



**INVITATION FOR BIDS FOR
THE SUPPLY, IMPLEMENTATION & MAINTENANCE OF AN INTERNET PROTOCOL VIDEO
SURVEILLANCE SYSTEM (IPVSS) FOR SRILANKAN AIRLINES**

REFERENCE NO: CPIT/NCB 05/2019

**SRILANKAN AIRLINES
COMMERCIAL PROCUREMENT DEPARTMENT (IT PROCUREMENT)
AIRLINE CENTRE
BANDARANAIKE INTERNATIONAL AIRPORT
KATUNAYAKE
SRI LANKA**

Section I. Instructions to Bidders (ITB)

A: General	
1. Scope of Bid	<p>1.1 The Purchaser named in the Data Sheet invites you to submit a bids for the supply of Service/solution as specified in Section III - Schedule of Requirements for use at SriLankan Airlines Ltd for the use within the Bandaranaike International Airport premises.</p> <p>Upon receipt of this invitation you are requested to acknowledge the receipt of this invitation and your intention to submit a bid.</p>
B: Contents of Documents	
2. Contents of Documents	<p>2.1 The documents consist of the Sections indicated below.</p> <ul style="list-style-type: none"> • Section I. Instructions to Bidders • Section II. Data Sheet • Section III. Schedule of Requirements • Sections IV. Bids Submission Form • Section V. General Conditions • Annexure A : Bid Acknowledgement Form • Annexure B : Technical/General Specifications & Compliance form • Annexure C : Price format • Annexure D : Bid Security Declaration form/Bid Security-Bank Guarantee Form • Annexure E : Performance Security Form / Bank Guarantee Form • Annexure F : Clientele Information Form • Annexure G : Sample Contract Agreement
C: Preparation of Bids	
3. Documents Comprising your Bid	<p>3.1 The Bid should comprise the following mandatory documents:</p> <ul style="list-style-type: none"> • Sections IV - Bid Submission Form. • Annexure B : Technical/General Specifications & Compliance sheet at Annexure B-I • Annexure C : Price Schedule Form • Annexure D : Bid Security Declaration Form & Bid Security/Bank Guarantee • Annexure F : Clientele Information Form • Audited financial statements for the last 03 years (Clouse 20)

4. Bid Submission Form and Technical/ General Specifications & Compliance form	4.1 The Bidder shall submit the Bids Submission Form using the form furnished in Section IV. 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.
5. Prices	<p>5.1 Unless stated in Data Sheet, all items must be priced separately in the Price Schedule Form at Annexure B.</p> <p>5.2 The price to be quoted in the Bids Submission Form shall be the total price of the Bids.</p> <p>5.3 Prices quoted by the bidder shall be fixed during the period specified in ITB clause 8.1 and not subject to variation on any account. A Bid submitted with an adjustable price shall be treated as non-responsive and may be rejected.</p>
6. Currency	6.1 The bidders shall quote in Foreign Currency or Sri Lankan Rupees (LKR).
7. Documents to Establish the Conformity of the Services	7.1 The Bidder shall submit an original certificate from the proprietor to demonstrate that it has been duly authorized by the proprietor to supply this Service/solution in Sri Lanka. (or) Vendor commitment letter for 100% guaranteed HP Enterprise product support without HP partnership.
8. Period of Validity of bids	<p>8.1 Bids shall remain valid for a period of one hundred eighty (180) days after the bids submission deadline date. If the full validity period is not properly indicated, SriLankan airlines reserves the right to obtain re-confirmation from the bidder that the Bid is valid until the date specified above.</p> <p>8.2 In exceptional circumstances, prior to the expiration of the bid validity date, Sri Lankan Airlines may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.</p>
9. Bid Security Declaration	<p>9.1 The bidder shall furnish as a part of its bid, a Bid-securing Declaration, & Bid Security/Bank Guarantee using the Bid-securing Declaration form included in Annexure D (Mandatory).</p> <p>9.2 Any bid not accompanied by a substantially responsive Bid securing Declaration in accordance with 1TB Sub-clause 8.1, Shall be rejected by Sri Lankan Airlines as non-responsive.</p> <p>9.3 Bid Securing Declaration may be executed:</p> <p>(a) If a Bidder withdraw its bids during the period of Bid validity specified by the Bidder on the Bid Submission form, except as provided in 1TB Sub-Clause 8.2 or</p> <p>(b) If a Bidder does not agree to correction of arithmetical errors in pursuant to 1TB Sub-Clause 15.3</p> <p>(c) If the successful Bidder fails to :</p> <p>i) Sign the contract in accordance security with 1TB Sub-Clause 23.3;</p> <p>(ii) Furnish a performance Security in accordance with 1TB Clause 24;</p>

10.Format and Signing of Bids	10.1 The bids shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. Please ensure all documents are duly signed and stamped in the given area when forwarding.
D:Submission and Opening of Bids	
11. Submission of Bids	<p>11.1 Bidders shall submit their bids by registered post, courier or by hand in a sealed envelope.</p> <p>11.2The sealed envelope shall bear the specific identification of this Bid exercise as indicated follows. “Supply, Implementation & Maintenance of an Internet Protocol Video Surveillance System (IPVSS) for SriLankan Airlines. (CPIT/NCB 05/2019)”</p> <p>11.3 The bidder shall submit the proposals in the price schedule forms attached at Annexure C.</p> <p>11.4 Completed Technical (un-priced) and Financial proposal should be submitted in two separate sealed envelopes with the tender reference no. CPIT/NCB 05/2019 and the Bidding Company’s name and the type of proposal (Technical or Financial) clearly marked on the top left corner of the envelope. Also a soft copy of the Technical proposal including all brochures & supporting documents should be submitted in the form of a CD/DVD/Pen Drive, along with the printed Technical proposal.</p> <p>11.5 If the Bidder wishes to hand deliver the Bids, please contact SriLankan Airlines personnel well in advance, for the arrangement of security clearance. Refer section II, Data Sheet, Clouse 16.2 for contact details.</p> <p>11.4 Pre Bidding - Site Inspection A pre bid site visit will be organized on 24th May 2019 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 site visit will not be accepted, hence participation in the site visit is mandatory for all Bidders.</p> <p>Please provide the following details of the participants for the site visit, through email: sampath.sudasinghe@srilankan.com by 8.30a.m. on 23rd May 2019 Sri Lankan time GMT +5:30 Time Zone) in order to organize the Security passes to enter SriLankan premises:</p> <ol style="list-style-type: none"> 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.

12. Deadline for Submission of Bids	12.1 Bids must be received by the Purchaser to the address set out in Section II, "Data Sheet", and no later than the date and time as specified in the Data Sheet.
13. Late Bids	13.1 The Purchaser shall reject any bids that arrives after the deadline for submission of bids in accordance with ITS Clause 11.1 above.
14. Opening of Bids	<p>14.1 The Purchaser shall conduct the opening of quotation in the Presence of the Suppliers at the address, date and time specified in the Data Sheet.</p> <p>14.2 A representative of the bidders may be present and mark its attendance.</p> <p>14.3 Presence of the supplier, will not necessarily ensure the selection of the proposed goods.</p>

E: Evaluation and Comparison of Bids	
15.Non conformity- ties, Errors, and Omission	<p>15.1 Provided that a Bid is substantially responsive, SriLankan Airlines may waive any non-conformities or omission in the Bid that do not constitute a material deviation.</p> <p>15.2 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 of 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.</p> <p>15.3 Provided that the Bid is substantially responsive, SriLankan Airlines shall correct arithmetical errors on the following basis:</p> <p>(a) If there is 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 shall be corrected.</p> <p>(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</p> <p>(c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.</p> <p>15.4 if the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be dis qualified and its Bid-Securing Declaration shall be executed.</p>
16.Clarifications	<p>16.1 To assist in the examination, evaluation and comparison of the bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its bids. Any clarification submitted by a Bidder in respect to its bid which is not in response to a request by the Purchaser shall not be considered.</p> <p>16.2The Purchaser's request for clarification and the response shall be in writing at SriLankan Airlines' address specified in the BDS.</p>
17.Responsiveness of Bids	<p>17.1 The Purchaser will determine the responsiveness of the bids to the documents based on the contents of the bids received.</p> <p>17.2 If a bid is evaluated as not substantially responsive to the documents issued, it may be rejected by the Purchaser.</p>

18.Evaluation and Comparison of bids	<p>18.1 The following factors & methodology will be used for evaluation.</p> <p><u>Minimum Eligibility Criteria</u></p> <ul style="list-style-type: none"> I. Minimum 03 year experience in implementing and managing similar complex projects within last 3 years period. II. Implementation of minimum two large-scale IPVSS projects for reputed companies and organizations of Sri Lanka or overseas. (projects minimum 100 cameras and over) within the last 03 years III. Bidder should provide minimum last three years financial statements. IV. Compliance to international standards. V. Fully compliance to the service levels stipulated in the Bid document. <p><u>Evaluation Criteria</u></p> <p>The proposed service/solution will be subjected to a Technical/Financial evaluation based on the following criteria:</p> <ul style="list-style-type: none"> I. High Availability of the solution, functions & design as specified in the Bid document. II. Total final cost of the project for 5 years period III. Credit terms better than specified IV. Service levels & performance better than specified in the Bid document. V. Compliance for all requirements specified in the Bid document. VI. Implementation lead time 02 months or better. VII. Positive Customer feedback in relation to minimum 2 on-going customers on similar projects (Over 200 cameras) implemented at enterprise level (Local or international) VIII. Successful completion of On-site demonstration & site visits to verify specifications & performance. IX. Technical competencies of the minimum 5 staff supporting the system and availability of the required equipment and facilities including capital for 5 years X. The Bidder should meet or exceed the Technical specifications stated in the Bid document in order to meet the actual requirements of SriLankan airlines. The specifications provided in the Bid document are the minimum requirements of SriLankan Airlines. XI. Bids not conforming to the terms, conditions and specifications stipulated in the Bid document will be subject to rejection.
19. Training and Development	The successful Vendor should provide all Training related to operating the System on Free of Charge basis.
20. Financial Capability	<p>20.1 The bidder shall furnish documentary evidence that it meets the following financial requirements (s):</p> <p>Audited financial statements for the last 03 years (mandatory)</p>
21. Purchaser's Right to Accept any Bids, and to Reject any or all Bids.	21.1 The Purchaser reserves the right to accept or reject any bids , and to annul the process and reject all bids at any time prior to acceptance, without thereby incurring any liability to bidders

F: Award of Contract	
22. Acceptance of the Bids	22.1 The Purchaser will accept the bids of the Bidder whose offer is not necessarily the lowest evaluated bid and is substantially responsive to the documents issued.
23. Notification of acceptance	<p>23.1 The Purchaser will notify the successful Bidder, in writing, that its bids has been accepted.</p> <p>23.2 Within seven (7) days after notification, the purchase shall complete the contract, and inform the successful bidder to sign it.</p> <p>23.3 Within seven (7) days of receipt of such information, the successful bidder shall sign the contract.</p> <p>23.4 The contract is extendable for a further 01 year period based on mutual agreement under the same terms & conditions and supplier performance.</p>
24. Performance Security	<p>24.1 Within fourteen (14) days of the receipt of notification of award from the Purchaser the successful bidder shall furnish the performance security of 10% of the total value of the contract, using for that the Performance Security Form included in Annexure E.</p> <p>24.2 The performance security shall be an unconditional, irrevocable, on demand bank guarantee drawn at sight in favor of the SriLankan Airlines valid for the period of the contract and 90 days thereafter..</p> <p>24.3 Failure of the successful bidder to submit the above mentioned performance security or sign the contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In the event the purchaser may award the contract to the next lowest evaluated bidder, whose offers is substantially responsive and is determined by SriLankan Airlines to be qualified to perform the contract satisfactory.</p>

Section II: Data Sheet

ITS Clause Reference	
1.1	<p>The Purchaser is: SriLankan Airlines Address: Commercial Procurement Department, SriLankan Airlines, Airline Centre, Bandaranayake International Airport, Katunayake</p>
7.1	<p>Proprietor's authorizations (or) Vendor commitment letter for 100% guaranteed product support is required.</p>
9.1	<p>Bid-securing Declaration, using the Bid-securing Declaration form included in Annexure D is required.</p>
12.1	<p>The address for submission of Bids is : Attention : Dehan de Silva Address : Senior Manager Commercial Procurement Commercial Procurement Department, Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka Telephone : +94 197732666</p> <p>Deadline for submission of bids is on or before 11th June 2019, 11.00 a.m. Sri Lankan time (GMT +5:30 Time Zone)</p>
15.2	<p>For <u>Clarification of bid purposes</u> only, SriLankan Airlines' address is: Attention: Sampath Sudasinghe Address: SriLankan Airlines Limited, Commercial Procurement Department (IT), Airline Centre, Bandaranaike International Airport, Katunayake , Sri Lanka Telephone: +94 (0) 19733 2777/ +94 (0) 19733 2666 Facsimile number: +94(0) 197335218 Electronic mail address: sampath.sudasinghe@srilankan.com sarath.jayathunga@srilankan.com</p> <p>If the Bidder wishes to hand deliver the Bid documents by hand, please provide details (Names/NIC no/passport no/vehicle number) of your representatives one day in advance to the Bid closing date, for the arrangement of security clearance.</p>

Section III - Schedule of Requirements
Supply, Implementation & Maintenance of an Internet Protocol Video Surveillance System (IPVSS) for
Engineering Hangars at SriLankan Airlines (CPIT/NCB 05/2019)

Line Item #	Model	QTY	Unit of Measure	Final Destination	Delivery Date
1.	Backend Equipment			IT Division of SriLankan Airlines	Based on the project implementation time lines
2.	2MP Bullet, Dome Cameras & Panoramic Cameras	112	EACH		
3.	2MP/4MP Bullet and Dome Cameras with Varifocal Lens	65	EACH		
4.	8MP 4K PTZ Cameras	03	EACH		
5.	2MP PTZ Cameras	14	EACH		
6.	Indoor PTZ Camera	05	EACH		
7.	5MP Fishy Eye Camera	01	EACH		
8.	ANPR Camera with total gate Entrance & Exit System	02	EACH		
9.	Localized Redundant storage & recording facility with 30 days retention	05	EACH		
10.	Centralized storage with 35 days retention	01	EACH		
11.	Network Devices				
12.	Configuration Charge				
13.	Structured Cabling System				
14.	Power Cabling				
15.	Civil Works & installation material charges (Please specify)				
16.	Monitoring Devices & Security Control Centre Devices				
17.	Installation & Commissioning	01			
18.	55 inches 4k LED Video Wall (TV)	16			
19.	High End Workstation	04			
20.	55" inch 4x1 Video Wall with integration	04			
21.	Maintenance & Support				

Section IV - 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 will be accepted.]

Date:

To: SriLankan Airlines

We, the undersigned, declare that:

- (a) We have read and have no reservations to the document issued;
- (b) We agree to supply conforming to the documents issued and in accordance with the Schedule of Requirements of the following Service/solution [insert a brief description of the System/solution];
- (c) The total project cost for 05 year is **(Please insert the total cost in word & figures)**
- (d) Our bid shall be valid for the time specified in ITB Clause 8.1
- (e) We understand that our bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.
- (f) We understand that you are not bound to accept the lowest evaluated bid or any other bids that you may receive.

Signed: [insert signature of the duly authorized person]

Name: [insert complete name of person signing the Bid Submission Form]

Date

Section V - General Conditions

- I. Bidder" means the proprietor of the brand or an authorized distributor for the proprietor. In the event where the bidder is an authorized distributor, it is mandatory an Authorized Distributor Status letter from the Proprietor is submitted to SriLankan Airlines along with the bid to avoid rejection of the bid.
- II. 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 excluding airfare (airfare means- SriLankan Airlines' destinations only) shall be borne by the bidder.
- III. All on-site & off-site expenses including incidental expenses related to the project implementation, maintenance & support etc. within the 5 year contract period, excluding Airfare (airfare means- SriLankan Airlines' destinations only) should be borne by the bidder. Please indicate the number of Air Tickets (airfare means- SriLankan Airlines' destinations only) required for each stage of the project.
- IV. If accepted, it is mandatory that the bidder signs the Contract Agreement - Annexure F.
- V. In order to ensure continuity of supply of Service/solution 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.
- VI. If SriLankan Airlines find that the delivered service/solution 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 service/solution to compliance with the Specifications. Modification will not affect the Warranty/ Service Levels provided hereunder. If the service/solution is rejected SriLankan Airlines shall recover any and all money paid and any service penalties incurred due to rejection of the system/solution.
- VII. Please state whether your company has appointed a local agent for SriLankan Airlines supply & delivery of Solution and services to be procured under this bid exercise. If so please submit a separate bidder information form including the information of local agent.
- VIII. Advance payment is not acceptable. 45 days credit from the date of commissioning and acceptance by UL is required.
- IX. Liquidated Damages

The Contractor shall pay liquidated damages as follows:

Incident	Liquidated Damages
Delayed delivery	Liquidated damages shall be determined by the SriLankan Airlines 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.
Non-compliance or Breach of Agreement	

Notwithstanding Clause 3 of Schedule C above, SriLankan Airlines shall have the right of settling any other amounts as costs or damages arising from the Contractor's breach, non-performance or partial performance of its obligations under this Agreement

ANNEXTURE A: Bid Acknowledgement Form

IMPORTANT

All Bidders should confirm the intention to submit a Bid by forwarding the duly completed Bid Acknowledgement form given below, 07 working days prior to the Bid closing date.

RECEIPT OF THE BID DOCUMENTS

Receipt of your Bid invitation document no. CPIT/NCB 05/2019 is hereby acknowledged

☐ You may expect to receive our proposal on or before.....

.....
.....
.....
.....

☐ We do not intend to bid because

.....
.....

Signed :

Title :

Company :

Date :

ANNEXURE B - Technical/General Specifications & Compliance Sheet

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

1.0 Back Ground

SriLankan Airlines, the National Carrier of Sri Lanka is in need of a reliable & cost effective state of art technology Internet Protocol Video Surveillance System (IPVSS) in SriLankan Airlines premises at Bandaranaike International Airport. The concerned areas have been identified as a location of least security coverage with high vulnerability. You are invited to submit best proposals from ISO Certified Manufactures of IPVSS equipment.

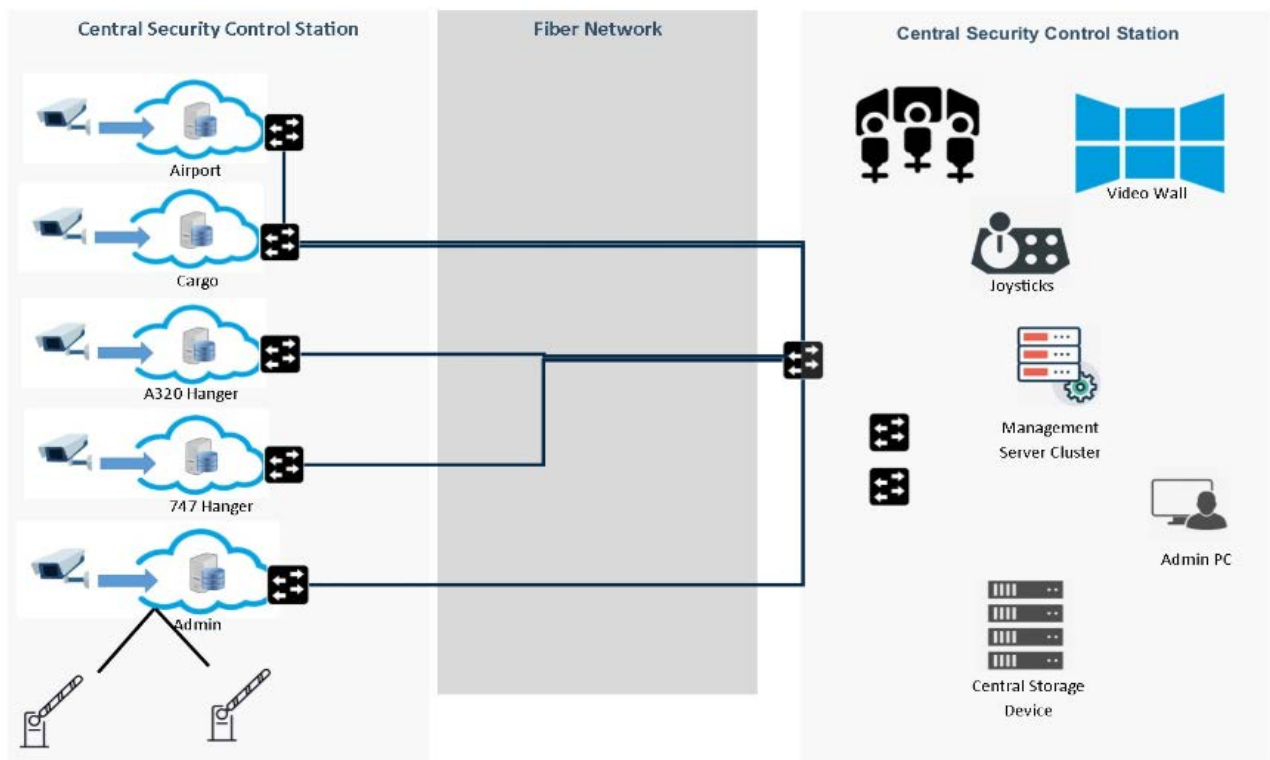
The proposed IP based Video Surveillance System should cover the outer/inner perimeter of the said areas. Currently there are several IPVSS systems operational at the premises with 2 main monitoring control rooms with coverage of over 90 cameras and retention period of 30 days.

The intention of the RFP is to provide comprehensive coverage to SriLankan Airlines premises where currently not covered by existing systems. The current systems to be seamlessly migrated to the proposed solution in stages. This will end up with single unified system with fully equipped control room and sufficient infrastructure for further expansion.

The solution should be an Intelligent Video Surveillance System with latest technology and sufficient privileges to expand the service area to entire airport including cargo complex. The reputed makes of ONVIF compliance or proven Open Source Software Solutions are welcome with suggested Control Room & Video Wall facilities.

The bellow Figure 1 shows the sample solution design of the system that fulfil the UL requirement.

Figure 1: Solution Overview



2. General Requirements & Proposal

- 2.1 The design should cover all the SriLankan Premises at BIA with minimum number of cameras and 35 days retention period covering following zones,
 - 2.1.1 B747 Hanger minimum number of 46 cameras with at least 4 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.
 - 2.1.1 A320 Hanger minimum number of 21 cameras with at least 3 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.
 - 2.1.2 Airport new baggage transit, Gates & checking counters minimum number of 43 cameras with at least 5 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.
 - 2.1.3 14 Cameras at Cargo area with expansion capability up to 128 cameras. Migrating existing system with 41 cameras using the existing cable infrastructure. At least 10 PTZ cameras are required.
 - 2.1.4 20 cameras at CAK admin with expansion capability up to 32 cameras.
- 2.2 Only the bare minimum number of cameras are given in above 2.1. However the requirement is to provide full coverage at the areas mentioned. As such the supplier should include any additional camera to ensure the full coverage and you are required to submit complete design details explaining how the camera setup will cover the full area. SLAL will have the right to reject any proposal without proper explanation of the design.
- 2.3 The total system should be capable of expanding up to 1000 or more cameras.
- 2.4 6 number of Vehicle number plate detection camera systems with vehicle Entrance & Exit Control systems with intercommunication system which can control from Security Operation Control Center. Please quote this price separately.
- 2.5 All the monitoring stations to be located at the identified control/monitoring room.
- 2.6 Sufficient number of storage devices to be located at the control room with minimum 35 days retention and expansion capability to support 1000 cameras.
- 2.7 In addition to centralize storage, another 30 days localized retention is required at all the above five zones.
- 2.8 The transmission backbone to be with single mode 24core outdoor fiber connectivity with all the locations to the central control room.
- 2.9 Existing cable ducts to be used where ever possible and additional duct paths to be constructed if required.
- 2.10 All the cabling to be carried out in GI brackets/conduits where ever required (cargo, Airport, Hanger, etc.).
- 2.11 Powder coated Galvanized casings/ brackets should be used for internal cable distribution where multiple cables are laid.
- 2.12 The complete infrastructure including network devices and accessories to be provided by the vendor.
- 2.13 All network accessories and devices should be of industry standard enterprise class reputed & reliable products.
- 2.14 Sufficient backup units to be maintained onsite to meet the service levels.
- 2.15 The design should be in such a way that any single point of failure to be avoided. Especially local recording should continue even at a time of any equipment failure. The proposal will be rejected if required redundancies are not provided.
- 2.16 All the equipment details to be submitted with proof and documentation covering network & topology diagrams.
- 2.17 All the product should be certified to operate in robust environment.
- 2.18 All the pricing has to be in LKR & preference will be given to such proposals.
- 2.19 The system patch and version upgrades need to be carried out free of charge.
- 2.1.1 The NVR/Server and core devices should have dual redundant power supply units.
- 2.1.2 Vendor should provide Indoor & Outdoor cameras by accessing the situation of environment.
- 2.1.3 Vendor should complete the total project as per the agreed time schedule and project plan. Failure to do so will impose delay penalties of 5000.00 LKR per day.

3. Technical Specifications & Requirement

3.1 Cameras :

A. Dome 2MP Camera with Varifocal lens

- 3.1.1 A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.
- 3.1.2 High resolution minimum 2 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.
- 3.1.3 Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.4 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.5 H.264 & H.265 video compression should support
- 3.1.6 Minimum 50 fps full frame rate under high motion and all conditions
- 3.1.7 IP camera should has inbuilt IR-cut filter with auto switch
- 3.1.8 Minimum Illumination 0.006Lux/F1.6
- 3.1.9 Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning
- 3.1.10 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.11 The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)
- 3.1.12 IP cameras should support configuration over standard internet browser with password protection
- 3.1.13 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording
- 3.1.14 The camera should made by hard metal.
- 3.1.15 All Cameras Should Support ONVIF IPVSS Protocol
- 3.1.16 WDR, Automatic White Balance & Starlight Technology should enabled in camera
- 3.1.17 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.18 The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.19 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.20 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.21 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.22 Camera should have minimum 256MB RAM & 32MB ROM
- 3.1.23 Camera should capable to perform minimum 5x Zoom & should be motorized Focus Control.

B. Dome 4MP Camera with Varifocal lens

- 3.1.24 A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.
- 3.1.25 High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.
- 3.1.26 Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.27 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.28 H.264 & H.265 video compression should support
- 3.1.29 Minimum 50 fps full frame rate under high motion and all conditions
- 3.1.30 IP camera should has inbuilt IR-cut filter with auto switch
- 3.1.31 Minimum Illumination 0.03Lux/F1.6
- 3.1.32 Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning
- 3.1.33 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.34 The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)
- 3.1.35 IP cameras should support configuration over standard internet browser with password protection
- 3.1.36 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording
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- 3.1.39 WDR, Automatic White Balance & Starlight Technology should enabled in camera

- 3.1.40 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.41 The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.42 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.43 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.44 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.45 Camera should have minimum 512MB RAM & 32MB ROM
- 3.1.46 Camera should capable to perform minimum 5x Zoom & should be motorized Focus Control.

C. Dome 2MP Camera without Varifocal lens

- 3.1.47 A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.
- 3.1.48 High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.
- 3.1.49 Lens with maximum 2.90mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.50 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.51 H.265 video compression should support
- 3.1.52 30 fps full frame rate under high motion and all conditions
- 3.1.53 IP camera should has inbuilt IR-cut filter with auto switch
- 3.1.54 Minimum Illumination 0.007Lux/F1.6
- 3.1.55 Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning
- 3.1.56 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.57 The camera should complies with rigorous dust and immersion tests (IP67)
- 3.1.58 IP cameras should support configuration over standard internet browser with password protection
- 3.1.59 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording
- 3.1.60 The camera should made by hard metal.
- 3.1.61 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.62 WDR, Automatic White Balance & Starlight Technology should enabled in camera
- 3.1.63 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.64 The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.65 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.66 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.67 Camera should have inbuilt Audio mic.
- 3.1.68 Camera should have minimum 256MB RAM & 32MB ROM

D. Dome 4MP Camera without Varifocal lens

- 3.1.69 A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.
- 3.1.70 High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.
- 3.1.71 Lens with maximum 2.90mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.72 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.73 H.265 video compression should support
- 3.1.74 30 fps full frame rate under high motion and all conditions
- 3.1.75 IP camera should has inbuilt IR-cut filter with auto switch
- 3.1.76 Minimum Illumination 0.03Lux/F1.6
- 3.1.77 Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning
- 3.1.78 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.79 The camera should complies with rigorous dust and immersion tests (IP67)

- 3.1.80 IP cameras should support configuration over standard internet browser with password protection
- 3.1.81 The system MUST support scheduled based full recording in day time (specified time) window and remaining time motion based recording
- 3.1.82 The camera should be made by hard metal.
- 3.1.83 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.84 WDR, Automatic White Balance & Starlight Technology should be enabled in camera
- 3.1.85 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.86 The camera should be able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.87 The camera should be able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.88 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.89 Camera should have inbuilt Audio mic.
- 3.1.90 Camera should have minimum 512MB RAM & 32MB ROM

E. Bullet 2MP Camera with Varifocal lens

- 3.1.91 A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.
- 3.1.92 High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Night vision Distance should be minimum 50 meters.
- 3.1.93 Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.94 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.95 H.265 video compression should support
- 3.1.96 25 fps full frame rate under high motion and all conditions
- 3.1.97 IP camera should have inbuilt IR-cut filter with auto switch
- 3.1.98 Minimum Illumination 0.006Lux/F1.6
- 3.1.99 Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning
- 3.1.100 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.101 The camera should comply with rigorous dust and immersion tests (IP67) and impact tests (IK10)
- 3.1.102 IP cameras should support configuration over standard internet browser with password protection
- 3.1.103 The system MUST support scheduled based full recording in day time (specified time) window and remaining time motion based recording
- 3.1.104 The camera should be made by hard metal.
- 3.1.105 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.106 WDR, Automatic White Balance & Starlight Technology should be enabled in camera
- 3.1.107 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.108 The camera should be able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.109 The camera should be able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.110 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.111 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.112 Camera should have minimum 256MB RAM & 32MB ROM
- 3.1.113 Camera should have minimum 1 inbuilt Video Interface.
- 3.1.114 Camera should have minimum 5x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.

F. Bullet 4MP Camera with Varifocal lens

- 3.1.115 A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.
- 3.1.116 High resolution minimum 4 MP or higher resolution camera & IR/Night vision Distance should be minimum 50 meters.
- 3.1.117 Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.118 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)

- 3.1.119 H.265 video compression should support
- 3.1.120 25 fps full frame rate under high motion and all conditions
- 3.1.121 IP camera should have inbuilt IR-cut filter with auto switch
- 3.1.122 Minimum Illumination 0.03Lux/F1.6
- 3.1.123 Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning
- 3.1.124 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which is suitable for the most unstable conditions.
- 3.1.125 The camera should comply with rigorous dust and immersion tests (IP67) and impact tests (IK10)
- 3.1.126 IP cameras should support configuration over standard internet browser with password protection
- 3.1.127 The system MUST support scheduled based full recording in day time (specified time) window and real-time motion based recording
- 3.1.128 The camera should be made by hard metal.
- 3.1.129 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.130 WDR, Automatic White Balance & Starlight Technology should be enabled in camera
- 3.1.131 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.132 The camera should be able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.133 The camera should be able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.134 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.135 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.136 Camera should have minimum 512MB RAM & 32MB ROM
- 3.1.137 Camera should have minimum 1 inbuilt Video Interface.
- 3.1.138 Camera should have minimum 5x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.

G. Bullet 2MP Camera without Varifocal lens

- 3.1.139 A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.
- 3.1.140 High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Night vision Distance should be minimum 50 meters.
- 3.1.141 Lens with maximum 3.60mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.142 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.143 H.265 video compression should support
- 3.1.144 25 fps full frame rate under high motion and all conditions
- 3.1.145 IP camera should have inbuilt IR-cut filter with auto switch
- 3.1.146 Minimum illumination 0.009Lux/F1.6
- 3.1.147 Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.
- 3.1.148 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which is suitable for the most unstable conditions.
- 3.1.149 The camera should comply with rigorous dust and immersion tests (IP67) and impact tests (IK10)
- 3.1.150 IP cameras should support configuration over standard internet browser with password protection
- 3.1.151 The system MUST support scheduled based full recording in day time (specified time) window and real-time motion based recording
- 3.1.152 The camera should be made by hard metal.
- 3.1.153 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.154 WDR, Automatic White Balance & Starlight Technology should be enabled in camera
- 3.1.155 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.156 The camera should be able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.157 The camera should be able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.158 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.159 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.

3.1.160 Camera should have minimum 256MB RAM & 32MB ROM

H. Bullet 4MP Camera without Varifocal lens

3.1.161 A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.

3.1.162 High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.

3.1.163 Lens with maximum 3.60mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)

3.1.164 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)

3.1.165 H.265 video compression should support

3.1.166 25 fps full frame rate under high motion and all conditions

3.1.167 IP camera should has inbuilt IR-cut filter with auto switch

3.1.168 Minimum illumination 0.06Lux/F1.6

3.1.169 Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.

3.1.170 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.

3.1.171 The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)

3.1.172 IP cameras should support configuration over standard internet browser with password protection

3.1.173 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording

3.1.174 The camera should made by hard metal.

3.1.175 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.

3.1.176 WDR, Automatic White Balance & Starlight Technology should enabled in camera

3.1.177 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.

3.1.178 The camera should able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.

3.1.179 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

3.1.180 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.

3.1.181 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.

3.1.182 Camera should have minimum 256MB RAM & 32MB ROM

I. Multi-Sensor Panoramic IR Bullet Network Cameras

3.1.183 A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.

3.1.184 High resolution minimum 2 MP or higher resolution cameras & IR/Nigh vision Distance should be minimum 30 meters.

3.1.185 Lens type not recognized, however exact lens type to be verified at site visit. (Please check the diagram & to be clarified at Site Visit)

3.1.186 Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)

3.1.187 H.265 video compression should support

3.1.188 25 fps full frame rate under high motion and all conditions

3.1.189 IP camera should has inbuilt IR-cut filter with auto switch

3.1.190 Minimum illumination 0.005Lux/F1.6

3.1.191 Camera should provide further elasticity for capturing wide area video minimum 180 degree.

3.1.192 Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.

3.1.193 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.

3.1.194 The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)

3.1.195 IP cameras should support configuration over standard internet browser with password protection

3.1.196 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording

3.1.197 The camera should made by hard metal.

- 3.1.198 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.199 WDR, Automatic White Balance & Starlight Technology should enabled in camera
- 3.1.200 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.201 The camera should able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.202 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.203 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.204 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.205 Camera should have minimum 512MB RAM & 32MB ROM

J. Outdoor 4K PTZ Camera

- 3.1.206 A well tropicalized, reliable, high quality colour IP outdoor PTZ cameras.
- 3.1.207 High resolution minimum 8 MP (4K) or higher resolution camera & IR/Nigh vision Distance should be minimum 400 meters.
- 3.1.208 Lens with Focal Length of minimum 5.40mm to maximum 250mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)
- 3.1.209 Hi-Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.210 H.264 & H.265 video compression
- 3.1.211 Minimum 30 fps full frame rate under high motion and all conditions
- 3.1.212 Minimum Pan/Tilt Range Pan: 0° ~ 360° endless; Tilt: -30° ~ 90°, auto flip 180°
- 3.1.213 PTZ IP camera should has inbuilt IR-cut filter with auto switch
- 3.1.214 Minimum Illumination colour 0.002Lux/F1.6 and B/W: 0.0002Lux
- 3.1.215 Camera should have inbuilt minimum 8KV lightning protection module for both the camera and its structure against lightning
- 3.1.216 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.
- 3.1.217 The camera should complies with rigorous dust and immersion tests (IP67)
- 3.1.218 IP cameras should support configuration over standard internet browser with password protection
- 3.1.219
- 3.1.220 The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording
- 3.1.221 The camera should made by hard metal.
- 3.1.222 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.223 WDR, Automatic White Balance & Starlight Technology should enabled in camera
- 3.1.224 Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.
- 3.1.225 The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.226 Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
- 3.1.227 The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.228 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.229 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.230 Camera should have minimum 1024MB RAM & 64MB ROM
- 3.1.231 Camera should have minimum 1 inbuilt Video Interface.
- 3.1.232 Camera should have minimum 30x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.

K. Outdoor PTZ Camera

- 3.1.233 A well tropicalized, reliable, high quality colour IP outdoor PTZ cameras.
- 3.1.234 High resolution minimum 2 MP (HD) or higher resolution camera & IR/Nigh vision Distance should be minimum 200 meters.
- 3.1.235 Lens with Focal Length of minimum 5.40mm to maximum 250mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)

- 3.1.236 Hi-Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)
- 3.1.237 H.264 & H.265 video compression
- 3.1.238 Minimum 30 fps full frame rate under high motion and all conditions
- 3.1.239 Minimum Pan/Tilt Range Pan: 0° ~ 360° endless; Tilt: -30° ~ 90°, auto flip 180°
- 3.1.240 PTZ IP camera should have inbuilt IR-cut filter with auto switch
- 3.1.241 Minimum Illumination colour 0.002Lux/F1.6 and B/W: 0.0002Lux
- 3.1.242 Camera should have inbuilt minimum 8KV lightning protection module for both the camera and its structure against lightning
- 3.1.243 The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which is suitable for the most unstable conditions.
- 3.1.244 The camera should comply with rigorous dust and immersion tests (IP67)
- 3.1.245 IP cameras should support configuration over standard internet browser with password protection
- 3.1.246 The system MUST support scheduled based full recording in day time (specified time) window and remaining time motion based recording
- 3.1.247 The camera should be made by hard metal.
- 3.1.248 All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.
- 3.1.249 WDR, Automatic White Balance & Starlight Technology should be enabled in camera
- 3.1.250 Camera must have inbuilt Micro SD Card slot which has minimum 128GB support.
- 3.1.251 The camera should be able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.
- 3.1.252 Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
- 3.1.253 The camera should be able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.
- 3.1.254 IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.
- 3.1.255 Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.
- 3.1.256 Camera should have minimum 512MB RAM & 32MB ROM
- 3.1.257 Camera should have minimum 1 inbuilt Video Interface.
- 3.1.258 Camera should have minimum 30x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.

3.2. Storage

- 3.1.1 High quality reliable Surveillance hard disks which can keep records minimum 30 days
- 3.1.2 Interface: SATA 6Gb/s
- 3.1.3 Storage System should be highly reliable with RAID 5 or above redundancy level.
- 3.1.4 Only principle recommended Hard Disk to be used of Central Storage & Recording Servers/NVRs

3.2 Recording Server/NVR Active-Active :

- 3.2.1 Scalable enterprise level software/appliance
- 3.2.2 Server level redundancy where single server failure should not impact the recordings and footages in the Total system. Please explain in detail how the design meets this requirement.
- 3.2.3 30 days recording to be capable to retain in the server/NVR
- 3.2.4 Automatically reap old recordings as part of disk management
- 3.2.5 Exporting footages to USB external hard disks and network file share automatically through a scheduled job
- 3.2.6 Recordings to be maintained with original resolution and framerate without compromising the quality of the footages
- 3.2.7 The Recording Server/NVR should support minimum 16 Internal HDD which can go minimum to 8 TB capacity for each HDD.
- 3.2.8 The Central Backup Storage Server should support minimum 24 Internal HDD which can go minimum to 10 TB capacity for each HDD.
- 3.2.9 The Server/NVR should have multiple record Modes including Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss) and Stop.

3.3 Central Control & Monitoring Center:

- 3.3.1 4 monitoring & control stations and each monitoring station should have 4 monitors.

- 3.3.2 Single 4x1 video wall which can access from any monitoring station.
- 3.3.3 The system should have single administrative panel which can manage entire IPVSS system.
- 3.4 Cabling/networking:
 - 3.4.1 The cabling network should consist of single mode fiber backbone and UTP at distribution level. All network switches and accessories should be enterprise class reputed products to be listed in Gartner Magic Quadrant or Forrester independent revivers.
 - 3.4.2 The Supplier will configure, install and maintain the total Cabling System including Fiber, which is a major part of the CCTV system.
 - 3.4.3 All required power and data cabling and accessories for cameras and devices to be included as part of the solution
 - 3.4.4 A neat cabling network incorporated with CAT6 Cables should be furnished according to EIA/TIA-568.
 - 3.4.5 Steel trunking/Steel Flexible and accessories to be used in accordance with the cabling guide lines imposed by SriLankan Airlines.
 - 3.4.6 All devices to be installed in wall mounted enclosure securely.
 - 3.4.7 24 port Patch panel with cable management should install at all access nodes.
 - 3.4.8 The solution should include complete power distribution system including lightning arresters, switchgear, cables, racks, wiring etc.
- 3.5 The vendor should have all necessary licenses, permissions, consents, no objections, approvals as required under law for carrying out its business.
- 3.6 Vendor should provide professional, objective and impartial advice at all times and hold the SriLankan Airline's interest and observe the highest standards of ethics, values, code of conduct, honesty and integrity while implementation of the IPVSS and during support period.
- 3.7 The selected Vendor 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.
- 3.8 On-site, comprehensive, back-to-back warranty from Original Equipment Manufacturer (OEM) for a period of 3 years from the date of purchase. The warranty also includes all software subscriptions (critical hot fixes, service packs, and major upgrades)
- 3.9 The SLA upgrade cost during the warranty period to be identified separately and paid at the end of the quarter. This is to be supported by manufacturer's commitment through back-to-back agreements and any proposal without meeting this requirement will be rejected. SLA upgrade means the additional cost incurred to the vendor when warranty is enhanced through Service Levels.
- 3.10 During the warranty 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 and/or repaired during the warranty period shall be free of charge to SriLankan Airlines.
- 3.11 Total Network including fiber and copper UTP to be maintained by the vendor as per the SLA conditions.
- 3.12 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 met.
- 4 Payment Terms
 - 4.1 Hardware/Equipment: 40% on successful delivery & 60% on successful installation, commissioning & acceptance of the System
 - 4.2 Network & Accessories : on successful installation, commissioning & acceptance of the System
 - 4.3 Installation & Commissioning : on successful installation, commissioning & acceptance of the System
 - 4.4 Maintenance Support/SLA upgrade & other charges : Quarterly in arrears
- 5 Business Continuity
 - 5.1 The successful vendor should be able to ensure continues system operation even at a time the agreement is breached by the vendor due to whatever reason. This can be done through a tri-party agreement with the principles who will take over the support responsibilities either by appointing another capable service provider or direct support.

- 5.2 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.
- 5.3 All the system access rights to be shared with SLAL administrators.
- 5.4 The proposals without addressing above business continuity requirements will be rejected.
- 5.5 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.
- 5.6 All the internal and external audit findings to be addressed within agreed time line by the vendor without any cost to the SLAL. This is a mandatory requirement.
- 6 Camera category & position design - Site Inspection (Please refer ITB Section 1-D Sub-clause 11.4),
- 6.1 Camera category and design detail will share at the site inspection (Please refer ITB Section 1-D Sub-clause 11.4). Due to security reasons information not published via RFP.
- 6.2 Vendor must provide suitable camera type (2Mp Bullet, Dome Cameras & Panoramic Cameras) according to the UL engineers recommendations where applicable.
- 7 Services and Support
- 7.1 Maintenance
- 7.1.1 The system should be supported by supplier minimum for the period 5 years from the date of commissioning including spares and labour.
- 7.1.2 The Service shall be provided for both remedial and Preventive Maintenance. Preventive Maintenance will be conducted at regular quarterly intervals which will be mutually decided by both the parties. Please provide the preventive maintenance schedule along with your proposal.
- 7.1.3 Preventive Maintenance will be carried out at the Customer's location at any time within the 8.00am to 4.30pm, as per customer discretion.
- 7.2 Spare Parts
- 7.2.1 The Supplier will 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.
- 7.2.2 The supplier or supplier's agent should maintain spare parts depot to meet the service levels. Any spare parts to made 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.
- 7.2.3 In any case supplier should be able to repair/replace faulty equipment within the agreed service levels and any spare part should be provided immediately irrespective of the spare parts stock.
- 7.2.4 The Supplier should supply all maintenance aids to the customer Free of charge.
- 7.3 Backup Cameras
- 7.3.1 The Supplier should provide a backup pool of Cameras onsite to meet the service levels as given below.

Cameras Installed Based Size	Backup Camera Pool Size
0 – 25	1
26 – 50	2
51 – 100	3
101-150	4
150-300	5

7.3.2 The backup pool of equipment (Cameras) will be of the minimum configuration of the installed base and will be the Hardware configuration/Specifications used by the Customer as appropriate.

7.3.3 The Supplier should provide a backup pool of switches onsite to meet the service levels as given below.

Switches Installed Based Size	Minimum Backup Switch Pool Size
0 – 10	1
10 – 20	2
>20	3

7.4 Service Levels

7.4.1 Fault Severity

Fault severity will be categorized based on the extent to which the fault affects the smooth operation of the business applications. The severity level (1, 2 and 3) will be identified by the Customer Service Desk when the fault call is reported to the supplier. The target service levels will depend on the severity level.

Severity 1:	Effect of Full or partial operation of the IPVS System/ Back up system
Severity 2:	Effect of Intermittent/full failure in an individual device.
Severity 3:	Effect of minor issues which does not affect the operation (in ambiguity situations, Customer has the right to decide)

7.4.2 Fault Reporting Windows

Reporting for Severity 1, 2 & 3 (Equipment in all locations): Business hours during a week Service Levels should also met during Non-Business Hours

7.4.3 Fault Resolution times

Severity 1:	Target time for resolution = within 3 Hrs
Severity 2:	Target time for resolution = within 6 Hrs
Severity 3:	Target time for resolution - within 24 hours

7.4.4 Liquidated Damages/Penalties:

In view of service not available as agreed within this Service Level Agreement, concerned parties will incur the following penalties. The measurement will be based on occurrences and will be effected on a monthly basis.

7.4.5 Liquidated Damages/Penalties on the Supplier

In the event that the Supplier does not resolve a fault within the agreed time the following charges will be imposed provided the delay is not due to reasons outside the control of Supplier.

Severity 1:	Rs: 2000/- per hour or part of, Maximum 50% of the Contract Quarter Value
Severity 2:	Rs: 1000/- per hour or part of, Maximum 50% of the Contract Quarter Value
Severity 3:	Rs: 500/- per hour or part of, Maximum 50% of the Contract Quarter value

8. Insurance

8.1 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

8.2 A public liability insurance policy covering death, bodily injury, property damage (including damage to SriLankan Airlines property and / or injury, death caused to any employee, passenger, agent, sub-contractor or representative of SriLankan Airlines), Obligations of which is subject to above clause 8.1, with a limit of indemnity of not less than LKR 5 million any one occurrence. The insurance policy shall be extended to cover, but not be limited to, fire and explosion.

- 8.3 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.
9. The Technical proposal should comprise the following mandatory documents:
- 9.1 Bidder should be an authorised partner of the proposed product and document evidence must be provided.
 - 9.2 In case of authorized partner of OEM the Bidder should submit Manufacturer Authorization Letter conforming the authorize partnership.
 - 9.3 Bidder must provide minimum 3 references of similar projects over 5 million each project which completed in last 3 years
 - 9.4 Comprehensive BOM. Item wise Bill-of-Materials (BOM) along the with the equipment specification to be provided as part of the documents. BOM should include details Brand, Model, Manufacture year, Quantity etc for each line item.
 - 9.5 Point-by-Point compliance statement at Annex B-1 below to be attached with the technical proposal.
 - 9.6 Bidder should provide all the above documents and evidence requested with the Technical proposal Failure to do so, the proposal will be rejected

10.0 Compliance Statement - Annex B-1

Number	Requirements, Terms & conditions	Yes/NO & Remarks/Explanation
2.1	The design should cover all the SriLankan Premises at BIA with minimum number of cameras and 35 days retention period covering following zones,	
2.1.1	B747 Hanger minimum number of 46 cameras with at least 4 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.	
2.1.1	A320 Hanger minimum number of 21 cameras with at least 3 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.	
2.1.2	Airport new baggage transit, Gates & checking counters minimum number of 43 cameras with at least 5 PTZ cameras. The systems should capable of expanding up to 128 IP cameras.	
2.1.3	14 Cameras at Cargo area with expansion capability up to 128 cameras. Migrating existing system with 41 cameras using the existing cable infrastructure. At least 10 PTZ cameras are required.	
2.1.4	20 cameras at CAK admin with expansion capability up to 32 cameras.	
2.2	Only the bare minimum number of cameras are given in above 2.1. However the requirement is to provide full coverage at the areas mentioned. As such the supplier should include any additional camera to ensure the full coverage and you are required to submit complete design details explaining how the camera setup will cover the full area. SLAL will have the right to reject any proposal without proper explanation of the design.	
2.3	The total system should be capable of expanding up to 1000 or more cameras.	
2.4	6 number of Vehicle number plate detection camera systems with vehicle Entrance & Exit Control systems with intercommunication system which can control from Security Operation Control Center. Please quote this price separately.	

2.5	All the monitoring stations to be located at the identified control/monitoring room.	
2.6	Sufficient number of storage devices to be located at the control room with minimum	
2.7	In addition to centralize storage, another 30 days localized retention is required at all the	
2.8	The transmission backbone to be with single mode 24core outdoor fiber connectivity with all	
2.9	Existing cable ducts to be used where ever possible and additional duct paths to be	
2.1	All the cabling to be carried out in GI brackets/conduits where ever required (cargo,	
2.11	Powder quoted Galvanized casings/ brackets should be used for internal cable distribution	
2.12	The complete infrastructure including network devices and accessories to be provided by	
2.13	All network accessories and devices should be of industry standard enterprise class	
2.14	Sufficient backup units to be maintained onsite to meet the service levels.	
2.15	The design should be in such a way that any single point of failure to be avoided. Especially	
2.16	All the equipment details to be submitted with proof and documentation covering network &	
2.17	All the product should be certified to operate in robust environment.	
2.18	All the pricing has to be in LKR & preference will be given to such proposals.	
2.19	The system patch and version upgrades need to be carried out free of charge.	
2.1.1	The NVR/Server and core devices should have dual redundant power supply units.	
2.1.2	Vendor should provide Indoor & Outdoor cameras by accessing the situation of environment.	
2.1.3	Vendor should complete the total project as per the agreed time schedule and project plan. Failure to do so will impose delay penalties of 5000.00 LKR per day.	
2. Technical Specifications & Requirement		
2.1 <u>Cameras :</u>		
3	Technical Specifications & Requirement	
3.1	Cameras :	
A.	Dome 2MP Camera with Varifocal lens	
3.1.1	A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.	
3.1.2	High resolution minimum 2 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.3	Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.4	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.5	H.264 & H.265 video compression should support	

3.1.6	Minimum 50 fps full frame rate under high motion and all conditions	
3.1.7	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.8	Minimum Illumination 0.006Lux/F1.6	
3.1.9	Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning	
3.1.10	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.11	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.12	IP cameras should support configuration over standard internet browser with password protection	
3.1.13	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.14	The camera should made by hard metal.	
3.1.15	All Cameras Should Support ONVIF IPVSS Protocol	
3.1.16	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.17	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.18	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.19	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.20	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.21	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.22	Camera should have minimum 256MB RAM & 32MB ROM	
3.1.23	Camera should capable to perform minimum 5x Zoom & should be motorized Focus Control.	
B.	Dome 4MP Camera with Varifocal lens	
3.1.24	A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.	
3.1.25	High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.26	Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.27	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.28	H.264 & H.265 video compression should support	
3.1.29	Minimum 50 fps full frame rate under high motion and all conditions	
3.1.30	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.31	Minimum Illumination 0.03Lux/F1.6	
3.1.32	Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning	
3.1.33	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	

3.1.34	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.35	IP cameras should support configuration over standard internet browser with password protection	
3.1.36	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.37	The camera should made by hard metal.	
3.1.38	All Cameras Should Support ONVIF IPVSS Protocol	
3.1.39	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.40	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.41	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.42	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.43	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.44	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.45	Camera should have minimum 512MB RAM & 32MB ROM	
3.1.46	Camera should capable to perform minimum 5x Zoom & should be motorized Focus Control.	
C.	Dome 2MP Camera without Varifocal lens	
3.1.47	A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.	
3.1.48	High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.49	Lens with maximum 2.90mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.50	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.51	H.265 video compression should support	
3.1.52	30 fps full frame rate under high motion and all conditions	
3.1.53	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.54	Minimum Illumination 0.007Lux/F1.6	
3.1.55	Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning	
3.1.56	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.57	The camera should complies with rigorous dust and immersion tests (IP67)	
3.1.58	IP cameras should support configuration over standard internet browser with password protection	
3.1.59	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.60	The camera should made by hard metal.	
3.1.61	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	

3.1.62	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.63	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.64	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.65	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.66	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.67	Camera should have inbuilt Audio mic.	
3.1.68	Camera should have minimum 256MB RAM & 32MB ROM	
D.	Dome 4MP Camera without Varifocal lens	
3.1.69	A well tropicalized, reliable, high quality colour IP fixed dome indoor cameras.	
3.1.70	High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.71	Lens with maximum 2.90mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.72	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.73	H.265 video compression should support	
3.1.74	30 fps full frame rate under high motion and all conditions	
3.1.75	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.76	Minimum Illumination 0.03Lux/F1.6	
3.1.77	Camera should have inbuilt minimum 6KV lightning protection module for both the camera and its structure against lightning	
3.1.78	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.79	The camera should complies with rigorous dust and immersion tests (IP67)	
3.1.80	IP cameras should support configuration over standard internet browser with password protection	
3.1.81	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.82	The camera should made by hard metal.	
3.1.83	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.84	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.85	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.86	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.87	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	

3.1.88	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.89	Camera should have inbuilt Audio mic.	
3.1.90	Camera should have minimum 512MB RAM & 32MB ROM	
E.	Bullet 2MP Camera with Varifocal lens	
3.1.91	A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.	
3.1.92	High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.93	Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.94	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.95	H.265 video compression should support	
3.1.96	25 fps full frame rate under high motion and all conditions	
3.1.97	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.98	Minimum Illumination 0.006Lux/F1.6	
3.1.99	Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning	
3.1.100	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.101	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.102	IP cameras should support configuration over standard internet browser with password protection	
3.1.103	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.104	The camera should made by hard metal.	
3.1.105	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.106	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.107	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.108	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.109	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.110	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.111	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.112	Camera should have minimum 256MB RAM & 32MB ROM	
3.1.113	Camera should have minimum 1 inbuilt Video Interface.	
3.1.114	Camera should have minimum 5x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.	

F.	Bullet 4MP Camera with Varifocal lens	
3.1.115	A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.	
3.1.116	High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.117	Lens with Focal Length of minimum 2.70mm to maximum 13.5mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.118	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.119	H.265 video compression should support	
3.1.120	25 fps full frame rate under high motion and all conditions	
3.1.121	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.122	Minimum Illumination 0.03Lux/F1.6	
3.1.123	Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning	
3.1.124	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.125	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.126	IP cameras should support configuration over standard internet browser with password protection	
3.1.127	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.128	The camera should made by hard metal.	
3.1.129	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.130	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.131	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.132	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.133	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.134	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.135	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.136	Camera should have minimum 512MB RAM & 32MB ROM	
3.1.137	Camera should have minimum 1 inbuilt Video Interface.	
3.1.138	Camera should have minimum 5x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.	
G.	Bullet 2MP Camera without Varifocal lens	
3.1.139	A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.	
3.1.140	High resolution minimum 2 MP HD (1080P) or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	

3.1.141	Lens with maximum 3.60mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.142	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.143	H.265 video compression should support	
3.1.144	25 fps full frame rate under high motion and all conditions	
3.1.145	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.146	Minimum illumination 0.009Lux/F1.6	
3.1.147	Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.	
3.1.148	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.149	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.150	IP cameras should support configuration over standard internet browser with password protection	
3.1.151	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.152	The camera should made by hard metal.	
3.1.153	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.154	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.155	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.156	The camera should able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.157	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.158	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.159	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.160	Camera should have minimum 256MB RAM & 32MB ROM	
H.	Bullet 4MP Camera without Varifocal lens	
3.1.161	A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.	
3.1.162	High resolution minimum 4 MP or higher resolution camera & IR/Nigh vision Distance should be minimum 50 meters.	
3.1.163	Lens with maximum 3.60mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.164	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.165	H.265 video compression should support	
3.1.166	25 fps full frame rate under high motion and all conditions	
3.1.167	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.168	Minimum illumination 0.06Lux/F1.6	
3.1.169	Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.	

3.1.170	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.171	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.172	IP cameras should support configuration over standard internet browser with password protection	
3.1.173	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.174	The camera should made by hard metal.	
3.1.175	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.176	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.177	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.178	The camera should able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.179	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.180	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.181	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.182	Camera should have minimum 256MB RAM & 32MB ROM	
I.	Multi-Sensor Panoramic IR Bullet Network Cameras	
3.1.183	A well tropicalized, reliable, high quality colour IP fixed outdoor bullet cameras.	
3.1.184	High resolution minimum 2 MP or higher resolution cameras & IR/Nigh vision Distance should be minimum 30 meters.	
3.1.185	Lens type not recognized, however exact lens type to be verified at site visit. (Please check the diagram & to be clarified at Site Visit)	
3.1.186	Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.187	H.265 video compression should support	
3.1.188	25 fps full frame rate under high motion and all conditions	
3.1.189	IP camera should has inbuilt IR-cut filter with auto switch	
3.1.190	Minimum illumination 0.005Lux/F1.6	
3.1.191	Camera should provide further elasticity for capturing wide area video minimum 180 degree.	
3.1.192	Camera should have inbuilt minimum 5.9KV lightning protection module for both the camera and its structure against lightning.	
3.1.193	The camera should allow for minimum $\pm 29\%$ (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.194	The camera should complies with rigorous dust and immersion tests (IP67) and impact tests (IK10)	
3.1.195	IP cameras should support configuration over standard internet browser with password protection	

3.1.196	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.197	The camera should made by hard metal.	
3.1.198	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.199	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.200	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.201	The camera should able to perform smart detections such as Tripwire violations, Illegal Access, Storage anomaly, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.202	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.203	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.204	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.205	Camera should have minimum 512MB RAM & 32MB ROM	
J.	Outdoor 4K PTZ Camera	
3.1.206	A well tropicalized, reliable, high quality colour IP outdoor PTZ cameras.	
3.1.207	High resolution minimum 8 MP (4K) or higher resolution camera & IR/Nigh vision Distance should be minimum 400 meters.	
3.1.208	Lens with Focal Length of minimum 5.40mm to maximum 250mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.209	Hi-Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.210	H.264 & H.265 video compression	
3.1.211	Minimum 30 fps full frame rate under high motion and all conditions	
3.1.212	Minimum Pan/Tilt Range Pan: 0° ~ 360° endless; Tilt: -30° ~ 90°, auto flip 180°	
3.1.213	PTZ IP camera should has inbuilt IR-cut filter with auto switch	
3.1.214	Minimum Illumination colour 0.002Lux/F1.6 and B/W: 0.0002Lux	
3.1.215	Camera should have inbuilt minimum 8KV lightning protection module for both the camera and its structure against lightning	
3.1.216	The camera should allow for minimum ±29% (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.217	The camera should complies with rigorous dust and immersion tests (IP67)	
3.1.218	IP cameras should support configuration over standard internet browser with password protection	
3.1.219		
3.1.220	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.221	The camera should made by hard metal.	

3.1.222	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.223	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.224	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.225	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.226	Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly	
3.1.227	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.228	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.229	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.230	Camera should have minimum 1024MB RAM & 64MB ROM	
3.1.231	Camera should have minimum 1 inbuilt Video Interface.	
3.1.232	Camera should have minimum 30x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.	
K.	Outdoor PTZ Camera	
3.1.233	A well tropicalized, reliable, high quality colour IP outdoor PTZ cameras.	
3.1.234	High resolution minimum 2 MP (HD) or higher resolution camera & IR/Nigh vision Distance should be minimum 200 meters.	
3.1.235	Lens with Focal Length of minimum 5.40mm to maximum 250mm, however exact lens type to be verified. (Please check the diagram & to be clarified at Site Visit)	
3.1.236	Hi-Power over Ethernet (POE) operation for camera (1* RJ45 100M/1Gbit)	
3.1.237	H.264 & H.265 video compression	
3.1.238	Minimum 30 fps full frame rate under high motion and all conditions	
3.1.239	Minimum Pan/Tilt Range Pan: 0° ~ 360° endless; Tilt: -30° ~ 90°, auto flip 180°	
3.1.240	PTZ IP camera should has inbuilt IR-cut filter with auto switch	
3.1.241	Minimum Illumination colour 0.002Lux/F1.6 and B/W: 0.0002Lux	
3.1.242	Camera should have inbuilt minimum 8KV lightning protection module for both the camera and its structure against lightning	
3.1.243	The camera should allow for minimum ±29% (Plus/minus) input voltage tolerance which suitable for the most unstable conditions.	
3.1.244	The camera should complies with rigorous dust and immersion tests (IP67)	
3.1.245	IP cameras should support configuration over standard internet browser with password protection	
3.1.246	The system MUST support scheduled based full recording in day time (specified time) window and reaming time motion based recording	
3.1.247	The camera should made by hard metal.	

3.1.248	All Cameras Should Support ONVIF IPVSS Protocol and ensure the interoperability between network video products regardless of manufacturer.	
3.1.249	WDR, Automatic White Balance & Starlight Technology should enabled in camera	
3.1.250	Camera must have Inbuilt Micro SD Card slot which minimum 128GB support.	
3.1.251	The camera should able to perform smart detections such as Tripwire violations, intrusion detection, Advanced Intelligent Functions such as face detection and abandoned or missing objects detection.	
3.1.252	Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly	
3.1.253	The camera should able to tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.	
3.1.254	IP camera should support Unicast & Multicast streaming methods and should have minimum 3 streams.	
3.1.255	Camera should have inbuilt Audio channel In & Out and inbuilt Alarm 1 channel In & 1 channel Out.	
3.1.256	Camera should have minimum 512MB RAM & 32MB ROM	
3.1.257	Camera should have minimum 1 inbuilt Video Interface.	
3.1.258	Camera should have minimum 30x optical Zooming capability, minimum 15x digital Zooming capability & should be motorized Focus Control.	
3.2.	Storage	
3.1.1	High quality reliable Surveillance hard disks which can keep records minimum 30 days	
3.1.2	Interface: SATA 6Gb/s	
3.1.3	Storage System should be highly reliable with RAID 5 or above redundancy level.	
3.1.4	Only principle recommended Hard Disk to be used of Central Storage & Recording Servers/NVRs	
3.2	Recording Server/NVR Active-Active :	
3.2.1	Scalable enterprise level software/appliance	
3.2.2	Server level redundancy where single server failure should not impact the recordings and footages in the Total system. Please explain in detail how the design meet this requirement.	
3.2.3	30 days recording to be capable to retain in the server/NVR	
3.2.4	Automatically reap old recordings as part of disk management	
3.2.5	Exporting footages to USB external hard disks and network file share automatically through a scheduled job	
3.2.6	Recordings to be maintained with original resolution and framerate without compromising the quality of the footages	
3.2.7	The Recording Server/NVR should Support minimum 16 Internal HDD which can go minimum to 8 TB capacity for each HDD.	
3.2.8	The Central Backup Storage Server should Support minimum 24 Internal HDD which can go minimum to 10 TB capacity for each HDD.	
3.2.9	The Server/NVR should have multiple record Modes including Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss) and Stop.	

3.3	Central Control & Monitoring Center:	
3.3.1	4 monitoring & control stations and each monitoring station should have 4 monitors.	
3.3.2	Single 4x1 video wall which can access from any monitoring station.	
3.3.3	The system should have single administrative panel which can manage entire IPVSS system.	
3.4	Cabling/networking:	
3.4.1	The cabling network should consist of single mode fiber backbone and UTP at distribution level. All network switches and accessories should be enterprise class reputed products to be listed in Gartner Magic Quadrant or Forrester independent revivers.	
3.4.2	The Supplier will configure, install and maintain the total Cabling System including Fiber, which is a major part of the CCTV system.	
3.4.3	All required power and data cabling and accessories for cameras and devices to be included as part of the solution	
3.4.4	A neat cabling network incorporated with CAT6 Cables should be furnished according to EIA/TIA-568.	
3.4.5	Steel trunking/Steel Flexible and accessories to be used in accordance with the cabling guide lines imposed by SriLankan Airlines.	
3.4.6	All devices to be installed in wall mounted enclosure securely.	
3.4.7	24 port Patch panel with cable management should install at all access nods.	
3.4.8	The solution should include complete power distribution system including lightning arresters, switchgear, cables, racks, wiring etc.	
3.5	The vendor should have all necessary licenses, permissions, consents, no objections, approvals as required under law for carrying out its business.	
3.6	Vendor 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 IPVSS and during support period.	
3.7	The selected Vendor 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.	
3.8	On-site, comprehensive, back-to-back warranty from Original Equipment Manufacturer (OEM) for a period of 3 years from the date of purchase. The warranty also includes all software subscriptions (critical hot fixes, service packs, and major upgrades)	
3.9	The SLA upgrade cost during the warranty period to be identified separately and paid at the end of the quarter. This is to be supported by manufactures commitment through back-to-back agreements and any proposal without meeting this requirement will be rejected. SLA upgrade means the additional cost incurred to the vendor when warranty is enhanced through Service Levels.	
3.1	During the warranty 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 and/or repaired during the warranty period shall be free of charge to SriLankan Airlines.	
3.11	Total Network including fiber and coper UTP to be maintained by the vendor as per the SLA conditions.	

3.12	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 met.	
4	Payment Terms	
4.1	Hardware/Equipment: 40% on successful delivery & 60% on successful installation, commissioning & acceptance of the System	
4.2	Network & Accessories : on successful installation, commissioning & acceptance of the System	
4.3	Installation & Commissioning : on successful installation, commissioning & acceptance of the System	
4.4	Maintenance Support/SLA upgrade & other charges : Quarterly in arrears	
5	Business Continuity	
5.1	The successful vendor should be able to ensure continues system operation even at a time the agreement is breached by the vendor due to whatever reason. This can be done through a tri-party agreement with the principles who will take over the support responsibilities either by appointing another capable service provider or direct support.	
5.2	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.	
5.3	All the system access rights to be shared with SLAL administrators.	
5.4	The proposals without addressing above business continuity requirements will be rejected.	
5.5	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.	
5.6	All the internal and external audit findings to be addressed within agreed time line by the vendor without any cost to the SLAL. This is a mandatory requirement.	
6	Camera category & position design - Site Inspections (Please refer ITB Section 1-D Sub-clause 11.4),	
6.1	Camera category and design detail will share at site inspection (Please refer ITB Section 1-D Sub-clause 11.4), Due to security reasons information not published via RFP.	
6.2	<i>Vendor must provide suitable camera type (2Mp Bullet, Dome Cameras & Panoramic Cameras) according to the UL engineers recommendations where applicable.</i>	
7	Services and Support	
7.1	Maintenance	
7.1.1	The system should be supported by supplier minimum for the period 5 years from the date of commissioning including spares and labour.	
7.1.2	The Service shall be provided for both remedial and Preventive Maintenance. Preventive Maintenance will be conducted at regular quarterly intervals which will be mutually decided by both the parties. Please provide the preventive maintenance schedule along with your proposal.	

7.1.3	Preventive Maintenance will be carried out at the Customer's location at any time within the 8.00am to 4.30pm, as per customer discretion.	
7.2	Spare Parts	
7.2.1	The Supplier will 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.	
7.2.2	<i>The supplier or supplier's agent should maintain spare parts depot to meet the service levels. Any spare parts to made 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.</i>	
7.2.3	<i>In any case supplier should be able to repair/replace faulty equipment within the agreed service levels and any spare part should be provided immediately irrespective of the spare parts stock.</i>	
7.2.4	The Supplier should supply all maintenance aids to the customer Free of charge.	
7.3	Backup Cameras	
7.3.1	The Supplier should provide a backup pool of Cameras onsite to meet the service levels as given below.	
Cameras Installed Based Size	Backup Camera Pool Size	
0 - 25	1	
26 - 50	2	
51 - 100	3	
101-150	4	
150-300	5	
7.3.2	The backup pool of equipment (Cameras) will be of the minimum configuration of the installed base and will be the Hardware configuration/Specifications used by the Customer as appropriate.	
7.3.3	The Supplier should provide a backup pool of switches onsite to meet the service levels as given below.	
Switches Installed Based Size	Minimum Backup Switch Pool Size	
0 - 10	1	
10 - 20	2	
>20	3	
7.4	Service Levels	
7.4.1	Fault Severity	
	Fault severity will be categorized based on the extent to which the fault affects the smooth operation of the business applications. The severity level (1, 2 and 3) will be identified by the Customer Service Desk when the fault call is reported to the supplier. The target service levels will depend on the severity level.	

	Severity 1: Effect of Full or partial operation of the IPVS System/ Back up system	
	Severity 2: Effect of Intermittent/full failure in an individual device.	
	Severity 3: Effect of minor issues which does not affect the operation (in ambiguity situations, Customer has the right to decide)	
7.4.2	Fault Reporting Windows	
	Reporting for Severity 1, 2 & 3 (Equipment in all locations): Business hours during a week Service Levels should also met during Non-Business Hours	
7.4.3	Fault Resolution times	
	Severity 1: Target time for resolution = within 3 Hrs	
	Severity 2: Target time for resolution = within 6 Hrs	
	Severity 3: Target time for resolution - within 24 hours	
7.4.4	Liquidated Damages/Penalties:	
	In view of service not available as agreed within this Service Level Agreement, concerned parties will incur the following penalties. The measurement will be based on occurrences and will be effected on a monthly basis.	
7.4.5	Liquidated Damages/Penalties on the Supplier	
	In the event that the Supplier does not resolve a fault within the agreed time the following charges will be imposed provided the delay is not due to reasons outside the control of Supplier.	
	Severity 1: Rs: 2000/- per hour or part of, Maximum 50% of the Contract Quarter Value	
	Severity 2: Rs: 1000/- per hour or part of, Maximum 50% of the Contract Quarter Value	
	Severity 3: Rs: 500/- per hour or part of, Maximum 50% of the Contract Quarter value	
8	Insurance	
8.1	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	
8.2	A public liability insurance policy covering death, bodily injury, property damage (including damage to SriLankan Airlines property and / or injury, death caused to any employee, passenger, agent, sub-contractor or representative of SriLankan Airlines), Obligations of which is subject to above clause 8.1, with a limit of indemnity of not less than LKR 5 million any one occurrence. The insurance policy shall be extended to cover, but not be limited to, fire and explosion.	
8.3	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.	

9.	The Technical proposal should comprise the following mandatory documents:	
9.1	Bidder should be an authorised partner of the proposed product and document evidence must be provided.	
9.2	In case of authorized partner of OEM the Bidder should submit Manufacturer Authorization Letter conforming the authorize partnership.	
9.3	Bidder must provide minimum 3 references of similar projects over 5 million each project which completed in last 3 years	
9.4	Comprehensive BOM. Item wise Bill-of-Materials (BOM) along the with the equipment specification to be provided as part of the documents. BOM should include details Brand, Model, Manufacture year, Quantity etc for each line item	
9.5	Point-by-Point compliance statement at Annex B-1 attached with the technical proposal.	
9.6	Bidder should provide all the documents and evidence requested with the Technical proposal. Failure to do so, vendor proposal will be rejected	

ANNEXURE C : Price Schedule Format

Supply, Implementation & Maintenance of an Internet Protocol Video Surveillance System (IPVSS) for SriLankan Airlines with end to end support through a Service Level Agreement (SLA)
(CPIT/NCB 05/2019)

Name of the Bidder :

Name of the Principal :

Name of the Manufacturer :

Line item No.	Description of Goods	Country of Origin/ manufacture	Brand/ model	Unit of Measure	Qty	Unit Price with 3 year warranty	Total Price with 3 year warranty	Remarks
1.	<u>Core Infrastructure - Backend Equipment required to support the solution as per the RFP requirements in Annex B</u> [Detailed line item BOM with pricing to be provided by the bidder]							
1.1	.....			Each				
1.2	.....			Each				
1.3	.....			Each				
1.4	.....			Each				
1.5	.....			Each				
2.	<u>Cameras</u>							
2.1	2Mp Bullet, Dome cameras & Panoramic Cameras			Each	112			
2.2	2MP/4MP Bullet, Dome Cameras with Varifocal Lens			Each	65			
2.3	8MP 4K PTZ Cameras			Each	03			
2.4	2MP PTZ Cameras			Each	14			
2.5	Indoor PTZ Camera			Each	05			
2.6	5MP Fishy Eye Camera			Each	01			
2.7	ANPR Camera with total gate Entrance & Exit System			Each	02			
2.8	Other Cameras (Please specify)							
3.	<u>Storage</u>							
3.1	Localized Redundant storage & recording facility with 30 days retention			Nos	05			
3.2	Centralized storage with 35 days retention			Nos	01			
4.	<u>Network Devices</u>							
4.1	Firewall (Please specify)			Nos				
4.2	Layer 2 Devices (Please specify)			Nos				
4.3	Layer 3 Devices (Please specify)			Nos				

4.4	Any Other requirements (Please specify)			Nos				
5	Structured Cabling System							
5.1	Switchgear and accessories (Please specify)			Lot				
5.2	Fiber Cabling			Meters				
5.3	Cat6 Cabling			Meters				
5.4	GI Brackets/casings, Pipes, Steel Flexible & Accessories (Please specify)			Lot				
5.5	Power cabling			Meters				
5.6	Cabinets with Power bars (Please specify)			Each				
5.7	RJ45 Patch Panels, cable Management Panels (Please specify)			lot				
5.8	Labor charges (Please specify)			lot				
5.9	Civil Works & installation material charges (Please specify)			lot				
6.	Monitoring Devices & Security Control Centre Devices							
6.1	55 inches 4k LED Video Wall (TV)			Each	16			
6.2	High End Workstation (Please specify)			Each				
6.3	55"inch 4x1 Video Wall with integration			Each	04			
6.4	Management Servers, Decoders ,Joysticks & other peripherals (Please specify)			Each				
6.5	Installation Materials (Please specify)			lot				
6.6	System monitoring & Management/control Servers (Please specify)			Each				
7.	Uninterrupted Power Supply (UPS)							
7.1	Localized UPS facility with 5minutes			Each				
7.2	Centralized UPS facility with 10 minutes			Each				
8	<u>Installation & Commissioning</u>							
8.1	Cost of installing & commissioning the system with all required accessories and labour			Amount	01			
9.	Any other requirements (Please specify)							
9.1	.....						
9.2	.....						
	<u>Total one time cost for 3 years</u>							

Line item No.	Description			Unit of measure	qty	Recurrent cost per Month	Total cost	Remarks
	<u>Variable/Recurrent charges</u>							
10	<u>Maintenance & Support</u>							
10.1	Maintenance & Support of the system through a Service Level Agreement for the 1 st 3 years to meet the service levels stated in the Bid document			Monthly	36			
10.2	Warranty, Maintenance & Support Cost for 4th year			Monthly	12			
10.2	Warranty, Maintenance & Support Cost for 5th year			Monthly	12			
11	<u>Insurance within the installation period.</u>							
11.1	Cost of Insurance cover			Monthly				
	Total variable recurrent cost for 60 months (5 years)							
	All-inclusive total project cost for 5 years							

Payment terms - with 45 days Credit form the Invoice date.

Hardware/Equipment: 40% on successful delivery & 60% on successful installation, commissioning & acceptance of the System

Network & Accessories: on successful installation, commissioning & acceptance of the System

Installation & Commissioning: on successful installation, commissioning & acceptance of the System

Maintenance Support/SLA upgrade & other charges: Quarterly in arrears

Advance payment is not acceptable. 45 days credit from the date of invoice on the format below.

If the Equipment are to be imported from your foreign principal / manufacture / agent please quote the best possible FCA price (Incoterms-Free Carriage alongside) for the delivery of items to our Freight Forwarder in the respective country. This will ensure that your proposal is more competitive since Sri Lankan Airlines could Air freight the shipments free of charge on our Aircraft and clear the shipment through SL Customs under the BOI - Duty Free facility. Please indicate the country of delivery in your proposal.

If you are unable to quote the FCA Price you may quote the CFR-Colombo price or Duty Free price to clear the shipment through SL Customs under the BOI - Duty Free facility.

If you are quoting FCA or CFR-Colombo price for the Equipment please quote in foreign currency. If you are quoting a delivered price for the Equipment your quote should be in LKR. All other cost components such as Installation & Commissioning, Maintenance & Support, Structured cabling, Labour etc. should be quoted in LKR.

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) since no further price negotiations will be carried out and your BAFO will be considered as the final price for evaluation.

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:..... (attached or not)

Acceptance on 10% performance security:.....

Implementation lead time:

Available locations for inspection of the proposed goods/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]*

ANNEXURE D : Bid Security Declaration form & Bank Guarantee format

THIS IS A COMPULSORY FORM. IF YOU DO NOT FILL & SUBMIT THIS FORM YOUR BID WILL BE REJECTED.

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

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

*Name of contract -- [insert name]

*Contract Identification No: -----[insert number]

*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 SriLankan Airlines, for the period of time of one year 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 Joint Venture (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]

Bid Security/Bank Guarantee format

[This Bank Guarantee form shall be filled in accordance with the instructions indicated in brackets]

-----*[insert the issuing agency's name, and address of issuing branch or office]*-----

Beneficiary: SriLankan Airlines Ltd, Airline Centre, Bandaranaike International Airport,
Katunayake, Sri Lanka.

Date: _____

BID GUARANTEE No: -----*[insert (by issuing agency) number]*

We have been informed that -----*[insert (by issuing agency) name of the Bidder; if a joint venture, list complete legal names of partners]* (hereinafter called "the Bidder") has submitted to you its bid dated -----*[insert (by issuing agency) date]* (hereinafter called "the Bid") for the supply of Bottled water for onboard use, Under Invitation for Bids No.-----*[insert IFB number]*("the IFB").

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

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

- (a) has withdrawn its Bid during the period of bid validity specified; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by SriLankan Airlines during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the Bidder was unsuccessful, otherwise it will remain in force up to ---- *(insert date)*

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

[signature(s) of authorized representative(s)]

ANNEXURE E : 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 the -----Supply 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](----- ---) [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

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)]

ANNEXURE F : 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
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

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.

ANNEXURE G - SAMPLE CONTRACT AGREEMENT

AGREEMENT FOR PROVISION OF SERVICE/SOLUTION

The Agreement for Provision of service/solution (hereinafter referred to as "Agreement") is made and entered into on this ____ day of _____

Between;

SRILANKAN AIRLINES LIMITED a company incorporated in Sri Lanka (Company Registration PB 67) and having its registered office at "Airline Centre", Bandaranaike International Airport, Katunayake, Sri Lanka, (hereinafter called and referred to as "**SriLankan Airlines**" which term or expression shall where the context so requires or admits mean and include the said **SriLankan Airlines Limited**, its successors, assignees and representatives) of the **One Part**;

And

_____ a company incorporated in _____ (Company Registration No. _____) and having its registered office at _____ (hereinafter called and referred to as the "**Contractor**" which term or expression shall where the context so requires or admits mean and include the said _____ its successors, assignees and representatives) of the **Other Part**.

WHEREAS SriLankan Airlines is desirous of procuring _____ (hereinafter referred to as "service/solution") as per the specifications and estimated quantities provided in Schedules attached herewith to the Agreement.

WHEREAS the Contractor is engaged in supply of _____ and desirous of supplying the Service/solution to SriLankan Airlines on a non-exclusive basis according to the specifications and estimated quantities mentioned herein and communicated by SriLankan Airlines from time to time in the future;

WHEREAS the Contractor has expressed its offer to provide SriLankan Airlines with the service/solution according to the terms and conditions provided herein and which offer has been accepted by SriLankan Airlines;

WHEREAS prior to the said offer and the execution of the Agreement, the Contractor has been apprised of the requirements and specification required by SriLankan Airlines for the supply and delivery of service/solution and to all other matters which might have influenced the Contractor in making its bids and has agreed to supply and deliver the Service/solution to SriLankan Airlines pursuant to the said requirements and specifications set forth in the Invitation for Bids document;

WHEREAS the Contractor has expressed its desire to provide SriLankan Airlines with Service/solution according to the terms and conditions provided herein.

IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. OBLIGATIONS OF THE CONTRACTOR:

1.1 The Contractor shall:

- 1.1.1 Deliver Service/solution as more fully described in the Schedule A in quantities ordered by SriLankan Airlines within the time frame as more fully described in Schedule A, to the locations more fully described in Schedule B hereto according to the specifications provided in Annex A (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 A;
 - 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 B in quantities mentioned in Annex B. The Contractor shall be responsible for providing all transportation necessary for the safe movement of Service/solution to the locations as specified in Schedule B 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 3 and Schedule C).
- 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 C 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 (except 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.
- 1.3 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 B 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 2 years from the date mentioned in the Commissioning and Acceptance Form in Annex C 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 A 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 3 and Schedule C 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 C.
- 2.2 SriLankan Airlines shall have the right to charge liquidated damages against the Contractor as provided in Schedule C 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 A are handed over by the contractor. If there is a discrepancy in quantity received and quantity indicated in invoice, UL will inform same to vendor 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 C 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 30 days from the date of Commissioning and Acceptance in Annex C . 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 favour, 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 C.
- 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 wilful 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, agent s 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 wilful 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.

5.4 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 C 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 2.1 of Schedule C, 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 despatch.
- 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.
- 10.3 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 authorised 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
- (a) left at or sent by prepaid registered post to the last known place of business of that; or
 - (b) sent by fax or e-mail to such place of business and confirmed by prepaid registered post, similarly addressed, within 24 hours of the despatch of such fax or e-mail.

In the case of SriLankan Airlines to –
SriLankan Airlines Limited
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

Name:
Designation:

Witness:

Name:
Designation:

For and on behalf of

Name:
Designation:

Witness:

Name:
Designation:

SCHEDULE A

1. Preliminary:

- 1.1 The specifications of Solution& service shall be deemed to form and be read and construed as an integral part of the Agreement.
- 1.2 If persons contracted by and on behalf of the Contractor require any security passes, clearances or other relevant documentation for the provision of Solution/service, the Contractor shall ensure that such passes clearances and documentation have been duly secured from the relevant parties/authorities in a timely manner.
- 1.3 Please refer **Annex A** attached for Specifications of the Post Warranty, Maintenance and Support for existing HP Server Infrastructure

2. Time Schedule:

- 2.1 The Contractor shall upon receipt of the Purchase Order successfully complete the implementation of the Solution/service to the locations specified in Schedule B according to the deadline given in Annex B as set forth under the Purchase Agreement, Purchase Order in accordance to the terms and conditions of the Agreement.

SCHEDULE B

(LOCATIONS)

1. Locations:

The Contractor shall supply and deliver the Solution/service to SriLankan IT Systems, SriLankan Airlines Ltd, Information Technology, Airline Centre, Bandaranaike International Airport, Katunayake, Sri Lanka.

2. Access to Locations:

- 2.1 Access to and from all premises of SriLankan Airlines will be subject to instructions and directions given by SriLankan Airlines and/or any other relevant party or authority.
- 2.2 The Contractor will ensure that workers contracted for and on behalf of the Contractor to provide the Solution/service under this Agreement shall under no circumstance violate Clause 2.1 above.
- 2.3 The Contractor shall indemnify SriLankan Airlines or any other party for death, injury, loss or damage in the event the Contractor or its workers for whatever reason are in breach of Clause 2.1 or any other stipulations under this Agreement.

SCHEDULE C
(RATES & CHARGES)

1. Rates

- 1.1 Rates payable by SriLankan Airlines to the Contractor in respect of the Solution/service specified under this Agreement will be as follows:

Please refer Annex C for Price Schedule Format.

Notwithstanding the Clause 1.1 in this Schedule, SriLankan Airlines shall be entitled to deduct from the aforementioned amounts payable by SriLankan for the delivery of the Solution/service any monies as may be deductible under this Agreement.

2. Bank Guarantee

- a. Bank Guarantee / Performance Security Deposit Amount shall be for a minimum amount of 10% of the agreement value as security to secure the due and proper performance by Contractor of its obligations inter alia under this Agreement.

Deadline of the Performance Security: within 14 days of the receipt of notification of award from the Purchaser the successful bidder shall furnish the performance security of 10% of the total value of the contract, using for that the Performance Security Form included in Annexure D.