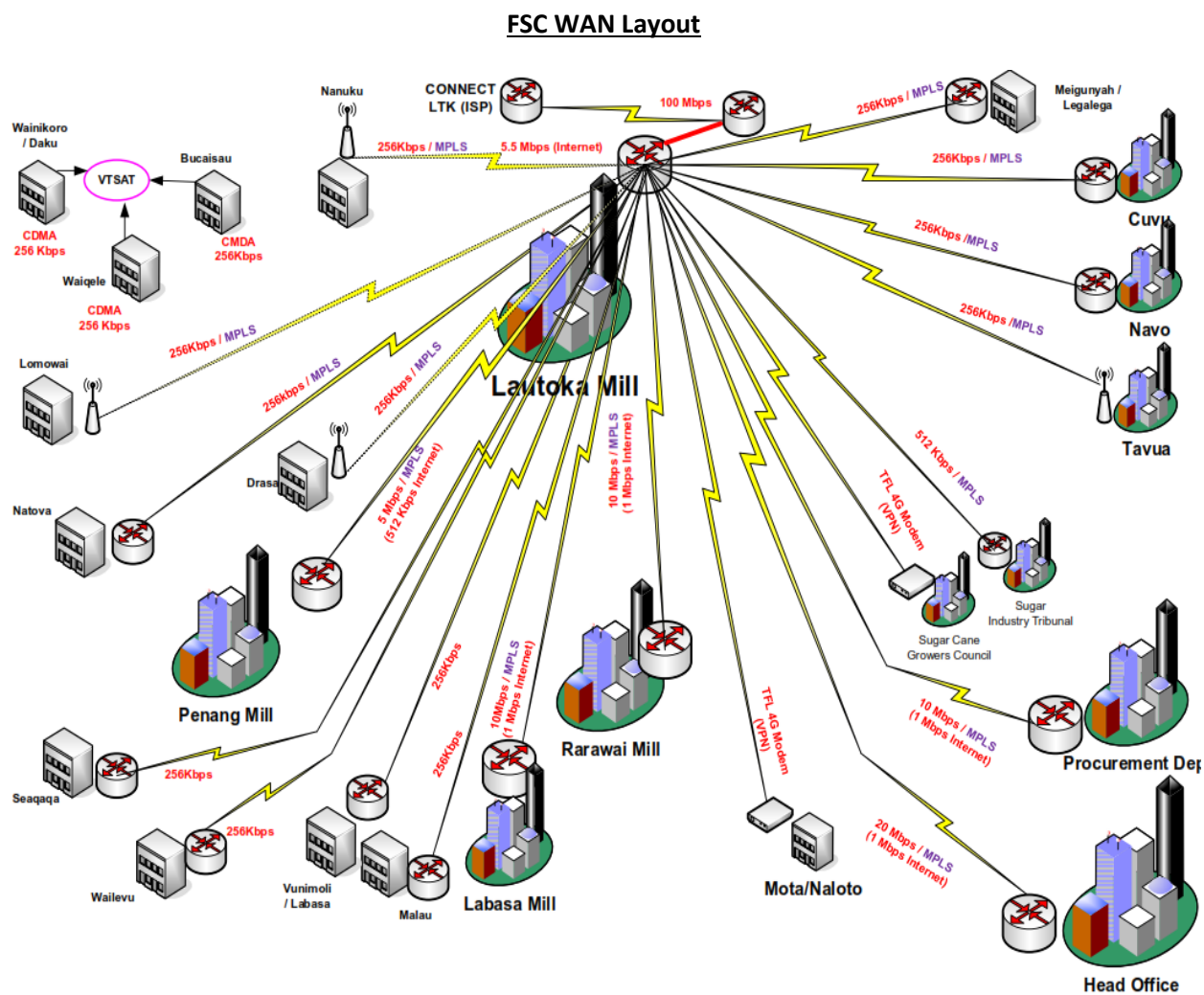




## General Scope of Work

Fiji Sugar Corporation is seeking options from telecommunication providers to connect all sites to Lautoka Mill (Information Systems Center). Currently FSC is on TFL's MPLS IPVPN network. The diagram below shows the current WAN layout as well as site details.



## Site Details

Site	WAN (Mbps)	Internet (Mbps)	VTSAT	4G Modem	Router	Hub Name	Site Address or Lat/Long
Lautoka Mill_Hub	100	5.5			Cisco 888		-17.608618, 177.446004
Meigunyah	0.256				Cisco 888	Lautoka Mill	-17.780772, 177.457635
Cuvu	0.256				Cisco 888	Lautoka Mill	-18.129923, 177.421387
Navo	0.256				Cisco 888	Lautoka Mill	-17.811817, 177.402484
Tavua	0.256				Cisco888	Lautoka Mill	-17.445252, 177.878428
Sugar Industry Tribunal	0.512			4G Modem	Cisco 888	Lautoka Mill	-17.604108, 177.446328
Sugar Crane Growers Council				4G Modem		Lautoka Mill	-17.609827, 177.452391
Procurement Dept	10	1			Cisco 888	Lautoka Mill	-17.608632, 177.440409
Head Office	20	1			Cisco 888	Lautoka Mill	-17.619029, 177.436893
Rarawai Mill	10	1			Cisco 888	Lautoka Mill	-17.545061, 177.681353
Labasa Mill	10	1			Cisco 888	Lautoka Mill	-16.429205, 179.386611
Penang	5	0.512			Cisco 888	Lautoka Mill	-17.372541, 178.163547
Drasa	0.256				Cisco 888	Lautoka Mill	-17.581140, 177.525769
Natova	0.256				Cisco 888	Lautoka Mill	-17.725848, 177.462963
Lomowai	0.256				Cisco 888	Lautoka Mill	-18.030278, 177.314644
Nanuku	0.256				Cisco888	Lautoka Mill	-17.375545, 178.044720
Mota/Nalota				4G Modem		Lautoka Mill	-17.594245, 177.683773
Wainkoro/Daku			0.256		Sky Edge, Telco	Lautoka Mill	-16.316447, 179.551278
Waiqele			0.512		Sky Edge, Telco	Lautoka Mill	-16.478956, 179.340532
Bucaisau			0.256		Sky Edge, Telco	Lautoka Mill	-16.360100, 179.423034
Seaqaqa	0.256				Cisco 888	Lautoka Mill	-16.517705, 179.141281
Wailevu	0.256				Cisco 888	Lautoka Mill	-16.434880, 179.346590
Vunimoli/Labasa	0.256				Cisco 888	Lautoka Mill	-16.430468, 179.386004
Malau	0.256				Cisco 888	Lautoka Mill	-16.361835, 179.366815

## PABX System

Manufacturer	Item Description	Location
NEC	NEC Sv8100	FSC Lautoka
NEC	NEC Sv8100	FSC Head Office
NEC	NEC Sv8100	FSC Rarawai Mill
NEC	NEC Sv8100	FSC Penang Mill
NEC	NEC Sv8100	FSC Labasa Mill
NEC	NEC Sv8100	FSC Procurement

Fiji Sugar Corporation currently has more than 400 computers and 700 users throughout the organization. The main goal is to get all sites connected to Lautoka Mill (ISC) which is the primary data center. All applications reside in the data center and all other sites connect to access applications i.e. Email, ERP, Payroll, FIS, Cane, TIS, Intranet and other inhouse applications. The requirements include:

### For all Categories

1. Supply, install and commission of WAN solution by the vendor
2. Vendor should provide stable, reliable, fully scalable, secure and redundant option solution for all sites either through wired (Fiber/Copper), wireless (RF) or 4G.
3. The prospective service provider should establish proposed network solution and must be capable of maintaining it for a period of 3 years based upon performance to be reviewed annually
4. Sites connected should have the option to communicate with each other i.e. any to any communication

5. Selected bidder should provide connectivity with minimum number of “hops” for all links
6. Stable and secure VPN connections when users connect remotely to access information
7. Provide support for PABX and recommend upgrades/solution when required
8. The committed bandwidth should always be available to use and the duration of non-availability of committed bandwidth will be treated as downtime of the link which can incur penalty
9. The proposed solution should be IPv4 and IPv6 compliant
10. Vendor should ensure that the network devices should be fully updated with latest firmware and security patches
11. The vendors network should support incident management: Prevention mechanism for miss-configuration. Alert mechanism should be in place for any incident occurred etc, every major incident reported should be notified to FSC either through alert system like sms or email and should be documented
12. Vendor should arrange and take responsibility for installation of cables, MUX/Mast/RF/antenna, modems, routers and switches
13. Vendor shall ensure that all supplied hardware, software etc. must not be End of Support / End of Service and spares/upgrades should be available for at least 5 years from date of commissioning
14. The network equipment shall support Packet Filtering, TCP spoofing, IPv4 & IPv6 both, QoS on both inbound and outbound traffic and other industry protocol
15. Required connections to termination the link on routers or switches should be done by the vendor. After the installation of network equipment, the vendor must ensure that all applications are accessible.
16. The redundant solution for mill network (Rarawai, Lautoka and Labasa) should be active-active or active-passive mode with auto failover mechanism.
17. The vendor should keep configuration backups for all sites monthly
18. Vendor should provide monitoring tool for all links

### **Vendor Requirements**

1. The vendor should have a clear Disaster Recovery and Business Continuity Plan in place for support Services
2. The vendor should not have been blacklisted by any Public Financial Institutions, RBF or any other government agencies on the last date of tender submission
3. Vendor should ensure that the service uptime should be 99.99%
4. The vendor should have their own full-fledged “Network Monitoring Center (NMC / NOC”, round the clock (24x7) manned by skilled & Technical manpower

#### **OTHER REQUIREMENTS AND TERMS & CONDITIONS:**

1. Confidentiality: The vendor shall not disclose to any one, any information marked as confidential and communicated or made available or accessible by the Vendor during execution of the work.
2. Ownership: Ownership of data: FSC will own the data, application and its source code whatsoever including supporting classes, modules, etc.

#### Project Type: Turnkey

- All resources for the entire project has to be supplied, installed and commissioned by the vendor.
- This includes but is not limited to all civil works, fabrication works, equipment, manpower, equipment configuration and testing etc.

#### Warranty & Comprehensive Maintenance

1. The entire solution should be composed of 3 years warranty, after successful testing, commissioning and defect free maintenance during the warranty period.

Warranty coverage should cover faulty item replacement within 24 hours. Faulty items refer to every electronic item provided in the solution which has not been physical damaged by FSC.

2. Contractor shall make necessary arrangements for keeping the sufficient spares at site to minimize the down time.
3. Training to be given to FSC staff for operation & maintenance, troubleshooting, user level training pertaining to system after successful commissioning.