination, such as a mobile phone. Users should be able to pick up active calls on the desktop phone or the remote phone without losing the connection. This should enable callers to dial a single

number to reach the phone user. Calls that are not answered need to be forwarded to voice mail. Remote destinations may include Mobile (cellular) phones, Smart phones, IP phones not belonging to the same IP based telephony and home phone numbers in the PSTN. Also should support PSTN interfaces include PRI, BRI, SIP, and FXO. IP phone users should be able to modify their own SNR settings directly from the phone by using the menu available with the Services feature button.

- Pull back the call from the remote phone—Phone user can manually pull back the call
  to the SNR extension by pressing the Resume soft key, which disconnects the call from
  the remote phone.
- Send the call to remote phone—Phone user can send the call to the remote phone by
  using the Mobility soft key. While connected to the call, the phone user can press the
  Mobility soft key and select "Send call to mobile." The call is forwarded to the remote
  phone.
- Enable or disable Single Number Reach—While the IP phone is in the idle state, the user can toggle the SNR feature on and off by using the Mobility soft key. If the user disables SNR, Cisco Unified CME does not ring the remote number.
- 3.6.28. Soft clients should enable users to access presence, instant messaging (IM), voice, video, voice messaging, desktop sharing, and conferencing. Also features such as access to corporate and personal directories, visual access to corporate voicemail, visibility into desk phone history of missed, placed, and received calls, secure store-and-forward text messaging and Dial-via-office should be available on soft client.
- 3.6.29. Supplier need to quote for a managed point to point board room video conference system to enable video conferencing between two board rooms (Katunayaka and Colombo).
  - Full High Definition Video with up to 2 HD sources, and collaboration with optimal definition for the best video quality every time, regardless of environment.
  - Highest Quality Audio with flexibility to add up to 2 microphones directly from the codec, and superior, full duplex audio with high quality stereo sound.
  - Ensure successful, streamlined integration projects with standards-compliant professional connectors.
  - The solution should be capable of connecting IP phone users and soft client users to the same video conference.
  - This solution should be seamlessly integrated to the proposed PABX system.
- 3.6.30. Also supplier need to quote for on-demand collaboration, online meeting, desktop sharing, web conferencing and videoconferencing application solution to maximum ten (10) concurrent users.

- 3.6.31. For voice communication of foreign offices, the supplier need to provide IP phones with extension dialing facility.
- 3.6.32. The supplier need to elaborate on new features such as Soft Clients, Mobility etc available on its proposed IP based telephony solution.
- 3.6.33. Supplier need to provide a managed point- point Board Room Video Conferencing solution for the communication between Katunayaka and Colombo.
- 3.6.34. Supplier should provide IP based telephony solution overview diagrams.
- 3.6.35. Alternative Remote Site Telephony Solution should be available to all branch offices, Airline Center (Admin) and BIA. This service need to be automatically activated when voice links are down.
- 3.6.36. The supplier shall be responsible for all applicable wiring connections from VoIP system to any communication equipment utilizing the VoIP system.
- 3.6.37. The supplier must provide a complete system design showing the integration of the voice network into the data network and further providing methodology for assuring voice quality throughout the system.
- 3.6.38. SLAL wishes to install core system servers, call managers and other equipment in its main data centers located at Airline Center and the Airport. Remote site equipment will be installed in secure data closets at each remote site. The supplier must provide recommendations and drawing showing the placement of equipment in the appropriate network racks or cabinets.
- 3.6.39. The proposal must include in-built failover capability to handle system failures and to have an acceptable level of redundancy to provide 24x7x365 availability for all voice services mentioned hereunder in case of power failure or another incident.
- 3.6.40. Basic VoIP Telephony Functions: SLAL expects to have basic VoIP related functions such as Extension to Extension Dialing, Direct inward dialing (DID), Direct Outward Dialing (DOD) including International Direct Dialing (IDD).
- 3.6.41. Analog Lines: The supplier should facilitate analog lines that will be used for analog phones and POS machines wherever required.
- 3.6.42. Enterprise Mobility: SLAL expects to have a solution that essentially extends the features of the desk phone to the mobile devices which keeps users in always connected and contactable even they are travelling within country or in overseas. In terms of functionality, users should not see/feel any difference of the proposed solution from desk phone and they should have the flexibility to switch over to any option when making/receiving calls based on the preference. For an ongoing call, call handing over process should be a smoother process and call should not be dropped when switching to the other option.
- 3.6.43. Desk Phone option for Overseas Offices: SLAL wishes to extend its head office-based voice services to other offices both in local and overseas which have internet connectivity. The supplier should provide a solution for those locations in such a way that the phones will be registered automatically through internet with proper security mechanisms in place.

- 3.6.44. Automatic CaII Distributor (ACD) / Interactive Voice Response (IVR): SLAL requires to transfer existing IVRs to the proposed solution. It should provide the agents to log in to their phone/workstation and have calls routed to them in the same way they were configured at present. Also, SLAL should be able to perform modifications to the call trees in each IVR based on business requirements. The system should have the capability to configure minimum of three levels in the IVR call tree and configure extensions to meet SLAL objectives. Both standard and customized reports must be able to generate for each IVR and separate logins must be provided for relevant user(s) to generate on their preference for each IVR. Additionally, the system should support displaying IVR statistics in real-time via external displays.
- 3.6.45. Hunt Groups: SLAL requires to have hunt groups with a pilot numbers that has been configured to distribute all incoming calls to respective extensions configured at each hunt group. For outgoing calls recipient should view only the pilot number and all extensions behind the hunt group must be masked to the pilot number. Following options must be able to configure for incoming calls.
  - Circular: Incoming calls hunt through agents in the order they appear in the list, starting with the agent following the last agent to receive a call. When the search reaches the end of the list, it loops back to the top and continues until it has tried all agents.
  - Regular: Incoming calls hunt through agents in the order they appear in the list, starting from the top each time.
  - Simultaneous: Incoming calls alert all agents at the same time. The first agent to answer handles the call.
  - •Uniform: Incoming calls hunt through all agents in order, starting with the agent who has been idle the longest and ending with the agent who most recently answered a call.
  - Weighted Call Distribution: Incoming calls are assigned to idle agents based on percentages you assign on the Hunt Group's Profile
- 3.6.46. Hotlines: Hotlines are being used to call directly to a remote extension without dialing the number. When the receiver unit gets off hook, it automatically dials the number that has been configured on the other end and vice versa. It should have the facility to configure an external number (Local/IDD) as the remote end for automatic dialing.
- 3.6.47. Call Accounting System: Supplier should include a Call Accounting System (CAS) as part of the solution. The CAS should include Call Dialing Report (CDR) for inbound, outbound and internal calls and usage reports for all types of inbound, outbound and internal calls. The reports should contain standard metrics such as destination (Local/National/IDD etc.), call length, number of answered/unanswered calls, number of dropped calls etc. for per extension, Cost Center and/or division basis. The CAS should be able to accommodate multiple parameters when adding an extension to the system itself such as Cost Center, Department, Division, Location/Building etc. and generate required reports with any combination of given parameters. Also, the system should facilitate both manual and

- automatic/scheduled options for generating reports and should be able to link with a SMTP gateway for automatic/scheduled reports. Multiple user logins with different administrative rights required to be configured to access CAS.
- 3.6.48. Short Code Dialing: The solution should include an option to facilitate 3/4-Digit short cord dialing facility for all the extensions configured in the system.
- 3.6.49. Conference Bridge Option: The solution should include a conference bridge facility to accommodate 10-15 users through a common number and relevant security features (Convener / Delegator PINs etc.).
- 3.6.50. Call Recording Facility: SLAL expects to record voice conversation for some extensions which may include from IVRs, Hunt Groups and individual extensions. The supplier should include this requirement as a part of the solution. The onsite staff should be able to add/remove/modify the extension which are added to the recording list based on SLAL IT operations team's requirement. if it involves license, the licensing scheme should be flexible to handle the changes within the permitted license quota limit. The solution should facilitate to create user logins to access voice records only for the permitted extensions and permission levels set by the system administrator. It also should have the searching facility based on multiple parameters given such as date, time, day, calling number, called number etc.
- 3.6.51. Connectivity for external PABX systems: SLAL has connectivity to several external PABX systems and the supplier should maintain the connectivity by providing SIP/H.323/MGCP trunks where appropriate. Please refer below table for external connectivity requirements.

Description	Connection Type
SL Catering	SIP Trunk
SCICOM Call Center	SIP Trunk
UK Call Manager	SIP Trunk

- 3.6.52. Fax/eFax Server Facility: The supplier should include eFax Management solution as a part of the main proposal. This solution should consider all aspects to transform existing fax machines to electronic format with the integration of SLAL's Microsoft Exchange environment. Users should be able to use MS Outlook client to send/receive faxes.
- 3.6.53. Also following features need to be included.
  - Ability for phones to display the Caller ID for an inbound call for the entire duration
    of the call Ability to keep call information (Caller ID and ANI) with the call, even
    when calls are transferred through another phone/switchboard.
  - Display phones must show name and number of internal callers, and external callers.
  - Ability to have a "rollover line" on telephones that show the show the Caller ID/ANI information of outside callers (ANI) on the second (rollover) call to a user, allowing the user to determine whether to answer the call or allow it to roll to coverage.
  - Display phones must show phone number of outside callers (ANI); must stay with call when transferred

- Display phones must show name of outside callers (Caller ID); must stay with call when transferred
- The ability to add a phone number that appears in the call log to the user's contacts/directory with a click.
- Different ring patterns for internal and external calls
- Ability to integrate with Microsoft Exchange service to access Global Address List
   (GAL) from the phone and dial the numbers
- Company directory on the phones or in the desktop client, so that users can scroll through a list and place a call to anyone on the system
- Personal Directory that can be created on individual phone unit based on each user's requirements and ability to scroll through the list and place calls.
- 3.6.54. Call Accounting: The proposed solution should include Call Accounting System with (Station Message Detail Record (SMDR)/Call Details Recording (CDR) capability. This capability must be able to be provided on the attendant console as well as other extensions. The system must have the ability to track outgoing, incoming, and internal calls, including:
  - ANI/ Caller ID/ Calling number
  - Extension number
  - Trunk group and member
  - Account code
  - Authorization code
  - Call date, time, and duration
  - Call type (report on incoming and outgoing, internal)
  - Dialed number (including trunk access code)

In addition, the system must provide the following report capabilities:

- Reports (summary and detail reports) at the following levels: individual extension/users, divisions, departments, Cost Center, and company wide
- Schedule reports to run automatically
- Ability to run ad-hoc reports and filter information to isolate calls that meet specific criteria such as date, time, dialed number, calling number, extension number, etc.
- Send regularly scheduled reports out via email
- Export reports into Excel or .PDF formats
- Have updates to user information made automatically when a user is added, deleted, or changed in the phone system
- 3.6.55. Contact Center/ IVRs: SLAL need to migrate existing IVRs to the proposed solution and below are the minimum feature requirements which required to be included

- Incoming calls must be able to be routed to different treatments, depending on the number dialed by the caller
- Routing treatments must be easily configurable by the support staff
- Call Queuing
- Multiple Queues
- Programmable, automatic after call wrap up time, programmable by queue
- Priority Queuing
- Call routing should be able to configure based on:
  - Dialed Number Identification Service (DNIS)
  - Time of day, Day of Week
  - Holiday Status
  - Customer input information
  - ANI of the Caller
  - Agent Skills
  - Call center conditions and routing
  - Call in on a "Special" number for a particular class of client, i.e. Chief Officer/
     Gold member etc.
- The ability of a queue to overflow to another queue, or location hunt group, if calls are not answered within a predetermined period of time
- Multiple, customized announcements played to caller while in queue (messaging on hold customizable by queue)
- Music or messages while callers are in queue
- The ability to force callers to listen to an entire announcement, even if an agent becomes available during the announcement. This would be programmable so that only certain announcements would have this requirement.
- Displays for the agents that show call duration, ANI, and DNIS of caller
- Queue status information for agents showing the number of calls in queue, the longest holding time, number of available agents, and abandon rates.
- Agents must be able to be members of multiple gueues
- The ability for an agent to automatically be placed in a 'make busy" or "not available" state when handling a non-ACD call
- The ability for the agent to be placed in a "make busy" or "not available" state when a call is presented to an agent who does not answers that call, while having the caller returned to queue with priority
- The ability for the agents to log in from any location in the system (any building) or remotely.
- Announcements in queue that are customizable for each individual queue.
- Ability to easily change the announcements in the queue(s).

## 3.6.56. Historical Reporting:

- The ability to group agents into teams or groups, and to obtain reports based on these groupings.
- The ability to schedule daily, weekly, and monthly reports so that they are run automatically.
- Historical Reports which shows call activity by queue, including:
  - number of calls
  - average hold time
  - number of calls which abandoned
  - length of time callers waited before abandoning
- Historical Reports which shows call activity by agent status, including:
  - Length of time logged in
  - Amount of time in Available, Not Ready, or After Call Work status for agents.
  - Number of ACD calls (inbound and outbound) and duration
  - Average call length
  - Number of calls on the agent's personal line (inbound and outbound)
  - Number of calls that an agent transferred
  - Number of calls put on hold, and duration of the hold times
- Historical reports based on the "Special" numbers or campaigns

## 3.7. Bandwidth/Link Specification

- 3.7.1. The provided bandwidth must be dedicated (CIR=1:1), symmetric and guarantee bandwidth of purchased.
- 3.7.2. Technical solution should support given bandwidths, where based on demand SLAL may request to increase the bandwidth. We are aware that the recurrent fee for bandwidth would rise and an additional investment might be required, however there should not be any installation/upgrade fee and shall not take more than 5 working days to implement.
- 3.7.3. Supplier must have a web interface facility for SLAL to retrieve real time and historical information on network performance, utilization and usage analysis.
- 3.7.4. SLAL has the right and flexibility to get the bandwidth and link requirements separately from a different provider or a supplier.
- 3.7.5. All WAN devices should have duel power supplies for redundancy.
- 3.7.6. All WAN and internet links should support SD-WAN capabilities.
- 3.7.7. The supplier should provide routers & firewalls that is required to terminate the links. The supplier should carry out an independent study for the sizing of these devices.
- 3.7.8. SLAL should be able to redistribute link's bandwidth or relocate links on FOC basis.

# 3.7.9. Internet Links

- 3.7.9.1. High available internet edges should be available at Admin Datacenter (CAK), Airport and MRI airport.
- 3.7.9.2. Supplier need to quote for minimum total internet capacity of 200Mbps with a same capacity backup bandwidth. ( $2 \times 200Mbps$ )
- 3.7.9.3. Supplier should indicate the specific international connectivity for each internet link given below. Example:- SEA-ME-WE 2
- 3.7.9.4. Total internet capacity will be distributed as below. Supplier need to maintain current SLAL static public IPv4 addresses blocks for the given four links. SLAL has currently obtained links from three ISPs to maintain the high availability to maintain audit requirements.

# 3.7.9.4.1. SLT Links

#	Application	Bandwidth (Mbps)	Public IP block
1	SABER	2	
2	ODS	10	
3	VDI	40	
4	EFB	5	
5	AIR MAN	2	
6	AIMS	6	
7	O365	50	
8	Web	12	Current IP blocks
9	Email	20	should be retained.
10	Applications	25	
11	WTC	4	
12	MRI	2	
13	Airport	20	
14	DR	2	

Total 200 Mbps

# 3.7.9.4.2. Dialog Links

#	Application	Bandwidth (Mbps)	Public IP block
1	SLC	10	
2	O365	16	

Total 26 Mbps

# 3.7.9.4.3. TATA Links

#	Application	Bandwidth (Mbps)	Public IP block
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1	Wi-Fi & VPN	1 (1)	Current IP blocks should be retained.
2	Social Media	4	

Total 34 Mbps

- 3.7.9.5. Above three categories of links to be provided by three different ISPs while maintaining the IP blocks specified. SLAL will have the right to select the offered links or continue the current links with the existing ISPs.
- 3.7.9.6. All internet links should have a backup link as per its primary link capacity.
- 3.7.9.7. Provider needs to include the required bandwidth for system to operate seamlessly. In the solution implementation stage if SLAL observed that poor performance of solution due to inadequate bandwidth, provider is responsible to increase the bandwidth to sufficient level with free of cost to SLAL.
- 3.7.9.8. The pricing for additional bandwidth should be quoted separately.
- 3.7.9.9. Internet service availability should not be less than 99.5% in a given calendar month.
- 3.7.9.10. Internet link should have direct peering with Tier 1 ISPs.
- 3.7.9.11. Supplier need to provide additional broad band connection to HIA as a backup internet connection.

#### 3.7.10. WAN Voice Links

3.7.10.1. WAN Voice minimum link capacities need to be distributed as follows

WAN Voice Links	
CAK - Admin to ISP SIP lines (minimum)	150
CAK - Airport to ISP SIP lines (minimum)	150
CAK - Admin	15Mbps
CAK - Airport	15Mbps
World Trade Centre (WTC)(minimum)	2x8Mbps
HIA	2x2Mbps
Regional (Branch Office)	2x4Mbps
Colpity Cargo (Branch Office)	2x5Mbps
Regional NCC (Branch Office)	256kbps
Iceland (Branch Office)	2x2Mbps
Kandy (Branch Office)	512kbps
Galle (Branch Office)	512kbps
New Bulk Stores	512kbps
Alternative Remote Site Telephony Solution	Admin, Airport and All branch offices

3.7.10.2. Above are the minimum bandwidth requirement and supplier should quote for the bandwidth as required for the proposing solution.

3.7.10.3.All links need to be dedicated for SLAL and service availability of each link should not be less than 99.95% in a given calendar month.

#### 3.7.11. WAN Data Links

3.7.11.1. WAN Data minimum link capacity will be distributed as follows.

WAN Data Links	
CAK - Admin	2x150 Mbps
CAK - Airport	
World Trade Centre (WTC)	2x50 Mbps
HIA	2x3 Mbps
Regional (Branch Office)	2x45Mbps
Colpity Cargo (Branch Office)	2x50Mbps
Regional NCC (Branch Office)	2x30Mbps
Iceland (Branch Office)	2x10Mbps
Kandy (Branch Office)	1x2Mbps
Galle (Branch Office)	1x2Mbps
New Bulk Stores	1x2Mbps

- 3.7.11.2. Supplier need to extent airport checking services (CUTE) to HIA through layer 2 connectivity (VLL) with respective bandwidth of 5 Mbps. For redundancy CUTE connectivity to HIA should be extended from both Airline center (Admin) and BIA.
- 3.7.11.3. Above are the minimum bandwidth requirement and supplier should quote for the bandwidth as required for the proposing solution.
- 3.7.11.4. All links need to be dedicated for SLAL and service availability of each link should not be less than 99.95% in a given calendar month.

#### 3.8. Wi-Fi Solution

- 3.8.1. Wi-Fi solution should be a high available, robust, highly secure, redundant and state of the art solution. Proposed solution overview diagrams need to be provided.
- 3.8.2. The solution should be capable of providing Wi-Fi services to at least 1000 users.
- 3.8.3. The supplier need to quote for fully-managed secure wireless LAN solution for meeting rooms, board rooms, and guest internet access to offer wireless access to company resources. Twenty two (22) locations need to be covered by this solution.
  - Colombo (Cargo T05, WTC 3rd Floor, Reginal, City Cargo)
  - Airport (APT counters, APT FD51, Serendib, Serendiva)
  - Admin (FLO training, Inflight, FLO, ADM ground floor, SIM, ITBS, Revenue, HR)
  - Engineering (ENG CEO office, ENG HOE office, Eng PSS)
  - Cargo (CGO Imports, AOCC)
- 3.8.4.In addition to above 3.8.3 coverage areas the supplier should also provide three (3) fully Wi-Fi zones (CEO office, City Cargo, Cargo T05 and ITBS). These areas should avoid traditional

- structured cabling infrastructure and these zone should consist Wi-Fi IP phones device to connect to IP telephony system. All client end devices (IP phones, laptops and Tabs) should be able to connect to SLAL LAN through Wi-Fi.
- 3.8.5. Wi-Fi solution should support policy based access, location bases access, MAC based access and AD group based access.
- 3.8.6. All backend devices should have duel power supplies for redundancy.
- 3.8.7. The supplier should deploy more than 100 Access Points (APs) to provide coverage to twenty two locations. Providing required coverage is a responsibility of the supplier and supplier may request a site visit if required.
- 3.8.8. Wi-Fi solution should be capable of configuring multiple SSID, AD integration, customized captive portals.
- 3.8.9. Wi-Fi solution should be integrated with Identity service engine and should be capable of enforcing identity and context-based policy to users and devices. Also should support AD integration, creation of local accounts, MAC based authentication and portal to create guest user accounts.
- 3.8.10. All users need to be authenticated to the wireless network before logging in. The solution should support a wide range of authentication protocols, including PAP, MS-CHAP, Extensible Authentication Protocol (EAP)-MD5, Protected EAP (PEAP), EAP-Flexible Authentication via Secure Tunneling (FAST), and EAP-Transport Layer Security (TLS).
- 3.8.11. The Wi-Fi solution should include wireless link encryption and should be capable of providing Wi-Fi services to BYODs (Bring Your Own Devices) securely.
- 3.8.12. The proposed solution should support Guest provisioning. This should enable full guest lifecycle management whereby guest users are allowed to access the network for a limited time either through administrator, employee sponsorship or by self-signing via a guest portal. It should allow an administrator to customize portals and policies based on specific needs of the enterprise. Also guest should be able to self-singing through Facebook login, Gmail login, etc.
- 3.8.13. The proposed Wi-Fi solution should be capable of device profiling. Predefined device templates should be available for a wide range of endpoints such as IP phone, printer, IP camera, Smartphone, and Tablet PC. Also administrators should be able to create their own device templates. These templates need to be used to automatically detect, classify, and associate administrative-defined identities when endpoints connect to the network. Also administrator should be able to associate endpoint-specific authorization policies based on device type.
- 3.8.14. Security groups need to be created limit users based on profiles to certain areas of the network. The servers and other resources should be divided into groups and policies need to be applied accordingly.

- 3.8.15. Should enable administrators to centrally configure and manage profiler, posture, guest, authentication, and authorization services in a single web-based GUI console; greatly simplifying administration by providing consistency in managing all these services.
- 3.8.16. The solution should be capable of URL filtering, traffic shaping, user quota management, application filtering, category based filtering, firewall servers, IPS/IDS services.
- 3.8.17. The solution should be capable of providing user based, traffic based, policy based, quota based, URL based, Sites based and usage based reports.
- 3.8.18. The solution should support Wi-Fi 6, WPA 3 & WPA2 standards and should be backward compatible with earlier versions.
- 3.8.19. The solution should support 802.11 standards such as 11g, 11a/g, 11n, 11ac, 11ax and should be backward compatible.
- 3.8.20. At least 10% of spare device stock out of deployed count of APs need to be maintained on site for Wi-Fi network maintenance.
- 3.8.21. APs should have the capability of connecting with both mGig and 1G as APs uplinks.
- 3.8.22. Access Points should support radios for 2.4 GHz and 5 GHz and should have at least 3 dBi Antenna gain on each radio. Also APs should support minimum of 23dbm of transmit power in both 2.4Ghz and 5Ghz radios and should follow the local regulatory Norms.
- 3.8.23. Access points should include standard OEM provided mounting brackets for mounting on walls or celling or roof top.
- 3.8.24. Access Points should support console port that uses standard port (RJ-45) type connection.
- 3.8.25. Access Points should support Hardware-based encrypted user data and management traffic between controller and Access point for better security.
- 3.8.26. Access Points should support the ability to serve clients and monitor the RF environment concurrently.
- 3.8.27. Access Points should continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.
- 3.8.28. Access Points should support telnet and/or SSH login to APs directly for troubleshooting flexibility.
- 3.8.29. Access Points should incorporate radio resource management for power, channel and performance optimization.
- 3.8.30. Access Points should support both OFDMA and MU-MIMO. Also APs should support 4x4 MIMO for both 2.4 and 5 GHz radio with data rates up to 5Gbps.
- 3.8.31. Access Points should support minimum 15 WLANs per AP for SSID deployment flexibility.
- 3.8.32. Access Points should support standard such as 802.3af, 802.11e and WMM. Also APs should support QoS and Video Call Admission Control capabilities.

#### 3.9. Datacenter Services

- 3.9.1. The supplier need to provide high available datacenter switch cluster to cater data center workloads.
- 3.9.2. Datacenter network should be SDN capable and should support centralized management.
- 3.9.3. All connectivity between datacenter and core network should be through 40G connectivity.
- 3.9.4. Datacenter network should have layer 2 and layer 3 capabilities.
- 3.9.5. Virtual Route Forwarding (VRF), Policy Based Routing (PBT), Network Address Translation (NAT), Port Address Translation (PAT) should be supported on datacenter network.
- 3.9.6. Separate zones or switches need to be deployed for DMZ, external, 3rd party, production and backup network segments.
- 3.9.7. At least 10% of spare device stock out of deployed count need to be maintained on site for datacenter network maintenance.
- 3.9.8. All Datacenter network devices should have duel power supplies for redundancy.
- 3.9.9. Current SLAL mini DR is located at Cargo complex at katunayake. The supplier should extend current datacenter network fabric extended to Cargo DR as well. The solution should maintain the same IP blocks or scopes or segments at DR as well.

DR Services	No of Ports	Current Switch Distribution	
100Mbps/1G Ports	15	48 Port Non-POE - 1	Ports should support 100Mbps and 1G
10G Ports	15		

- 3.9.10. All Datacenter traffic (in & out) should be Deep Packet Inspected (DPI).
- 3.9.11. Intra end point isolation should be supported.
- 3.9.12. Expected minimum datacenter network port distribution

Datacenter Services	No of Ports	Current Switch Distribution	
10 Mbps/100Mbps/1G Ports	140	48 Port Non-POE - 4	Ports should support 10Mbps, 100Mbps and 1G (Management Traffic and Other connectivity)
1G/10G Ports (DMZ)	80	48 Port Non-POE - 1 24 Port Non-POE - 4	Ports should support both 1G and 10G (DMZ Segments)
1G/10G Ports (Local LAN)	240	48 Port Non-POE - 5	Ports should support both 1G and 10G (Server Traffic)
1G/10G Ports (Local LAN)	50	48 Port Non-POE - 2 24 Port Non-POE - 1	Ports should support both 1G and 10G (Backup Network)
10G Ports	40		Ports should support 10G (Backup Network)

- 3.9.13. All datacenter traffic need to be filtered with firewall, IPS and IDS solution. Also it should be capable of filtering traffic when it is passing through different datacenter network segments. (Client to Server, Server to Client, Server to Server, Server to internet)
- 3.9.14. The supplier should provide a full-fledged security solution to the data center network to monitor and gain full control over the network traffic passing to the different segments across the core devices. The solution must capable of,
- 3.9.14.1. Providing a fully integrated security platform to define and implement security policies in congruent to the IT governance and compliance practices established.
- 3.9.14.2. Providing a unified single management interface with the integration of multi-security platforms such as advanced malware detection, firewall, IPS, IDS, etc.
- 3.9.14.3. Integration with existing security appliances/products such as SIEM, Darktrace etc.
  - 3.9.14.4.Monitoring all in/out network traffic passing to different segments across core devices and providing correlated view and visibility of both application and network services access including flow patterns from core network to the end devices in a single dashboard.
  - 3.9.14.5.Continuous enhancement of the network to the best version possible by benchmarking it in accordance to the security policies defined and reinforcing them based on the feedbacks receive from the intelligence of the system itself.
  - 3.9.14.6.Identification and categorization of the network traffic based on the L3 L7 information and providing insights to differentiate permitted and malicious activities happening in the network based on historical data and in real-time.
  - 3.9.14.7. For anomalies, it should provide necessary information to investigate to a deeper level and provide suggestions to mitigate the potential threat and take necessary preventive measures.
  - 3.9.14.8. Providing security intelligence to the network dynamically to identify and mitigate the potential zero-day vulnerabilities by linking with up-to-date definition updates form industry leading independent cyber security authorities
  - 3.9.14.9. The Solution should support "Stateful" policy inspection technology and application intelligence.
  - 3.9.14.10. The Solution shall support network traffic classification which identifies applications across all ports irrespective of port/protocol/evasive tactic.
  - 3.9.14.11. The Solution shall be able to handle (alert, block or allow) unknown/unidentified applications and unknown UDP & TCP communications
  - 3.9.14.12. The Solution should support URL based traffic Policy Enforcement and URL based traffic Routing (Static, Dynamic, Policy Based).
  - 3.9.14.13. The Solution (NGFW) shall be able to identify, decrypt and evaluate SSL, SSH tunnel traffic in an inbound and outbound connections
  - 3.9.14.14. The solution should support more than 10 Million concurrent sessions with application visibility turned on.

- 3.9.14.15. NGFW should support more than 20Gbps throughput, 2 Million access control entries, 10 Million NAT translations, 1000 VLANs and 500,000 connections per second.
- 3.9.14.16. NGFW should be a high available solution with support to Active/Active or Active/Standby clustering.
- 3.9.14.17. NGFW should be a hardware based appliance solution.
- 3.9.14.18. NGFW should support creating access-rules with IPv4 & IPv6 objects, user/groups, application, geolocation, url, zones, vlan, etc
- 3.9.14.19. NGFW should support static NAT, dynamic NAT and dynamic PAT.
- 3.9.14.20. NGFW should support Static, RIP, OSPF, OSPFv3 and BGP, BGPv6.
- 3.9.14.21. NGFW should support capability to create multiple virtual context/instance with strict hardware resource (CPU, Memory & Storage) reservation and ensure traffic isolation between virtual context/instance.
- 3.9.14.22. NGFW should support capability to integrate with other security solutions to receive contextual information like security group tags/names.
- 3.9.14.23. NGFW should have the capability of passively gathering information about virtual machine traffic, network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as intrusion event data correlation, elimination of false positives, and policy compliance.
- 3.9.14.24. The solution should be able to identify, decrypt and evaluate both inbound and outbound SSL traffic on-box.
- 3.9.14.25. The solution should support the capability to identify infected devices / machines and be able to update Network Admission control (NAC) solution so that the same can be quarantined.
- 3.9.14.26. The solution should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.
- 3.9.14.27. The solution should be able to identify attacks based on Geo-location and define policy to block on the basis of Geo-location.
- 3.9.14.28. The solution must support IP reputation intelligence feeds from third party and custom lists of IP addresses including a global blacklist.
- 3.9.14.29. The solution should support URL threat intelligence feeds to protect against emerging threats.
- 3.9.14.30. The solution shall have capability to analyze and block TCP/UDP protocol to identify attacks and malware communications.
- 3.9.14.31. The management platform must be accessible via a web-based interface with no additional client software.
- 3.9.14.32. The management platform must provide a highly customizable dashboard.

- 3.9.14.33. The management platform must be capable of role-based administration, enabling different sets of views and configuration capabilities for different administrators subsequent to their authentication.
- 3.9.14.34. The management platform must provide multiple report output types or formats, such as PDF, HTML, and CSV.
- 3.9.14.35. Streamline the IT operations by introducing simplified and effective IT administration and management capabilities such as providing
  - Single management interface for device management and policy enforcements,
  - APIs to integrate with IT service desk management tools (BMC Remedy) and other third-party tools to automate incident reporting and handling,
  - Faster response and remediation in terms of fault isolation with the availability of precise and accurate information in a single interface.

#### 3.10. VPN Services

- 3.10.1. Supplier should quote for high available VPN gateway with ISP redundancy. At least two VPN concentrators need to be deployed with connectivity to at least two different ISPs.
- 3.10.2. The VPN gateway should be capable of creating at least fifty (50) remote access VPNs and at least fifty (50) site to site IPsec VPNs.
- 3.10.3. The Solution should support Dynamic policy enforcement on VPN Clients.
- 3.10.4. The Solution should support the SSL VPN and IPSec VPN for both Site-Site & Remote Access VPN.
- 3.10.5. The Solution's IPSec ISAKMP methods should support MD5, IKE (v1, v2), AES256, SHA(256,512), DH(1,2,5,7,11,15,20,21,24), RSA & Manual Key Exchange Authentication, 3DES/AES-256 Encryption of the Key Exchange Material and algorithms like RSA-1024 / 1536.
- 3.10.6. The Solution's Gateway system should support virtual tunnel interfaces to provision Route-Based IPSec VPN.
- 3.10.7. The Solution should support PKI Authentication with PCKS#7 & PCKS#10 standards
- 3.10.8. The Solution's IPSec should have the functionality of Perfect Forward Secrecy (PFS) and NAT-T (NAT Traversal)

## 3.11. Load Balancing and Traffic Optimization

- 3.11.1. The Solution should support ISP link load balancing (Spill Over, Bandwidth Priority) via dedicated Link Load Balancer appliance or an integrated module with policy based traffic handling where high-performance is assured.
- 3.11.2. The Solution should provide provisions to load balance Outwards links to ISPs based on QoS/Application-Delivery policies. [Guaranteed bandwidth, Maximum bandwidth, Priority bandwidth utilization,)
- 3.11.3. The solution should have following capabilities.
  - WAN optimization

- SD-WAN
- Traffic Shaping with Category based traffic shaping

# 3.12. Third Party Service Integrations

3.12.1. The proposed solution should support below third party integrations.

Integration With 3rd Party	No of	
integration with 3rd Party	connections	
Amadeus Connectivity through SITA	2	Primary Connectivity to Admin and Secondary Connectivity to Airport Current Devices - 2 Routers to run BGP with SITA, 2 Firewalls
LIDO Skyconnect Connectivity through SITA	2	Primary Connectivity to Admin and Secondary Connectivity to Airport Current Devices - 2 Routers to run BGP with SITA, 2 Firewalls
CUTE Connectivity Through SITA	2	Primary Connectivity to Admin and Secondary Connectivity to Cargo mini DR Current Devices - 3 Switches (48 Port Non-POE - 3)
Overseas and Mercator connectivity through SITA	2	Primary Connectivity to Admin and Secondary Connectivity to Airport Current Devices - 2 Routers to run BGP with SITA, 2 Firewalls
Internet Edge with ISPs	4	Admin, WTC and HIA  Current Devices - 8 Routers to run BGP with ISPs, 4  Switches (48 Port Non-POE - 4)
Branch Offices WAN connectivity	9	1. WTC, Regional, Colpity Cargo, Galle, Kandy, Iceland, Regional NCC 2. Primary Connectivity to Admin and Secondary Connectivity to Airport
External PABX connectivity	4	1. London 2. SCICOM 3. AASL 4. SL Catering
Integration with short cords	2	1979, 1973
Integration with SCICOM	1	
Integration with SL Catering	1	
3 <sup>rd</sup> Party Service provider's Connectivity	2	SLC(SriLankan Catering), Scicom, etc.

		Current Devices - 2 Switches (48 Port Non-POE - 2)
Integration with VDI	2	Redundant 40G connectivity should be established between Core and VDI environment. Firewall and IPS/IDS filtering should be available between Core to VDI and VDI to Core traffic.

- 3.12.2. All connectivity should be integrated securely to SLAL LAN network. At least firewall and IPS function should be available when integrating with 3<sup>rd</sup> party providers.
- 3.12.3. The supplier should provide switches, routers & firewalls that is required for 3<sup>rd</sup> party integration. The supplier should carry out an independent study for the sizing of these devices.

## 3.13. Security Services

- 3.13.1. The supplier must manage the system end-to-end as a managed service and all equipment additions, removals, configuration changes, modifications etc. must strictly follow the SLAL IT Division's governance structure including policies defined under change management, incident management, request management, asset management etc.
- 3.13.2. The solution should support policy based access, user identification and segmentation throughout the wired and wireless networks.
- 3.13.3. The solution should be capable of implementing division, department and user based policies.
- 3.13.4. Solution should seamlessly integrate with existing Security Information & Event Management (SIEM) (McAfee Enterprise Security Manager), Tenable, Darktrace and corporate perimeter firewall (Checkpoint) solutions.
- 3.13.5.All internet Edges should be protected with Enterprise class Firewall, IPS/IDS, DDOS protection solution. CAK internet edge should integrate with existing perimeter firewall (checkpoint).
- 3.13.6.All client to server, server to client, server to server traffic need to be protected with Enterprise class Firewall, IPS/IDS solution.
- 3.13.7. All VDI to Core network and Core network to VDI traffic need to be protected with enterprise class Firewall, IPS/IDS solution.
- 3.13.8. The solution should be capable of providing application dependency map.
- 3.13.9. The solution should be capable of allowing only required traffic and blocking any other traffic.
- 3.13.10. All network integrations with 3rd party service providers should be connected with at least a firewall.

- 3.13.11. All branch offices WAN connectivity should be filtered with a firewall service at both ends.
- 3.13.12. Voice traffic need to be encrypted as a part of the voice solution and cost related to voice traffic encryption need to be given as optional pricing.
- 3.13.13. Behavioral Analysis Solution need to be a port of the network solution and cost related to Behavioral Analysis Solution need to be given as optional pricing.
- 3.13.14. The supplier need to propose Network Access Control (NAC) solution and it should be capable of seamlessly integrating with the proposed network solution.
- 3.13.15. The Solution should provide a highly powerful and flexible attribute-based access control solution that combines authentication, authorization, and accounting (AAA), posture, profiling and guest management services on a single platform. All devices need to be integrated with AAA solution.
- 3.13.16. The solution should facilitate an authentication platform which provides a robust control when providing IT services access to the users through access layer infrastructure devices. The solution should provide,
  - 3.13.16.1. Centralized user administration capability and integration capability with other authentication databases such as MS Active Directory etc.
  - 3.13.16.2. Profile based authentication when accessing IT services irrespective of the access media either wired or wireless.
  - 3.13.16.3. In terms of provisioning IT services, it should support role-based policy enforcement which can segment users based on their roles and provide controlled access only to the intended network resources
  - 3.13.16.4. It should allow SLAL to authenticate and authorize users and endpoints via wired, wireless and VPN with consistent policy throughout the SLAL.
  - 3.13.16.5. It should offer comprehensive visibility of the network by automatically discovering, classifying, and controlling endpoints connected to the network to enable the appropriate services per endpoint.
  - 3.13.16.6. It should addresses vulnerabilities on user machines through periodic evaluation and remediation to help proactively mitigate network threats such as viruses, worms and spyware.
  - 3.13.16.7. Solution should consume license only based on active devices on the network where devices include user endpoints (such as laptops, tablets and smartphones), non-user devices (such as printers, IP phones, security equipment, medical devices, manufacturing equipment), virtual machines, Network infrastructure devices (such as switches, routers and access points) should not consume license and If so supplier should consider these licenses exclusively and should be counted along with User/Endpoints.
  - 3.13.16.8. The solution should have in built Troubleshooting & Monitoring Tools.
  - 3.13.16.9. The solution should support centralized and distributed deployment options with clustering of nodes or cross-site failover for disaster recovery scenarios.

- 3.13.16.10. The solution should allow SLAL to get finer granularity while identifying devices on SLAL network with Active Endpoint Scanning.
- 3.13.16.11. The solution should be able to block unauthenticated/rogue machine without giving any access to the network.
- 3.13.16.12. The solution should be able to control the user even before IP address is assigned and it should act as a pre-admission solution.
- 3.13.16.13. The solution should enforces security policies by blocking, isolating, and repairing noncompliant machines in a quarantine area without requiring administrator attention.
- 3.13.16.14. The solution should offers a rules-based, attribute-driven policy model for creating flexible and business-relevant access control policies.
- 3.13.16.15. The Solution should have capability to see endpoints attribute data via passive network telemetry or alternatively from the infrastructure via device sensors on switches at Core, Distribution and Access Layers.
- 3.13.16.16. The solution should have the capability to determine whether users are accessing the network on an authorized, policy-compliant device.
- 3.13.16.17. The solution should support periodic re-assessment for clients that are already successfully validated for compliance.
- 3.13.16.18. The solution should be able to enforce Layer 4 controls from access to distribution to core to edge to data center to servers without the need of mirroring the traffic and maintaining end to end segmentation even when two endpoints are in same broadcast domain.
- 3.13.16.19. The solution should provide support policy enforcement through VPN gateways and should be able to authenticate and authorize based on device type and authentication.
- 3.13.16.20. The solution support authenticating IP phones and users connected behind IP phones on the same physical port.
- 3.13.16.21. The solution should support guest user's onboarding through social media login to simplify the registration process.
- 3.13.16.22. The solution should deliver customizable self-service portals as well as the ability to host custom web pages to ease device and guest on-boarding. The solution should support sponsor approval for guest users connecting into the network and the approval request should have control from multiple sponsor to avoid single point of failure.
- 3.13.16.23. The solution should support flexible guest account approval even in absence of sponsor.
- 3.13.16.24. The solution should support full guest lifecycle management.
- 3.13.16.25. The solution should be able to integrate with other security solutions

- 3.13.16.26. Based on the authentication policies configured, users should be able to carry out permitted activities and access network resources from either company provided hardware or BYOD.
- 3.13.16.27. Monitoring capability and visibility of the user activity happening from network to the device edge.
- 3.13.16.28. Automatic identification capability of the users, user location, and a wider range of device attributes such as device type, operating system, version, vulnerabilities within the devices etc.
- 3.13.16.29. Automatic block or quarantine capability whenever an abnormal activity of a user is triggered, or potential threat is identified in a user device.
- 3.13.17. The solution should be capable of on boarding BYOD to the network securely and seamlessly.
- 3.13.18. External & internal connecting devices should be audited and allowed only if it has met defined conditions such as updated malware protection, secured operating system on the device etc. (Automated Compliance Check)
- 3.13.19. The Solution must provide a role-based administrative access control with granularities. All Administration accounts should be managed centrally, and role-based access should be configured on all servers and network devices. Access to devices must be audited authenticated, authorized and logged. The Solution must integrate with Active Directory for user authentication and AD security group-based authorization.
- 3.13.20. All network devices IOS or firmware need to be up to date with latest stable versions to maintain security compliance. Any upgrade cost to meet security compliance need to be bared by the supplier.
- 3.13.21. Solution must have provisions to monitor endpoints vulnerabilities in real time and remediate via virtual patching. It should be able to verify system hardening against industry benchmark.
- 3.13.22. Solution should support micro segmentation between users where it should be able to restrict communication between users on the same segment and communication between users will only be allowed based on policy. The supplier should to provide details on how this is achieved with the proposed solution.
- 3.13.23. Supplier should follow proper CR (Change Request) process and update CMDB (Configuration Management Database) & maintaining transparency of all maintenance and administration activities together with responsibility of internal teams to be maintained. Corporate security incident response and management procedures and change management procedures must be followed administrator/analyst, at all the time.
- 3.13.24. Supplier should develop comprehensive standard operations procedure manual which cover all operational requirements and obtain approval from SriLankan management. (Standard operations procedures must be reviews and improved at least annually)

- 3.13.25. Monthly service review/information security review meetings should be held with required parties and agreed actions should be taken accordingly.
- 3.13.26. Supplier should align to ITIL best practices & ISO20000-1 standards. Also Adherence to PCI-DSS, GDPR and ISO27001:2013 practices and requirements is a must.
- 3.13.27. The core product troubleshooting documents like admin guides, installation guides, and manuals should be made available directly through publicly accessible OEM website. The OEM must share the admin guides during technical evaluation and thereafter.
- 3.13.28. SriLankan Airlines has the right to audit any network device or system at any time. Supplier should provide SriLankan Airlines with admin access without any delay at minimum, but not limited to. SriLankan Airlines will have authority to question/inquire any supplier employee or obtain assistance for any system related investigations at sole discretion of SriLankan Airlines. Also SriLankan should be given physical/virtual access to any location where the data of SriLankan Airlines resides.
- 3.13.29. Application inventory and license tracking system should be maintained for whole environment by the supplier.
- 3.13.30. Supplier should manage and maintain assets tracking together with electronic notification to users and Service Teams. Should include approval process & should support taking web-based acknowledgement from users. This should provide an interface to get changed information to SLAL CMDB.
- 3.13.31. All License must be procured under SriLankan airlines ownership. However, if vendor has obtained any license through SriLankan Airlines the values should be transferred to SLAL as Service Credits or direct payments.
- 3.13.32. Supplier should comply with Business Continuity plan of SriLankan Airlines by keeping required backups, Systems & Processes for recovery and to meet requested service levels.
- 3.13.33. Backup of Systems & Data must be done according to the SLAL Backup policies.
- 3.13.34. Vendor should retain Information to comply with RTI (Right to Information) act.
- 3.13.35. Data Retention as per organizational requirements should be maintained.
- 3.13.36. Data & Information Transfer at the end of Project need to be done by the vendor to safeguard business continuity of SriLankan Airlines. Vendor will be responsible till the data & information transfer is completed.
- 3.13.37. All data and voice communication should be encrypted and all applicable cost should be indicated separately.

## 3.14. Passive Infrastructure

- 3.14.1. Managing the passive infrastructure of the SLA needs to be considered with respect to the following areas,
  - Supporting the existing infrastructure
  - Upgrades and expansions to the existing infrastructure (UTP)

- Upgrades and expansions to the existing infrastructure (Fiber)
- Deploying new infrastructure (i.e. New Building or Location) (Fiber + UTP)

## 3.14.2. Supporting the existing infrastructure: -

- 3.14.2.1. The Supplier shall conduct a mandatory audit of the passive infrastructure to get an inventory and also so to validate the performance of the passive infrastructure. A wire scope test need to be performed throughout the UTP and Fiber cabling infrastructure.
- 3.14.2.2. The Supplier need to undertake to rectify any issues found during the above audit and the material and services rates need to be specified in the commercial proposal.
- 3.14.2.3. New requirements or ongoing repairs need to be done at the material and services and costing will be considered, case by case during this contract period.
- 3.14.2.4. The supplier need to restock any required items at the rates specified in the commercial proposal.
- 3.14.2.5. The network assessment must include a passive infrastructure audit to test and validate the functionality of existing network cabling (both fiber and copper) paths and provide the results. It also should include necessary recommendations along with applicable pricings and lead time for repair wherever faults were being identified.
- 3.14.2.6. Any additional cabling/wiring required by the supplier to complete the installation must be included as a part of the RFP response.
- 3.14.2.7.A neat cabling network incorporated with CAT6 Cables should be furnished according to EIA/TIA-568.
- 3.14.2.8. Total Network including fiber and coper UTP to be maintained by the supplier as per the SLA conditions.
- 3.14.2.9. The supplier need manage all IT rooms, racks & passive infrastructure (fiber & UTP CAT 6) with SLAL standards and proper labeling need to be carried out.
- 3.14.2.10. The supplier need to provide detailed drawings including cable paths, ducts, and terminations.
- 3.14.2.11. The supplier should have necessary tools such as cable testers, OTDR, fiber splicer, etc. and should provide when required to SLAL on FOC basis.

## 3.14.3. Upgrading and Expansion to the existing infrastructure (UTP): -

- 3.14.3.1. Unit rates need to be provided for per UTP port for adding an additional node to the existing infrastructure, where a point will be drawn from a exiting rack/patch panel to a specified user area, in such case average point length of 40M, materials per node, labor per node, termination & testing per node can be considered for cost analysis.
- 3.14.3.2. Node Structure (Flow + Components):

- Rack -> Patch Panel -> Cable -> Cable Laying with materials from the patch panel to the user -> Keystone and Face plate -> Termination -> Patch code (Patch panel end) -> Fly Lead (User End).
- 3.14.3.3. SLAL has the right to decide to implement new structured cabling through the proposed supplier or from a different supplier depending on the unit rates.
- 3.14.4. Upgrades and expansions to the existing infrastructure (Fiber) :-
  - 3.14.4.1.Unit rates need to be provided for adding an additional fiber link to the existing infrastructure, where a fiber will be drawn from new patch panels to a specified area, in case average point length per meter, 12 core fiber indoor/outdoor, materials per fiber meter, labor per fiber meter, termination & testing per fiber can be considered for cost analysis.
  - 3.14.4.2. Fiber Node Structure (Flow + Components):
    - Rack -> Fiber Patch Panel -> Fiber Cable -> Cable Laying with materials from the patch panel to the required location -> Fiber Connectors -> Termination -> Fiber Patch codes.
  - 3.14.4.3.SLAL has the right to decide to implement new fiber layering through the proposed supplier or from a different supplier depending on the unit rates.
- 3.14.5. Deploying New Infrastructure (i.e. New Building or Location, Fiber + UTP) :-
  - 3.14.5.1.SLAL will provide drawings, location of data points, number of nodes per given location and site visit as per the new requirement. Based on the above information supplier need to prepare a proposal (estimate) for the new infrastructure which with a detail bill of materials.

SLAL has the right to decide to implement new infrastructure through the proposed supplier or from a different supplier depending on the unit rates.

# 3.15. Reporting/Monitoring/Logs/Network Management/Billing/Inventory

# 3.15.1. Reporting

- 3.15.1.1. Periodic reports, to be provided on monthly basis on or before the 5th working day succeeding calendar month, shall include without limitation.
  - Utilization of all links within core and distribution network (% Utilization and actual throughput usage)
  - Utilization of all WAN links including Internet links (% Utilization and actual throughput usage)
  - Core & distribution device utilization reports (CPU/Memory/Port utilization)
  - Reporting on Telephone/fax usage (5th working day of the month)
  - Call center agent reports (10th working day of the month)

- Backup links & path testing reports (quarterly)
- 3.15.1.2. On-demand reports shall include following reports.
  - Any periodic report mentioned above
  - Report on any uplink to any L2 switch
  - Up-to 200 ports/interfaces/links/devices other than what mentioned above (excluding access ports). However on-demand reports required for any specific access ports need to be provided on request.
  - Telephone/fax usage (next working day)
  - Call center agent (next working day)
- 3.15.1.3. Service Level: Urgent Requests within 3 hours, Normal Requests within 6 hours

## 3.15.2. Monitoring

- 3.15.2.1. 24x7x365 monitoring of 99.95% Service availability for the services.
- 3.15.2.2. The Solution should include end to end visibility (network devices, users, links, device health and performance).
- 3.15.2.3. 24x7x365 Dashboard to view information of Devices and Links
  - Device information (CPU/Memory utilization, interface status, interface counters etc)
  - Link information (Utilization up to source/destination IP/TCP Port, protocols, applications, bandwidth, traffic volume etc).

#### 3.15.3. Logs

- 3.15.3.1.Call Detail Record (CDR) logs must be kept for minimum of one-year period and SLAL should have access to detail at any time whenever required.
- 3.15.3.2.Call records (voice) must be kept throughout the contract period and the proposal shall include an interface where the users can access to them by entering login credentials.
- 3.15.3.3.All device (Network switches, routers, firewalls, Access points etc.) related logs (System logs, security logs, etc.) must be kept minimum of one-year period, either at device level or in a centralized location.

# 3.15.4. Network Management

- 3.15.4.1. The supplier need to propose a network management solution covering following key aspects. Please specify the proposed software for each aspect.
  - Fault Management
  - Configuration Management
  - · Accounting Management

- Performance Management
- Security Management
- 3.15.4.2. Fault management: Involves recognizing, isolating, correcting and logging the faults occurring in the network. Fault management also need to be used to analyze trends in the network and predict its availability.
- 3.15.4.3.Configuration management: Involves gathering and storing device configuration information periodically so that in case of a catastrophic event the device can be restored to a configuration which is closer or identical to the configuration just before the failure. Configuration management also involved in monitoring changes to the configuration, who made the changes and the time of the changes were made and also involved defining device configuration procedures and standards.
- 3.15.4.4.Accounting management: Involves monitoring access to the network in order to track unauthorized access and access attempts. It also involves monitoring network resource usage (Disk quota, CPU cycles, Memory, Network bandwidth) and bill the users based on the usage.
- 3.15.4.5.Performance management: Involves collecting values of different parameters of the device, store them efficiently and analyze them. By analyzing these vital statistics regularly many issues and potential issues need to be identified before they become a catastrophe.
- 3.15.4.6.Security Management: Involves monitoring authentication, authorization and accounting of the network devices. It also involves monitoring access violations, attempted network.
- 3.15.4.7. The solution should be capable of providing information and indications to the current statures of the system, systems should gather and store historical information as well as policies and procedures which governs actions to be taken to handle a specific event or an incident.
- 3.15.4.8.All the network devices within the SLAL local network should be managed using a centralized NMS, which need to be placed at CAK premises.
- 3.15.4.9.All software should be enterprise class and all licenses need to be included with the proposal.
- 3.15.4.10. The solution should be capable of generate alerts (E-Mail) when a threshold is breached.

# 3.15.5. Billing

3.15.5.1.The supplier must provide invoices on monthly basis for all service components included in the proposal.

- 3.15.5.2.It is mandatory to include fixed and variable (usage based) components separately in monthly invoice with clear breakdowns.
- 3.15.5.3.Supplier shall submit a separate pricing schedule for additional installations, software, hardware, and for all other applicable components for each service category in the proposal.
- 3.15.5.4. The pricing schedule should include all applicable components of a product or a service (Ex. PTT charges, Software licenses, hardware, installation charges etc.) as a bundled price up to the final demarcation point (Core room, office premises at an airport etc.) of the customer. SLA will not be liable to pay any additional cost components apart from the proposal provided.
- 3.15.5.5.For the telephone system, Supplier should include a Call Accounting System (CAS) as part of the solution. The CAS should include Call Dialing Report (CDR) for inbound, outbound and internal calls and usage reports for all types of inbound, outbound and internal calls. The reports should contain standard metrics such as destination (Local/National/IDD etc.), call length, number of answered/unanswered calls, number of dropped calls etc. for per extension, Cost Center and/or division basis, with cost components.
- 3.15.5.6.The CAS should be able to accommodate multiple parameters when adding an extension to the system itself such as Cost Center, Department, Division, Location/Building etc. and generate required reports with any combination of given parameters. Also, the system should facilitate both manual and automatic/scheduled options for generating reports and should be able to link with a SMTP gateway for automatic/scheduled reports. Multiple user logins with different administrative rights required to be configured to access CAS.
- 3.15.5.7. The proposed solution should include Call Accounting System with (Station Message Detail Record (SMDR)/Call Details Recording (CDR) capability. This capability must be able to be provided on the attendant console as well as other extensions.
- 3.15.5.8. The system must have the ability to track outgoing, incoming, and internal calls, including:
  - ANI/ Caller ID/ Calling number
  - Extension number
  - Trunk group and member
  - Account code
  - Authorization code
  - Call date, time, and duration
  - Call type (report on incoming and outgoing, internal)
  - Dialed number (including trunk access code, local, national, IDD etc.)
  - Cost based on actual tariffs available

- 3.15.5.9. In addition, the system must provide the following report capabilities:
  - Reports (summary and detail reports) at the following levels: individual extension/users, divisions, departments, Cost Center, and company wide
  - Schedule reports to run automatically
  - Ability to run ad-hoc reports and filter information to isolate calls that meet specific criteria such as date, time, dialed number(Local, National, IDD), calling number, extension number, Cost etc.
  - Send regularly scheduled reports out via email
  - Export reports into Excel or .PDF formats
  - Have updates to user information made automatically when a user is added, deleted, or changed in the phone system

## 3.15.6. Inventory

3.15.6.1. The supplier should maintain proper inventory and update it regularly reflecting to the changes taking place in the network. The inventory must include at least the serial numbers, model numbers of IP phones, network switches, routers and any other relevant equipment and the information such as available stocks of at the beginning, deployed amounts, spares available etc. for each equipment category. This should be able to integrate with SLAL IT Division's inventory management software (BMC Remedy).

## 3.16. Service Levels and Support Services

- 3.16.1. Service Level Agreement for fully Managed Services
  - 3.16.1.1. Supplier shall provide fully managed corporate data and voice services. All services should be managed end to end by the supplier irrespective of the relevant dependent services. Supplier is the single point of contact for all services provided to Sri Lankan Airlines Limited as detailed in this RFP.
  - 3.16.1.2. Validity period: 5 (Five) years from the date of Acceptance Test.
  - 3.16.1.3. Locations covered:
    - BIA (Airline Center, Airport terminal, Engineering Hanger, Unit 3 Area, Cargo Terminal)
    - WTC
    - Regional Building (Colombo 1)
    - City Cargo Office (Colombo 3)
    - Iceland Office
    - Regional NCC Office
    - Galle
    - Kandy

- HIA
- New Bulk Stores
- 3.16.1.4. Following services proposed to Sri Lankan Airlines, need to be covered in the scope of this Service level agreement.
  - Fully managed Data solution to Local/Branch offices
  - Fully managed Data solution to SLAL Datacenter
  - Fully managed Voice solution to Local/Branch offices
  - Fully managed Secure Wireless solution to Local/Branch offices
  - Fully managed Board Room Video Conferencing solution to Local/Branch offices
  - Fully managed passive infrastructure (Fiber and UTP Cat 6)

## 3.16.2. Service Availability

- 3.16.2.1. Services availability should be defined based on the criticality of area and the incident and should be measured based on the total number of minutes per calendar month.
- 3.16.2.2. Overall Service availability should be more than 99.95% and is calculated considering the average of service availabilities mentioned above. Please note that downtimes required for scheduled maintenance activities are to be excluded from the above calculations. The maximum downtime taken for scheduled maintenance activities in each month should be less than 2 hours.

#### 3.16.3. Response and Resolution

- 3.16.3.1.Considering the importance of the UL network, supplier should provide 24x7x365 managed services to Sri Lankan Airlines.
- 3.16.3.2.Incidents reported are categorized in to 6 types based on the site and the service type.

  Response and resolution periods for the incident types are defined as below. Resolution time will occur from the time the issue is logged on the supplier Helpdesk.

Critical Area			Non-critical Area				
Туре	Service Type	Response	Resolution Time	Туре	Service Type	Response	Resolution Time
Type 1	Incidents relating to Data service	Immediate	1 hour	Type 4	Incidents relating to Data service	Immediate	2 hour
Type 2	Incidents relating to Voice service	Immediate	1 hour	Type 5	Incidents relating to Voice service	Immediate	2 hour
Type 3	Incidents relating	Immediate	1 hour	Type 6	Incidents relating	Immediate	2 hour

t	to		to	
I	Internet		Internet	
9	service		service	
	SCIVICC		JCI VICC	

Table 1

- 3.16.3.3.Maximum duration for "immediate" response should be within 15 minutes of the time of reporting the incident in Critical or Non-Critical Area.
  - "Critical Areas":- Airport Terminal (BIA/HIA), Cargo Terminal (BIA/HIA),
     Engineering Hangar, MCC, Chairman's office, CEO office ticket offices of SLA, Data
     Center, Flight Simulator Center, Ramp Section, Line Maintenance Section
  - "Non Critical Areas":- "Non-critical Areas" are defined as any area of the Site other than the Critical Areas defined herein.
  - "Any Area": shall include both the Critical Areas and Non Critical Areas.
- 3.16.3.4. Additionally when logging an incident, SLAL may define an incident as Critical/ Non-critical depending on the impact to their business operations and such defining by SLAL shall be final and conclusive and shall not be questioned or challenged by the supplier.
- 3.16.3.5. Further response and resolution times that are applicable for specific services are defined in Table 2.

No	Service type	Service Hour as defined in this Annex	Area as Defined in this Annex	Response	Resolution	Remarks
		Business	Critical	Immediate	2 hours	Software bug
	Fax service		Non- Critical	Immediate	4 hours	fixes, customer power failure,
1		Non- business	Critical	Immediate	2 hours	scheduled
			Non- Critical	Immediate	8 hours	maintenance and new
2	Operator console	Any	Any	Immediate	1 hour	features are
3	Special Group Nos. (ERU/PSU etc.)	Any	Any	Immediate	1 hours	excluded.
		Conference	Any	Immediate	1 hour	
4	Audio / Video Conference	Non- conference	Any	Immediate	1 hour	

5 Wi-Fi Access	Any	Critical	Immediate	4 hours
Point*	7,	Non- Critical	Immediate	6 hours

Table 2

3.16.3.6.Resolution Time exclusions: Travelling time for remote offices (as detailed in Table 3 )where no on-site support is available

Location	Average Travel Time
Galle	4 hours
Kandy	4 hours

Table 3

3.16.3.7.Reports and Root Cause Analysis: - The report of each incident should be provided upon request within 3 working days after successful closure of the incident.

# 3.16.4. Fault Reporting

- 3.16.4.1. Faults can be reported by SLAL at any time of the day (24 hrs, 07 days) to the Onsite service Desk operated by the supplier.
- 3.16.4.2. Level 01 to 06 fault escalation procedure matrix need be provided by the supplier.

Level	Fault Escalation
Level 01	24x7 Help Desk Tele No:
Level 02	Name: Designation: Contact No: Email:
Level 03	Name: Designation: Contact No: Email:
Level 04	Name: Designation: Contact No: Email:
Level 05	Name: Designation: Contact No: Email:

Table 4

#### 3.16.5.1. Service for Critical Areas

- 3.16.5.1.1. Critical Areas will have service hours as defined below and resolution times are applicable as per the tables given above
  - Locations operated in Business hours 8am 6 pm during working days
  - Locations operated in 24x7 Hours

## 3.16.5.2. Service Hours for Non-Critical Areas

- 3.16.5.2.1. Non-Critical areas will have service hours as defined below and resolution times are applicable as per the table given above.
  - Locations operated in Business hours 8am 6 pm during working days
  - Locations operated 24x7
- 3.16.5.2.2. Resolution time for the faults reported within the Service Hours: If the fault is reported within the service hours defined above, the resolution time will be calculated within the same day. Time to restore given in the table is applicable from the fault reported time
- 3.16.5.2.3. Resolution time for the faults reported outside the Service Hours: If the fault is reported outside the service hours defined above, the resolution time will be calculated at the beginning of the next service hour window. Time to restore given in table is applicable from the time the service hour window begins.

## 3.16.6. Other Network performance parameters

- 3.16.6.1.RTT within core, distribution & access network: Within any LAN or within any location in CAK MAN to the Data centre < 2 ms (based on an average calculated within at least 1 Hour). For remote sites within any LAN and within the CAK MAN < 2 ms to the gateway.</p>
- 3.16.6.2.Packet error rate: Within any LAN or CAK MAN < 0.1% packet loss (based on a measurement of at least 1 Hour).

#### 3.16.7. Administration and Operations

#### 3.16.7.1. Data communications

- 3.16.7.1.1. Change requests
  - 3.16.7.1.1.1 Access side changes or additions/deletions such as switch port configurations, vlan changes. Such changes will be carried out as and when required
  - 3.16.7.1.1.2. Core/Distribution configurations Any changes to the existing config such as a routing change, new vlan additions, new subnets. These changes will only be carried out during non-peak hours decided & informed by the SLAL to the supplier as a best practice.
  - 3.16.7.1.1.3. Change requests mentioned above will be made in two service categories "Urgent" and "Normal". Service Level:

- Urgent Requests within 1 hour
- Normal Requests within 4 hours
- 3.16.7.1.1.4. SLAL will request maximum of 10 change requests per month as Urgent requests.

# 3.16.7.1.2. New service Requests

- 3.16.7.1.2.1. New office service provisioning models based on number of users (5, 15, 25, 50, 100)
- 3.16.7.1.2.2. Planning, network engineering and overall project management of a new network request including without limitation:
  - Requirement gathering
  - Creation of the overall project plan including network design and equipment configuration
  - Implementation of the overall project plan
  - · Network site installation and acceptance
- 3.16.7.1.2.3. Service level (Time to implement):
  - 5 user 10 business days
  - 15 user 10 business days
  - 25 user 100 user 8-10 weeks

## 3.16.7.1.3. Expansion & on-demand service provisioning

- 3.16.7.1.3.1. The supplier should provide new services as per SLAL request for expansion & on-demand service provisioning. Services include:-
  - New fiber cable connection (Service Level: in 4 weeks)
  - New copper cable connection (Service Level: in 1 week)
  - LAN connection (100/1000 Mbps) with existing cabling (Service Level: in 1 day)
  - LAN connection (100/1000 Mbps) with new cabling (Service Level: 8-10 weeks)
  - L2 Switch (24 port POE) for POC or migration test labs with 3rd party solution providers (Service Level: in 1 day)
  - L2 Switch (48 port POE) for POC or migration test labs with 3rd party solution providers (Service Level: in 1 day)
  - L3 switch (Latest model at the time of request of models currently in use) (Service Level: 8-10 weeks)
  - Router (Latest model at the time of request of models currently in use) (Service Level: 8-10 weeks)
  - Wireless AP (Service Level: 8-10 weeks)
  - 10Gbps/40Gbps connection within core and distribution network (Service Level: 12 weeks)
  - Wireless LAN controller (Service Level: 12 weeks)

- Video conference endpoint with screen (Service Level: 12 weeks)
- Firewall (Service Level: 12 weeks)
- 3.16.7.1.3.2. Unit cost should be included in the financial proposal.
- 3.16.7.2. Voice Services
  - 3.16.7.2.1. Change requests (Add /modify / remove of voice ports/ features)
    - 3.16.7.2.1.1. Service Level
      - Business hours: Any service requiring feature enabling/disabling
         Effective within 1 hour
      - Out of business hours: Any service requiring feature enabling/disabling
         Effective within 2 hour
    - 3.16.7.2.1.2. Shifting/Relocation of telephone/fax/hotline (up to 24 devices) within the same/different premises within the scope (cabling available) need to be supported with Service Level: 3working days
    - 3.16.7.2.1.3. Change of feature/ facility in Operator console 1 hour
    - 3.16.7.2.1.4. Change of feature/ facility in special group numbers 1 hour
  - 3.16.7.2.2. New service requests
    - 3.16.7.2.2.1. New Requests for any new telephone/fax/hotline (up to 10 devices) Service Level:

[Cabling/Port available] 1 working days [Cabling/Port not available] 3 working days

- 3.16.8. Service Level Measurement
  - 3.16.8.1. Service levels on Availability
    - 3.16.8.1.1. Availability is calculated over a calendar month period and per service type basis. Each service type has a Weight (W) based on the impact to the services at specific area. (Critical / Non-Critical)
    - 3.16.8.1.2. Availability measurements on a service will be made only when there is a service outage associated with the service type in concern.

Critical A	rea	Non-critical Area		
Service Type	Weight (W)	Service Type	Weight (W)	
Data/Wi-Fi service	0.7	Data/Wi-Fi service	0.3	
Voice service	0.5	Voice service	0.2	
Internet service	0.3	Internet service	0.1	

- 3.16.8.1.3. In case of a full port (data, voice and internet services) is down, it will be considered as a Data service outage in calculations.
- 3.16.8.1.4. Actual Service Availability =  $100 \Sigma$  [(# of affected ports x W x Downtime in Minutes)/(Total # of ports x  $60 \times 24 \times 100$  x No of days per month)] x 100
- 3.16.8.1.5. Actual Overall Service availability will be calculated considering sum of availability for critical ports and availability of sum of non-critical ports
- 3.16.8.1.6. If the actual service availability is less than the target availability, then; Hours that exceeds the service level = (Service Availability Target % Actual Service Availability %) x 24\* # of days in Calendar Month
- 3.16.8.1.7. For every 1 hour or part of it (calculated proportionately) that exceeds the service level, service provider should credit 1 SCU to the customer. The SCU's are cumulative.

## 3.16.8.2. Service levels on Resolution

- 3.16.8.2.1. Resolution service levels will be calculated per incident basis.
- 3.16.8.2.2. For every hour or part of it (calculated proportionately) that exceeds the set resolution time, service provider should credit SCU to the customer as per the below criteria. The SCU's are cumulative.

Critical Area			Non-critical Area		
Service	SCU	Resoluti	Service	SCU	Resolutio
Туре		on*	Туре		n*
Data	3 SCU/Total # of data	1 hour	Data	2 SCU/Total # of data	2 hour
service	ports in critical area		service	ports in non-critical	
				area	
Voice	2 SCU/Total # of	1 hour	Voice	1 SCU/Total # of Voice	2 hour
service	Voice ports in critical		service	ports in non-critical	
	area			area	
Internet	1 SCU/Total # of	1 hour	Internet	0.5 SCU/Total # of	2 hour
service	Internet ports in		service	Internet ports in non-	
	critical area			critical area	

Table 6

3.16.8.2.3. Fax service, operator console, special group numbers & Audio/Video conferencing are considered as "Voice service" and the resolution times for these services are detailed in Table 2.

- 3.16.8.2.4. Wi-Fi services are considered as "Data service" and the resolution time is detailed in Table 2.
- 3.16.8.3. Service levels on Performance
  - 3.16.8.3.1. Performance parameters will be measured from identified uplinks from the core, distribution and access switches to the Data Center.
  - 3.16.8.3.2. For every hour or part of it (Calculated proportionately) during which the services do not meet the set performance parameters, service provider should credit 0.05 SCU to the customer. The SCU's are cumulative.
- 3.16.8.4. Service levels on New Requests
  - 3.16.8.4.1. For every day or part of it (Calculated Proportionately) that exceeds the set service provisioning time, service provider should credit 0.01 SCU to the customer. The SCU's are cumulative.
- 3.16.8.5. Service levels on Change Requests.
  - 3.16.8.5.1. For every hour or part of it (Calculated Proportionately) that exceeds the set service levels, service provider should credit 0.01 SCU to the customer. The SCU's are cumulative.

## 3.16.9. Service Credit Unit (SCU)

- 3.16.9.1. Financial Value of 1 SCU will be calculated as follows.
  - 1 Service Credit Unit (SCU) = Total Monthly Charge for the Managed Data and Voice Solution for all locations/ N
  - N= number of days per month
- 3.16.9.2.Penalty should be credited to the SLAL within 14 days after the last date of the next calendar month.
- 3.16.9.3.Credits shall be exclusive of any applicable taxes charged from Sri Lankan Airlines or collected by the supplier.

## 3.16.10. Delay in implementation

3.16.10.1. The solution should be implemented within 5 months from the PO release date. In the event the supplier is unable to implement the Solution within 5 months, the supplier will be subjected to a penalty of 5% of the contact value for each calendar month or part of it (calculated proportionately) for the delay of services.

## 3.16.11. Backup Pool

3.16.11.1. The Supplier should provide a backup pool of devices onsite to meet the service levels as per section 3.16.

Distribution Switches	30% of deployed devices	
Access Switches	10% of deployed devices	
IP Phones	15% from each deployed category	
Routers	20% from each deployed stork category or minimum 2 units from each category	
Firewalls	20% from each deployed stork category or minimum 2 units from each category	
Access Points	10% of deployed devices	
Datacenter	10% of deployed devices	
Other		To Meet the SLA

- 3.16.11.2. The backup pool of equipment/devices are the minimum quantities and the supplier should maintain sufficient backup unit's onsite to meet the service levels as per section 3.16.
- 3.16.11.3. The proposed devices OEM should have a local spare depot and the supplier should have access to local OEM local spare depot. Please provide a letter from OEM confirming local depot availability, local depot access to the supplier and availability of spare devices.
- 3.16.11.4. More than 50% of backup pool should be available at any time and any faulty device should be replaced in maximum of 72 hrs. If backup pool is not maintained as above, for every hour or part of it (Calculated Proportionately) the supplier should credit 0.5 SCU to the customer. The SCU's are cumulative.

## 3.16.12. Support Services

- 3.16.12.1. The supplier should provide principle support to all proposed products and services for the contract period.
- 3.16.12.2. Principle support should be available 24x7x365 and support experts/engineers should be fluent in English language.
- 3.16.12.3. Onsite support services need to be provided as per section 3.18.

#### 3.17. Training

3.17.1. Supplier should include System Administration level training for three (03) number of SriLankan Airlines engineers at a Principle certified training Center at suppliers cost. All costs related to training to be factored but not limited to course fees, training materials, exam fees, air fare, food, accommodation, hotel transfers/transport etc.

- 3.17.2. For continuous improvement and knowledge acquisition the supplier should provide local annual training leading for vendor certification for minimum three (03) SLAL engineers for each below category at suppliers cost. Please include the training schedule in the proposal.
  - Wi-Fi Technologies
  - Networking Technologies
  - Security Technologies
  - Datacenter Technologies
  - PABX Technologies
  - WAN Technologies

## 3.18. Onsite services

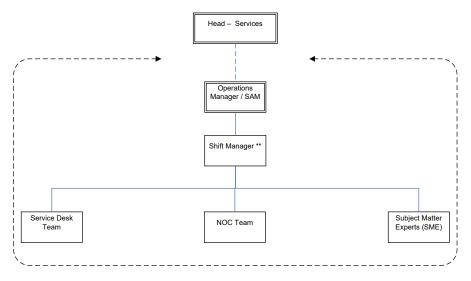
- 3.18.1. Network Operation Center (NOC)
  - 3.18.1.1. The supplier should provide onsite dedicated team, who will operate 24x7 to support the Data & Voice services covered under this RFP.
  - 3.18.1.2.NOC team should continuously monitor the Data & Voice network components via Network Management systems, and need to identify failures, exceptions in the network and need to take remedial actions in a proactive manner.
  - 3.18.1.3. NOC team should perform the functions which are listed below;
    - Monitor the SriLankan Data and Voice network & services (covered under the managed service scope) 24x7.
    - Analyze and process events raised in the NMS
      - ✓ Acknowledge events
      - ✓ Raise Trouble Tickets
      - ✓ Initial troubleshooting, isolation and resolution within defined time period
      - $\checkmark$  If not resolved within defined time period, escalate to 2nd Level and follow-up
      - ✓ Update Trouble tickets
    - Accept and process Incidents raised from Service Desk
      - ✓ Update Incidents
      - ✓ Initial troubleshooting, isolation and resolution within defined time period
      - ✓ If not resolved within defined time period, escalate to 2nd Level and followup
      - ✓ Update Trouble tickets
    - Accept and process Change requests from SLAL Service Implementation team
      - ✓ Update CRs
      - ✓ Analyze, categorize and prioritize CRs
      - ✓ Plan and Implement CRs
      - ✓ Escalate to 2nd level if required for CR implementation

- 3.18.1.4. The NOC should be operated as a distributed operation with onsite resources in all key locations of SriLankan Airlines. The manned sites include Katunayake, Colombo and Hambantota.
- 3.18.1.5.BIA Airline Center should be the Central NOC site which will host all NMS & Service Desk systems and the consolidated monitoring need to be take place. This NOC should operate 24x7 with 2 Engineer resources in every shift and a Passive network technical officer during standard business hours (8x5). In total there should be at least 8 Engineers and 1 Technical officer at a minimum supporting the onsite NOC operation in Katunayake.
- 3.18.1.6.BIA should have a 24x7 onsite NOC operation with 1 Engineer.
- 3.18.1.7.HIA need should have an 8x5 onsite NOC operation with 2 Engineer and on call support after office hours. In total there should be 2 Engineers at minimum supporting the onsite NOC operation in HIA.
- 3.18.1.8.All offices located in Colombo metro area should be supported by a 8x5 NOC operation with 1 onsite Engineer residing at SriLankan Airlines WTC office. As per resource requirements on demand, the supplier should source additional resources to support the Colombo NOC operation.
- 3.18.1.9. Kandy & Galle sites should be supported on 24x7 on remote basis.
- 3.18.1.10. In addition to above minimum staff the supplier should provide 2 Engineers to support SLAL services such as web hosting, server patch management, network management, 3rd party service management, overseas support, security vulnerability management, system/network/application troubleshooting, passive infrastructure management and report writing.
- 3.18.1.11. Network Operations team should be of subject matter experts in multiple IP technology domains including Core IP routing & switching technologies, Network Security, IP Voice technologies, Network Management Systems.

#### 3.18.2. Onsite Service Desk

- 3.18.2.1.Onsite Service Desk dedicated for end-to-end SLAL voice and data service delivery should be proposed with this solution.
- 3.18.2.2. Onsite Service Desk should perform following key functions;
  - Single Point of Contact (SPOC) for SLAL for Data and Voice services
  - Incident Management
  - Event Management
  - Customer Experience Management
  - SLA reporting
- 3.18.2.3. Service desk should follow the defined work flows in performing above tasks and should adhere to the defined SLAs to meet/exceed the customer expectations.

- 3.18.2.4. The service desk function should be located at SriLankan Airlines Headquarters in Katunayake and need to be operated 24x7. The operation should be provided with 2 dedicated service desk resources along with NOC team as a shared function as per below plan;
  - One dedicated resource should be available from 07:00 hrs to 00:00 hrs to cover busy hours.
  - NOC team should perform the Service Desk function from 00:00 hrs to 07:00 hrs.
- 3.18.3. The structure of the Core service delivery team should be structured as below.



\*\* Shift Manager will be a role played by one of Senior consultants / Engineers who are on duty.

- 3.18.4. Service Desk, NOC & SME teams need to report to the Shift Manager for the SLAL managed service function, and the shift manager need to report to the Operations Manager. The Service Level escalation path need to take same hierarchy.
- 3.18.5. Summary of the minimum resource allocation plan

Functio n	В	IA-Katunay	ake	-	HIA-Mathth	ala		Colombo	
	Servic e Hrs	Shift resourc es	Total resourc es	Servic e Hrs	Shift resourc es	Total resourc es	Servic e Hrs	Shift resourc es	Total resourc es
Manager	8x5	1 - Manager	1 - Manager						
Service Desk	24x7	1 - SDA*	2 -SDA	N/A			N/A		
NOC - Active	24x7	2 - ENG	8 - ENG	8x5	2-ENG	2-ENG	8x5	1-ENG	1-ENG

NOC - Passive	8x5	1 - TO	1 - TO	8x5	0	0	8x5	0	0
SLAL Services Support	8x5	2 - ENG	2 - ENG						

# SDA - Service Desk Analyst

- \* SDA role during non-critical hours need to be performed by the NOC team
  - 3.18.6. All Service Level Agreements will kick in from time of logging of incidents or events into the Service Desk.
  - 3.18.7. Service Credits will be applied if vendor could not maintain the required number of employees.
  - 3.18.8. The supplier should allocate experts /engineers and Technical Officers as per the Skill Matrix given in Annex F.
  - 3.18.9. At the time of implementation proper skilled project team should be deployed.
  - 3.18.10. SriLankan Airlines should have the right to interview any employee recruited and supplier is liable to inform new recruits or change of employees through proper communication channels before one week in case of planned change or within 24 hours if emergency change of employment.

## 4. Business Continuity

- 4.1. The successful supplier should be able to ensure continues system operation even at a time the agreement is breached by the supplier due to whatever reason. This can be done through a triparty agreement with the principles who will take over the support responsibilities either by appointing another capable service provider or direct support.
- 4.2. Also vendor should make arrangements for customer engineers to continue the support in above situation by providing manufactures training and relevant information documentation etc well in advanced. Please provide details how this will be done.
- 4.3. All the system access rights should be shared with SLAL administrators.
- 4.4. The proposals without addressing above business continuity requirements will be rejected.
- 4.5. Regular DR drills to be carried out to ensure the business continuity. Please indicate the plan and the mechanism and such activities to be taken place at least once a year.
- 4.6. All the internal and external audit findings to be addressed within agreed time line by the supplier without any cost to the SLAL. This is a mandatory requirement.
- 4.7. The Supplier need to maintain adequate spares required to deliver the agreed service support and levels defined for equipment covered under this agreement and further extension of the agreement.

4.8. The supplier or supplier's agent should maintain spare parts depot to meet the service levels. Any spare parts to make available within 4 hours of reporting the fault. Please provide details of available spares. Any offer without clear explanation on the mechanism of repair/replacement to meet the service levels will be rejected.

#### 5. Terms and Conditions

- 5.1. The specifications provided in this RFP are the minimum requirements of SLAL. The supplier must meet or exceed these specifications to meet the actual requirements.
- 5.2. All services covered under proposal shall include in the agreement and the supplier shall provide a draft format to SLAL for internal review and make necessary amendments. Once finalized, the agreement will be signed by authorized signatories from both parties.
- 5.3. Interested Parties shall sign an NDA with SriLankan Airlines prior to requesting any additional information. The terms and conditions in the NDA are not negotiable.
- 5.4. Interested Parties shall clearly detail the dependencies, such as any additional hardware, software, licenses and efforts for the implementation/integrations which are not covered by the scope of work.
- 5.5. Interested Parties SHALL be able to demonstrate previous experience implementing similar solutions in similar scale within last 5 years period (please indicate relevant clientele and project descriptions).
- 5.6. Solution SHALL be "Off-the-Shelf", meaning that the Solution is commercially available and requires no further research or development and is part of an existing product line with a field-proven operational history (that is, it has not simply been tested in a laboratory or experimental environment). If any part of the Solution is a fully compatible extension of a field-proven product line, it SHALL have been publicly announced on or before the date that the proposal is submitted.
- 5.7. Contract period will be five (5) years with provision to extend the services for minimum of another 2 years period.
- 5.8. Suppliers are liable to be rejected if; they are not conforming the terms, conditions and specifications stipulated in this RFP.
- 5.9. Bids are liable to be rejected if; they are not provided the terms by term compliance for conditions and specifications stipulated in this RFP.
- 5.10. The bidder should not be currently blacklisted by any Central/State Govt. dept. /Public Sector Unit.
- 5.11. The supplier should have all necessary licenses, permissions, consents, no objections, approvals as required under law for carrying out its business.
- 5.12. The supplier should provide professional, objective and impartial advice at all times and hold the SriLankan Airlines's interest and observe the highest standards of ethics, values, code of conduct, honesty and integrity while implementation of the data & voice solution and during support period.

- 5.13. The supplier must submit a list of equipment, which will be provided for the installation in the SriLankan Airlines, along with space, environment and power requirements.
- 5.14. SLAL reserves the right to accept/reject wholly or partially any proposal without assigning any reason at any stage of the procurement process.
- 5.15. Validity period of the bids shall be 120 days.
- 5.16. Supplier must have staff trained and certified in the design and delivery of managed network solution. The details should be attached to the proposal.
- 5.17. Proof-of-concept (POC) is required to make sure to confidently select the best solution for SLAL based on the requirements. SLAL IT technical staff shall be fully engaged during the POC process.
- 5.18. Supplier is responsible for solution design, configuration, licensing, tuning, acceptance test and subsequent maintenance of the proposed solution.
- 5.19. In case supplier is unable to continue the support due to whatever reason during the service period, a mechanism should be proposed to ensure business continuity either by having an agreement with another service provider with sufficient capabilities and resources or handing over support component to SLAL nominated party. In the 2nd scenario vendor should adequately compensate SLAL. Please provide the details of proposed mechanism.
- 5.20. SLAL may immediately terminate the whole or part of the agreement by giving notice in writing without incurring any liability to the vendor if vendor failed to meet the service levels in any period of three (3) consecutive months.
- 5.21. If the solution or part of the solution does not meet SLAL requirements or expectations or continues failures in systems, the supplier should provide a new solution or part of the solution from SLAL recommended product at supplier's cost. If fails SLAL will have the sole right to terminate the agreement and the ownership of all the equipment provided will be taken over by SLAL. Further supplier should pay the business loss incurred to SLAL due to the lack of services.

## 6. Financial Breakdown

- 6.1. The payments will be commencing only after supplier has received acceptance from SriLankan Airlines. However, Payments could be started for different service components when the services fulfill the SriLankan Airlines requirement and UAT for that component is carried out and accepted.
- 6.2. The supplier shall include all costs deemed necessary to cover all contingencies essential for the proposed system. (Mandatary)
- 6.3. Supplier should provide itemized pricing for each component/service. SLAL should be able to see the associated cost for each component. (Mandatary)
- 6.4. Itemized pricing of usage based services to be clearly indicated. (Mandatary)
- 6.5. Prices related to HIA need to be provided separately and separate agreement need to be singed for HIA solution. (Mandatary) SLAL will have right to implement the main solution without HIA component.
- 6.6. Each cost component for bandwidth and links should be listed separately. (Mandatary)

- 6.7. It is required that the new solution is offered as a managed service and a monthly rental/ "service charge" will be paid to the selected supplier. But supplier shall provide pricing for both "managed service" option & "outright purchase plus support" option so that final decision shall be taken by SriLankan Airlines after financial analysis. This is purely a financial decision and therefore both the options should include same level of services.
  - 6.7.1. Option 1 Managed service
  - 6.7.2. Option 2 Outright purchase plus support
- 6.8. The option 2 (Outright purchase plus support) should include capital expenditure as one time cost and all other operational expenses such as links and support including staff cost as a monthly cost.
- 6.9. If the supplier propose links from 3rd party ISPs, all the cost to be passed through directly SLAL without having any margin. ISP monthly invoices to be produced as a proof.
- 6.10. Cost related to ISP link related charges and SLAL network solution related charges need to be provided separately. SLAL has the right to decide to procure ISP links separately depending on the units rates proposed. In such situations supplier should be able to manage and integrate the links to proposed solution FOC basis.
- 6.11. Depending on the solutions provided, SLAL may purchase links and the solution from two different suppliers. Therefore the proposals submitted to be clearly demarcated with these two options including the cost.
- 6.12. Supplier shall present an attractive pricing schedule with clear break downs for additional installations, software, hardware, and for all other applicable components for each service category in the proposal separately.
- 6.13. SriLankan is entitled for BOI concessions and supplier could get the advantage of cost reductions by shipping those items to SriLankan Airlines, but any benefits should be passed to SriLankan Airlines by indicating those cost reductions in Financial Proposals So that supplier could give a competitive bid for the project.
- 6.14. The pricing schedule should include all applicable components of a product or a service as a bundled price. SLAL will not be liable to pay any additional cost out of the proposal provided. However clear cost breakdown to be provided.
- 6.15. All the optional requirements to be addressed in the main proposal as a mandatory condition to ensure the compatibility. However SLAL may decide whether to implement the options along with the main project or later. As such please provide the optional pricing separately and those prices will not be considered in the main proposal.
- 6.16. Monthly bills need to be broken down in to fixed and variable costs. Two separate monthly invoices need to be provided.
- 6.17. Any cost incurred in local currency should be invoiced in Sri Lankan Rupees (LKR) and proposals not meeting this condition will be rejected.
- 6.18. Monthly itemized bills for each division/department at SLAL should be made available with inventory details for products and services provided. Two summarized bills also to be produced

- covering fixed and variable costs separately for the total services delivered. Please submit sample invoices along with the proposals.
- 6.19. The supplier will be liable for service credits for failure to meet agreed service levels as given in section 3.16. Such payments will be deducted from the supplier's monthly invoice.
- 6.20. The supplier should provide country wise IDD call rates and local call rates should be provided for Off-Net, On-Net & to SLAL corporate mobiles. All incoming and to SLAL corporate mobile rates should be free of charge.
- 6.21. The supplier should pass the benefits of the market price reductions time to time to SLAL specially the call rates and link charges. Annual review meetings to be held to agree for the pricing. SLAL may decide to change the service provider if the proposed pricing is higher than the market rates at the review meetings.
- 6.22. Site wise total cost breakdown need to be provided for each branch office (WTC, Reginal, City Cargo, Regional NCC, Iceland, Kandy, Galle, Bulk Stores, HIA, etc). SLAL has the right to remove any site at any time within the contract period. Relevant site cost need to be adjusted from monthly invoice after the site removal.
- 6.23. The supplier should provide pricing for new office service provisioning to cater below requirements. Total infrastructure need to be maintained by the supplier and should be part of the maintenance agreement.

No	New Office Model	Outright purchase plus support	Managed service
1	5 user Office		
2	15 user Office		
3	25 user Office		
4	50 user Office		
5	100 user Office		

6.24. Cost of the additional services need to be provided separately in following format.

No	Item	Description	Outright purchase plus support	Managed service (monthly rental basis)
1	IP Phone	Basic IP Phone		
		Executive Phone		
		Executive Colour		
		Phone		
		Video Phone		
		IP Phones with		
		operator console		

	T		T	
		Wireless Phone		
		VPN Phones to		
		Overseas Office		
		Analog Phone		
		Analog line		
		Operator Console		
		Soft Client		
2	POE switch	10/100Mbps		
	port			
3	Voice mail			
4	Call Recording			
5	Call			
	Accounting			
6	Contact			
	Center/IVR			
7	Multi party SD	Conferencing per		
	conferencing	participant or per		
		location		
8	Call Center			
	Agent			
9	Distribution			
	switch			
10	Data Center			
	Switch			
11	POE Access			
	switch			
12	Non-POE			
	Access switch			
13	Router			
14	Wireless			
	Access Point			
15	Wireless LAN			
	controller			
16	Firewall			
17	Internet Link	1M Leased line		
18	Voice Link	256kbps		
19	WAN Link	Per 1M		

# 7. Insurance

- 7.1. Supplier shall, at its own cost and expense, obtain and maintain the following insurance policies commencing from the date of this Agreement for the duration of this Agreement and shall provide evidence of same to SriLankan Airlines upon request
- 7.2. The Supplier shall also arrange and keep in place an insurance policy on an all risk basis covering any equipment or items or stock or personal effects of its employees for the replacement value of such equipment or items or stock or personal effects. Notwithstanding this clause Customer shall not be responsible for any loss or damage to such equipment or items or stock or personal effects of the service provider or its employees or representatives.
- 7.3. A property all risk insurance coverage covering all property and equipment of supplier of its replacement costs whilst on the premises of the customer. The insurance policy so arranged shall

- include cover for but not be limited to fire, lightning, riot, malicious damage, explosion, accidental damage, cyclone, storm, tempest, flood, natural perils, terrorism, burglary and theft, aircraft damage, impact damage, sprinkler leakage, bursting and overflowing of water tanks and apparatus, electrical and electronic damage from external and internal causes.
- 7.4. A workmen's compensation insurance policy covering all employees and representatives of supplier involved in the performance of this agreement. The insurance policy so arranged shall be extended to cover riot and terrorism.
- 7.5. A public liability insurance policy with a limit of indemnity of not less than LKR 20M per event. The insurance policy shall be extended to cover liability arising out of fire and explosion.
- 7.6. If there are external transmission towers etc. installed on SLAL premises then the limit of indemnity under 7.4. above should be in keeping with possibility of damage to property of SLAL. This cannot be less than LKR 10 M.
- 7.7. A professional indemnity insurance policy with a limit of indemnity of not less than LKR 10 million per event.
- 7.8. The supplier should obtain necessary insurance cover for the equipment which are owned by the supplier (Fire, lightning, explosion, smoke, soot, corrosive gases, water, humidity, shot-circuit, other electrical causes, malicious acts of workmen, employees, third parties, burglary, loss or damage directly or indirectly caused by or arising out of earthquake, volcanic eruption, tsunami, hurricane, cyclone or typhoon, loss of damage directly or indirectly caused by theft.)

#### 8. Mandatory Documentation

8.1. Point-by-Point compliance statement with reference to detail elaborations in the proposal. (Annex D) - Including Digital Copy-Excel

A point by point compliance to the requirements laid-down in sections of this RFP including annexes is essential for the proposal to be taken into evaluation process. The bidder should complete Annex D, including the remarks column, stating in relation to each statement point of the given requirements & specifications, whether the proposed solution is fully complied, partially complied or non-complied. In case of partial-compliance any alternate method of realization should be clearly stated with illustrations and explanations justifying the deviation from the technical specifications. Also any limitations should be clearly mentioned in the compliance statement. The remarks column should not be kept blank even if the term is "Complied"; use the column to detail out how the requirement is achieved. Completing the compliance statement, which constitute the primary point of information for proposal evaluation, is a prerequisite for the evaluation. All responses which do not satisfy this requirement will not be considered for evaluation. Supplier may attach required amendments as annexures if required.

- 8.2. Non-disclosure Agreement- Signed by Respective Authority (Annex E)
- 8.3. Comprehensive report on independent sizing exercise, methodology and results
- 8.4. Bill of Material (BoM)
  - i. Comprehensive Bill of Material

- ii. Support Infrastructure & Other Requirements (Power, cooling, data network, space, storage, processing power, memory, backup media, etc.)
- iii. Spare and backup stock list
- 8.5. Financial Proposal
  - i. Cost components separately for BOM attached above
  - ii. Must reflect "managed service" option & "outright purchase plus support" deployment scopes separately
- 8.6. Detailed project plan indicating all milestones with aggressive time lines. Must reflect logical deployment phases.
- 8.7. Draft Contract with implementation, maintenance & support for a period of five (05) years.
- 8.8. Schedule for extension of Support & Maintenance Contract for next three (03) years in yearly steps.
- 8.9. POC Proposal
- 8.10. Comprehensive commissioning and User Acceptance Test procedure for all services, solutions, hardware and other equipment to be installed under this RFP. Provide a list of items to be covered (check list) during the acceptance procedure in full detail. This shall be modified at the request of SLAL.
- 8.11. References for similar scale and related deployment completed within last 5 years in Sri Lanka.
  - Job Location
  - Contact name and telephone number
  - Date of contract
  - Description
  - Services Provided
- 8.12. In case of authorized partner of OEM the vendor should submit Manufacturer Authorization Letter conforming the authorize partnership.
- 8.13. Drawings shall be supplied by the supplier showing topology of the
  - Proposed solution
  - Network connectivity
- 8.14. A list of all resources which will be used for the proposed solution including details of technical specifications of equipment product catalogs and any software versions & releases to be provided.
- 8.15. Supplier should provide last three years audited financial reports.
- 8.16. Proposed schedule of preventive maintenance carried out by provider as part of the agreement.
- 8.17. Skilled Human Resource Allocation for deployment of proposed solution which include following details at minimum.
  - Skilled technical resources allocation
  - Project management resources allocation
  - Experience of similar projects

- Deployment certifications from the principle for the proposed solution
- Related Technical skills
- Detail curriculum-vitae of all proposed resources

Index	Description	YES/ No ( Request not to leave any	Remarks
		cell Blank)	
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## 10. Annex E: Non-Disclosure Agreement

It is understood and agreed to that the below identified discloser of confidential information may provide certain information that is and must be kept confidential. To ensure the protection of such information, and to preserve any confidentiality necessary under patent and/or trade secret laws, it is agreed that

- 1. The Confidential Information to be disclosed can be described as and includes:
  - Technical and business information relating to airline business information systems, existing and/or contemplated products and services, proprietary ideas and inventions, trade secrets, drawings and/or illustrations, research and development, financial information and financial projections, customers, clients, marketing, and current or future business plans and models, specifications, records, data, computer programs, drawings, schematics, know-how, notes, models, reports, samples or other forms of copies, derivations, analyses, compilations, studies, memoranda, notices and other materials regardless of whether such information is designated as "Confidential Information" at the time of its disclosure.
- 2. All Confidential Information received by Receiving Party from the SriLankan Airlines Limited (hereinafter referred as 'Disclosing Party') shall remain the exclusive property of the Disclosing Party and no title to or other interest in the Confidential Information is granted or transferred to the Receiving Party by this Agreement
- 3. To return promptly to the Disclosing Party, or to destroy any copies of such Confidential Information in written, graphic or other tangible form at the Disclosing Party's request including all copies and notes thereof and including Confidential Information incorporated into analyses, compilations, studies or other documents prepared by the Receiving Party with destruction being certified in writing by an officer of the Receiving Party.
- 4. The Recipient agrees not to disclose the confidential information obtained from the Disclosing Party to anyone unless required to do so by law.
- 5. This Agreement states the entire agreement between the parties concerning the disclosure of Confidential Information. Any addition or modification to this Agreement must be made in writing and signed by the parties.

- 6. This Agreement shall commence on the date first written and signed below and shall continue thereafter for a period of ... years, unless and until terminated by providing 30 days' notice in writing to the Disclosing Party. Notwithstanding the termination, the obligations and limitations with respect to protection, use, disclosure and return or destruction of Proprietary Information shall survive such termination and shall continue until such time the Parties hereto mutually agree in writing that such treatment is no longer warranted.
- 7. This Agreement shall be construed in accordance with the laws of Sri Lanka and shall be subject to the exclusive jurisdiction of the Courts in Sri Lanka.

WHEREFORE, the parties acknowledge that they have read and understood this Agreement and voluntarily accept the duties and obligations set forth herein.

# Recipient of Confidential Information

Organization Na	me :	
Business Registr	ation	:
Organization Ad	dress	:
Authorized Signa	atory	:
Designation	:	
Signature	:	
Date	:	

#### 11. Annex F: Skilled Employees and Skills Matrix for Support Personals

## Experts/Specialists

- 1. Degree from Recognized University or Degree Equivalent Qualification from recognized institute in relevant Discipline
- 2. Minimum of 5 Years Working Experience in relevant Discipline
- 3. Expertise in Respective Domains (Certifications should be available for highest expert levels by principles)

# **Engineers**

- 1. Degree from Recognized University or Degree Level Qualification from recognized institute in relevant Discipline
- 2. Minimum of 3 Years Working Experience at Engineer/Executive Level
- 3. Medium to High Level Professional Qualifications

#### Lead Engineer/Manager

- 1. Bachelor's Degree in Engineering, Computer Science, General Science with Mathematics, Management Information Systems or Applied Statistics from a recognized University or Full professional qualification equivalent to NVQ Level 7 in a mentioned field of education.
- 2. High level Professional Qualifications in two or more relevant technical disciplines including ITIL/ISO /PMP
- 3. Expertise in Communication (English/Sinhalese) and Managerial Skills
- 4. Minimum of 5 Years of Experience in technical and Service Management

#### Service Desk Analyst

- 1. Degree from Recognized University or Degree Equivalent Qualification from recognized institute in relevant Discipline
- 2. Medium to Entry Level Professional Qualifications
- 3. Minimum of 1 Year Working Experience at Engineer Level in relevant Disciplines
- 4. Fluency in English

#### **Technical Officers/Technicians**

- 1. Minimum of Diploma Level (NVQ 5-6 verified) Qualifications
- 2. Minimum of 1 Year Working Experience in Technical Backgrounds
- 3. Fluency in English

# Section VI - General Specifications

- I. Supplier" means the proprietor of the brand or an authorized distributor for the proprietor. In the event where the supplier is an authorized distributor, it is mandatory an Authorized Distributor Status letter from the Proprietor is submitted to SriLankan Airlines along with the proposal to avoid rejection of the proposal.
- II. The supplier should arrange product demonstration at SriLankan Airlines premises at the evaluation stage. All applicable expenses including airfare should be borne by the bidder.
- III. The supplier needs to perform a Proof of concept (POC) of the proposed system/solution. All applicable expenses including airfare should be borne by the bidder.
- IV. If required, SriLankan Airlines requires to inspect the product at the evaluation stage by SriLankan Airlines' personnel (minimum 2 pax), same has to be arranged by the bidder at a client site to inspect the proposed product. All applicable expenses shall be borne by the bidder.
- V. All other on-site & off-site expenses & all incidental expenses related to the project implementation, maintenance & support etc. within the 5-year contract period should be borne by the bidder.
- VI. If the Bid is accepted, it is mandatory that the supplier signs the Contract Agreement Draft contract at Section VII for reference.
- VII. In order to ensure continuity of supply of Goods & Services to SriLankan Airlines in the event of a disruption to bidder's operations, please provide details of alternative arrangements available within the agreed cost and specifications of product.
- VIII. Upon delivery and/ or completion of installation of the system/solution, SriLankan Airlines shall perform User Acceptance Tests (UAT) to determine that the goods/service is operating in conformance with SriLankan Airlines 's published performance specifications for the goods/service and any other requirements agreed to by the parties (hereinafter "Specification) as indicated in the Specification Sheet.
- IX. If SriLankan Airlines find that the delivered goods/service does not comply with the Specifications stated in this Agreement, SriLankan Airlines in its discretion has the right to either reject or request modification to the goods/service to compliance with the Specifications. Modification will not affect the Warranty/ Service Levels provided hereunder. If the goods/service is rejected SriLankan Airlines shall recover any and all money paid, and any service penalties incurred due to rejection of the system/solution.
- X. Please state whether your company has appointed a local agent for SriLankan Airlines supply & delivery of Goods and services to be procured under this bid exercise. If so, please submit a separate bidder information form including the information of local agent.
- XI. Advance payment is not acceptable. 45 days credit from the date of commissioning and acceptance by UL is required.
- XII. Liquidated Damages

The Contractor shall pay liquidated damages as follows:

Incident	Liquidated Damages
Delayed delivery	Liquidated damages shall be determined by the SriLankan Airlines
Non-compliance or Breach of Agreement	and shall in any event be not less than the higher of (a) rate of one percent (01%) of the amount due for delivery per day (b) LKR 10,000 per day.

# Section VI - Annex G: Clientele Information Form

Company Name	Company Representative's Contact Details (Please state name, official email address and telephone number)	System / solution implemented	Implementation date	Present status

Note: Please mention the users of the same service/solution proposed to SriLankan Airlines.

In addition to above information please provide your clientele of other systems/solutions implemented.

# Section VII - Draft Contract

# AGREEMENT FOR PROVISION OF SERVICE/SOLUTION

_		r Provision of service/solution (hereinafter referred to as "Agreement") is made and entered ay of
Between	;	
having it (hereina so requir	ts registe fter called res or adr	<b>RLINES LIMITED</b> a company incorporated in Sri Lanka (Company Registration PB 67) and red office at "Airline Centre", Bandaranaike International Airport, Katunayake, Sri Lanka, and referred to as <b>"SriLankan Airlines"</b> which term or expression shall where the context nits mean and include the said <b>SriLankan Airlines Limited</b> , its successors, assignees and f the <b>One Part</b> ;
And		
registere "Contra	d office octor" wh	npany incorporated in (Company Registration No) and having its at (hereinafter called and referred to as the ich term or expression shall where the context so requires or admits mean and include the its successors, assignees and representatives) of the <b>Other Part.</b>
		akan Airlines is desirous of procuring (hereinafter referred to as "service/ solution") ations and estimated quantities provided in Schedules attached herewith to the Agreement.
Service/s	solution to	Contractor is engaged in supply of and desirous of supplying the o SriLankan Airlines on a non-exclusive basis according to the specifications and estimated ned herein and communicated by SriLankan Airlines from time to time in the future;
		Contractor has expressed its offer to provide SriLankan Airlines with the service/solution erms and conditions provided herein and which offer has been accepted by SriLankan Airlines;
the requiand to a supply a specifica <b>WHERE</b>	irements all other rand delivitions set	to the said offer and the execution of the Agreement, the Contractor has been apprised of and specification required by SriLankan Airlines for the supply and delivery of service/solution natters which might have influenced the Contractor in making its bids and has agreed to er the Service/solution to SriLankan Airlines pursuant to the said requirements and forth in the Invitation for Bids document; Contractor has expressed its desire to provide SriLankan Airlines with Service/solution erms and conditions provided herein.
IT IS H	EREBY A	GREED BY AND BETWEEN THE PARTIES AS FOLLOWS:
1.	OBLIGA <sup>.</sup>	TIONS OF THE CONTRACTOR:
1.1	The Cont	ractor shall:
	1.1.1	Deliver Service/solution as more fully described in the Schedule in quantities ordered by SriLankan Airlines within the time frame as more fully described in Schedule, to the locations more fully described in Schedule hereto according to the specifications

provided in Annex ... (such schedules and annexes to be part and parcel of this Agreement) on non-exclusive basis on the terms and conditions set out herein.

- 1.1.2 Be deemed to have appraised itself fully of the provisions of this Agreement.
- 1.1.3 Ensure that Service/solution provided under this Agreement shall:
  - a) be in accordance with the specifications set out in Annex ....;
  - b) conform with any sample provided by the Contractor during the selection process or thereafter and approved by SriLankan Airlines;
  - c) be fit for the purposes envisaged under this Agreement and suitable for Airport Ground Operations;
- 1.1.4 Ensure that it has the necessary/required licenses, approvals and authorizations to provide Service/solution to SriLankan Airlines envisaged under this Agreement.
- 1.1.5 Deliver the Service/solution on CFR-CMB basis (defined as per INCOTERMS latest version) to the locations set out in Schedule .... in quantities mentioned in Annex .... The Contractor shall be responsible for providing all transportation necessary for the safe movement of Service/solution to the locations as specified in Schedule ... of the Agreement.
- 1.1.6 At its own cost comply with all requirements of any Governmental or local Governmental regulations (particularly with those pertaining to Board of Investment of Sri Lanka, Customs in Sri Lanka or any other country, safety, health, labour, clearing and security) and shall indemnify and hold harmless SriLankan Airlines against any loss, damage or claim that may arise due to the non-compliance with any such regulations.
- 1.1.7 Invoice SriLankan Airlines for the Service/solution at the rates and in the manner specified and described herein (particularly as set out in Clause .... and Schedule .....).
- 1.1.8 Not assign, transfer or sublet its rights or obligations under this Agreement without the prior written approval of SriLankan Airlines. Provided that the Contractor shall not be relieved of responsibility under this Agreement for such portion of its obligations as are assigned, transferred or sublet.
- 1.1.9 Not at any time, during or after the term of this Agreement, divulge or allow to be divulged to any person any confidential information relating to the business and operations of SriLankan Airlines unless duly authorized in writing by SriLankan Airlines or required under any law.
- 1.1.10 Pay liquidated damages as stipulated in Schedule .... if the Contractor fails to deliver the Service/solution on time or SriLankan Airlines rejects the Service/solution pursuant to Clause 2.6 hereof.
- 1.1.11 Subject to the terms and conditions of this Agreement, the Service/solution shall be delivered on CFR-CMB (INCOTERMS latest version) and the rights and obligations of the Parties and the transfer of risk and title shall be governed in terms of CFR-CMB (INCOTERMS latest version).
- 1.1.12 Arrange pre delivery inspection at manufacturing plant once the Service/solution are completely manufactured for minimum 2 personnel of SriLankan Airlines at contractors' cost (expect air fare of SriLankan Airlines destinations) at the manufacturing location.
- 1.1.13 Provide all required and relevant testing facilities for pre delivery inspection for SriLankan

Airlines personnel.

- 1.1.14 Make available all the required manuals specified under technical/general specifications should be available in English Language at pre delivery inspection.
- 1.2 In the event any of the Service/solution supplied or delivered pursuant to this Agreement are rejected by SriLankan Airlines, the Contractor shall take immediate steps, and not later than 15 working days from the rejected date to either replace the rejected Service/solution or make alternations necessary to meet the specifications, free of any costs to SriLankan Airlines.
- In the event of any item of the Service/solution being damaged at any stage prior to the handing over of the Service/solution to nominated freight forwarder at the port of dispatch or if any item of the Service/solution are lost during transit from the Contractor's warehouse to the locations as set forth under Schedule ..... or if any item of the Service/solution are wrongly supplied, the Contractor shall replace the said damaged, lost or wrongfully supplied item of Service/solution with new ones and shall ensure that supply and delivery of same is affected speedily and no later than Four (04) weeks from the date of notification by SriLankan Airlines ("Replacement") at its own cost. SriLankan Airlines shall not be liable for any damage or deterioration caused or occurring to the wrongly supplied items under Clause 1.3 while in the custody of SriLankan Airlines. In the event the Contractor fails to provide any of the item of Service/solution within a reasonable period of time, SriLankan Airlines shall be at liberty to purchase such items of Service/solution from another source and the Contractor shall reimburse SriLankan Airlines' for any cost incurred in respect of same.
- 1.4 The contractor shall arrange commissioning of the Service/solution and training for relevant SriLankan Airlines staff once the Service/solution are received to SriLankan Airlines stores through a qualified representative engineer of the manufacturing company. All applicable expenses of commissioning and training must be borne by the contractor.
- 1.5 The contractor shall provide a comprehensive unconditional warranty of ..... years from the date mentioned in the Commissioning and Acceptance Form in Annex .... for manufacturing defects of the Service/solution except ware and tare.
- 1.6 The contractor shall guarantee the spare parts availability of the purchased Service/solution for minimum 10 years irrespective of the validity period of this agreement.
- 1.7 The contractor shall handover all items/Service/solution specified in Schedule ....without any cost to SriLankan Airlines.

# 2. RIGHTS AND OBLIGATIONS OF SRILANKAN AIRLINES:

- 2.1 SriLankan Airlines shall pay the Contractor for Service/solution provided at the rates and in the manner specified and described herein (particularly in Clause .... and Schedule ...... hereto). For the avoidance of doubt, the adjustment/variation of the quantity of Service/solution provided under this Agreement shall still be provided by the Contractor in accordance to the same rates as specified under Schedule ......
- 2.2 SriLankan Airlines shall have the right to charge liquidated damages against the Contractor as provided in Schedule ..... where the Contractor fails to deliver the Service/solution as required under this Agreement or any non-compliance or breach by the Contractor of any of its obligations under this Agreement.
- 2.3 Notwithstanding anything contained in this Agreement, SriLankan Airlines may at any time hire, purchase and/ or engage any other person(s)/contractor(s) to purchase Service/solution which are similar to the Service/solution contemplated in this Agreement and/or which SriLankan Airlines may deem in its opinion as specialized in nature.
- 2.4 Have the right to inspect and reject the Service/solution (or any part thereof) provided under this Agreement if in its opinion it decides that such Service/solution (or any part thereof) fail to meet the specifications required by SriLankan Airlines under this Agreement or is not of merchantable quality

and unfit for the purposes intended. SriLankan Airlines right to inspect and where necessary, reject the Service/solution (or part thereof) after the Service/solution' arrival or issuance of the Delivery Note shall in no way be limited or waived by reason of the Service/solution having previously been inspected and passed by SriLankan Airlines or its representative prior to the Service/solution delivery.

- 2.5 When the Service/solution are received to SriLankan Airlines stores, SriLankan Airlines shall conduct a quality and quantity inspection of the same and shall accept the Service/solution at the locations once commissioning and training is completed, and other required items/Service/solution specified in Schedule ...... are handed over by the contractor. If there is a discrepancy in quantity received and quantity indicated in invoice, UL will inform same to Bidder within 5 working days of receipt of shipment to stores.
- 2.6 Upon the acceptance of the Service/solution by SriLankan Airlines, the Service/solution shall become and remain the property of SriLankan Airlines. Notwithstanding that title in whole or in part of the Service/solution may have passed to SriLankan Airlines pursuant to Clause 2.7, the Contractor shall remain and be responsible to SriLankan Airlines to make good any loss or damage to such Service/solution due to any act or negligence on the part of the Contractor or Contractor's Representatives; or arising from any incident whatsoever from the commencement of this Agreement until the Service/solution are handed over to SriLankan Airlines at the port of destination, Colombo and accepted by SriLankan Airlines.
- 2.7 Nothing in this Agreement shall prevent SriLankan Airlines from sourcing similar Service/solution or any other Service/solution or services from any third party on whatsoever basis during the period of the Agreement.
- 2.8 In the event SriLankan Airlines in its opinion decide that the Service/solution are not in accordance to the requirements and specifications set forth under this Agreement, SriLankan Airlines shall have the right to reject the Service/solution and:
  - (i) refrain from making any payments pursuant to such Order made in respect of such Service/solution; and
  - (ii) either replace the rejected Service/solution with Service/solution meeting the specifications required under this Agreement free of any costs to SriLankan Airlines; or
  - (iii) obtain substitute Service/solution for the rejected Service/solution and the Contractor shall reimburse to SriLankan Airlines all costs incurred by SriLankan Airlines in respect of same.

# 3. **INVOICING & PAYMENT**:

- 3.1 The Contractor shall provide the Service/solution at the rates assigned to each category as described in Schedule ... hereto.
- 3.2 The Contractor shall not increase the rates, charges or any other prices set out in this Agreement during the period of this Agreement.
- 3.3 Subject to Clause 3.5, SriLankan Airlines will settle the invoices submitted by the Contractor for Service/solution under this Agreement within ............. days from the date of Commissioning and Acceptance in Annex ... . The invoice will be raised at the time of departure of the Service/solution from the warehouse of the Contractor. A copy of invoice will be emailed to SriLankan Airlines at the time, the invoice is raised.
- 3.4 SriLankan Airlines shall inform any dispute on any invoice within 5 working days of receipt of the invoice from the Contractor and proceed to settle the undisputed amount within the payment period referred to in Clause 3.3 hereof. The Parties shall endeavor to resolve the dispute on the invoice

amicably within 30 days of notification or any other period mutually agreed and where the Parties fail to resolve the dispute amicably, Parties shall resort to the dispute resolution mechanism provided in this Agreement as a mean to resolve the dispute. If the dispute is resolved in the Contractor's favor, the amount payable to the Contractor shall be payable within fourteen (14) days of the resolution of the dispute.

- 3.5 SriLankan Airlines shall be entitled to withhold any payments due to the Contractor under this Agreement and any sums of money required to be withheld by SriLankan Airlines under any law or regulation for the time being in force and/or pursuant to this Agreement.
- 3.6 Payment shall be made in according to the payment details provided in Schedule .....
- 3.7 Invoices to be addressed to: Manager Financial Services, SriLankan Airlines Ltd, Airlines Centre, BIA, Katunayake, Sri Lanka and/or email to: zaroosha.farook@srilankan.com

# 4. **LIABILITY & INDEMNITY:**

- 4.1 The Contractor shall indemnify and hold harmless SriLankan Airlines free and clear from and against any and all losses, costs, expenses, claims, damages and liabilities, to SriLankan Airlines, its officers, agents, employees, representatives or any third parties and/or any property, that may arise pursuant to this Agreement, in particular pursuant to (but not limited to) any:
  - a) claim in respect of any workers of the Contractor under the Workman's Compensation laws or any other law;
  - b) accident, injury or death caused to any person by negligence or willful misconduct of the Contractor, its servants, agents, employees or representatives;
  - c) acts of theft, pilferage, damage of property caused by the Contractor or its servants, agents, employees or representatives;
  - d) any losses, damages, injuries, illness or death incurred due to manufacturing defects, nonperformance and or malfunction of the Service/solution procured under this agreement by SriLankan Airlines;
  - d) if the Service/solution provided to SriLankan Airlines are not suitable for the use intended and/or does not meet the specifications set out in this Agreement including alleged illness, injury, death or damage as a result of the use of any the Service/solution produced, packaged, stored or shipped by Contractor;
  - d) violation of any laws, regulations or intellectual property rights of any party;
  - e) breach of any obligations, representations, warranties or covenants in the Agreement by the Contractor;
- 4.2 SriLankan Airlines shall indemnify and hold harmless the Contractor free and clear from and against any and all losses, costs, expenses, claims, damages and liabilities that may arise pursuant to the death or injury of a worker of the Contractor or damage to the Contractor's (or its workers) property caused by SriLankan Airlines' negligence or willful misconduct.

## 5. INSURANCE:

5.1 The Contractor shall, without prejudice to its obligations under Clause 5.1 and as a condition precedent to this Agreement, at its own cost secure policies of insurance as described below, acceptable to

SriLankan Airlines which shall be kept current throughout the term of this Agreement. These insurances will include but not limited to;

- a) Workmen's Compensation Insurance or employer's liability insurance for all employees of the contractor or their representatives involved with performance of this contract. The policy shall include extensions for riot and terrorism.
- 5.2 Such insurances as aforementioned incorporate the following provisions in respect of liability assumed by the Contractor under this Agreement (unless otherwise specified by SriLankan Airlines):
  - a) Name SriLankan Airlines, its successors and assigns, directors, officers, servants, employees, agents and contractors as additional assureds.
  - b) A severability of interest clause, where the insurances (except with regard to the limits of liability) will operate in all respects as if there were a separate policy covering each assured.
  - c) Confirm that such insurances shall be primary without right of contribution from any other insurance carried by SriLankan Airlines.
  - d) Provide that the cover afforded to SriLankan Airlines shall not be invalidated by act or omission by the Contractor or by any other person and shall remain valid regardless of any breach or violation by the Contractor or any other person of any warranty, declaration or condition contained in such insurances.
  - e) The Insurer (of the insurances) will provide 15 days prior written notice to SriLankan Airlines of any material change of the insurances affected pursuant to this Clause.
- 5.3 The Contractor shall also within 15 days of the execution of this Agreement and at each consequent renewal (or renewal of insurances whichever shall occur first) produce an Insurance Policy/Certificate/Endorsement evidencing coverage as per the requirements of Clause 5.1.
- In the event the Contractor defaults and/or fails to comply with any of its obligations under this Clause, SriLankan Airlines may (without prejudice to any other remedy available under this Agreement) pay any premiums that may remain due and unpaid provided that SriLankan Airlines shall be entitled to deduct or charge the Contractor any such amounts expended by it to pay such aforementioned unpaid premiums.
- 5.5 The insurance coverage required by Clause 5.1 and 5.2 shall at all times be valid and adequate to meet all the obligations set out above and any other obligations required by law. Failure to maintain insurance coverage to the required level will be considered by SriLankan Airlines as a fundamental breach of this Agreement.

# 6. **NON-COMPLIANCE**:

- 6.1 In the event of the non-compliance or breach by the Contractor of any of its obligations contained in this Agreement, SriLankan Airlines may at its discretion, without prejudice to any of its rights under this Agreement:
  - a) Terminate this Agreement as per Clause 7 below:

- b) Charge the Contractor liquidated damages at the rate specified in Schedule .... of the estimated amount of the monies payable for the relevant Service/solution for the relevant period of non-compliance or breach; and/or
- c) Obtain the Service/solution from another contractor provided however, that in the event any money is expended by SriLankan Airlines on account of the Contractor's non-compliance or breach of its duties, such said expenditure shall be re-charged to the Contractor.

The Contractor shall in the aforementioned instances make good the irregularity, breach and/or lapse as soon as possible to the satisfaction of SriLankan Airlines and shall reimburse SriLankan Airlines any expenses incurred by it in such said instances.

# 7. TERM & TERMINATION:

- 7.1 This Agreement shall be valid for a period of \_\_\_ years commencing from \_\_\_\_ until\_\_\_\_ unless terminated earlier and shall automatically stand terminated upon the expiry of the Agreement. Notwithstanding the above, the Parties may extend the Term of this Agreement upon the expiry of the Term for a further period of 1 year by written mutual agreement on the same terms and conditions of this Agreement; provided however that such extension shall be subject to the Contractor's satisfactory performance of the Agreement decided at the sole discretion of SriLankan Airlines.
- 7.2 Notwithstanding Clause 7.1, SriLankan Airlines may terminate this Agreement at any time, without assigning any reasons whatsoever, by giving the Contractor 90 days' written notice of termination without any liability to pay compensation and such termination shall take effect on the expiry of the said 90 days' notice period.
- 7.3 SriLankan Airlines may terminate this Agreement forthwith in writing in the event the Contractor does not:
  - a) provide the Service/solution at the time, manner and/or to the specifications/ quality required by SriLankan Airlines pursuant to this Agreement;
  - b) comply with the requirements and/or notices of SriLankan Airlines; and/or
  - c) perform, fails or is failing in the performance of any of its obligations under this Agreement.
- 7.4 Subject to Clause 7.3 hereof, either party shall have the right to terminate this Agreement forthwith at any time by giving written notice to the other upon the happening of any of the following events:
  - a) if the other party is in breach of any of the terms or conditions of this Agreement and fails to rectify same within 30 days of the written notice of the breach to the defaulting party or immediately if the breach is incapable of remedy;
  - b) if the other party enters into liquidation whether compulsory or voluntary (otherwise than for the purpose of amalgamation or reconstruction) or compounds with or enters into a scheme of arrangement for the benefit of its creditors or has a receiver appointed of all or any part of its assets or takes or suffers any similar action in consequence of debt; and/or
  - d) if the other party shall cease substantially to carry on trade or shall threaten to cease substantially to carry on trade.

- e) disruption to the performance of the Agreement for a period of more than 60 days due to force majeure event.
- 7.5 Expiration or termination of this Agreement pursuant to the provisions of this Clause shall be without prejudice to the accrued rights and liabilities of either party.
- 7.6 On termination of this Agreement the Contractor shall only be entitled to receive the payment of monies (less any monies as SriLankan Airlines is entitled to deduct/set-off under this Agreement) for Service/solution duly provided in accordance with the terms of this Agreement. The Contractor shall not be entitled to any further costs, remuneration consequential or special damages, loss of profits or revenue claimed to have been suffered by the Contractor (including its agents, employees and representatives) as a result of this Agreement.
- 7.7 In the event SriLankan Airlines terminates this Agreement in whole or in part, pursuant to 7.3 a), b) or c) of the Agreement, SriLankan Airlines may procure upon such terms and in such manner as it deems appropriate, Service/solution, as the case may be, similar to those undelivered under the Agreement, and the Contractor shall be liable to SriLankan Airlines for any excess costs for such similar Service/solution procured by SriLankan Airlines. However, the Contractor shall continue performance of the Agreement to the extent not terminated herein.

#### 8. BANK GUARANTEE:

- 8.1 Upon the execution of this Agreement, the Contractor shall furnish SriLankan Airlines a bank guarantee for the sum as set forth under Clause ..... of Schedule .... as an irrevocable and unconditional bank guarantee drawable on demand in Sri Lanka from a bank acceptable to SriLankan Airlines, in a form and substance satisfactory to SriLankan Airlines as security for the due and proper performance by the Contractor of its obligations under this Agreement. All applicable bank charges (including any charges at the time of encashment) on such bank guarantee shall be borne by the Contractor). The said bank guarantee shall remain in force for the duration of this Agreement and 90 days thereafter.
- 8.2 The proceeds of the Bank Guarantee shall be payable to SriLankan Airlines as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Agreement.
- 8.3 The Bank Guarantee will be discharged by SriLankan Airlines and returned to the Contractor within 90 days of the expiry of this Agreement or within 90 days following the date of completion of Contractor's obligations under the Agreement, whichever is later, less monies due to SriLankan Airlines and/or as SriLankan Airlines is entitled to deduct/set-off under this Agreement.
- 8.4 In the event, that the Contractor fails to pay any monies due to SriLankan Airlines (or any part thereof) as and when the same become payable under this Agreement, SriLankan Airlines shall be entitled to adjust or deduct any monies due to SriLankan Airlines from the Bank Guarantee accordingly. In the event of an adjustment or deduction of the Bank Guarantee by SriLankan Airlines against any sums due from the Contractor, the Contractor shall immediately submit to SriLankan Airlines the amount adjusted or deducted by SriLankan Airlines and restore the Bank Guarantee to its original amount.
- 8.5 SriLankan Airlines shall not make any payments under this Agreement to the Contractor until SriLankan Airlines has received the Bank Guarantee as stipulated under Clause 8 hereof.
- 8.6 SriLankan Airlines' rights with respect to the Bank Guarantee shall be in addition to any other rights or remedies available to SriLankan Airlines.

# 9. GOVERNING LAW:

9.1 This Agreement shall be governed by the laws of Sri Lanka and subject to the jurisdiction of the courts in Sri Lanka.

## **10. FORCE MAJEURE:**

- 10.1 In the event that either party shall be wholly or partly unable to carry out its obligations under this Agreement by reasons or causes beyond its control, including by way of illustration Acts of God or the public enemy, fire, floods, explosions, epidemics, insurrection, riots or other civil commotion, war, Government order or by any other cause (excluding, however, strikes, lockouts or other labour troubles), which it could not be reasonably be expected to foresee or avoid, then the performance of its obligations in so far as they are affected by such cause shall be excused during the continuance of any inability so caused. Such cause(s) shall however as far as possible be remedied by the affected party with all reasonable dispatch.
- 10.2 Notwithstanding the above each party shall give the other as soon as possible notice of the occurrence or imminent occurrence of an event as indicated above and where such notice is given verbally it shall be followed immediately in writing.
- In the event the force majeure event relates to delivery of Service/solution by the Contractor, unless otherwise directed by SriLankan Airlines in writing, the Contractor shall continue to perform its obligations under the Agreement as far as is reasonable and practical. And shall seek all reasonable alternative means for performance not prevented by the force majeure event. In case of delays in the completion of delivery in accordance to the time schedule as specified in the respective Purchase Order(s) due to any of the force majeure event mentioned above, the time schedule for the delivery of Service/solution shall be extended accordingly.

# 11. GENERAL:

- 11.1 This Agreement shall constitute the entire agreement and understanding of the parties and shall supersede all prior agreements, whether written or oral between the parties hereto concerning the subject matter hereof.
- 11.2 In the event of a conflict between this Agreement and its Schedules, the Schedules shall take precedence over this Agreement in respect of the subject matter thereof. In the event of a discrepancy between Purchase Order and the Agreement, the Purchase Order will take precedence over this Agreement in respect of the subject matter thereof.
- 11.3 In the event that either party shall be rendered wholly or partly unable to carry out its obligations under this Agreement as a result of strikes, lockouts and labour troubles, then such party so incapacitated shall compensate such other for damage and/or loss suffered by such other as a result of such strike, lockout or labour trouble.
- 11.4 At all times the Contractor (together with its workers) will be deemed to be an independent contractor and shall not under any circumstances be considered an employee, representative or agent of SriLankan Airlines.
- 11.5 The right and remedies of SriLankan Airlines against the Contractor for the breach of any condition and for obligations undertaken by the Contractor under this Agreement shall not be prejudiced or deemed to be waived by reason of any indulgence or forbearance of SriLankan Airlines.

- 11.6 Nothing in this Agreement shall prevent SriLankan Airlines from availing itself of any remedies provided under the general law in addition to the remedies stipulated in this Agreement.
- 11.7 Except to the extent as amended under the Purchase Order(s), this Agreement shall not be varied or modified otherwise than by an instrument in writing of even date herewith or subsequent hereto executed by or on behalf of SriLankan Airlines and the Contractor by its duly authorized representatives.
- 11.8 If any provision of this Agreement should become or be adjudged invalid or unenforceable for any reason whatsoever, such invalidity or unenforceability shall not affect any other part of this Agreement and all other provisions shall remain valid and in full force and effect.
- 11.9 The titles to the clauses in the Agreement are for convenience of reference only and do not form part of this Agreement and shall not in any way affect the interpretation thereof.
- 11.10 SriLankan Airlines does not grant the Contractor any right, title or interest in any of its designs, labels, know-how, trade names, trademarks, service marks, logos and other distinctive brand features or business identifiers, logo, copyright or any other intellectual property rights of SriLankan Airlines ("Intellectual Property Rights") except as expressly authorized in writing by SriLankan Airlines and the Contractor shall not have any right, title or interest in the said Intellectual Property Rights of SriLankan Airlines other than the right to use it for purposes of this Agreement for the Term hereof only with the express written consent of the SriLankan Airlines.
- 11.11 The Contractor shall not issue any press release or other public announcement related to this Agreement, written or oral, without the prior written consent of SriLankan Airlines, except as required by law or a court order. For avoidance of any doubt, the Contractor shall not make, give or issue any press release or other press activity involving or referring to SriLankan Airlines or any of its affiliates or their services or operations, without SriLankan Airlines prior written approval.
- 11.12 The Contractor expressly assures and warrants that it has all the necessary approvals, authorizations and licenses to enter into this Agreement and to provide the Service/solution envisaged under this Agreement.
- 11.13 Any notice or other communication required or authorized by this Agreement to be served or given by either party to the other shall be deemed to have been duly served or given if in writing and
  - left at or sent by prepaid registered post to the last known place of business of that; or (a)
  - sent by fax or e-mail to such place of business and confirmed by prepaid registered post, (b) similarly addressed, within 24 hours of the dispatch of such fax or e-mail.

In the case of SriLankan Airlines to – SriLankan Airlines Limited Commercial Procurement, Bandaranaike International Airport, Katunayake Sri Lanka Fax: E-mail:

Attention:

In the case of the Contractor to -

**IN WITNESS WHEREOF** the parties hereto have caused their authorized signatories to place their hands hereunto and to one other of the same tenor on the date first referred to above in:

For and on behalf of SRILANKAN AIRLINES LIMITED	For and on behalf of	
Name: Designation:	Name: Designation:	
Witness:	Witness:	
Name: Designation:	Name: Designation:	

# Section VII - Annex H : Performance Security

[The issuing agency, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]
[Issuing Agency's Name, and Address of Issuing Branch or Office]
Beneficiary: SriLankan Airlines Limited, Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka
Date:
PERFORMANCE GUARANTEE No:
We have been informed that[name of Bidder](hereinafter called "the Bidder") has entered into Contract No[reference number of the contract] dated with you, for theSupply of[name of contract and brief description] (hereinafter called "the Contract").
Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
At the request of the Bidder, we[name of Agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of[amount in figures](
This guarantee shall expire, no later than the day of,20[insert date,28 days beyond the scheduled completion date including the warranty period] and any demand for payment under it must be received by us at this office on or before that date.
[signature(s)]

# **Section VIII - Vendor Information Form**

Section A - Basic information of the vendor		
1.	Registered Name of the Vendor:	
2.	Date of Incorporation:	
3.	Country of Incorporation:	
4.	Nature of business :	5. Company type :
6.	Telephone & Fax numbers :	7. E-mail address :
	Tel: Fax:	
8.	Registered address:	
9.	Other contact details (if any):	
10.	Registered Name and address of the age	nt (if any)

Section B - Details of Directors, Shareholders and related parties		
1. Name(s) of Directors		
2. Name(s) of Shareholders		
<ol> <li>If the Shareholders are incorporated entities, please state the shareholders of such entities</li> </ol>		
4. If the Shareholders are equity funds, please state the owners of such funds		
5. Name (s) of Directors of Parent/Subsidiary who are also Directors of SriLankan Airlines		
6. Name(s) of Directors of Parent/Subsidiary who are also Employees of SriLankan Airlines		
7. Names of Close Family Members who are either Directors/Employees of SriLankan Airlines		

\*Please note that the copies of passports and proof of residence of the above mentioned Shareholders / Directors / Owners of funds shall be submitted by the vendor upon the request of SriLankan Airlines.

As the authorized representative of [ name of the Vendor], I hereby confirm on
pehalf of[ name of the Vendor] that the information provided above are true
and accurate and acknowledge that the bid of[ name of the Vendor]
submitted herewith shall be rejected in the event all or any of the information submitted above is found
to nbe incorrect.
Details of vendor's authorized signatory:  Name:
Designation:
Date:
Signature & Company Rubber Stamp:

Section C -Business verification: Duly signed and stamped copy of above document to be supported by the following documents				
$\checkmark$	Tick the appropriate boxes			
	A copy of the Certificate of Incorporation certified by the Company Secretary of the vendor Company		A copy of Form 15 (Sri Lankan Companies) certified by the Company Secretary or a letter from the Company Secretary confirming the shareholding.	
	<ul> <li>A copy of Form 20 (Sri Lankan Companies) certified by the Company Secretary or a letter from the Company Secretary confirming the directors</li> </ul>		For Partnerships, list of partners confirmed by one of the partners, preferably by the most senior partner.	
			Audited financial statements of the vendor Company for the last three years	
	For partnerships and sole proprietorships, certificate of business registration		Others (specify)	