



RESERVE BANK OF FIJI



**2023 - 2024 RESERVE BANK OF FIJI - CLOSED CIRCUIT
TELEVISION OPEN TENDER**

Requirement Specification Document

Tender Document

Due Date: 30/04/2024 by 3.00pm



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INVITATION TO TENDER

The Reserve Bank of Fiji (RBF) invites written proposals from reputable vendors for the supply of a Closed-Circuit Television (CCTV) Solution.

1. 2 x 32TB Network Video Recorder (NVR);
2. 44 x 4MP Fixed Dome – Indoor infrared cameras;
3. 20 x POE Injectors;
4. Structured Cabling for 12 floors

Detailed specifications including terms and conditions of the proposal can be obtained via email from the Mr Poasa Vasukicakau, Manager Security.poasa@rbf.gov.fj

All proposals are to be in Fijian Dollars and inclusive of VAT.

Proposals should be addressed to:

**The Governor
Reserve Bank of Fiji
Private Mail Bag
Suva
Fiji**

All proposals are to be submitted on email with the subject: '**CONFIDENTIAL – CLOSED-CIRCUIT TELEVISION OPEN TENDER 2023 - 2024**' to the Board Secretary, Ms Subrina Hanif, subrina@rbf.gov.fj and Manager General Administrative Services, Ms Melania Tamaue, melania@rbf.gov.fj. All submissions are to be received no later than **30/04/2024** by **3.00pm**.

Incomplete and late submissions will not be considered. Lowest or any tender may not be necessarily accepted. Successful and unsuccessful submissions will be notified through formal correspondence.



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Introduction

The RBF is a statutory body with the following principle purpose:

- To regulate the issue of currency, and the supply, availability and international exchange of money;
- To promote monetary stability;
- To promote a sound financial structure;
- To foster credit and exchange conditions conducive to the orderly and balanced economic development of the country;
- To regulate the insurance industry; and
- To regulate the capital markets and the securities industry.

The Reserve Bank is inviting tenders from reputable vendors to supply, install and support the following equipment:

1. 32TB Network Video Recorder (NVR)
2. 4MP Fixed Dome – Indoor infrared cameras
3. POE Injectors
4. Structured Cabling

The expectations from the deployment of these items are:

- Supply equipment that meets the Bank's current requirements and is scalable.
- Reduce operational and maintenance costs.
- Provide a secure and reliable infrastructure.

Purpose of Document

The purpose of this document is to outline the Banks requirements, tender process and the acceptable standards that need to be exhibited by the vendor during execution of the tender and delivery process.

Scope of Works

Supply and install the required hardware and software as per below:

- Configuration of NVRs and cameras. The RBF will be guided by the vendor on focusing, positioning and configurations of cameras to achieve optimal performance and results. The placement and number of cameras per floor will be guided by the approved plan.
- Setup of NVR High Availability cluster at main site for resilience. In the event the main NVR fails, the secondary NVR should resume without any impact to camera recordings. The secondary NVR will also serve as a backup source of recordings



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for up to 30 days.

- Restrict viewing and investigations access for specific operator roles.
- Configuration of Backup. The backup schedule must be configured to run weekly and include configurations and recordings.
- User Acceptance Testing. Use cases to include NVR functionality, camera functionality, recordings, recordings retrieval, backup and restoration.
- Structured cabling for 12 levels¹. More details are provided in the detailed systems requirements section below.

¹Applicable to local vendors only. A site survey can be facilitated upon request.

Detailed System/Equipment Requirements

The solutions are to meet the specifications below:

A. Item Description: 32TB NVR Quantity: 1 plus secondary

***A secondary NVR to be quoted for high availability and resilience.**

| Requirement | | Description |
|---|-----------------|---|
| Capacity | | 32 TB effective capacity after Raid 6 |
| Operating System | | Microsoft Windows Server 2019 – 16 core |
| Memory | | 2 × 8 GB DDR4 |
| Processor | | 1 × Intel® 8-core Xeon |
| Network Video Streaming Performance (10 GbE - Multiple Connections) | Recording Rate: | Up to 800 Mbps |
| | Playback Rate: | Up to 600 Mbps |
| Network Video Streaming Performance (1 GbE - Multiple Connections) | Recording Rate: | Up to 700 Mbps |
| | Playback Rate: | Up to 600 Mbps |



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| | | |
|--------------------------------------|--|---------------------------------------|
| Hard Disk Drive Configuration | Video Data: | RAID 6 Up to 10 × 3.5", hot swappable |
| | Operating System: | 2 × 240 GB M.2 SSD Drives, RAID 1 |
| Video Outputs | 1 x VGA | |
| Network Interface | Supports 2 × 10 GbE SFP+ ports 6 × 1 GbE RJ-45 ports | |
| Local Viewing | No | |
| Form Factor | 2U rack mount chassis | |
| Out-of-band Management | Yes | |
| Power Input | 100 to 240 VAC, 50/60 Hz, auto-switching | |
| Power Supply | 800 W Mixed Mode | |
| Power Consumption | Maximum 604 W (2061 BTU/h) | |
| Power Efficiency | Platinum | |
| Rack Rail System | Yes | |
| Bezel | 1, front | |
| Power Cords | 2 total: 1 × C13 / C14, 1 × country variant ((AU) AS3112 / C13) | |
| Notes | Provide detailed ETA | |
| | All minimum requirements must be strictly met | |
| | Where applicable quote higher specifications as upgrade options | |

B. Item Description: Indoor Cameras

Quantity: 44

| Requirement | Description | |
|--|---|--------|
| Dome | Yes | |
| Surface Mount | Yes | |
| MP | 4.0 | |
| Lens | 3.3 - 9 mm | |
| IR | Yes | |
| WDR | Yes | |
| Analytics | Yes | |
| Image Sensor | 1/2.8" progressive scan CMOS | |
| Max Resolution (H x V) and Aspect Ratio | (16:9) 2560 x 1440 (4:3) 2304 x 1728 | |
| Dynamic Range | WDR Off | 83 dB |
| | WDR On | 126 dB |
| Max Image Rate | (50 Hz/60 Hz): 25 fps/30 fps | |
| 3D Noise Reduction Filter | Yes | |
| Streaming | Multi-stream H.264, Multi-stream H.265, Motion JPEG | |



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| | | | |
|------------------------------------|---|-----------------------------------|------------------------------------|
| Motion Detection | Pixel motion: Selectable sensitivity and threshold. Classified object detection | | |
| Camera Tamper Detection | Yes | | |
| Electronic Shutter Control | Automatic, Manual (1/7 to 1/8196 sec) | | |
| Iris Control | Automatic, Open, Closed | | |
| Day/Night Control | Automatic, Manual | | |
| Flicker Control | 60 Hz, 50 Hz | | |
| White Balance | Automatic, Manual | | |
| Backlight Compensation | Adjustable | | |
| Privacy Zones | Up to 64 zones | | |
| Network | 100BASE-TX, RJ45 Connector, CAT5e Cabling | | |
| ONVIF | ONVIF compliance version 1.02, 2.00, Profile S, Profile T, Profile G (www.onvif.org) | | |
| Security | Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, FIPS 140-2 L1 (with optional camera license), FIPS 140-2 L3 (with optional accessory) | | |
| Protocols | IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, ARP, HSTS | | |
| Streaming Protocols | RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP | | |
| Device Management Protocols | SNMP v2c, SNMP v3 | | |
| Power Consumption | 13 W max (11W with no IR or IR disabled) | | |
| Power Source | VDC: 12 V \pm 10%, 12 W min | VAC: 24 V \pm 10%, 13 VA min | PoE: IEEE802.3af Class 3 compliant |
| RTC Backup Battery | 3V manganese lithium | | |
| Memory | 2 GB RAM, 512 MB Flash | | |
| Low-light technology | Yes | | |
| Bandwidth Management | Yes | | |
| Image Compression Method | H.264, H.265, Motion JPEG | | |
| Notes | Provide ETA | | |
| | All minimum requirements must be strictly met | | |
| | Where applicable quote higher specifications as upgrade options | | |



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C. Item Description: PoE Injectors
Quantity: 20

| Requirement | Description |
|---------------|--|
| PoE Injectors | PoE Injectors IEEE802.3af Class 3 compliant |
| | |

D. Item Description: Structured Cabling
Number of Floors: 12

| Copper Cable Box | 15 x Cat6 Cables (500 Feet) Boxes |
|--------------------|--|
| Structured Cabling | <ul style="list-style-type: none"> - Number of Ports: 45 - Number of Floors: 12 - Ports per Floor: 4 (varying locations and floors) - Supply and run Cat 6 cables - Supply, install, patch and mount patch panel tie, mounting blocks and structured cabling between camera mount and floor-level switch. - Mounting blocks to be supplied by vendor - Supply and installation of Ducting and conduits for all cables - Supply and installation of Horizontal cable management bar (where required) - Neat up wiring and patch panel cabling - Labelling of all ports in the tie - Test and Verify cable connectivity - Provide Test Result Report |

Please note that all tender submissions need to indicate whether the minimum tender requirements are met and need to be submitted using the following format.

| Minimum Requirements | Description | Specification Quoted | Meets Minimum Requirements (Yes or No) | Any upgrade Options |
|----------------------|-------------|----------------------|--|---------------------|
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Tender Process

The steps below provide a brief outline of the RBF tender process:-

1. Selected vendors can liaise with RBF to clarify any issues before submitting their tenders;
2. Vendors are to submit tenders within the time specified;
3. Analysis and assessment of submitted tender by RBF;
4. Clarification of tender items, if necessary;
5. Awarding of Tender;
6. Meeting with selected vendor regarding equipment delivery;
7. Contract Signing.

Tender Requirements, Selection and Evaluation

1. Company Profile;
2. Business License & Registration;
3. Authorized Letter of Service Centre and Reseller;
4. Fiji Revenue & Customs Services Tax Compliance Certificate (if local) or equivalent Compliance Certification for overseas bidders;
5. Fiji National Provident Fund Compliance Certificate (if local) or equivalent Compliance Certification for overseas bidders;
6. Prices should be valid for at least two months;
7. Supply all associated licensing agreements, documentation, and kits where applicable.
8. Document and provide serial number upon delivery of items;
9. Provide information on warranties and extended warranties, where applicable;
10. Provide ETAs for items in the tender upon placing order;
11. Provide costs in Fiji dollar and inclusive of VAT;
12. For overseas bidders only, please exclude GST levy and advise whether the price is inclusive or exclusive of 15% Withholding Tax;

It is mandatory for the bidder to provide all the requirements listed above in order for their bid to be considered for further assessment. Any bidder who does not meet the 100% requirement as per the above list, their submission **SHALL NOT BE CONSIDERED** for further assessment.

Tender may not necessarily be awarded to the lowest bidder. The Bank, when analyzing the tender, will keep in mind the delivery and support services provided by the chosen company. For products and services tendered:

Delivery Services consists of:

1. Availability Management – Ensuring the solution will have a 99.99% uptime.
2. Capacity Management – The Bank will look at solutions that have growth potential.
3. Continuity Management – The solution should incorporate a Disaster Recovery Plan in action.



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4. Service Level Management – The Bank might establish a modular service level agreement for the support and maintenance of equipment.
5. Financial Management – provide solutions which are competitive and practical.

Support Service consists of:

1. Service Help Desk. – Central point of contact for logging calls.
2. Incident Management – Process of restoring a disrupted service.
3. Problem Management – Process of diagnosing the cause of the incident and preventing them in future.
4. Change Management – Process of handling change efficiently.
5. Release Management – Process of managing new versions of software and hardware and firmware.
6. Configuration Management – Process of managing all components of the infrastructure.