Tender Scope for Network Infrastructure Upgrade

1. Introduction

The **Civil Aviation Authority of Fiji (CAAF)**, hereinafter referred to as "the Authority," is seeking proposals from qualified and experienced vendors to upgrade its network infrastructure. The project involves replacing existing switches with managed Cisco switches, implementing Cisco wired and wireless solutions, deploying a Fortinet firewall with High Availability (HA), and integrating a network monitoring tool like SolarWinds. The selected vendor will supply all necessary hardware, perform configurations, provide as-built documentation, and train the Authority's staff. Additionally, the vendor will set up all security configurations and network monitoring tools to ensure a secure and efficient network environment.

2. Objectives

- **Network Infrastructure Upgrade**
  - Replace existing network switches with managed Cisco switches suitable for an environment supporting approximately 80 users.
  - Implement Cisco wired and wireless solutions to enhance network connectivity and performance.
  - Deploy a Fortinet firewall with High Availability (HA) for robust network security.
  - Integrate a network monitoring tool (e.g., SolarWinds) for real-time monitoring and management of network resources.
- **Professional Services**
  - Supply all required hardware and software components.
  - Configure all network devices and security settings according to best practices.
  - Provide comprehensive as-built documentation detailing the network architecture and configurations.
  - Deliver training to the Authority's IT staff on managing and maintaining the new network infrastructure and monitoring tools.

3. Scope of Work

The selected vendor will be responsible for delivering the following services:

A. Network Infrastructure Upgrade

1. **Assessment and Planning**
   - Conduct a site survey to assess the current network infrastructure.
   - Develop a detailed implementation plan outlining the upgrade process, timelines, and resource requirements.

2. **Hardware Procurement and Supply**
    - o Provide all necessary hardware, including:
        - ▪ Managed Cisco switches suitable for 80 users.
        - ▪ Cisco wired and wireless networking equipment.
        - ▪ Fortinet firewall with HA capability.
        - ▪ Network monitoring tool licenses (e.g., SolarWinds).
3. **Installation and Configuration**
    - o Install and configure Cisco switches and networking equipment.
    - o Set up wired and wireless networks with appropriate VLANs, SSIDs, and security protocols.
    - o Deploy the Fortinet firewall with HA setup, including all security policies and rules.
    - o Install and configure the network monitoring tool for comprehensive network oversight.
4. **Security Configuration**
    - o Implement best practice security configurations for all network devices.
    - o Set up intrusion detection and prevention systems.
    - o Configure firewall policies, access controls, and VPNs as required.
5. **Testing and Validation**
    - o Perform thorough testing of the network infrastructure to ensure optimal performance and security.
    - o Validate the HA functionality of the Fortinet firewall.
    - o Test network monitoring alerts and reporting features.
6. **Documentation**
    - o Provide as-built documentation, including:
        - ▪ Network diagrams.
        - ▪ Configuration settings for all devices.
        - ▪ Security policies and procedures.
        - ▪ Maintenance and troubleshooting guides.
7. **Training**
    - o Conduct training sessions for the Authority's IT staff on:
        - ▪ Managing and maintaining Cisco network devices.
        - ▪ Operating the Fortinet firewall and understanding HA features.
        - ▪ Using the network monitoring tool for daily operations.

B. Post-Implementation Support

1. **Warranty and Support**
    - o Offer a warranty period for all hardware supplied.
    - o Provide post-implementation support services for a specified duration.
2. **Knowledge Transfer**
    - o Ensure comprehensive knowledge transfer to the Authority's IT team.
    - o Provide support documentation and resources for ongoing operations.

4. Network Requirements

Based on an environment supporting approximately 80 users, the network requirements are as follows:

A. Cisco Managed Switches

- **Core Switches**
  - Minimum of two Cisco Layer 3 managed switches for redundancy.
  - Support for advanced routing protocols (e.g., OSPF, EIGRP).
  - High throughput capacity to handle internal traffic.
- **Access Switches**
  - Sufficient number of Cisco Layer 2 managed switches to connect all endpoints.
  - Support for Power over Ethernet (PoE) for connected devices.
  - VLAN support for network segmentation.

B. Cisco Wired and Wireless Solutions

- **Wired Network**
  - Gigabit Ethernet ports for all user connections.
  - Fiber connectivity options for backbone connections.
- **Wireless Network**
  - Cisco wireless access points providing comprehensive coverage.
  - Support for the latest Wi-Fi standards (e.g., Wi-Fi 6).
  - Secure wireless authentication mechanisms (e.g., WPA3, 802.1X).

C. Fortinet Firewall with High Availability

- **Fortinet Firewall Specifications**
  - Enterprise-grade firewall suitable for medium-sized organizations.
  - High Availability (HA) configuration with failover capabilities.
  - Support for advanced security features:
    - Intrusion Prevention System (IPS).
    - Anti-virus and anti-malware protection.
    - Web filtering and application control.
    - Virtual Private Network (VPN) support.

D. Network Monitoring Tool

- **SolarWinds Network Performance Monitor**
  - Real-time network monitoring and alerting.
  - Performance analysis and reporting features.
  - Support for monitoring all network devices, including Cisco switches, wireless access points, and Fortinet firewall.
  - Customizable dashboards and user interfaces.

5. Deliverables

The vendor is expected to provide the following deliverables:

- **Hardware and Software**
  - All network hardware and software components as specified.
- **As-Built Documentation**
  - Detailed network diagrams.
  - Configuration files and settings.
  - Security policies and procedures.
  - User manuals and maintenance guides.
- **Training Materials**
  - Training manuals and resources for IT staff.
  - Training session recordings (if applicable).
- **Project Reports**
  - Implementation plan and schedule.
  - Testing and validation reports.
  - Post-implementation support plan.
- **Knowledge Transfer**
  - Documentation of knowledge transfer sessions.
  - Access to support resources and contacts.

6. Vendor Qualifications

Prospective vendors must demonstrate the following qualifications:

- **Experience**
  - Proven experience in network infrastructure projects of similar size and complexity.
  - Previous projects involving Cisco networking equipment and Fortinet firewalls.
- **Certifications**
  - Certified professionals as part of the project team:
    - Cisco Certified Network Professional (CCNP) or higher.
    - Fortinet Network Security Expert (NSE) certifications.
- **Technical Expertise**
  - Expertise in network design, implementation, and security.
  - Experience with network monitoring tools like SolarWinds.
- **Project Management**
  - Strong project management capabilities.
  - Ability to deliver on time and within budget.
- **Training and Support**
  - Experience in providing training and knowledge transfer.
  - Capability to offer post-implementation support.

7. Proposal Requirements

Vendors should include the following information in their proposals:

- **Executive Summary**
  - Overview of the proposal and alignment with the Authority's objectives.
- **Company Profile**
  - Background information, including years in business, areas of expertise, and organizational structure.
- **Relevant Experience**
  - Examples of similar projects completed, including client references.
- **Project Team**
  - Bios and qualifications of key personnel assigned to the project.
- **Technical Solution**
  - Detailed description of the proposed hardware and software solutions.
  - Network design and architecture.
- **Methodology and Approach**
  - Implementation plan with timelines and milestones.
  - Training and knowledge transfer plan.
- **Cost Proposal**
  - Detailed breakdown of all costs, including hardware, software, services, training, and any additional charges.
- **Compliance Statement**
  - Confirmation of the ability to meet all requirements outlined in this tender.
- **Additional Information**
  - Any other relevant information that supports the proposal.

8. Evaluation Criteria

Proposals will be evaluated based on the following criteria:

- **Understanding of Requirements** (20%)
  - Demonstrated comprehension of the project scope and objectives.
- **Technical Solution** (30%)
  - Suitability and quality of the proposed hardware and software solutions.
  - Compliance with the specified network requirements.
- **Experience and Expertise** (20%)
  - Relevant experience and qualifications of the vendor and project team.
- **Methodology and Approach** (15%)
  - Soundness and effectiveness of the implementation plan.
- **Cost Effectiveness** (10%)

- o   Value for money and transparency of the cost proposal.
- **References and Past Performance** (5%)
  - o   Feedback from provided references and track record of delivering similar projects.

9. Submission Instructions

- **Proposal Submission Deadline**: **29th November 2024**
- **Submission Method**: Proposals must be submitted electronically in PDF format to **tenders@caaf.org.fj**.
- **Inquiries**: All questions or requests for clarification must be submitted in writing to **tender.enquiries@caaf.org.fj**
- **Proposal Validity**: Proposals must remain valid for a period of 90 days from the submission deadline.

10. Terms and Conditions

- The Authority reserves the right to accept or reject any or all proposals without assigning any reason.
- All costs incurred in the preparation of the proposal shall be borne by the vendor.
- The successful vendor will be required to enter into a formal agreement with the Authority.
- The vendor must comply with all applicable laws and regulations.
- All work products and deliverables developed during the project will become the property of the Authority.

11. Compliance Matrix and Evaluation Criteria

To ensure a transparent and objective selection process, the Authority will use the following compliance matrix to evaluate vendor proposals. Vendors are required to complete the matrix by indicating their level of compliance and providing comments or references to their proposal where appropriate.

Compliance Matrix

Instructions for Vendors

- **Vendor Response**: Indicate your level of compliance with each criterion by selecting **Yes**, **Partial**, or **No**.
- **Comments/Reference**: Provide brief comments or references to sections in your proposal that address the criterion.
- **Points Awarded**: This column will be filled out by the evaluation committee based on the quality of your response.

Scoring Guidelines

- **Yes**: Full compliance; the vendor meets or exceeds the requirement. Eligible for full points.
- **Partial**: Partial compliance; the vendor meets some aspects of the requirement. Eligible for partial points.
- **No**: Non-compliance; the vendor does not meet the requirement. Zero points awarded.

Evaluation Criteria and Point Allocations

No.	Criteria	Description	Maximum Points	Vendor Response (Yes/Partial/No)	Comments/Reference	Points Awarded (Filled By Authority)
1	**Understanding of Requirements**		**20**			
1.1	Comprehension of Project Scope	Demonstrated understanding of the tender's objectives and requirements	10			
1.2	Alignment with Authority's Goals	Proposal aligns with the Authority's strategic goals and needs	10			
2	**Technical Solution**		**30**			
2.1	Hardware and Software Suitability	Proposed equipment meets or exceeds specified requirements	15			
2.2	Network Design and Architecture	Quality and scalability of the proposed network design	10			
2.3	Security Features	Adequacy of security configurations and features	5			
3	**Experience and Expertise**		**20**			
3.1	Relevant Project Experience	Experience in similar network	10			

		infrastructure upgrade projects				
3.2	Qualifications of Project Team	Expertise and certifications of team members (e.g., CCNP, NSE)	10			
4	**Methodology and Approach**		**15**			
4.1	Implementation Plan	Clarity and feasibility of the proposed implementation plan	10			
4.2	Training and Knowledge Transfer Plan	Effectiveness of the training and knowledge transfer approach	5			
5	**Cost Effectiveness**		**10**			
5.1	Cost Transparency	Clear breakdown of costs, fees, and expenses	5			
5.2	Value for Money	Competitive pricing relative to the services and equipment offered	5			
6	**References and Past Performance**		**5**			
6.1	Client References	Positive feedback from previous clients	3			
6.2	Track Record	Demonstrated ability to deliver projects on time and within budget	2			
	Total Points		**100**			

Minimum Qualification Threshold

Vendors must achieve a minimum score of **70 out of 100 points** to be considered for final selection.

Evaluation Process

The evaluation committee will review each proposal against the criteria listed in the compliance matrix. Points will be awarded based on the level of compliance and the quality of the vendor's response.

Please ensure that your proposal includes a completed compliance matrix. Failure to do so may result in disqualification.

We look forward to receiving your proposal and thank you for your interest in working with the Civil Aviation Authority of Fiji.