Tender Scope for Network Infrastructure Upgrade (Meraki Switch Compatible)

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 and access points with Meraki switches and access points or switches and access points which are compatible with Meraki solutions, implementing Meraki 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 Meraki switches or switches compatible with Meraki solutions, suitable for an environment supporting approximately 80 users.
- Implement Meraki wired and wireless solutions to enhance network connectivity and performance.
- o Deploy a Fortinet firewall with High Availability (HA) for robust network security.
- o Integrate a network monitoring tool (e.g., SolarWinds) for real-time monitoring and management of network resources.

Professional Services

- o 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:

Assessment and Planning

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

Hardware Procurement and Supply

- Provide all necessary hardware, including:
 - Managed switches compatible with Meraki solutions suitable for 80 users.
 - Meraki wired and wireless networking equipment.
 - Fortinet firewall with HA capability.
 - Network monitoring tool licenses (e.g., SolarWinds).
 - Network switch devices that ensure interoperability, security, and performance standards.

• Installation and Configuration

- o Install and configure Meraki switches and networking equipment.
- 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.
- Install and configure the network monitoring tool for comprehensive network oversight.

• 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.

• Testing and Validation

- Perform thorough testing of the network infrastructure to ensure optimal performance and security.
- o Validate the HA functionality of the Fortinet firewall.
- Test network monitoring alerts and reporting features.

• Documentation

- o Provide as-built documentation, including:
 - Network diagrams.
 - Configuration settings for all devices.
 - Security policies and procedures.
 - Maintenance and troubleshooting guides.

Training

- o Conduct training sessions for the Authority's IT staff on:
 - Managing and maintaining Meraki network devices.
 - Operating the Fortinet firewall and understanding HA features.
 - Using the network monitoring tool for daily operations.

4. Network Requirements

Meraki-Compatible Managed Switches

- Core Switches:
 - Minimum of two Layer 3 managed switches compatible with Meraki solutions for redundancy.
 - Support for advanced routing protocols.
 - High throughput capacity to handle internal traffic.
- Access Switches:
 - Enough Layer 2 managed switches compatible with Meraki solutions to connect all endpoints.
 - Support for Power over Ethernet (PoE) for connected devices.
 - VLAN support for network segmentation.

Meraki Wired and Wireless Solutions

- Wired Network:
 - Gigabit Ethernet ports for all user connections.
 - Fiber connectivity options for backbone connections.
- Wireless Network:
 - Meraki wireless access points providing comprehensive coverage.
 - Support for the latest Wi-Fi standards.
 - Secure wireless authentication mechanisms.

Fortinet Firewall with High Availability

- Enterprise-grade firewall suitable for medium-sized organizations.
- High Availability (HA) configuration with failover capabilities.

Support for advanced security features.

Network Monitoring Tool

- o SolarWinds Network Performance Monitor or Similar:
 - Real-time network monitoring and alerting.
 - Performance analysis and reporting features.
 - Support for monitoring all network devices.

5. Deliverables

The vendor is expected to provide the following deliverables:

- Hardware and Software
- As-Built Documentation
- Training Materials
- Project Reports
- Knowledge Transfer

6. Vendor Qualifications

Prospective vendors must demonstrate the following qualifications:

- Experience in network infrastructure projects of similar size and complexity.
- Certified professionals as part of the project team (e.g., Cisco/Meraki certifications, Fortinet NSE).
- Expertise in network design, implementation, and security.
- Experience with network monitoring tools like SolarWinds.

7. Proposal Requirements

Vendors should include the following in their proposals:

- Executive Summary
- Company Profile
- Relevant Experience
- Project Team Qualifications
- Technical Solution
- Methodology and Approach
- Cost Proposal
- Compliance Statement

8. Evaluation Criteria

Proposals will be evaluated based on:

- Understanding of Requirements (20%)
- Technical Solution (30%)
- Experience and Expertise (20%)
- Methodology and Approach (15%)
- Cost Effectiveness (10%)
- References and Past Performance (5%)

9. Submission Instructions

- Proposal Submission Deadline: 21st February 2025
- **Submission Method:** Proposals must be submitted electronically in PDF format to tenders@caaf.org.fj with the Subject "Tender for Network Infrastructure Upgrade"
- Inquiries: Direct all inquiries to tender.enquiries@caaf.org.fj

10. Terms and Conditions

- The Authority reserves the right to accept or reject any proposals.
- All costs incurred in the preparation of the proposal shall be borne by the vendor.
- The successful vendor must comply with all applicable laws and regulations.

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