



**INFORMATION AND COMMUNICATION TECHNOLOGY
AGENCY OF SRI LANKA**



**BIDDING DOCUMENT
Volume 02**

National Competitive Bidding (NCB)

**Procurement of Supply, Upgrade, Installation, Maintain and Commission of
Network Infrastructure for the Parliament of Sri Lanka**

IFB No: ICTA/SG2/GOODS/NCB/2018/004

September, 2018

Contents

Invitation for Bids (IFB)	1
Section II. Bidding Data Sheet (BDS)	3
Section III. Evaluation and Qualification Criteria	7
Section IV. Bidding Forms	10
Bid Submission Form	11
Price Schedule.....	13
Bid Guarantee	15
Manufacturer’s Authorization.....	16
Bidder Information Form.....	18
Joint Venture Partner Information Form.....	19
Section V. Schedule of Requirements	21
Section VI. Contract Data	55



Invitation for Bids (IFB)

INFORMATION AND COMMUNICATION TECHNOLOGY AGENCY OF SRI LANKA

Procurement of Supply, Upgrade, Installation, Maintain and Commission of Network Infrastructure for the Parliament of Sri Lanka

IFB No: ICTA/SG2/GOODS/NCB/2018/004

1. Information Communication Technology Agency of Sri Lanka (ICTA) will be implementing projects by investing on improving existing network infrastructure for the parliament of Sri Lanka to provide efficient, reliable and secure services between Government institutions and the general public. Under this initiative, ICTA intends to improve ICT facilities at the Parliament of Sri Lanka to provide efficient and effective services within the Parliament.
2. The Chairman, Project Procurement Committee (PPC), on behalf of Information and Communication Technology Agency of Sri Lanka (ICTA), now invites sealed Bids from eligible and qualified Bidders for **Procurement of Supply, Upgrade, Installation, Maintain and Commission of Network Infrastructure for the Parliament of Sri Lanka.**
3. The Bidders should meet the following minimum qualification criteria:
 - Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last **Three [3]** years prior to the applications submission deadline.
 - Minimum average annual turnover of **LKR 70 Million** calculated as total certified payments received for contracts in progress or completed, within the last three **(3)** years;
 - To qualify for the award of contract, the bidder should have completed at least **Two (2)** similar projects within the last **Three (3)** years, with a value of at least **LKR 30 Million**, that have been successfully and substantially completed and that are similar to the scope of works indicated in the Schedule of Requirements
4. Bidding will be conducted using the **National Competitive Bidding (NCB)**

procedure as defined in Procurement Guidelines of Democratic Socialist Republic of Sri Lanka (GoSL) and is open to all eligible Bidders that meet the qualifications requirements specified in the Bidding Documents.

5. Interested eligible Bidders may obtain further information from **Procurement Division Segment 2, ICTA, 160/24, 3rd Floor, Kirimandala Mawatha, Colombo 05** and inspect the Bidding Documents free of charge during office hours (09:00 Hrs 16:00 Hrs) on working days Commencing from **October 12, 2018** at the office of ICTA at the above address. Telephone: 2369099 Extension: 346, E-Mail: procurementsg2@icta.lk
6. A complete set of Bidding Documents in English Language may be purchased by Interested Bidders on submission of a written application and upon payment of a non-refundable fee of **Sri Lankan Rupees Ten Thousand (LKR 10,000.00)**, from **October 12, 2018** during office hours on working days from the office of the ICTA at the address given in paragraph (5) above. The Method of payment will be by cash.
7. Bids must be delivered to the address below (Para 5) at or before **1500 hrs, November 7, 2018**. Late bids will be rejected. Bids will be opened immediately after the deadline for bid submission in the presence of the bidders' representatives, who choose to attend at the address below at **1500 hrs, November 7, 2018**. All bids must be accompanied by a Bid-Security of not less than **Sri Lankan Rupees Five Hundred Thousand (LKR 500,000.00)**.
8. A **pre-bid meeting and site visit** which potential Bidders may attend will be held 11:00 hrs on **October 23, 2018** at the **Parliament of Sri Lanka; Sri Jayewardenepura Kotte**.

Chairperson,
Project Procurement Committee,
Information and Communication Technology Agency of Sri Lanka (ICTA),
**160/24, 2nd Floor, Kirimandala Mawatha,
Colombo 05.**

Section II. Bidding Data Sheet (BDS)

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

ITB Clause Reference	A. General
ITB 1.1	The Purchaser is: Information and Communication Technology Agency of Sri Lanka
ITB 1.1	The name and identification number of the Contract are: Procurement of supply, upgrade, installation, maintain and commission of network infrastructure for the parliament of Sri Lanka Contract Number: ICTA/SG2/GOODS/NCB/2018/004 To qualify for evaluation, bidders are required to bid for 100% of the items and quantities specified for the Parliament of Sri Lanka. Partial bids shall be treated as non-responsive and shall be rejected.
ITB 2.1	The source of funding is: Government of Sri Lanka (GoSL)
	B. Contents of Bidding Documents
ITB 7.1	For Clarification of bid purposes only, the Purchaser's address is: Attention: Procurement Officer – Segment 02 Address: Information and Communication Technology Agency of Sri Lanka, 160/24, Kirimandala Mawatha, Colombo 5. Telephone: 2369099 -346 Facsimile numbers is 2369091. e-mail: procurementsg2@icta.lk A pre-Bid meeting and Site visit will be held: Yes Date : October 23, 2018 Time : 11.00 hrs. Venue : Parliament of Sri Lanka; Sri Jayewardenepura Kotte, Important Note: <i>All bidders must attend to the Pre-Bid meeting and Site visit because important informations relating to the Network wiring, location of Access Points, layout diagrams, measurements, etc. can be observed/obtained during the Site Visit.</i> <i>The Prospective Bidders must send the Name and ID card numbers of the representatives who attend to the Pre-Bid and Site visit to the e-mail: procurementsg2@icta.lk and Copy to the Attn: Ishan D. Bandara ishanb@icta.lk two days prior the Pre-Bid Meeting(i.e. on or before October 21,2018)</i> Clarifications may be requested not later than 07 days before the deadline for submission of bids.

Section II. Bidding Data Sheet (BDS)

C. Preparation of Bids	
ITB 13.1	Alternative bids shall not be considered. Options are not allowed, the bids submitted with options shall be treated as non-responsive and shall be rejected.
ITB 14.3	<p>Bidder shall separately quote for the all Items indicated in the Price Schedule.</p> <p>Bidders are requested to carry out necessary survey at the site visit. Bidder shall include all the cost for the entire network infrastructure works including (wiring / cabling / finishing work. etc) which stated in the schedule of requirement</p>
ITB 15.1	The bidder shall quote the total bid price in Sri Lankan Rupees .
ITB 17	<p>Add the following to ITB 17:</p> <p>17.4 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser’s satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Schedule of Requirements.</p> <p>17.5 To establish the eligibility of the Goods and Related Services in accordance with ITB Clause 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.</p>
ITB 17.3	<p>Period of time the Goods are expected to be functioning at least years including warranty period.</p> <p>Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares in Sri Lanka</p>
ITB 18.1 (a)	<p>Manufacturer’s Authorization is required for following Items:</p> <p>Item 1: Wireless Access Point Controller (WAPC)</p> <p>Item 2: Wireless Access Points (WAP)</p> <p>Item 3: Core Firewall</p> <p>Item 4: Core Ethernet Switch</p> <p>Item 5: Access Ethernet Switch – 24 Ports</p> <p>Item 6: NAC</p> <p>Item 7: Log Management System</p>

Section II. Bidding Data Sheet (BDS)

ITB 19.1	The bid validity period shall be Ninety-one days (91) days from the date of bid closure, accordingly the bid shall be valid until February 06, 2019 .
ITB 20.1	Bid shall include a Bid Security issued by a commercial bank licensed by the Central Bank of Sri Lanka in the format prescribed in Section IV “Bidding Forms – Bid Guarantee”
ITB 20.2	The amount of the Bid Security shall be as follows; Sri Lankan Rupees Five Hundred Thousand (500,000.00) Bid Security shall be issued in favor of; Chief Executive Officer Information and Communication Technology Agency of Sri Lanka 160/24, Kirimandala Mawatha, Colombo 5, Sri Lanka.
ITB 20.2 (f)	Bid Security shall be valid for a period of 28 days beyond the original validity period of bids (up to March 6, 2019) or beyond any period of extension subsequently requested under ITB clause 19.
D. Submission and Opening of Bids	
ITB 22.2 (c)	One copy of the bid shall be accompanied by the Original Bid . This should be in two separate envelopes, duly marking as “ORIGINAL” and “COPY”. The inner and outer envelopes shall bear the following identification marks: Procurement of supply, upgrade, installation, maintain and commission of network infrastructure for the parliament of Sri Lanka Contract Number: <u>ICTA/SG2/GOODS/NCB/2018/004</u>
ITB 23.1	For bid submission purposes, the Purchaser’s address is: Attention: Procurement Officer – Segment 02 C/o; Chief Executive Officer Address: Information and Communication Technology Agency Lanka, 2 nd floor, 160/24, Kirimandala Mawatha, Colombo 05. The deadline for the submission of bids is: Date: November 07, 2018 Time: 1500 hrs
ITB 26.1	The bid opening shall take place at: Address: Information and Communication Technology Agency, 2 nd floor, 160/24, Kirimandala Mawatha, Colombo 05. Date: November 07, 2018 Time: 1500 hrs (immediately after deadline for bid submission)
E. Evaluation and Comparison of Bids	
ITB 34.1	Domestic preference shall not be a bid evaluation factor.

Section II. Bidding Data Sheet (BDS)

ITB 35.3.d	The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: (a) Deviation in Delivery schedule: No (b) Deviation in payment schedule: No the cost of major replacement components, mandatory spare parts, and service: No
ITB 35.4	N/A
ITB 35.5	N/A

Section III. Evaluation and Qualification Criteria

This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser use to evaluate a bid and determine whether a Bidder has the required qualifications. No other criteria shall be used.

Contents

1. Evaluation Criteria (ITB 35.3 {d})
2. Evaluation Criteria (ITB 35.4)
3. Multiple Contracts (ITB 35.5)
4. Post qualification Requirements (ITB 37.2)
5. Domestic Preference (ITB 34.1)

1. Evaluation Criteria (ITB 35.3 (d))

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14, one or more of the following factors as specified in ITB Sub-Clause 35.3(d) and in BDS referring to ITB 35.3(d), using the following criteria and methodologies.

- (a) Delivery schedule: **Not Applicable**
- (b) Deviation in payment schedule : **Not Applicable**
- (c) Cost of major replacement components, mandatory spare parts, and service.

Not Applicable

- (d) Specific additional criteria Other specific additional criteria to be considered in the evaluation, and the evaluation method shall be detailed in BDS Sub-Clause 35.3(d)]

2. Evaluation Criteria (ITB 35.4)

Bidder shall quote for the all items stated in the Price Schedule. (Single lot)
Evaluate the all Bids and select the lowest Evaluated responsive Bid.

3. Multiple Contracts (ITB 35.5)

Not Applicable

4. Post qualification Requirements (ITB 37.2)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 36.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 37, using the following requirements.

- (a) **Financial Capability**
 - i. The Bidder **shall furnish documentary** evidence that it meets the following financial requirements:
 - ii. **Minimum average annual turnover of LKR 70 Million calculated as total certified payments received for contracts in progress or completed, within the last three (3) years**
 - iii. The bidder **must demonstrate** access to or availability of financial resources such as liquid assets, un-encumbered real assets, line of credit and other financial means, other than any contractual advance payment to meet the cash flow requirement of not less than Sri Lanka Rupees **Fifteen Million** (LKR 15 Million) or

equivalent, and net of the bidder's other commitments for this project.

- iv. Audited statements of accounts of the company for the past three (03) years shall be submitted with the bid.

(a) **Commercial and Technical Capability**

The Bidder shall furnish documentary evidence to demonstrate that it meets the following requirements;

- i. Bidder shall be a legally registered company in Sri Lanka and has been in operation for the last Three (03) years. Bidder shall submit the proof document with the Bid.
- ii. **To qualify for the award of contract, the bidder should have completed at least Two (2) similar projects within the last Three (3) years, with a value of at least LKR 30 Million(each project value should be at least LKR 30 Million), that have been successfully and substantially completed and that are similar to the scope of works indicated in the Schedule of Requirements**
- iii. Bidder **must submit the detailed list of similar projects/orders** that the bidder has completed successfully during the period of last three (03) years ending on the deadline of bid submission.
- iv. Bidders and agents shall have technically competent as the authorized dealers/suppliers for brands/products offered in the bid for the last 3 years in supply, delivery installation, providing warranty, support and maintenance.
- v. Documentary evidence to establish conformity of the goods to the technical specifications/standards in the bidding documents along with the Technical Specification Form.

5. Domestic Preference (ITB 34.1)

Not Applicable

Section IV. Bidding Forms

Table of Forms

Bid Submission Form

Price Schedule

Bid Guarantee

Manufacturer's Authorization

Bid Submission Form

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

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

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

To: **Chief Executive Officer**

Information and Communication Technology Agency of Srilanka,

160/24, Kirimandala Mawatha,

Colombo 05,

Sri Lanka.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services [** insert a brief description of the Goods and Related Services*];
- (c) The total price of our Bid without VAT, including any discounts offered is: *[insert the total bid price in words and figures]*;
- (d) The total price of our Bid including VAT, and any discounts offered is: *[insert the total bid price in words and figures]*;
- (e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 23.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 43 and CC Clause 17 for the due performance of the Contract;
- (g) We have no conflict of interest in accordance with ITB Sub-Clause 4.3;
- (h) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been declared blacklisted by the National Procurement Agency;
- (k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

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

In the capacity of *[insert legal capacity of person signing the Bid Submission Form]*

Section III. Evaluation and Qualification Criteria

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

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

Dated on _____ day of _____, _____ *[insert date of signing]*

Price Schedule

[The Bidder shall fill in these Price Schedule in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements. ICTA arrange site visit and Bidder has to do an assessment to quantify the items mentioned as lot in BOM]

Item No (1)	Description of Goods or related services (2)	Qty. and unit (3)	Unit price Excluding VAT LKR (4)	Total Price Excluding VAT LKR (5)= (3) x (4)	VAT LKR (6)	Total Price Including VAT LKR (7)= (5) +(6)
1	Wireless Access Point Controller	2				
2	Wireless Access Point	Lot				
3	Firewall Unit	2				
4	Core Switch	2				
5	Cable and Cable Management	4				
	Patch Cord – Cat 6	Lot				
	Patch Cord – Fiber	Lot				
	Cable laying - Fiber	Lot				
	Cable laying - Cat 6	Lot				
	Cable Management	Lot				
	Faceplate (Single) with Keystone	Lot				
	Termination, Labelling & Testing of a UTP/Fiber Network node, WAP and Network Equipment's Installation	Lot				
	Enclosures with required accessories	Lot				
6	Miscellaneous Items (Casings, Power outlets, RJ45 Connectors etc)	Lot				

Item No (1)	Description of Goods or related services (2)	Qty. and unit (3)	Unit price Excluding VAT LKR (4)	Total Price Excluding VAT LKR (5)= (3) x (4)	VAT LKR (6)	Total Price Including VAT LKR (7)= (5) +(6)
7	Access Ethernet Switch – 48 Ports	Lot				
8	VM Licensing	1				
9	NAC	1				
10	Log Management	1				
11	Warranty & Maintenance	Lot				
12	Training	Lot				
13	Installation & commission	Lot				
14	Licenses	Lot				
15	Damage & Recovery	Lot				
Total						

Note: Bidders are requested to carry out necessary survey during the site visit. Bidder shall include all the cost for the entire network infrastructure works including (wiring / cabling / finishing work. etc) which stated in the schedule of requirement

Name of the Bidder:

.....

Signature and the Company Seal

Bid Guarantee

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

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

Beneficiary: Chief Executive Officer ,
Information and Communication Technology Agency of Srilanka,
160/24 , Kirimandala Mawatha,
Colombo 05,
Sri Lanka.

Date: ----- *[insert (by issuing agency) date]*

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

We have been informed that ----- *[insert (by issuing agency) name of the Bidder; if a 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 *[insert name of Supplier]* under Invitation for Bids No. { **Insert the IFB Number** } ("the IFB").

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

At the request of the Bidder, we ----- *[insert name of 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 the Purchaser 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)]

Manufacturer's Authorization

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

Date:

{ IFB No: ICTA/SG2/GOODS/NCB/2018/004 }

To:

**Chief Executive Officer ,
Information and Communication Technology Agency of Srilanka,
160/24,Kirimandala Mawatha,
Colombo 05,
Sri Lanka.**

WHEREAS

We [*insert complete name of Manufacturer*], who are official manufacturers of [*insert type of goods manufactured*], having factories at [*insert full address of Manufacturer's factories*], do hereby authorize [*insert complete name of Bidder*] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [*insert name and or brief description of the Goods*], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the Conditions of Contract, with respect to the Goods offered by the above firm.

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

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

Title: [*insert title*]

Duly authorized to sign this Authorization on behalf of: [*insert complete name of Bidder*]

Dated on _____ day of _____, _____ *[insert date of signing]*

Bidder Information Form

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

Date: _____

IFB No: ICTA/SG2/GOODS/NCB/2018/004

Page _____ of _____ pages

1. Bidder's Legal Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each party: <i>[insert legal name of each party in JV]</i>
3. Bidder's actual or intended Country of Registration: <i>[insert actual or intended Country of Registration]</i>
4. Bidder's Year of Registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Legal Address in Country of Registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of: <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.1 and 4.2. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB Sub-Clause 4.1. <input type="checkbox"/> In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 4.5.

Joint Venture Partner Information Form

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

Date: _____

IFB No: ICTA/SG2/GOODS/NCB/2018/004

Page _____ of _____ pages

1. Bidder's Legal Name: <i>[insert Bidder's legal name]</i>
2. JV's Party legal name: <i>[insert JV's Party legal name]</i>
3. JV's Party Country of Registration: <i>[insert JV's Party country of registration]</i>
4. JV's Party Year of Registration: <i>[insert JV's Part year of registration]</i>
5. JV's Party Legal Address in Country of Registration: <i>[insert JV's Party legal address in country of registration]</i>
6. JV's Party Authorized Representative Information Name: <i>[insert name of JV's Party authorized representative]</i> Address: <i>[insert address of JV's Party authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Party authorized representative]</i> Email Address: <i>[insert email address of JV's Party authorized representative]</i>
7. Attached are copies of original documents of: <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation or Registration of firm named in 2, above, in accordance with ITB Sub-Clauses 4.1 and 4.2. <input type="checkbox"/> In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 4.5.

9. Names and addresses of the Independent Inspecting Authorities in country of origin (for approval and selection by Purchaser)

1.
2.
3.

10. Name and address of Air Carrier proposed to be used by supplier:

.....
.....

11. The Bidder shall affirm the following:

I hereby swear that no individual or partner or stockholder or officer or director associated with this Bid is in any way associated or interested in any other Bid being submitted for this contract to the Purchaser.

.....
Signature of person authorized to sign

.....
(Name and title of person authorized to sign)

List below the supplementary supporting documentary evidence attached.

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

Section V. Schedule of Requirements

- 5.1 LIST OF GOODS AND DELIVERY SCHEDULE
- 5.2 TECHNICAL SPECIFICATIONS
- 5.3 INSPECTIONS AND TESTS
- 5.4 SERVICE LEVEL AGREEMENT

Minimum Technical and Functional Specifications

Provided below are the minimum Technical Specifications to upgrade, maintain, commission and install communication infrastructure. Bidders should respond to these requirements according to the formats given below.

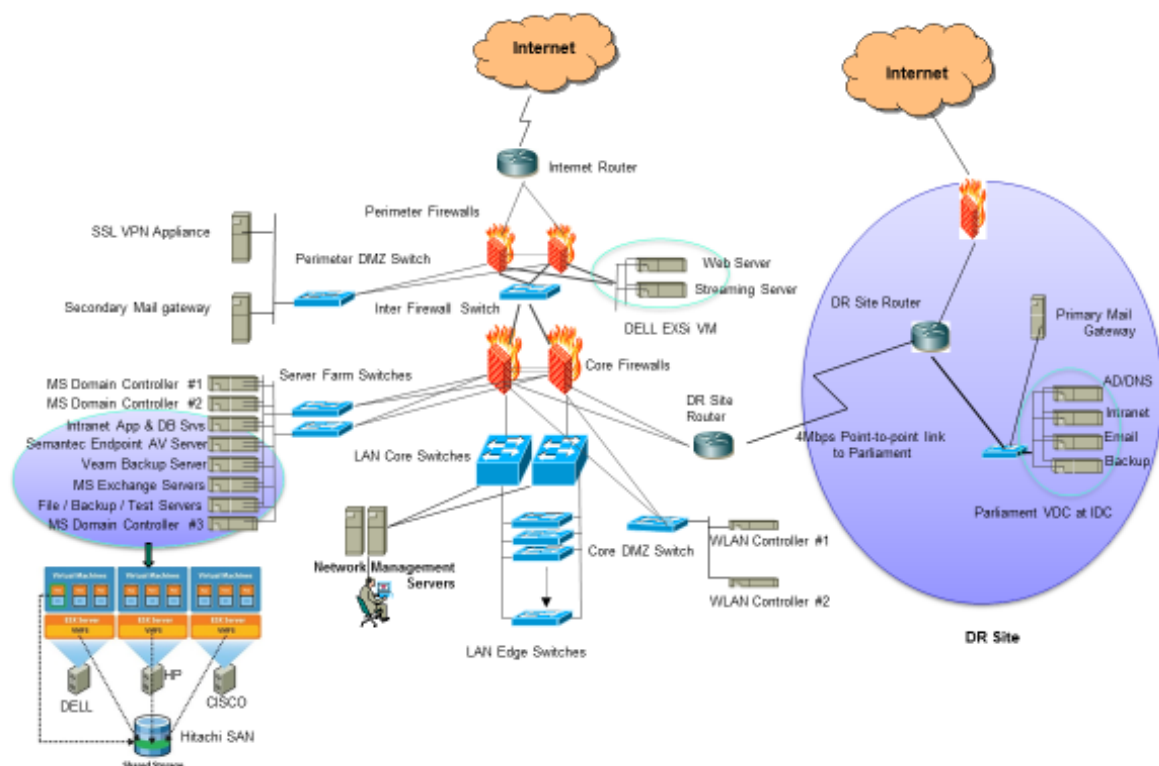
1. Overview

Parliament IT infrastructure has been evolved as an unified network over the last 11 years having enhanced its capacity and performance with incorporation of advanced IT technology and equipment and the infrastructure has now reached to its top where no further performance improvement can be achieved.

The overall IT system services consist of Fiber backbone, Core Switches, Firewalls, Wired and wireless network infrastructure along with VMware based server infrastructure.

1.1. Current Network infrastructure

Communication Infrastructure – Parliament of Sri Lanka



1.2. Available services

- Web service and Mobile Application with Wowza Streaming enabled.
- Web based Parliament intranet system
- Exchange Mail service
- IT Infrastructure Services - Microsoft AD, DNS, Domain infrastructure
- Storage Area Network
- Legacy applications services (Hansard App, Fingerprint Access control system)
- Internet connectivity through 20Mbps Leased line.
- VMware and Veeam Backup service.
- Central Monitoring mechanism enabled with Intermapper.
- McAfee Endpoint security
- DR site at SLT cloud platform – Mirrored Intranet, Mail, AD, and Backup systems
- Internal Test and Development environments of Web and Intranet systems.
- Tape based backup solution (Offline) with LTO II Tape loader

1.3. Bidders are required to submit a gap analysis report after studying the existing system.

2. Issues identified in the current system

- Some Equipment including the following are at End of Life.
 - Core switch - Cisco Catalyst 4506,
 - Core firewall – Juniper SGS 1000
 - Wireless Controller – Aruba 2400 together with 76 number of Access points (AP61)
 - Edge Switches – Cisco 2950, 2960
- Poor Performance to cater the future requirement
 - The existing bandwidth of Backbone is limited to 1Gbps and this bandwidth does not meet the requirements (CCTV, IPTV) to come in the future.
- Insufficient Scalability
- Inadequate redundancy

Not all the devices are high available

- Weak Security throughout the Network Infrastructure
No IDS /IPS in the current system
- No Maintenance Agreements
Most of the devices do not have Comprehensive maintenance agreement to guarantee uninterrupted service availability
- Insufficient Wireless coverage
- Poor authentication features in wireless infrastructure
- Poor performance in the wireless infrastructure
- No central log management facility

2.1. Bidders are expected to propose their high-level design approach addressing the gaps and issues listed here in compliance with specifications. The design needs to have clarifications on how to solve the gaps and issues.

3. Scope of the project

3.1. The project is intended to upgrade the existing ICT infrastructure mainly addressing the following key components to enhance performance and high availability in order to make the system suit current needs and future readiness;

- Wireless LAN (Access Controllers and Access Points)
- Core Firewall
- Core Switch
- Fiber Back bone
- Edge Switches
- VMWare licensing
- NAC
- Log Management System

3.2. Study the existing infrastructure and provide a gap analysis report;

-
- 3.3. To provide the required equipment and services in compliance with given minimum Specification and the BOM;
 - 3.4. To extend the network cable (UTP and FO) infrastructure to required locations;
 - 3.5. To upgrade and install the equipment and services with minimum interruption to business operations in Parliament;
 - 3.6. To test and commission the system, acceptable to Parliament;
 - 3.7. To provide training and documentation;
 - 3.8. To maintain the system for a period of three years;

4. Design Consideration

Vendor has to make sure following Design Consideration

- Seamless integration to the existing system with minimum interruption to existing ICT services;.
- Maintain High Availability of the devices and supportive services;
- Improved performance
- No single point of failure
- Improve central monitoring capability
- Should support unified data infrastructure supporting multiple data streams such as CCTV, IP TV , and IT systems

4.1.The bidder should provide detailed design document addressing the above concerns.

5. Minimum Technical Specification

5.1.General Requirements (The Bidder shall fill following Compliance Sheet. Bidders failure to fill the sheet may be a reason for the rejection.)

	Requirements	M/D	Yes/No	Bidders Comment
5.1.1	Proposed products and accessories shall comply with OEM standards	M		
5.1.2	Backbone bandwidth shall support 1G /10G or higher	M		
5.1.3	Wired Client access speed must be at 1 Gbps or higher and Wireless client access speed must be 20Mbps or higher	M		
5.1.4	Shall facilitate data, voice and video	M		
5.1.5	Shall Support Software Defined Networking (SDN) capabilities/features	D		
5.1.6	Need to support IPv4 and IPv6	M		
5.1.7	All the network devices shall support TACACS+	M		
5.1.8	Manufacturer authorization letters shall be provided	M		
5.1.9	The bidder shall have a minimum 2 no of Product certified engineers supported by documentary evidence	M		
5.1.10	Standard Rack-mountable devices shall provide (Without AP)	M		
5.1.11	Proposed product types shall be in leader category on the Gartner Magic Quadrant in respective areas for last 5 years	M		
5.1.12	Active Directory authentication is required to allow internal users privileged access to all devices	M		
5.1.13	The proposed equipment shall be integrated with the existing Network Monitoring Tool	M		

5.2.Wireless Access Point Controller (WAPC)

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.2.1	Brand	(Specify)	M		
5.2.2	Model	(Specify)	M		
5.2.3	Country of Origin	(Specify)	M		
5.2.4	Country of Manufacture	(Specify)	M		
5.2.5	Year of manufacture	(Specify)	M		
5.2.6	Type	Rack Mountable	M		
5.2.7	Supported bandwidths and standards	Shall support 802.11ac Wave 2	M		
		2.4 GHz	M		
		5 GHz	M		

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.2.8	Minimum WAPs supported	Shall support maximum 200 access points per controller	M		
5.2.9	Maximum client support	3000 wireless clients	M		
5.2.10	Maximum VLANs	4096	M		
5.2.11	Throughput	20 Gbps	M		
5.2.12	AP discovery & control	Layer 2 & 3	M		
5.2.13	L3 support	IPv4 and IPv6, DHCP Server Support	M		
5.2.14	Access	Captive portal	M		
5.2.15	Interface	2x Multigigabit Ethernet interface (up to 10 Gigabit Ethernet), + 4x 1 Gigabit Ethernet	M		
5.2.1		1x service port: 1 Gigabit Ethernet port (RJ-45) 1x redundancy port: 1 Gigabit Ethernet port (RJ-45) 1x console port: Serial port (RJ-45) 1x console port: Serial port (mini-B USB) 1x USB 3.0 port	M		
5.2.2	Security Standards and Protocols	Need to support WEP, WPA, WPA2 security	M		
5.2.3		Shall support MD5, 3DES, SHA-1, TLS..etc	M		
5.2.4		Shall support AES and TKIP encryption	M		
5.2.5	Authentication, Authorization, and Accounting (AAA)	IEEE802.1X , AAA, RADIUS, LDAP, Local Database	M		
		Web-based authentication	M		
		TACACS support for management users	M		
		Multiple Authentication in encrypted form	M		
5.2.6	Simplified Guest Access and Onboarding	Shall have prebuilt templates to get a quick start with Wi-Fi guest portals	M		
5.2.7		Shall provide easy drag-and-drop components to create a custom look and function for the portal pages	M		
5.2.8		Shall provide multiple access	M		

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
		methodologies to choose from, including simple registration, SMS, guest vouchers, email authentication, sponsor email, and social media login			
5.2.9		Shall provide Guest user analytics such as new vs. repeat visitors, network usage, portal and SMS success ratio, language used etc	M		
5.2.10	Management and Monitoring	Web-based: HTTP/HTTPS	M		
		Command-line interface: Telnet, Secure Shell (SSH) Protocol, serial port	M		
5.2.11		Need to support SNMP for monitoring and management	M		
5.2.12		Shall able to monitor user activities such as bandwidth, Signal Strength ..etc	M		
5.2.13		Shall provide real time performance logs for devices and user activities (Real time and historical)	M		
5.2.14		required detailed diagnostic logs for user connections	M		
5.2.15		Need detail user reporting facilities to improve visibility for user activities (Real time and historical)	M		
5.2.16		Shall have QoS for Voice/Video over wireless	M		
5.2.17	Accessories	Ethernet cable / Console cable	M		
		Power cord	M		
5.2.18	Power Supply	100 ~ 220V, 50/60Hz	M		
5.2.19	Dimension (W x D x H)	(Specify)	M		
5.2.20	Weight	(Specify)	M		
5.2.21	Operating Temperature & Humidity	Operating: 32 to 104 °F (0 to 40°C)	M		
		Operating Humidity: 5% to 95% RH non-condensing	M		
5.2.22	Install and Configuration	The bidder shall install and configure the WAPC as per the purchasers' request and to other systems simultaneously.	M		
5.2.23		Required to configure two Controllers with high availability (Active-Active)	M		

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.2.24		Vendor shall provide detailed report on WAP deployment with connectivity diagram. The report needs to cover traffic flow, high availability, security etc.	M		
5.2.25	Application and device Support	Need Support Intruder Prevention (IDP)	M		
5.2.26		Application visibility and ACL shall Support	M		
5.2.27		Shall support industry standard BYOD management	M		
5.2.28		Manufacturer authorization letter shall be provided.	M		

5.3. Wireless Access Points (WAP)

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.3.1	Brand	Shall be the same brand of the Controller	M		
5.3.2	Model	(Specify)	M		
5.3.3	Country of Origin	(Specify)	M		
5.3.4	Country of Manufacture	(Specify)	M		
5.3.5	Year of manufacture	(Specify)	M		
5.3.6	Type	Indoor	M		
5.3.7	Supporting standards	Shall support 802.11ac Wave 2	M		
5.3.8	Maximum client support	Maximum 40 user per AP	M		
5.3.9	Integrated Antenna	Shall have inbuilt integrated Antennas	M		
5.3.10	MIMO support	MIMO 3X3	M		
5.3.11	Deployment modes	Vendor shall submit comprehensive WAP deployment report along with wireless assessment. For this vendor can do a site survey	M		
5.3.12		Shall provide wireless coverage for 90% floor area of parliament building providing minimum -65dBm signal strength (The remaining 10% of the floor area will be defined by Parliament upon awarding the	M		

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.3.13		contract)		
5.3.13		Shall support Centralized deployment controlled through a Wireless controller (Plug and play AP deployment is required)	M	
5.3.14		Shall support seamless roaming across parliament building	M	
5.3.15		Shall provide minimum user bandwidth 20 Mbps	M	
5.3.16	Ports	1 x 10/100/1000BASE-T autosensing (RJ-45), Power over Ethernet (PoE) Management console port (RJ-45)	M	
5.3.17	Frequency band	2.4 GHz	M	
		5 GHz	M	
5.3.18	Transmission power	22 dBm or higher	M	
5.3.19	Power over Ethernet (PoE)	802.3af / 802.3at	M	
5.3.20	Data rate	Total aggregate dual-radio data rate of up to 1 Gbps	M	
5.3.21	Multiple broadcast SSID	16	M	
5.3.22	Accessories	Ethernet cable	M	
		Wall / Ceiling mount kit	M	
5.3.23	Security Standards	802.11i, Wi-Fi Protected Access 2 (WPA2), WPA	M	
		802.1X, AES, TLS, EAP-MSCHAPv2...etc	M	
5.3.24	Management	Standalone secure web based, SSH or Centrally manage with a controller	M	
5.3.25	Mounting option	Wall / Ceiling mounting required with the mounting bracket	M	
5.3.26	Operating system	(Specify)	M	
5.3.27	Hardware reset button	Required	M	
5.3.28	Dimension (W x D x H)	(Specify)	M	
5.3.29	Weight	(Specify)	M	
5.3.30	Power supply	PoE enabled	M	
5.3.31	Install and Configuration	WAP shall be deployed in controller redundancy mode between two controllers providing high availability;	M	

5.4.Next Generation Firewall

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.4.1	Brand	(Specify)	M		
5.4.2	Model	(Specify)	M		
5.4.3	Country of Origin	(Specify)	M		
5.4.4	Country of Manufacture	(Specify)	M		
5.4.5	Year of manufacture	(Specify)	M		
5.4.6	Form factor	Rack Mountable	M		
5.4.7	Interfaces	4x 1G/10G interfaces (SFP) / Ethernet	M		
5.4.8		8 x 1 Gigabit (SFP) /Ethernet interfaces	M		
5.4.9		1 x Gigabit Ethernet copper port for Management	M		
5.4.10		1 x RJ-45 console	M		
5.4.11		1 x USB 2.0	M		
5.4.12	Architecture	Proposed Firewall shall not be proprietary ASIC based & shall be open architecture based on multi-core CPU's to protect & scale against dynamic latest security threats	M		
5.4.13	Maximum concurrent sessions	1 million	M		
5.4.14	Next Generation Firewall throughput (FW+IPS)	4.7 Gbps (Shall be real world throughput not lab throughput)	M		
5.4.15	Multiple Security Zones	Shall support minimum 1024 security zones	M		
5.4.16	Access Control Criteria	User Identity	M		
		Source and Destination zone	M		
		IP Addresses	M		
5.4.17	VLAN interfaces	Shall have minimum 1024 VLAN	M		
5.4.18	VLAN support	802.1Q VLAN Support	M		
5.4.19	IP address assignment	Static	M		
		PPoE client	M		
		DHCP Server, Client, Relay	M		
5.4.20	User Authentication	Internal Database	M		
		AD Integration	M		

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.4.21	Routing protocols	Dynamic Routing <ul style="list-style-type: none"> • BGP • OSPF • RIP v1, v2 	M	
		Static routes	M	
		Policy based routing	M	
		Multicast Support	M	
		Other (specify)	M	
5.4.22	PAT/NAT	Static NAT (Port forwarding)	M	
5.4.23		Dynamic PAT/NAT	M	
5.4.24		One to One PAT/NAT	M	
5.4.25		Policy Based PAT/NAT	M	
5.4.26		IPsec NAT Traversal	M	
5.4.27	Networking	Port Independence	M	
5.4.28		VLAN (Tagging, Routed mode)	M	
5.4.29		VoIP and Video Conferencing Support	M	
5.4.30		QoS Support Bandwidth priority <ul style="list-style-type: none"> • Differentiated services • Other (specify) 	M	
5.4.31	IDS/IPS	IDS support	M	
		IPS support	M	
5.4.32	Threat/Security Protection	DoS/ DDoS attacks Prevention	M	
5.4.33		Advanced threats Prevention	M	
5.4.34		Detecting and Preventing Brute Force Login Attacks	M	
5.4.35		Network Attack Detection	M	
5.4.36		Zone based IP spoofing & flooding protection	M	
5.4.37		Shall be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.	M	
5.4.38	IPv6 support	Comprehensive security over IPv6 (Routing and policing)	M	
5.4.39	Indicators (Alarm / Notification)	Management System Alert	M	
		Port Status	M	
5.4.40	Installation & Deployment	Vendor shall deployed firewalls in Active-Standby mode with minimum impact to business continuity	M	
5.4.41		Required to configure two Firewall with high availability	M	

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.4.42		Vendor shall submit comprehensive deployment report		
5.4.43	Administration & system management	Web-based configuration wizard	M	
5.4.44		Role-based access control	M	
5.4.45		Support of API	M	
5.4.46		Command Line Interface (Serial, SSH, Telnet)	M	
5.4.47		Other (specify)	M	
5.4.48	Centralized event and Policy management	Shall provide unified management console for firewalls, , intrusion prevention,	M	
5.4.49		Shall deliver comprehensive alerts and reports	M	
5.4.50		Shall display event and contextual information in hyperlinked tables, graphs, and charts	M	
5.4.51		Shall monitor network behavior and performance to identify anomalies	M	
5.4.52		Shall provide Role-based management	M	
5.4.53		Shall have customizable dashboard with custom and template-based reports	M	
5.4.54		Shall provide correlation and remediation features for real-time threat response	M	
		Shall have open APIs for integration with third-party solutions	M	
5.4.55	Bandwidth management	User / Group / Application based bandwidth policies	M	
5.4.56		Internal Application & User Identity based Traffic Discovery	M	
5.4.57		Other (specify)	M	
5.4.58	Logging/Reporting	Graphical Interfaces	M	
5.4.59		Real-time Monitoring	M	
5.4.60		Historical Monitoring	M	
5.4.61		Syslog support	M	
5.4.62		NetFlow Support		
5.4.63		Log Viewer	M	
5.4.64		HTML and PDF reports	M	
5.4.65		Other (specify)	M	
5.4.66	Certifications	NSS LAB Report	M	
5.4.67		Other (Specify)	M	

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.4.68	Power supply with Internal or External Redundant PSU	100~240V, 50/60Hz Power Supply	M	
5.4.69	Power consumption	(Specify)	M	
5.4.70	Dimension (WxDxH)	(Specify)	M	

5.5.Core Switch

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.5.1	Brand	(Specify)	M	
5.5.2	Model	(Specify)	M	
5.5.3	Country of Manufacture	(Specify)	M	
5.5.4	Year of manufacture	(Specify)	M	
5.5.5	Type	Rack Mountable	M	
5.5.6	Status LEDs	System, Link/Act	M	
5.5.7	Interfaces/Ports	Switch shall support 1G and 10G Gigabit Ethernet and fiber interfaces.	M	
5.5.8		Shall have at least 24 number of 1G Gigabit Ethernet ports	M	
5.5.9		Shall have at least 48 number of 10G Fiber ports	M	
5.5.10		Existing 1G Fiber ports/connections need to utilized and capable to upgrade in to 10G at any time.	M	
5.5.11		Shall support 10G back born speed for entire edge switches which are located at 18 different Rack locations in the parliament complex	M	
5.5.12	CPU memory DRAM	16GB DRAM & 16GB Flash or Higher	M	
5.5.13	Supporting switching layer	Shall have L3 Support	M	
5.5.14	VLAN support	Port-based and 802.1Q VLAN Support (4,000 VLAN IDs)	M	
		Centralized VLAN Management	M	
		Guest VLAN support	M	
		Dynamic VLAN assignment via Radius server with 802.1x client	M	

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
		authentication		
5.5.15		VLANs created on the Core Switches shall be propagated to all the other switches automatically	M	
5.5.16	Switching capacity	1.4Tbps or higher	M	
5.5.17	L3 features support	IPv4 and IPv6 Support	M	
5.5.18		Static routing <ul style="list-style-type: none"> • RIP (v1, v2) • OSPF • BGP v4 • IPv4 and IPv6 Routing (OSPFv3 and EIGRPv6) 	M	
5.5.19		Equal-cost routing (L3 Load Balancing)	M	
5.5.20		IGMPv1, v2, and v3	M	
5.5.21		Policy-based routing	M	
5.5.22	Other features	NTP Support	M	
		Net Flow Support	M	
5.5.23	Mac address	96,000 or higher	M	
5.5.24	Security	Access Control Lists (L2 / L3)	M	
5.5.25		Centralized authentication, Configuration and security reporting	M	
5.5.26		Port Security	M	
5.5.27		DHCP Snooping	M	
5.5.28		Dynamic ARP inspection (DAI)	M	
5.5.29		Intrusion Detection System (IDS)	M	
5.5.30		TACACS+ and RADIUS authentication	M	
5.5.31		AES-256 Encryption	M	
5.5.32	Switch Management	SSH, SNMP v1/v2/v3 & Web Interface, Remote Monitoring (RMON), Command Line Interface (CLI) & RSPAN support	M	
5.5.33	Spanning tree	Spanning Tree, Multiple Spanning Rapid Spanning Tree	M	
5.5.34	Reliability (MTBF)	30 Years or better	M	
5.5.35	Other management	SSH, DHCP client support, SYSLOG, configuration unload/backup via HTTP or TFTP	M	
5.5.36		SNMP Mibs for QOS	M	
5.5.37		Network Timing Protocol (NTP) to provide an accurate and consistent timestamp to all Intranet switches.	M	

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.5.38	Highly Availability	Vendor shall deployed core switches in Active-Active mode with minimum impact to business continuity.	M		
5.5.39		Vendor shall submit comprehensive deployment report.	M		
5.5.40	Standards	IEEE 802.x Standards (1as, 1s, 1w, 11, 1x, 3ad, 3af, 3at, 1D, 1Q)	M		
5.5.41	QOS	Support for Automatic Quality of Service for easy configuration of QoS features for critical applications	M		
5.5.42		Rate limiting support based on source and destination IP address, source and destination MAC address	M		
5.5.43	Accessories	Console cable	M		
		Rack mountable Installation kit	M		
5.5.44	Enclosure dimension (H x W x D)	(Specify)	M		
5.5.45	Operating temperature	23 to 113°F (-5 to 45°C)	M		
5.5.46	Weight	(Specify)	M		
5.5.47	Power supply	Power supplies 220-240 VAC	M		

5.6.Upgrade Cabling Infrastructure (Indoor)

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.6.1	The proposed Cabling infrastructure shall support Communication Infrastructure technologies such as Gigabit Ethernet (1000Mbps) 10 Gigabit Ethernet (10Gbps)	M		
5.6.2	The existing Fiber Optic (FO) cable which are incompatible with 1/10 Gb shall be identified and upgraded with supportive cable (the existing FO cable and rack locations given in Annexure A)	M		
5.6.3	The cable shall be compliant with the ANSI/TIA/EIA 568 and CAT 6 or better standards;	M		
5.6.4	Cable shall be properly laid using information outlets, cross connectors and solid PVC Casing and conduit;	M		
5.6.5	Patch leads of maximum 2m length shall be provided for connection of patch panel to the switch	M		

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.6.6	FO cable shall be single mode, 6 core, 50/125 micron compatible with 1/10 Gbps; the FO cables shall be properly terminated at both ends;	M		
5.6.7	Enclosure shall be as follows <ul style="list-style-type: none"> All cabling shall be terminated in industry standard equipment closets; the existing closets may be used, as needed; otherwise, new closets with minimum following specification shall be provided: Shall be fully enclosed with lockable front door; Shall be properly grounded as per EIA/TIA 607; Shall have adequate room for mounting patch panels, switches and power units; 			
5.6.8	UTP cables shall be properly extended to required locations	M		
5.6.9	All new fiber cables shall use two physical network paths for each and every rack location (vendor can utilize existing cable paths if it consists of free space)	M		

5.7.Upgrade VMware License

Item No.	Minimum Specification	M/D	Yes/No	Bidders Comment
5.7	Vendor shall supply VMware vSphere Standard Licenses for minimum 4 number of Servers (2CPU per each server);	M		
5.7	Shall provide the License for VCenter Server and deploy the server accordingly;	M		
5.7	Shall upgrade the existing VMware infrastructure to the latest vSphere version and deploy licenses accordingly;	M		
5.7	The upgraded VMware infrastructure shall be well integrated with the existing Storage Area Network (SAN) and the VMs shall be migrated with minimum business impact;	M		
5.7	The existing Veeam Backup shall be well reconfigured and integrated with the proposed system	M		

5.8.Access Ethernet Switch – 24/48 Ports

Item No.	Minimum Specification	M/D	yes/No	Bidders Comment
5.8.1	Brand (Specify)	M		
5.8.2	Model (Specify)	M		
5.8.3	Country of Origin (Specify)	M		

Item No.	Minimum Specification		M/D	yes/No	Bidders Comment
5.8.4	Country of Manufacture	(Specify)	M		
5.8.5	Year of manufacture	(Specify)	M		
5.8.6	Type	Rack Mountable	M		
5.8.7	Hardware Features	Switch shall support 1G and 10G Gigabit Ethernet and fiber interfaces.	M		
5.8.8		Shall have at least 2 number of 10G Fiber ports	M		
5.8.9		Vendor shall provide standard 24 or 48 number of 1G ports switches as per your proposal	M		
5.8.10		Switching bandwidth shall be minimum 200 Gbps	M		
5.8.11		Forwarding rate shall be minimum 150 Mpps	M		
5.8.12		Proposed switches shall be operating in wire-speed and shall be non-blocking	M		
5.8.13		Shall have UPOE and POE+ capabilities	M		
5.8.14		Minimum 8GB Memory and 16GB Flash	M		
5.8.15	Switching Features	Must support Fast and Gigabit Ethernet	M		
5.8.16		Must support Spanning-Tree Protocol	M		
5.8.17		Must support VLAN encapsulation	M		
5.8.18		Must support Protocols LACP,LDAP and DHCP	M		
5.8.19		Need to support multiple VLANS, ACL and QOS	M		
5.8.20	Routing Protocol Support	Must support Static IP routing	M		
5.8.21	Security Features	Must support multiple privilege levels for remote access	M		
5.8.22		Must support AAA using RADIUS and/or TACACS+,	M		
5.8.23		Shall be able to support ACLs for both IPv4 & IPv6, VLAN ACLs,	M		
5.8.24	Management Features	Web GUI for device configuration (HTTP/HTTPS).	M		
5.8.25		Need to support SNMPv1, SNMPv2, SNMPv3 and net flow	M		
5.8.26		Network Timing Protocol (NTP) to provide an accurate and consistent	M		

Item No.	Minimum Specification		M/D	yes/No	Bidders Comment
		timestamp			
5.8.27		Shall have remote logging for administration using Telnet, CLI Console and SSH connectivity	M		
5.8.28		All the required license to meet the specification must be provided by the vendor at the time product delivery. Vendor shall decide on the licenses that needs fulfill the above requirements.	M		
5.8.29	Deployment modes	Vendor shall deploy adequate number of switches considering the distribution of Access Point as specified in the proposal with minimum impact to business continuity.	M		
5.8.30		Vendor shall submit report on switch distribution and WAPs connected to switches	M		

5.9.NAC

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.9.1	Brand	(Specify)	M		
5.9.2	Model	(Specify)	M		
5.9.3	Country of Origin	(Specify)	M		
5.9.4	Country of Manufacture	(Specify)	M		
5.9.5	Features	Solution shall offer comprehensive visibility of the network by automatically discovering, classifying, and controlling endpoints connected to the network. (Shall support Application, End user, network and device visibility)	M		
5.9.6		Shall support HA	M		

5.9.7		NAC shall support all network equipment, BYOD Support, USB Detection and Network security	M		
5.9.8		Syslog support shall be included	M		
5.9.9		Solution shall enable administrators to centrally configure and manage profiler, guest, authentication, and authorization services in a single web-based GUI console,	M		
5.9.10		Shall support multiple Admin Group Roles and responsibilities	M		
5.9.11		Group based policy support			
5.9.12		Shall support Role-based access policies which allow to restrict the network access privileges for any user or group	M		
5.9.13		Solution shall offer a rules-based, attribute-driven policy model for creating flexible and business-relevant access control policies.	M		
5.9.18		Provides the ability to create fine-grained policies by pulling attributes from predefined dictionaries that include information about user and endpoint identity, posture validation, authentication protocols, profiling identity, or other external attribute sources.	M		
5.9.19		Solution shall provide a wide range of access control mechanisms, including downloadable access control lists, VLAN assignments, URL redirect, and Security Group	M		

		Access tagging.			
5.9.20		Shall support threat protection and containment			
5.9.21		Shall support Captive portal bypass			
5.9.22		Solution must support Non 802.1x technology on assigned ports and 802.1x technology on open use ports	M		
5.9.23		Solution shall be scalable enough to support 7500 endpoints in the network. Bidder shall propose license to 800 endpoints at day zero	M		
5.9.24		Shall support full guest lifecycle management, whereby guest users can access the network for a limited time, either through administrator sponsorship or by self-signing via a guest portal. Allows administrators to customize portals and policies based on specific needs of the enterprise.	M		
5.9.25		Solution shall utilize standard RADIUS protocol for authentication, authorization, and accounting (AAA).	M		
5.9.26		Solution shall support a wide range of authentication protocols, including PAP, MS-CHAP, Extensible Authentication Protocol (EAP)-MD5, Protected EAP (PEAP), EAP-Flexible Authentication via Secure Tunneling (FAST), and EAP-Transport Layer Security (TLS).	M		
5.9.27		Shall supports the TACACS+	M		

		protocol			
5.9.28		Support for importing endpoints from LDAP server.	M		
5.9.29		Shall have predefined device templates for a wide range of endpoints, such as IP phones, printers, IP cameras, smartphones, and tablets. (NAC shall have built in profile Support for PC, iPad, iphone, android .etc)	M		
5.9.30		It shall allow Administrators to create their own device templates and it can used to automatically detect, classify, and associate administrative-defined identities when endpoints connect to the network.	M		
5.9.31		Solution shall support automatic provisioning of NAC agents	M		
5.9.32		Solution shall have capability which allows users to add and register a device on a portal. Shall allow users to mark as lost any device that you have registered in the network, and blacklist and reinstate the device on the network,	M		
5.9.33		Solution shall classify a client machine, and shall support client provisioning resource policies to ensure that the client machine is set up with an appropriate agent version, up-to-date compliance modules for antivirus and antispysware vendor support, and correct agent customization packages and profiles, if	M		

		necessary			
5.9.34		The portal used for Device registration shall be customizable, allowing to customize portal theme by changing text, banners, background color, and images	M		
5.9.35		Shall support importing endpoints from a comma-separated values (CSV) file in which the list of endpoints appears with the MAC address and the endpoint profiling policy details separated by a comma.	M		
5.9.36		Solution shall provide support policy enforcement through VPN gateways	M		
5.9.37		Should offer a web based built-in monitoring, reporting, and troubleshooting console to assist helpdesk operators and administrators streamline operations	M		
5.9.38		Offers comprehensive historical and real-time reporting for all services, logging of all activities, and real-time dashboard metrics of all users and endpoints connecting to the network.	M		
5.9.39		Solution shall support schedule reports to run and re-run at specific time or time intervals & send and receive email notifications once the reports are generated.	M		

5.9.40		Solution shall support the following databases: <ul style="list-style-type: none"> •Internal Users •Internal Endpoints •Active Directory •LDAP •RSA •RADIUS Token Servers •Certificate Authentication Profiles 	M		
5.9.41	Installation & Deployment	Vendor shall submit detailed report on installation & deployment			

5.10. Log Management System

Item No.	Minimum Specification		M/D	Yes/No	Bidders Comment
5.10.1	General	The solution shall facilitate capture of log data and transmit them to the central server. The solution must be in a position to virtually collect logs from overall parliament IT infrastructure systems, applications, servers, nodes and other networking devices as sources. (Parliament may procure additional products / servers in future where such infrastructure upgrade being mentioned with this RFP too, and the bidder has to check the feasibility and support of the same for the proposed solution). Vendor requires to provide such detailed list of servers, devices, applications required to be integrated with Centralized Log Management System at site inspection phase with the support of Department of ISM.	M		
5.10.2		The solution product shall be compatible with Intel platform (both in 32bit & 64 bit processors), and with latest reputed Windows or Linux Server Operating System together with sophisticated DBMS accordingly.	M		

5.10.3		The log data generated shall be captured and stored in a centralized device / VM machine based solution for automated or dynamic log file analysis. (If appliance, it shall have non-windows hardened platform to minimize the security breaches and database shall be included with in the solution which shall not be non-proprietary.)	M		
5.10.4		The solution shall have facility to customize the log generation / collection sequence. The log data must be transferred to the central server over the network on real-time basis or in occasional batches based on defined schedule or the amount of log data waiting to be transferred.	M		
5.10.5		The product proposed shall provide simple settings that automatically maintain the database. (e.g: the database shall automatically purge any data that is older than a user-specified date.)	M		
5.10.6		The solution needs the ability to collect logs from all the servers, firewalls, IDS/IPS, AV and Spyware, Security apps and Others (web server, SQL, custom logs)	M		
5.10.7		The system must prevent loss of logs if the management system fails to work for whatever reason	M		
5.10.8		The system must require access approval to view logs, set policies and manage user rights to the solution.	M		
5.10.9		The solution must be able to trigger notifications via email, SMS, script execution etc.	M		
5.10.10	Log Analysis	Analyze and visualize data to answer key questions based on device or application health, behavior or trends, spot trends, track SLA compliance.	M		
5.10.11		Generation of log reports facilitating the display of the results of log analysis.	M		
5.10.12		Generate shareable reports for proactive monitoring with alert generation for near future incidents based on KPIs.	M		

5.10.13		shall provide transparency in each system / device accessibility by generating reports (date/time, accessed personal, etc..) through log analysis.	M		
5.10.14		Enabling net flow at corresponding IT devices for analyzing the traffic for reporting and proactive monitoring with preset KPIs. Enabling net flow at corresponding IT devices for analyzing the traffic for reporting and proactive monitoring with preset KPIs, which is being partly covered by current system of Inter mapper monitoring tool.	M		
5.10.15		Enabling SNMP traps and MIBS covering overall IT infrastructure devices / services yielding proactive monitoring with preset KPI alerts, and analyzing their functionality via SNMP based parameter monitoring such as system performance, memory, CPU, etc.. Which enable timeline monitoring of systems, while generating reports for the past, as being partly covered by current system of Inter mapper monitoring tool.	M		
5.10.16	Log Monitoring	The solution must facilitate monitoring and review of the log data and shall have automated analysis facility. Log monitoring module shall have facility to generate reports. Facility must be there for management of the log server/s and clients.	M		
5.10.17		Log Viewing shall facilitate display of log entries in a human –readable format. It must provide log viewing capability.	M		
5.10.18		The solution must have user management facility with privileges restricting access to limited resources.	M		
5.10.19		Support collaborative dashboards with dynamic charts that provides singleton view of particular cross sections of the IT infrastructure.	M		
5.10.20		Alert facility must generate automatic alert notification based on specific events including notifications in the failure of collector agents.	M		
5.10.21	Storage	The system shall support on single system which allow different retention period requirements across different mandates, devices and policies.	M		
5.10.22		The period upto which the data must be available shall be customizable. There must be archival facility through which the old log data can be pushed to an external device like SAN , NAS for external storage.	M		

5.10.23		Log Compression shall facilitate storing of log file in a way that reduces the amount of storage space needed for the file without altering the meaning of its content	M		
5.10.24		Log Reduction shall remove unneeded entries from a log to create a new log that is smaller.	M		
5.10.25		Log Conversion shall facilitate parsing a log in one format and storing its entries in a second format.	M		
5.10.26		Log File Integrity Check must calculate a message digest for each file and helps in storing the message digest securely to ensure that changes to archived logs are detected.	M		
5.10.27	Disposal	Log Clearing shall be supported	M		
5.10.28	Backup	The solution shall facilitate moving the archived data / data to an external tape library / LTO device	M		
5.10.29	Web Access	The web interface shall have simple and advanced search facility with the minimum information of the item by using server identification, event date, event type, threat type, occurrence period etc. or combination of any of two or more information regarding the item.	M		
5.10.30		The product shall have provision for web-browser based access on Internet/Intranet by the administrator / authorized users of Parliament.	M		
5.10.31		The web-based component shall be compatible with all common browser (e.g. Internet explorer, firefox etc.).	M		
5.10.32		Active Directory authentication required	M		
5.10.33	Administration	This module shall provide right to administrator for providing access to different users regarding multiple or single access to various modules / servers / event types / backup and archival.	M		
5.10.34		Agent /Collector notification shall be there if down or no longer sending/receiving events	M		
5.10.35	License and Compliance	The Solution shall include compliance specific queries e.g ISO ,SOX , HIPAA , etc	M		
5.10.36	Installation & Deployment	Vendor shall submit detailed report on installation & deployment	M		

6. Warranty and Maintenance

Three year comprehensive warranty and maintenance is required for the all the devices and services. During the warranty period vendor is expected to attend an issue within 24 hours without any monetary or otherwise compensation. With regards to warranty and maintenance following is needed

- Preventive Maintenance schedule during the warranty period should be provided;
- Annual Maintenance cost after the warranty period should be provided;
- Product updates should be provided during the maintenance period (For all products).

7. Testing and Quality Assurance

7.1.The bidder shall be responsible for inspection and Quality Assurance (QA) for all materials and workmanship

7.2.Factory test report for equipment should be provided before commissioning the project;

7.3.Bidder should provide a list of test cases based on the following criteria to measure quality of the proposed system

7.4.Improved performance

7.5.Wireless coverage signal strength

7.6.Easy of user authentication

7.7.Quality of service;

7.8.Monitoring and log management

7.9.Bidder should provide a test report acceptable to Parliament, based on the above criteria before commissioning the project;

8. Documentation

-
- 8.1. Specifications and data sheet for each item;
 - 8.2. List of software and software licenses;
 - 8.3. Test certificates including manufacture test reports etc;
 - 8.4. System Documentation and User manuals ;
 - 8.5. System configuration diagrams in simplified block format;
 - 8.6. Manufacturer's instructions and drawings for installation, maintenance, and operation of all purchased items;
 - 8.7. Overall system operation and maintenance instructions including preventive maintenance and troubleshooting instructions;
 - 8.8. Connectivity diagram of the devices as a whole

9. Licenses

- 9.1. Licenses should be provided
- 9.2. Licenses cost should be included in the commercial proposal;

10. Training

- 10.1. Training is required in the following context
 - Administration & Management of each devices and software along with clear documentation
 - Trouble shooting each individual device and as an integrated system
 - Architectural design and built in technologies
- 10.2. Training should be provided for minimum of 6 persons;

11. Damage Recovery – Demolishing and Painting Work

- 11.1. Existing Plastic Edge Beading of Gypsum Board ceiling and existing members of ceiling structure shall not be disturbed or damaged in making ceiling and wall openings.
- 11.2. Rate for demolishing work shall include promptly removing debris from Parliament Premises as directed.
- 11.3. Allow for making ceiling openings and repairing using new Gypsum Board of required size in the existing Gypsum Board ceiling for installation of Data and power cabling as per the site requirement.

-
- 11.4. Allow for cutting & digging lines for electrical conduiting and making brick wall openings of required size for installation of Ducts/ Pipes for Data and power cabling as per the site requirement.
- 11.5. All walls damaged shall be repaired and painted to its original condition. Rate shall include for
- a. Preparation of surfaces, cleaning down Smoothing, Knotting, stopping etc
 - b. Protecting floors, and fittings etc
 - c. Removing and replacing doors furniture and cleaning upon
 - d. Providing samples and specification of all paints to be used in the works
 - e. Providing painting to an approved color scheme and design
- 11.6. Any other work which are not specified as the items in BOM but indicated in the tender drawings
- 11.7. Prepare and apply three coat of specified Emulsion paint on the Surface of prepared smooth Gypsum Board Ceiling
- 11.8. Prepare and apply two coats of approved type of Joint Compound or equivalent to " Total Coat " by square trowel and to get smooth surface on the conduit lines in chased area at existing walls and apply three coat of specified Emulsion paint on the Patch Surface of wall, match to existing applied color of wall paint.

12. BOM

Item No.	Description of Item	Quantity / Units	Comment
1	Wireless Access Controller	2	Required
2	Wireless Access Point	Lot	Required

3	Firewall Unit	2	Required
4	Core Ethernet Switch	2	Required
5	Cable and Cable Management		
	Patch Cord – Cat 6	Lot	Required
	Patch Cord – Fiber	Lot	Required
	Cable laying - Fiber	Lot	Required (Ref. Annexure
	Cable laying - Cat 6	Lot	Required
	Cable Management	Lot	Required
	Faceplate (Single) with Keystone	Lot	Required
	Termination, Labelling & Testing of a UTP/Fiber Network node, WAP and Network Equipment's Installation	Lot	Required
	Enclosures with required accessories	Lot	
6	Miscellaneous Items (Casings, Power outlets, RJ45 Connectors)	Lot	Required
7	Access Ethernet Switch – 24 Ports	Lot	Required
8	VM Licensing	1	Required
10	NAC	1	Required
11	Log Management	1	Required
12	Warranty & Maintenance	Lot	Required
13	Training	Lot	Required
14	Installation & commission	Lot	Required
15	Licenses	Lot	Required
16	Damage & Recovery	Lot	Required

(Vendor has to do an assessment to quantify the items mentioned as lot in BOM)

- 12.1. The bill of materials for the equipment/software/license/services required for the project shall be included and the Commercial Proposal should include price information for the bill of materials and any other cost associated with the project;

13. Contingency And Disaster Recovery Plan

Proposed disaster recovery plan describing the contingency procedures for the entire infrastructure devices should be provided.

14. Annexure A - Distance from server room to Rack locations

Rack	Rack Location	Fiber Distance -	Fiber Distance -	No of Switch	Switch Models	POE or not
------	---------------	------------------	------------------	--------------	---------------	------------

No.		50/125um (Approx)	62.5/125um (Approx)	es	(Edge)	
1	Server Room	0m	0m	3	Cisco 2950 - 24 port ----03 nos	NO
2	Server Room	0m	0m	0		
3	Finance Section	78m	108m	3	Cisco 2960 - 48 port ----01 nos	YES
					Cisco 2960 - 24 port ----01 nos	YES
					Cisco 2950 - 24 port ----01 nos	NO
4	Committee Office	76m	56m	3	Cisco 2950 - 24 port ----03 nos	NO
5	Committee Room - 04	94m	97m	3	Cisco 2960 - 24 port ----01 nos	YES
					Cisco 2950 - 24 port ----01 nos	NO
					Cisco 2960 - 24 port ----01 nos	YES
6	Interview No.17	96m	88m	3	Cisco 2960 - 24 port ----01 nos	YES
					Cisco 2950 - 24 port ----02 nos	NO
7	Establishment Office	84m	110m	2	Cisco- Linksys SFE2010 -48 port ----01 nos	NO
					Cisco 2950 - 24 port ----01 nos	NO
8	Members Services Office	90m	116m	3	Cisco 2960 - 24 port ----01 nos	YES
					Cisco 2950 - 24 port ----02 nos	NO
9	Office of the Leader of the House	119m	131m	1	Cisco- Linksys SFE2010 -48	NO

					port ----01 nos	
10	Office of the Chief Gov. Whip	112m	76m	3	Cisco-Linksys SFE2010 -48 port ----01 nos	NO
					Cisco 2950 - 24 port ----02 nos	NO
11	Library 1st Floor	24m	N/A	1	Cisco 2950 - 24 port ----01 nos	NO
12	T.O. Electrical 1st Floor	99m	110m	1	Cisco 2950 - 24 port ----01 nos	NO
13	Prime Minister Pantry\lobby	127m	114m	2	Cisco 2960 - 24 port ----01 nos	YES
					Cisco 2950 - 24 port ----02 nos	NO
14	SG Area - PSA Room	98m	40m	2	Cisco 2950 - 24 port ----01 nos	NO
					Cisco 2960 - 24 port ----01 nos	YES
15	Opposition Whip Office	84m	73m	1	Cisco-Linksys SFE2010 -48 port ----01 nos	NO
16	IT Training Centre	148m	128m	2	Cisco-Linksys SFE2010 -48 port ----01 nos	NO
					Cisco 2960 - 48 port ----01 nos	YES
17	Hansard Book Store	83m	73m	4	Cisco 2950 - 24 port ----04 nos	NO
18	C.P.A. Office	143m	N/A	1	Cisco 2950 - 24 port ----01 nos	NO
19	Civil Section	186m	N/A	1	Cisco 2950 - 24 port ----01 nos	NO

					nos	
20	Jayanthipura - X-Ray Room	1190m	N/A	1	Cisco 2960 - 24 port ----01 nos	YES
Total number of Switches				40		

Section VI. Contract Data

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

CC 1.1(i)	The Purchaser is: Information & Communication Technology Agency of Sri Lanka.
CC 1.1 (l)	The Project Site/Final Destination is: Information & Communication Technology Agency of Sri Lanka. No. 160/24, Kirimandala Mawatha, Colombo-05, Sri Lanka
CC 8.1	For <u>notices</u> , the Purchaser's address shall be: Attention: Managing Director Address: Information & Communication Technology Agency of Sri Lanka. No. 160/24, Kirimandala Mawatha, Colombo-05, Sri Lanka, Telephone: 0112369099-346 Electronic mail address: procurementsg2@icta.lk The Supplier's address is:
CC 12.1	Details of Shipping and other Documents to be furnished by the Supplier are. I. The full detail of the shipment including description of goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc, II. 03 copies of supplier's invoice showing contract no, goods description, quantity, unit price and total amount. III. Original and 03 copies of the negotiable, clean, on-board bill of lading marked freight prepaid and 03 copies of non-negotiable bill of lading. IV. Insurance certificate with 02 copies V. Manufacturer's/ Supplier's warranty certificate with 02 copies VI. Supplier's factory inspection report with 02 copies. VII. Certificate of origin with 02 copies

<p>CC 15.1</p>	<p>CC 15.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment shall be made in Sri Lanka Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.</p> <p>a) Advance Payment: Ten (10) percent of the Ten (10) percent of the Contract Price after signing of the Contract. Payment shall be made provided the Supplier presents a request for payment accompanied by an Advance Payment Security in the form of a bank guarantee for an amount equal to the amount of the payment, and that shall be valid until the completion of the work.</p> <p>b) On Completion: the Purchaser shall pay the Supplier Seventy (70) percent of the Contract Price after delivery and installation.</p> <p>c) On Acceptance: Twenty (20) percent of the Contract Price shall be paid upon submission of a claim supported by the Acceptance Certificate issued by the Purchaser.</p> <p><i>Note: to make the payments Bidder shall comply the requirements indicated in the Section V- Schedule of Requirements.</i></p>
<p>CC 17.1</p>	<p>A Performance Security shall be required.</p> <p>17.4 After delivery and acceptance of the Goods, the performance security shall be reduced to five (5) percent of the Contract Price and valid up to 60 days beyond the Supplier’s warranty obligations.</p>
<p>CC 25.1</p>	<p>The inspections and tests shall be as follows:</p> <p>Refer 7 in Section V. Schedule of Requirements</p>
<p>CC 25.2</p>	<p>The Inspections and tests shall be conducted by:</p> <p>Parliament of Sri Lanka and ICTA</p>
<p>CC 26.1</p>	<p>The liquidated damage shall be 0.5% per week</p>
<p>CC 26.1</p>	<p>The maximum amount of liquidated damages shall be 10%</p>

CC 27	<p>27.3 The warranty period shall be three years (36 months) (comprehensive)</p> <p>27.5 & 27.6 - The period for correction of defects in the warranty period is 2 days.</p> <p>CC 27.7 MAINTENANCE SERVICE</p> <p>27.7- Four (4) preventive maintenance services shall be provided by the supplier during the period of warranty annually.</p> <p>Note: All charges with regard to the supply of spare parts, labour, travel, per diem and accommodation to supplier's staff etc; shall be borne by the supplier during the period of warranty.</p> <p>Client shall not pay any additional expenditure for services rendered during the above period.</p>
--------------	--