



**TENDER NUMBER: BLMMCORPOPEX057**

**REQUEST FOR PROPOSAL FOR THE APPOINTMENT OF SERVICE PROVIDER IN  
BUSHBUCKRIDGE LOCAL MUNICIPALITY FOR THE:**

**SUPPLY, INSTALLATION AND MAINTANANCE OF INTERNET AND WI-FI  
CONNECTIONS, MPLS, VPN, AND VOIP SOLUTION FOR A PERIOD OF 3  
YEARS**

**The Terms of Reference**

**1. INTRODUCTION**

The Bushbuckridge local municipality wish to appoint a suitable qualified and licensed Internet service provider (ISP) to provide internet and telecommunication (telephone/voice) services. The service provider must supply, install and maintenance support for, Next Generation Firewall, MPLS VPN, Mime cast email security, network infrastructure and VoIP Telephony System for a period of 36 months (3 years) to all the Bushbuckridge local municipality branch offices. The municipality has about 29 branch offices around Bushbuckridge, which are connected to the network, sharing resources that are centralized in the head office datacenter.

**2. ROLE OF THE MUNICIPALITY**

In a nutshell the Municipality's role could be described as to provide services to and ensure the socio economic development of the Bushbuckridge area to the benefit of all the residents by providing good, effective and efficient governance.

**3. OBJECTIVE**

- Is to connect all the municipality site to be on a single unified corporate network.
- Supply, install, configure and maintenance a scalable Internet Connectivity and Voice (Telecommunication) Service on all Bushbuckridge local municipality offices including the 29 offices.
- Supply, install, configure and maintenance of the Next Generation Firewall for Head office, for ICT security.
- Providing security for Wi-Fi connectivity.

#### 4. PROPOSAL BE ALIGNED WITH THE SCOPE OF WORK BELOW

- 1) Supply, installation and configuration of two (2) Next Generation Firewall devices, and provide 3 years' maintenance and support, internet breakthrough should be through head office firewall.
- 2) Provide OEM Certified Training for the Firewall solution for ICT staff (6 officials for the Firewall).
- 3) Configure DMZ, Policies and create VLANS for the Wi-Fi, Voice, Data, Video and separate the WI-FI network by creating a Guest network and Cooperate network connection.
- 4) Provide four (4) usable public IP addresses and migrate, DNS to new solution.
- 5) Supply, installation and maintenance of VoIP solution and Internet services for three (3) years.
- 6) Supply, installation and configuration of new 100 VoIP telephone devices, support 10/100/1000 Ethernet.
- 7) Port all municipality telephone numbers, Sixteens (16) direct numbers.
- 8) Integrate the current VoIP telephone handsets to the new VoIP solution.
- 9) Provide training for the for the VoIP solution, to employees.
- 10) Provide network monitoring tool with Auto call logging system.
- 11) Provide onsite support for 36 Months.
- 12) Integrate the current infrastructure, including the VoIP telephone devices with the new proposed solution.
- 13) The ISP must provide full Transmission Control Protocol with Internet Protocol (TCP/IP) Internet Service Provision and telephone service for all BLM offices. The service is expected to be highly accessible and reliable, with overall uptime of no less than 99%.
- 14) Provide Mime cast email security services need to be provided to ensure mail security. Mime cast agreement need to be submitted as part of the tender (our current Email connection is via Exchange 2016 on premises).
- 15) The bidder shall provide the necessary hardware and other services required to setup the Internet connection and VoIP services (includes SIP Trunk, PBX or Hosted VoIP infrastructure).
- 16) A dedicated, leased line of a minimum bandwidth of 100Mbps Internet breakout from bidder's network, complete with relevant backup. This connection will primarily be used for internet browsing, and VoIP.
- 17) Head Office is Fibre optic cable and Microwave as a secondary connection; other office will have only primary connection on Microwave or Fibre connections.
- 18) The provided bandwidth must be dedicated (CIR 1:1)



- 19) Redundant (failover) internet connectivity and telephone services for Head.
- 20) Ensure provided services are monitored 24/7/365 from operations centre that is manned by competent technical staff.
- 21) Provide VoIP mobile application with a callback option to selected remote users, on mobile phones, using data free of charge.
- 22) 18 x 1u smart ups.
- 23) Monthly reports must be provided to BLM's ICT staff. The reports must include as a minimum: uptime; utilisation; and performance against Service Level Targets;
- 24) Allow remote branch connectivity (private VPN service via your MPLS network).
- 25) The successful bidder must configure the VoIP system to all switches per buildings and regional sites.
- 26) Provide a switchboard VoIP system equipment and teleconference solution.
- 27) The VoIP system must generate monthly telephone bills per user, and per department.
- 28) All users must be migrated to the VoIP system, all calls must be free, when calling another VoIP number and also when calling branch offices.
- 29) The VoIP system must allow setting of threshold or maximum amount spend on calls an individual can incur, this can be done by BLM departmental unit when required, at no additional cost.
- 30) All necessary hardware, cabling, software and other services (required for the Internet service and VoIP solution) to work, should be provided and set up cost should be included in the proposal, all licences must be under Bushbuckridge Local Municipality.**

- **NB: The Microwave connection to the cabinet switch should be done using Fibre cable or else the cabinet on sites must be earthed.**

## **5. COMPETENCIES OF THE SERVICE PROVIDER(S) TEAM**

Bidders are required to provide evidence that they have successfully Supplied, installed the MPLS VPN network solution including the internet, Next Generation Firewall, Wi-Fi connectivity, intranet and VOIP solution for a period of minimum 36 months.

Installed and maintained data network and VOIP. The service provider must provide evidence of being **ICASA licensed and a mime cast partner.**



## 6. Requirements:

### 6.1 Mandatory Requirements:

- Independent Communication Authority of South Africa (ICASA) license certificates: IECNS and IECS.
- On the proposal the bidder must provide a clear detailed, of the OEM routers, firewall, VoIP and how each site will be connected and what type of connection will be used, with fibre or Microwave, clear detailed connection per site, all sites should be connected within 60 days (the first 18 sites be connected within the first 30 days).
- NB: all sites and coordinates have been attached as Annexure A on this document:

### 6.2 WORK EXPERIENCE AND RELEVANT CERTIFICATES

#### 6.2.1 OEM Certificate /Letter (OEM for the Proposed solution be aligned with the Specifications)

OEM Letter or Certificate as a reseller or distributor or Partner.	OEM Name	Letter attached Yes/No
1. VoIP Solution		
2. Next Gen Firewall		
3. Routers		

#### 6.2.2 Questionairs:

6.2.2.1 What is your Mean Time to Repair (MTTR)?

6.2.2.2 Are you providing VoIP premise or hosted services?

6.2.2.3 How Long does it takes for number porting?

6.2.2.4 How do you notify customers of service disruption?



6.2.2.5 Does you VoIP solution supports toll free calling and emergency numbers?

6.2.2.6 Does your VoIP solution supports mobile usage?

6.2.3 VoIP Solution Bandwith utilization

VoIP Solution Bandwidth utilization requirements	
Number of Concurrent Calls	Bandwidth Speed Required
1	
3	
10	
15	
20	
50	
80	

6.2.4 Qualifications: Indicate with yes or no

Name of Qualification or Certificate	Qualification or Certificate attached Yes / No
Degree or Diploma IT	
ITIL	
Prince 2	
CCNA	
CCNA Security	
NSE 5	
CCNP	
CCSP Security	
Cobit 5	









## **SPECIFICATIONS**

PROPOSAL FOR THE SUPPLY, INSTALLATION AND MAINTANANCE OF INTERNET AND WI-FI CONNECTIONS, MPLS, VPN, AND VOIP SOLUTION FOR A PERIOD OF 3 YEARS

**Bushbuckridge Local Municipality**

### **THE PROPOSAL MUST BE ALIGNED WITH THE TECHNICAL SPECIFICATION**

The VoIP solution must provide the following major functions or services -

a) The VoIP Telephone system must have the following features:

- Voice prompt to guide the caller.
- **10/100/1000 Ethernet support**
- Handset Pin (Per individual user)
- Call Transfer
- Call forwarding
- Voice recording
- Voice Mail
- Teleconferencing (free when calling Municipality site)
- Call parking
- Auto attendant
- Follow-me
- Music on hold
- SMS sending functionality
- Automatic switching capabilities
- Hunting groups

Allow billing per individual user, by providing a unique Identity pin per individual telephone user and allow setting of threshold or maximum amount that an individual can spend on calls per month.

Ensure device and data visibility on and off the network.



Integrate the current VoIP Telephone system
Internal Calls should be free when calling all Municipality offices
The compliers in providing flexibility to add other VoIP handset if required, a detailed provision must be presented.
Port all current municipality telephone numbers
Ensure that the current VoIP handsets integrated to the VoIP solution
Provide Handsets to offices that they were not allocated a VoIP handsets
The Bidder must provide 100 VoIP telephone Handset; these include 5 Switchboard ICT service desk handset. 6 special tele-conferencing phone for boardrooms. The 89 handsets will be distributed to other offices that they didn't have handsets before.

### 1. Next Generation Firewall Technical Specification

<b>Required Functionality of the Workflow Management Software/System</b>
The Bidder to provide Two (2) Next Generation Firewall with High Availability configuration, policies configured and a certified training and a skill transfer must be included as part of the project.
The Bidder comply and will ensure that any necessary hardware equipment's that will be needed to create the MPLS VPN, an intranet, internet and VoIP services must be include as part of the pricing (e.g. routers, microwaves, and switches and other consumables etc.).
The bidder complies with the Next Generation Firewall specification. Functional Requirement of the Next Generation Firewall <ul style="list-style-type: none"> <li>• <b>Application visibility and control, NGIPS. Advance malware protection, URL Filtering, DDOS</b></li> <li>• <b>User identification (intergraded with Microsoft Active Directory), Application visibility and control, SSL VPN, IPS, Gateway Anti-virus, Anti-bot, data leakage protection and URL filtering.</b></li> <li>• <b>VPN Access for users to work remotely.</b></li> <li>• <b>Mail scanning</b></li> <li>• Web caching</li> <li>• Analyser</li> <li>• QOS Support</li> <li>• Firewall must be controlled over the web and provide real time monitoring</li> <li>• Centralized management and reporting</li> <li>• Spam filtering</li> <li>• DMZ Configuration</li> <li>• Sandboxing support</li> </ul>

### 2. Mime Cast Technical Specification

<b>Required Functionality of the Workflow Management Software/System</b>
Provide Mimecast emails security solution that includes: <ul style="list-style-type: none"> <li>• Scan all inbound and outbound mails</li> <li>• Internet content filtering services for incoming/outgoing mail for 400 users.</li> <li>• Spam filtering</li> <li>• Monthly report on scanned email</li> </ul>



## ISP MPLS VPN

Required Functionality of the Workflow Management Software/System
The Bidder comply and will ensure that any necessary hardware equipment's that will be needed to create the MPLS VPN, an intranet, internet and VoIP services must be include as part of the pricing (e.g. routers, microwaves, and switches and other consumables etc.).
The bidder must be capable of provisioning efficient Quality of Service (QOS) on the network. also provide the flexibility to change the QOS at any time. End-to-end Quality of service (QOS) offered (prioritization of the traffic, partitioning of bandwidth for applications etc.)
The bidder must provide monthly uptime of 99.9% link for 24/7X365 basis
<b>The bidder must provide a fully network architecture diagram, showing how internet is provided on MPLS network</b>
Reporting  The Municipality (and its various departments) must be updated on a regular basis of any development requiring action or attention by the municipality. Such updates include;
The network monitoring system with Auto call logging system., made available by the provider, should comprehensively address all issues relating to performance, availability and uptime etc.





## BUSHBUCKRIDGE LOCAL MUNICIPALITY

DIRECTORATE: CORPORATE SERVICES

TENDER NUMBER: BLMCORPOPEX057

### PROPOSED SOLUTION WITH PRICING STRUCTURE AND SPECIFICATIONS

- Provisioning of the MPLS VPN, Firewall, and VoIP solution, to all sites for 3 years.
- Monitoring costs
- All costs of Implementating the project
- Any connectivity costs
- Costs of any hardware if any
- Maintenance and support costs
- Bandwidth costing structure

Region	Proposed Bandwith solution MPLS VPN	Router Specification / Model and Type of Connection	Concurent Connection Mbps.	Duration	Rate
1. Head office	Fibre Optic 100 MB Primary Internet Breakthrough		Solution must allow concurrent connection up to 450 Mbps.	36 Months	
	Microwave 20 MB Secondary, Internet breakthrough				
2. Mapulaneng DLTC	Provide a network link to				



Region	Proposed Bandwith solution MPLS VPN	Router Specification / Model and Type of Connection	Concurent Connection Mbps.	Duration	Rate
	connect to Head office via Fibre or Wireless radio link. Sites are 150 m apart.	No Router Required			
3. Bohlabela Office	Microwave / Fibre 10MB		Solution must allow concurrent connection up to 100 Mbps.	36 Months	
4. Thulamahashe Regional Office	Provide a network link to connect to Bohlabela Offices via Fibre. Sites are 150 m apart.	No Router Required			
5. Information Center	Microwave / Fibre 5MB			36 Months	
6. Dwarsloop Disaster Center	Microwave / Fibre 10MB			36 Months	
7. Dwarsloop Regional Office	Provide a network link to connect to Bohlabela Offices via Fibre. Sites are 150 m apart.	No Router Required			



Region	Proposed Bandwith solution MPLS VPN	Router Specification / Model and Type of Connection	Concurent Connection Mbps.	Duration	Rate
8. Shatale Regional Office	Microwave / Fibre 4MB			36 Months	
9. Casteel Regional Office	Microwave / Fibre 4MB			36 Months	
10. Hluvukani Regional Office	Microwave / Fibre 4MB			36 Months	
11. Acornhoek Regional Office	Microwave / Fibre 6MB			36 Months	
12. Mhala DLTC	Microwave / Fibre 6MB			36 Months	
13. Mhala Stores	2MB			36 Months	
14. Angincourt Regional Office	Microwave / Fibre 4MB			36 Months	
15. Lillydale Regional Office	Microwave / Fibre 3MB			36 Months	
16. Mkhuhlu Regional Office	Microwave / Fibre 10MB			36 Months	
17. Marite Regional Office	Microwave / Fibre 4MB			36 Months	
18. Hluvukani DLTC	Microwave / Fibre 3MB			36 Months	
<b>Maintenance and Support</b>				<b>36 Months</b>	
<b>Sub-Total</b>					
<b>New sites the VoIP telephone must include PoE adapters.</b>					
1. Inyaka Water Treatment	Microwave / <b>Fibre 10 MB</b> and 24 Port Ethernet 10/100/1000			36 Months	



Region	Proposed Bandwidth solution MPLS VPN	Router Specification / Model and Type of Connection	Concurrent Connection Mbps.	Duration	Rate
	Full PoE Cisco Switch Ethernet with 4x10Gb SFP uplinks.				
2. Mkhuhlu library	Microwave / Fibre 2MB			36 Months	
3. Hluvukane library	Link this site with Hluvukani DLTC fibre connection	Router not required.			
4. MP Stream library	Microwave / Fibre 2MB			36 Months	
5. Shatale library	Microwave / Fibre 2MB			36 Months	
6. Acornhoek Library	Microwave / Fibre 2MB			36 Months	
7. Dwaarsloop Library	Microwave / Fibre 2MB			36 Months	
8. Thulamahashe Library	Microwave / Fibre 2MB			36 Months	
<b>Maintainance and Support</b>				<b>36 Months</b>	
<b>Sub-total</b>					



**LTE Router VPN connection required with four ports RJ45 Ethernet connection for network connection also supports Wireless connection and VoIP solution.**

Region / Site	LTE Router Model	QTY	Rate
1. Thulamahashe Traffic Fines		1	
2. Sandriver Water Treatment		1	
3. Edinburgh Water Treatment plant		1	
4. Marite water plant		1	
5. Hoxani Water Treatment Plant		1	
6. Thulamanshe water plant		1	
7. Acornhoek water plant		1	
<b>Maintainance and Support</b>	<b>36 Months</b>		
<b>Sub-Total</b>			



Description	QTY	Duration	Rate per QTY	Total Rate								
<b>2 X Next Generation Firewall Dual Power supply and High availability configured.</b> <b>Choose one Firewall from the list:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">1. Fortinet 200F Next Gen Firewall</td> <td style="width: 20%;"></td> </tr> <tr> <td>2. Palo Alto PA 3220 Next Gen</td> <td></td> </tr> <tr> <td>3. Sophos XG230 Next Gen</td> <td></td> </tr> <tr> <td>4. Cisco Firepower 2120 series</td> <td></td> </tr> </table>	1. Fortinet 200F Next Gen Firewall		2. Palo Alto PA 3220 Next Gen		3. Sophos XG230 Next Gen		4. Cisco Firepower 2120 series		2			
1. Fortinet 200F Next Gen Firewall												
2. Palo Alto PA 3220 Next Gen												
3. Sophos XG230 Next Gen												
4. Cisco Firepower 2120 series												
Mimecast solution: Email Security Gateway		36 Months										
VoIP Telephone Handsets	100											
Firewall Certified Training	6											
1u smart ups system Rack Mounted	18											
Number Porting (013)	16											
Shared APN	100 GB	36										
New Telephone No (013)	7											
Network Monitoring tool with Auto call logging system.		36 Months										
Maintenance and Support		36 Months										
<b>Sub-Total</b>												





Peak Hours' Time: From \_\_\_\_\_ H \_\_\_\_\_ to \_\_\_\_\_ H \_\_\_\_\_

Off Peak Hours' Time: From \_\_\_\_\_ H \_\_\_\_\_ to \_\_\_\_\_ H \_\_\_\_\_

Geographical Calls	Peak Hours Rate	Off Peak Hours Rate	Total Rate
National			
Cell Numbers			

	ADD CONTINGENCIES @ 10%	R
	<b>SUB TOTALS</b>	R
	Add VAT @ 15%	R
	<b>TOTAL TENDER SUM CARRIED TO FORM OF OFFER</b>	R

.....	.....
<b>Signature</b>	<b>Date</b>
.....	.....
<b>Position</b>	<b>Name of Bidder</b>



## Annexure A

### Bushbuckridge Local Municipality: VoIP phones per office and Sites Coordinates

Site	No of VoIP Phones present Per Sites.	Coordinates	
1. Bushbuckridge Head Office	130	-24.84018025990	31.06682929420
2. Lillydale Regional Office	4	-24.89090363440	31.38436172420
3. Hluvukanin Regional Office	4	-24.64859138250	31.33899048670
4. Dwarsloop Regional Office	6	-24.80110392630	31.08505831630
5. Shatale Regional Office	4	-24.79553936160	31.03528220820
6. Casteel Regional Office	4	-24.70058021480	31.02969262710
7. Acornhoek Regional Office	9	-24.59595689630	31.06360560170
8. Thulamahashe Regional Office	7	-24.72621240670	31.20708797140
9. Mkhuhlu Regional Office	9	-24.98638450900	31.24317103290
10. Agincourt Regional Office	3	-24.82122992200	31.26671965900
11. Marite Regional Office	5	-24.95721271410	31.12757004550
12. Mapulaneng Testing Station (DLTC)	7	-24.84020826620	31.06534347470
13. Dwaarsloop Disaster Centre	2	-24.80086101480	31.08617234480
14. Mhala Testing Station	8	-24.72370337500	31.18683900800
15. Thulamahashe Stores	2	-24.72411830220	31.18876514570
16. Hluvukani DLTC	3	-24.64849490290	31.36415412120
17. Bohlabela Office Municipal Offices	30	-24.72611564470	31.20629379720
18. Information / Tourism Centre	6	-24.83296368850	31.07089181320
19. Inyaka Water Treatment	15	-24.860375	31.090760
20. MP Stream Library	3	-24.76722337100	31.21405170330
21. Thulamahashe Library	3	-24.72282211440	31.19058524940
22. Dwaarsloop / Mafemani Library	3	-24.80429481510	31.08745618060
23. Shatale Library	3	-24.79924994400	31.04043788860
24. Mkhuhlu Library	3	-24.98602651920	31.24530544380
25. Acornhoek Library	3	-24.60179917772663	31.076021667581298
26. Hluvukani Library	3	-24.64710240451649	31.363204013424504
27. Hoxani Water Treatment Plant	2	- 25.014558	31.209238
28. Edinburgh Water Treatment plant	2	S24°42.097'	E031°13.509'
29. Sandriver Water Treatment	2	S24°41.736'	E031°10.152'

