

Independent Communications Authority of South Africa 350 Witch-Hazel Avenue, Eco Point Office Park Eco Park, Centurion. Private Bag X10, Highveld Park 0169 Telephone number: (012) 568 3000/1

# MPLS OR SD-WAN NETWORK WITH INTERNET ACCESS FOR A PERIOD OF 5 YEARS.

#### **ANNEXURE A**

#### 1. Background and Scope

The Head Office hosts the VOIP, Financial, CRM and other centralized application services. All forms of infrastructure management are located at the head office. ICASA has recently acquired Silverpeak SD-WAN for optimisation of bandwidth between the head office in Centurion and all other 8 regions (Polokwane, Durban, Bloemfontein, Gqeberha, Mafikeng, Kimberley, Cape Town, Nelspruit).

National Spectrum Monitoring (NSM) layout

# The National Spectrum Monitoring (NSM) layout (Figure 1) indicates the current complement of sites located within the borders of South Africa. The sites are connected via a 3G APN solution provided by a national operator.

Site Name: GP-Observatory (JHB)		
Latitude (S)	26°11'4.24"S	
Longitude (E)	28° 4'34.85"E	
Site Name: GP-Nooi	tgedacht (Magalies)	
Latitude (S)	26° 6'29.89"S	
Longitude (E)	27°48'31.36"E	
Site Name: GP-Esko	m Waterkloof-Pretoria	
Latitude (S)	25°48'09" S	
Longitude (E)	28°15′22.36″ E	
Site Name: FS-Bloemfontein		
Latitude (S)	29°06′43.87″ S	
Longitude (E)	26°13′39.17″ E	
Site Name: KZN-Alv	erstone	
Latitude (S)	29°46'37.26" S	
Longitude (E)	30°42'45.57" E	
Site Name: KZN-Hilt	on	
Latitude (S)	29°33'55.90" S	
Longitude (E)	31°17′44.29″ E	
Site Name: EL-Woodbrook-SAPS		
Latitude (S)	33°20′00.4″ S	
Longitude (E)	27°52′34.10″ E	

Site Name: PE-Schauderville-SAPS			
Latitude (S)	33°56′04.02″ S		
Longitude (E)	25°33′41.87″ E		
Site Name: CT-Koeb	erg		
Latitude (S)	33°42'56.00" S		
Longitude (E)	18°33'30.20" E		
Site Name: CT-Kuils	rivier		
Latitude (S)	33°56'45.20" S		
Longitude (E)	18°44'17.44" E		

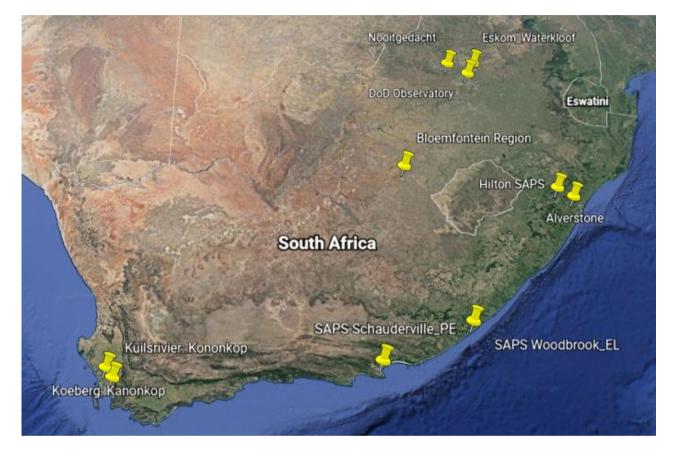


Figure 1: NSM Layout

## 2. Scope of work

Icasa invites the suitable service providers to provide reliable connection between the remote monitoring sites, regional offices, and head office in Centurion using broadband access links and SD-WAN, 3G (or better) or dedicated access links and MPLS with dedicated firewall for a period of 5 years.

## 2.1 Special Mandatory Conditions

The following are special mandatory conditions for the proposed solution:

Substantiate / Comments	
Special Condition	

Bidder(s) must be a tier 1 ISP provider that owns a national MPLS/SD-WAN network. The ISP must have its	Comply	Not Complied
own Points of Presence in each region of South Africa. Please provide proof in a form of a letter which include addresses to prove point of presence in all provinces.		
The ISP must have internet break out on major cables such as SAT3, SAFE, EASAY, WACS, SEACOM etc.	Ссопруу	<b>Nød t©compbilte</b> kl
Please provide at least one letter proving that your internet breaks out on any major cable.		
Data centres must be self-owned and built on N + 1 standards.	Comply	Not Complied
Please provide the diagram.		
The ISP will be responsible for support nationally.	Comply	Not Complied
<i>Please provide addresses for different provinces proving point of presence.</i>		
Primary Bidder must have their own 24x7 Helpdesk and Engineers to troubleshoot and resolve issues.	Comply	Not Complied
<i>Please provide CVs for engineers and demonstrate availability of helpdesk.</i>		
Primary Bidder must also provide all the licensing-type approved equipment like routers, firewall and any	Comply	Not Complied
devices for the APN connection for their proposed solution. <i>Please provide the letters from Original Equipment</i> <i>Manufacturer (OEM)</i>		

# 2.2 Functional Requirements

		COMPLY	
	<b>SLA Requirements</b> (minimum specification requirement)	YES	NO
1.	Provide a guaranteed service, 99.9% for link to Head Office and 99% for link to Regional Offices, and 99% to Monitoring sites.		
2.	100Mb to Head Office		

3.	10Mb link to Regions	
4.	1Mb or above link, or 3G wireless solution to Monitoring sites	
5.	Ability for ICASA to route VoIP site-to-site using existing Audiocode gateways and Microsoft Skype for Business	
6.	Real time and monthly advanced reporting (Both link utilisation as well as Firewall reporting)	
7.	Support & monitor the network 24/7/365	
8.	Service Level Agreement to include comprehensive monthly reporting that indicates performance, availability, Top Talkers as well as utilization	
9.	The following are the minimum latency required <ul> <li>Site to Site &lt;= 3 ms</li> <li>Internet -Local &lt;=120 ms</li> <li>Internet -International &lt;= 300 ms</li> </ul>	
10.	A priority of Service is required where ICASA will be able to set priority to different classes of applications to be utilized across the links.	
11.	Multiple branch VPN overlays: Secure communications between multiple offices	
12.	Efficient WAN Path Controller: Dynamic policy-based application path selection across multiple WAN links	
13.	Agile approach to Connectivity Solutions: Scalable and versatile enable cost efficient connectivity options	
14.	Realtime monitoring, Analytics and reporting: Easier troubleshooting and support and management reporting	
15.	Secure branch to branch communications	
16.	Enhanced Voice and Video performance	

		COMPLY	
	The following are additional audit requirements needed	YES	NO
1.	All routers and firewalls to have banners / disclaimers upon login		
2.	TACACS or equivalent authentication on routers and firewalls		
3.	Monthly SLA reports to show evidence of configuration backups on routers and firewalls		

4	SP to provide baseline configuration for routers and firewalls (at start of contract and then annually)	
5.	SP to ensure that Firewall firmware is continuously updated to ensure vulnerabilities are closed / mitigated	
6.	SP to provide ICASA a read-only login to the routers and Firewall	
7.	Any changes to router or firewall configurations must be signed off by ICASA prior to the change being implemented	

#### 2. <u>Specifications</u>

The terms of reference / specifications for an MPLS or SD-WAN network with internet access for a period of 5 years is indicated above.

#### 3. Briefing Session

There will be a non-compulsory briefing session conducted via a Teams meeting session.

# 4. Bid Evaluation

The bid will be advertised for a period of 21 calendar days in the ICASA Website/ National Treasury e-Tender on an 80/20 procurement principle.

Bidders will be evaluated on; a) submission of the required documents, b) special mandatory conditions c) functionality and d) price/bb-bee. Only bidders who meet the cut-off score of 80 points out of 100 points for functionality will be considered further for price evaluation. All bid proposals submitted will be evaluated in accordance with the 80/20 procurement principle as prescribed by National Treasury Regulations.

Functionality Criteria per Category	Weight
ISP to provide Proof of Experience and proven track record in rendering	30
similar services (3 Reference letters on a letterhead stating Name of Client,	
Contact Telephone number, date when work was performed and services	
rendered.)	
6 years and more relevant service in MPLS Network connectivity with	
internet access & 3 references =5	

<ul> <li>Response of tender based on Audit Requirements and Change Management</li> <li>comply with less than 7 requirements = 1</li> </ul>	10
comply to all <b>15</b> requirements = <b>5</b>	
<ul> <li>comply with less than <b>15</b> requirements = <b>1</b></li> </ul>	
Response of tender based on SD WAN/MPL and SLA Requirements	30
Functionality Criteria per Category	Weight
experience working on the project =1	
<ul> <li>network professional with at least 1 and less than 3 years BGP</li> </ul>	
<ul> <li>network professional with at least 3 - 5 years BGP experience working on the project =3</li> </ul>	
<ul> <li>network professional with 6 or more years BGP experience working on the project =5</li> </ul>	
BGP Experience	10
<ul> <li>in any month =2</li> <li>No guarantee of minimum 99% uptime =1</li> </ul>	
<ul> <li>Availability but no reduction in fee if the 99% uptime is not achieved</li> <li>in any month -2</li> </ul>	
if the 99% uptime is not achieved in any month $=3$	
Availability with manual penalty clauses (i.e. reduction in monthly fee)	
fee) if the 99% uptime is not achieved in any month, =5	
• Availability with automatic penalty clauses (i.e. reduction in monthly	
Service Level Agreement with penalty clauses	10
access & 3 references =1	
• 2 years and less experience in MPLS Network connectivity with internet	
access & 3 references =2	
• 3 years relevant experience in MPLS Network connectivity with internet	
access & 3 references =3	
• 4 years relevant experience in MPLS Network connectivity with internet	
access & 3 references =4	

comply to all 7 requirements = 5	
Response of tender based on future Requirements namely, upgrade of the	10
link as an when needed within 24 hours	
Upgrade within 24 hours= 5	
<ul> <li>Upgrade between 25 hours – 48 hours= 3</li> </ul>	
<ul> <li>Upgrade can be completed after 2 days and more= 1</li> </ul>	
TOTAL	100