



# **THE APPOINTMENT OF A SERVICE PROVIDER TO PROVIDE SD-WAN, INTERNET, FIREWALL AND DIRECT ROUTING SERVICES FOR CEF OVER A PERIOD OF THREE (3) YEARS**

## **SCOPE OF REQUIREMENTS**

### **1. INTRODUCTION**

Central Energy Fund(CEF) SOC Ltd is a state-owned company involved in the search for appropriate energy solutions to meet the energy needs of South Africa and the sub-Saharan African region. It also manages the operation and development of the oil and gas assets of the South African government. The company falls under the auspices of the Department of Minerals and Petroleum. For more information on the company, you can visit our current website: [www.cefgroup.co.za](http://www.cefgroup.co.za)

### **2. BACKGROUND AND OVERVIEW**

The Central Energy Fund's IT Infrastructure consists of the following:

- Two internet lines at CEF Head Office in Sandton, the fibre line which serves as the primary internet connectivity line and the microwave link which is the fail-over/backup line.
- Global System for Mobile communication(GSM) services: A pool of Access Point Name(APN) data used by users to access systems remotely and 1 SIM card used for server room monitoring services.
- 30 Session Initiation Protocol(SIP) voice channels used for video conferencing and telephone system.
- Next Generation Firewall Solution consisting of two High Availability(HA) appliances.

CEF SOC Ltd has a head office in Sandton. CEF is looking at appointing a Service Provider to provide Software Defined-Wide Area Network(SD-WAN), Internet, Firewall and Direct Routing(Integration of Telephone System with Microsoft Teams) as specified under the scope of requirements.

### **3. SCOPE OF REQUIREMENTS**

- 3.1. The successful bidder will be required to provide the following infrastructure and services for a period of three (3) years:
  - 3.1.1. 50Mbps primary fibre link at SANPC-Refinery in Durban KZN.
  - 3.1.2. 50Mbps failover microwave link at SANPC-Refinery Durban in KZN.
  - 3.1.3. 50Mbps link for SANPC in Johannesburg.
  - 3.1.4. 50Mbps link for SANPC in Milnerton Cape Town.



3.1.5. SD-Wide Area Network(WAN) link to interconnect CEF head office in Sandton, SANPC-Refinery in Durban KZN and SANPC in Johannesburg and Milnerton.

3.1.6. SD-WAN Technology solution with Edge device deployed in each site( CEF head office in Sandton, SANPC-Refinery in Durban KZN and SANPC in Johannesburg and Milnerton).

3.1.7. SD-WAN edge devices at CEF in Sandton, SANPC-Refinery in Durban KZN, SANPC Johannesburg and SANPC Milnerton should have advanced firewall security capability to protect and enable the site to break out to the internet.

3.1.8. SD-WAN infrastructure should be monitored via a central web portal of the service provider.

3.1.9. SD-WAN should manage, provision and push configurations to sites quickly without specialized IT resources on site and bring new sites quickly with zero-touch provisioning.

3.1.10. The SD-WAN solution offered must be able to integrate with Microsoft Active Directory or cloud-based identity and access management solution such as Microsoft Entra.

3.1.11. The SD-WAN solution must be able to Interconnecting with the Petro SA SDWAN Meraki Network.

3.1.12. The SD-WAN Solution should provide WAN optimization such as load balancing and failover on WAN links on each site.

3.1.13. Direct Routing to integrate VoIP system with Microsoft Teams.

3.1.14. Next-Generation Firewall Solution for the CEF Head Office.

3.1.15. Next-Generation Firewall(HA) solution should provide Web filtering, VPN and Zero trust security.

3.1.16. Implement express-route to connect all sites to Microsoft Azure.

### 3.2. Service description:

3.2.1. The service provider must provide pricing for each link (primary & Failover) with a guaranteed speed of 50Mbps downstream and 50Mbps upstream (full duplex) at SAPREF.

3.2.2. The service provider must provide pricing for a guaranteed speed of 50Mbps downstream and 50Mbps upstream (full duplex) for SANPC in Jhb.

3.2.3. The service provider must provide pricing for a guaranteed speed of 50Mbps downstream and 50Mbps upstream (full duplex) for SANPC in Milnerton CPT.

3.2.4. The service provider must ensure that the primary line (fibre) and failover line (microwave) at each site terminate to different POP for high availability.

3.2.5. The service provider must provide a connectivity solution that should not be limited to bandwidth utilization.



- 3.2.6. The service provider must provide CEF with static public IP addresses (minimum of 40 public IP addresses over the duration of the contract).
- 3.2.7. The service provider must provide a guaranteed 1:1 contention ration on the primary line (Fibre) for both local and international connectivity.
- 3.2.8. The service provider must provide a service availability guarantee for ISP and SD-WAN solution of no less than 99.5% uptime as a Service Level Agreement, and the SLA must be subject to penalties.
- 3.2.9. The service provider must provide a service availability guarantee for the firewall of no less than 99.9% uptime as a Service Level Agreement, and the SLA must be subject to penalties.
- 3.2.10. The service provider will be required to implement and continuously manage and monitor Quality of Service (QoS) on the network.
- 3.2.11. The service provider must provide and maintain all the necessary equipment to enable the specified solution without impacting business operations.
- 3.2.12. The service provider must provide 24/7 support for all sites.
- 3.2.13. The service provider must provide a bandwidth utilization monitoring system for active monitoring and generation of usage reports.
- 3.2.14. All network equipment provided/supplied will need to be insured by the service provider to cover theft, damage and any act of God that will take place for the duration of the contract across all sites.
- 3.2.15. The service provider must cater for formal training for Three (3) CEF ICT personnel. This training must also include accredited certification (including certification exams). Training and certification must cover the proposed solution set.

#### 4. PRICING SCHEDULE

##### 4.1. Full Scope of Work Pricing Schedule.

Description	Once off charge (if any)	Monthly charge	Total over 3 years	Notes (if any)
50Mbps SANPC-Refinary primary fibre line				
50Mbps SANPC-Refinary backup/microwave fibre line				
50Mbps SANPC JHB				

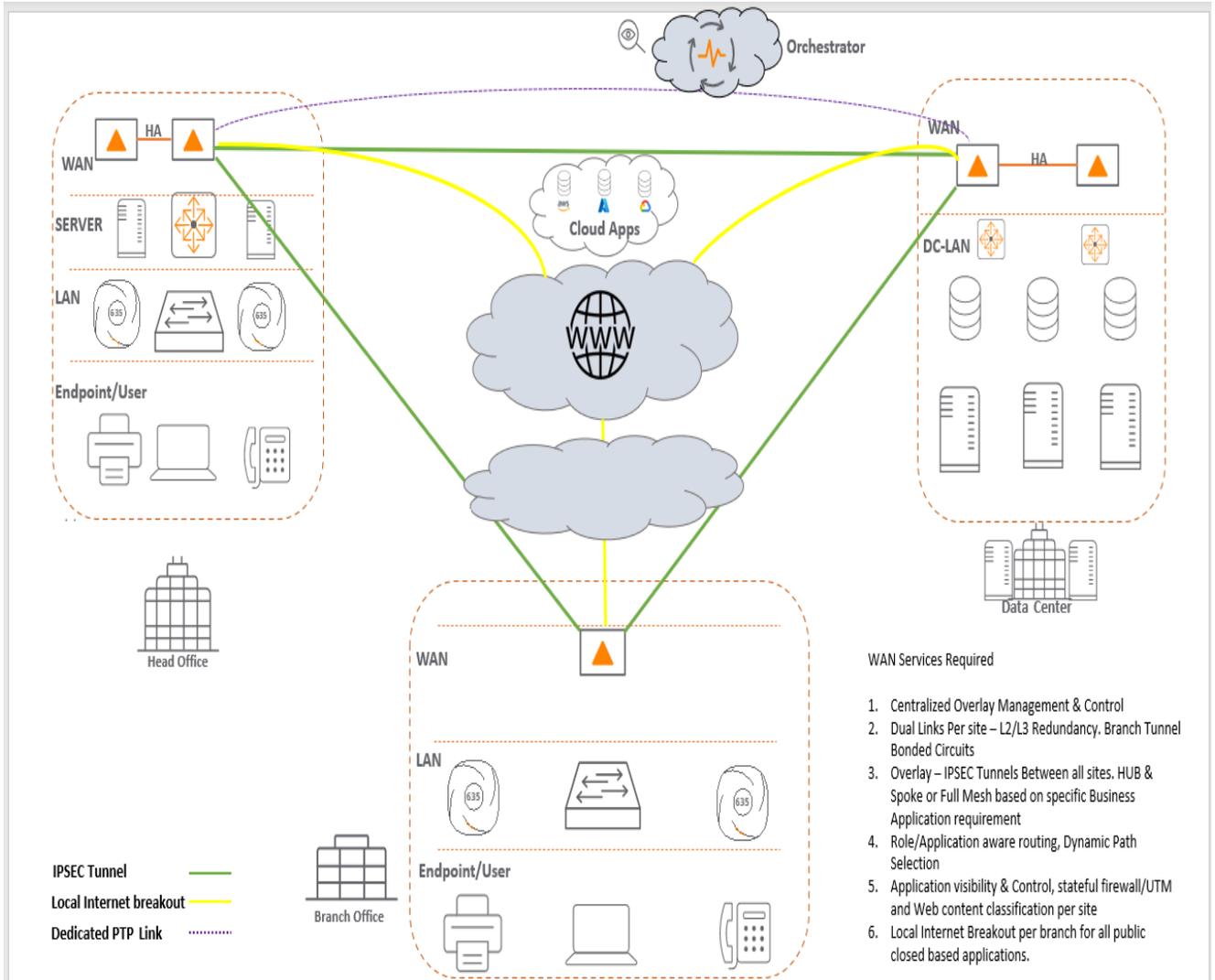


50Mbps SANPC Milnerton CPT				
SD-WAN Solution				
Service management /Service desk				
Static public IP addresses				
Firewall Solution				
Direct Routing				
Other costs (if any)				
Total Excl.VAT				
VAT				
Total Inc.VAT				
<p>Note this table is a template and must be amended accordingly to ensure Bidder has included all foreseeable costs to render SD-WAN, INTERNET, FIREWALL AND DIRECT ROUTING SERVICES as per full CEF scope of requirements including escalations in prices over the 3-year period</p>				

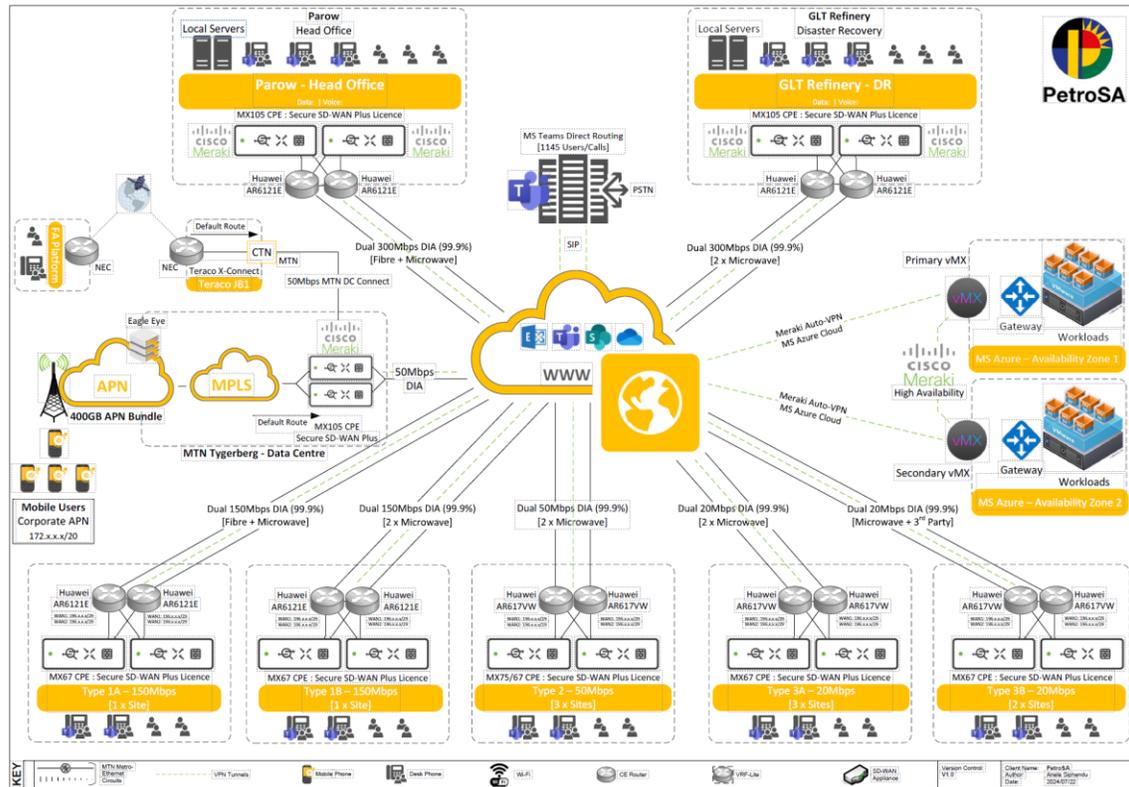
**5. Location and size of each site:**

<b>Site Name.</b>	<b>Location</b>	<b>Approximately users</b>
Sandton CEF Head Office	Sandton	<b>200</b>
SANPC-Refinery Durban KZN	Durban	<b>80</b>
SANPC Johannesburg	Johannesburg	<b>40</b>
SANPC Milnerton CPT	Milnerton Cape Town	<b>40</b>

## 6. HIGH LEVEL PROPOSED SD-WAN TOPOLOGY



## 7. PetroSA Planned SD-WAN TOPOLOGY



NB- As per line number 3.1.11. we want to create bridge SD-WAN network with the Petro SA SD-WAN as part of our IT shared services model.