



**TERMS OF REFERENCE FOR PROVISION OF INTERNET, VPN, WIFI AND VOICE OVER INTERNET
PROTOCOL TELEPHONE SYSTEM FOR ALFRED NZO DEVELOPMENT AGENCY FOR THE PERIOD OF 3
YEARS**

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PROJECT NAME

PROVISION OF INTERNET, VPN, WIFI AND VOICE OVER INTERNET PROTOCOL TELEPHONE SYSTEM FOR ALFRED NZO DEVELOPMENT AGENCY FOR THE PERIOD OF 3 YEARS

1. INTRODUCTION

The ANDA would like to invite qualified and experienced Service Provider to Supply, Deliver and Install Internet solution with a VPN, WiFi and the hosted VoiP Telephony System

2. PURPOSE

The purpose of this solution is to upgrade the existing network infrastructure and connect ANDA staff to the agency's network through Virtual Private Network. VPN/MPLS solution gives extremely secure connections between private networks linked through the Internet. It allows remote computers to act as they were on the same secure, local network.

The service providers are required to quote on rate basis for future additional sites and personnel that may be added on during the contract of the project.

For the proposed solution the bidder should have total cost for 3 years.

3. BACKGROUND

The Alfred Nzo Development Agency (ANDA) is a municipal entity of Alfred Nzo District Municipality established in terms of the Municipal Systems Act (MSA) No. 32 of 2000 and regulated in terms of the Municipal Finance Management Act (MFMA) 56 of 2003. ANDA is registered in terms of the Companies Act No 71 of 2008.

ANDA is governed by a plethora of legislation and regulations that intends to support and strengthen its role in transforming society and the developmental state. The Agency is established as a special purpose vehicle for the objective of driving and facilitating economic development and investment throughout the Alfred Nzo District.

The principal mandate of the agency is to act as the operational arm of the Municipality for the purposes of implementing economic, social and environmental policies and projects within the area of jurisdiction of the Municipality or such areas as the Municipal Entity may specify from time to time. It acts to promote development of economic potential on a regional basis by building on opportunities, which recognise the unique competitive strengths of the region's economy.

The Alfred Nzo Development Agency has one site which is the main office in Mt Ayliff. The network connection of ANDA offices is slow and vulnerable exposing the agency's digital assets to many attacks, which can cause unauthorized access leading to loss to data. The current network infrastructure is running on 10Mbps which is slow due to the increase of

staff members. There is an existing infrastructure onsite which includes telephone and the LAN.

4. SCOPE OF WORK

4.1 VPN and Internet Connection Solution

- Provide VPN and Internet Connection for a period of three years.
- Service Provider must provide Routers and Switches (external I/O ports, rack mounting, management features, and routing/switching capacity) as part of the Solution which support VOIP.
- Implement QOS (Quality of Service) and demonstrate how traffic is going to be split (Voice, Business critical applications e.g. Servers, PC's and Printers and etc)
- Provide a network diagram of the implemented solution
- Provide a Wi-Fi Solution
- Provide access to a network performance monitoring tool to monitor performance of the VIRTUAL PRIVATE NETWORK
- Provide a clear fault reporting and escalation plan including the change management process plan
- Provide a detailed clear project plan on the implementation of the project
- Provide security for the network solution provided.
- Provide space for entity firewall to be hosted in your data centre for internet breakout.
- All LAN equipment provided, after the contract will remain the property of the Agency.
- Provide a maximum 8 hours downtime SLA per month and if that is not met the service provider has to pay the entity.

4.2 BILL OF QUANTITIES

ITEM	SITE NAME	NO OF USERS	BANDWITH
1	Main Building	21	20Mbps
2	Dedicated Internet Access	21	20Mbps
3	POE Switch		Quantity
	48 Ports Switches- Switch feature: Gigabit Ethernet ports with line-rate forwarding		1

	performance Gigabit Small Form-Factor Pluggable (SFP) or 10G SFP+ uplinks Stacking of up to 8 switches with 80 Gbps of stack throughput (optional) Power over Ethernet Plus (PoE+) support with up to 740W of PoE budget 24-port PoE fanless switch for deployment outside the wiring closet Reduced power consumption and advanced energy management features USB and Ethernet management interfaces for simplified operations Enhanced limited lifetime warranty (E-LLW) offering next-business-day hardware replacement Power resiliency with optional dual field-replaceable power supplies Layer 3 capability		

4.3 Wi-Fi Solution

Alfred Nzo Development Agency want data only WiFi services with different SSID's namely:

- **Alfred Nzo Development Agency staff account** to connect on the domain network and systems to execute their duties and across ANDA offices and the staff WiFi security and login credentials to be linked to Active Directory accounts.
- **Board Members account** to connect on ANDA internet when they are around ANDA building and attending meetings.
- **Guests account** to access ANDA internet when attending meetings and daily login credential passwords should change randomly after 24 hours in order for new guests to apply for new login credentials.
- **ANDA community account** to connect on ANDA internet in order to access all sites allowed by the Agency to be accessed.

Hosted controller to manage all Access Points.

The WiFi access points will be connected on the existing LAN which is Category 5e (Ethernet cable currently installed), POE switch will be supplied by service provider for VPN, and the service provider must use the same switch.

4.4 Coverage requirements:

There is only one building or site that will be installed with outdoor WiFi access points, which will also cover users within the ANDA building is:

- ANDA building: Umzimvubu Goats Complex, Hospital Road, Mount Ayliff, 4735

Building that will be installed with indoor WiFi access points that might not be covered by the outdoor Access Points in the ANDA building is:

- ANDA building: Umzimvubu Goats Complex, Hospital Road, Mount Ayliff, 4735

4.5 Capacity and Density:

- ANDA building- 35 to 50 devices

4.6 Added services:

- Vouchering for public Wi-Fi e.g. 100MB
- Providing employees with a secure Wi-Fi network
- Multiple SSID's
- Survey and analytics

4.7 VoIP Solution

- Provide a VoIP telephone system for a period of three years.
- Provide support and maintenance for a period of three years.
- Provide pro-active 24/7/365 days support.
- Provide telephone system that will reduce telephone costs.
- Provide system that prevents the use of ANDA Telephones by unauthorized person.
- Provide system that will prohibit dialling of international calls by staff below the level of Accounting Officer; unless prior permission is obtained.
- The system must assign Personal identification number (PIN) to users.

- Provide printouts of calls made per extension/ PIN Code as and when required.
- Provide system which will printout monthly statements for each PIN codes.
- Provide training to users and system administrators.
- Provide a clear fault reporting and escalation plan and turnaround time to resolve calls logged.
- Ability to provide remote support to the system.
- Provide a hosted switchboard solution.
- Provide IP phones.
- Provide quality of service and explanation how the quality of service will be addressed by your solution.
- Provide next business day SLA for all the equipment.
- Provide solution that has proactive monitoring.
- Provide your VoIP rates table to different Networks.
- Provide direct line dialling, if there are costs state the costs to provide the service.
- Provide Telephone Management Services to help ANDA to take control and monitor internal telecoms expenditure.
- Provide a detailed clear project plan on the implementation of the project.
- Provide detailed Telephone solution provided to ANDA.
- Provide support costing- Remote Support, Online Support & Costs per km.
- Retain existing geographic phone and fax numbers of ANDA, Bidder's solution should address how this can be achieved.
- Provide a maximum 2 hours downtime SLA per month and if that is not meet the service provider has to pay the municipality.

Existing Geographic Phone Number: Only one number which is 039 492 0011

4.8 Standard Functions

FEATURES	DESCRIPTION
1. Basic Call logs	Missed calls, received calls, placed calls (history)

2. Call waiting	Busy tone if user is on a call. If user has voicemail, the call is redirected directly to the voicemail.
3. Calling name retrieval	Name of the user displayed on the IP phone screen
4. Connected line identification presentation	Number of the user displayed on the IP phone screen
5. External calling line ID delivery	Called user can see the number on his/her phone
6. Internal calling line ID delivery	Called user can see the number on his/her phone
7. Call forwarding always	Forward all calls to a specific number
8. Call transfer	User can transfer the active call to another destination
9. Flash call hold	User can put a call on hold
10. Last number redial	Redial last called number
11. Three-way call	Three-way conference calling
12. Call forwarding busy	Forward calls when there is an active call on the line. If the user has voicemail, the call is automatically directed to the voicemail
13. Call forwarding no answer	Forwarding calls when there is no answer for a number of seconds. If the user has voicemail, the call is automatically directed to the voicemail.
14. Call forwarding not reachable	Forward calls when device is not registered. If the user has voicemail, the call is automatically directed to the voicemail
15. Inventory report	List of users and phones
16. Call hold	User can put the call on hold
17. N-way call	Conference call (internal and external) numbers for external conference calls must

	be provided
18. Simultaneous ring	Ring multiple handsets at the same time

4.9 Other standard phone functionality or capability:

- Four line and programmable feature keys enable quick access to telephony features and staff
- High-resolution, graphical grayscale display makes viewing easier
- Dedicated fixed keys** ease communications for increased efficiency
- Built-in speakerphone adds freedom with hands-free communications
- Wideband for enhanced audio clarity is supported with handset, speaker, or a headset
- Line keys, Soft-keys, Two-way navigation and select keys, Hold/Resume, Transfer and Conference keys
- Messaging, Service and Directory keys
- Standard key pads
- Volume control toggle key
- Voicemail

4.10 Advanced Functions

FEATURES	DESCRIPTION
1. Speed dial option	Allow user to dial numbers from hard buttons.
2. Roaming Profiles	User can login to any phone and he receives his profile (number, name, etc).
3. Phone lockout	Before user makes a call, he must login to the phone. Even if user logs out of the phone, his line is still available.
4. Call park	Park call to slot. Calls can be retrieved from the calling park slot.
5. Call pick up	Pick up calls on other lines
6. Busy lamp Field	Secretary can see if the manager is on a call.

Boardroom Telephone

Functionality/Capability

- Wideband (G.722) for crystal-clear audio performance
- 360-degree coverage or rooms up to 800 square feet (74.3 square meters)
- Up to 26 attendees
- Backlit, antiglare, color pixel display eases viewing and navigation
- Same easy-to-use call experience as other IP Phones
- Scalable: options for daisy-chaining*, expansion microphones
- Wired and DECT wireless expansion microphone options*
- SHA-256 encryption to help secure communications
- Same Phone OS as other IP phone administration, avoids user retraining
- Managed with same on-premises tools as other IP phones
-

Reception Phone with Expansion Module

Functionality/Capability

- Program 14 physical keys per module, 28 keys with "second page" in software
- Keys present up to 14 characters when active, enhancing user accuracy in call handling
- Two graphical, backlit, high-resolution color displays makes viewing easy
- Get status of available staff with Busy Lamp Field (BLF) support
- View both voice message and missed call counts on the display
- One-, two-, and three-module configurations expand scalability and extend IP phone investment
- Power options include Power over Ethernet (POE) and a local power cube
- The Power Save Plus option reduces power consumption in off-hours

5. BILL OF QUANTITIES

ITEM	DISCREPTION	QUANTITY
1	Channel Switchboard	50
2.	Basic IP Phones with Screen Display	21
3.	Boardroom Telephones	1
4.	Main Switchboard Phone	1
5.	Existing Geographic Phone Number including Main Switchboard number	1

ITEM	SITE NAME	NO OF USERS	REQUIRED BANDWIDTH
1	Main Building	30	20Mb

6. SPECIAL CONDITIONS OF CONTRACT / MANDATORY REQUIREMENTS

Proof of the following must be attached to the proposal. Failure to comply with the below will result in your proposal being rejected.

Certificate of compliance in terms of providing connectivity (Electronic Communication Network Service)	Comply	Do Not Comply
ICASA License (Electronic Communications Services)		
Provide a maximum 2 hours downtime SLA per month and if that is not met the service provider has to pay the Agency.		

NB: This project must be completed within 60 days from the date of appointment with minimal network disruption

7. FUNCTIONALITY REQUIREMENTS

POINTS SCORING

FUNCTIONAL ASSESSMENT – POINTS SCORING	
Functional Category & Description	Points Allocation
Experience	Total = 25
Similar projects (VPN, Wi-Fi, and VoIP) that were successfully conducted (5 points per project to a maximum of 5 projects)	25
5* Successful Completed project	25
4* Successful Completed project	20
3* Successful Completed project	15
2* Successful Completed project	10
1* Successful Completed project	5
In order to claim points, the bidder should attach appointment letters/ Purchase order and reference letter signed off by Client for each successful completed project.	
Non submission of both deliverables will result in zero point scoring.	
Expertise	Total =30
Project team comprising of skilled personnel required to successfully complete the project. The team must be employed by the bidder. Proof of Qualifications and skills matrix must be attached.	
Anyone in the project team must be certified with the following	

certificates: CCIE Routing and Switching or CCNP Routing and Switching or CCNA Routing and Switching CCNP Wireless or CCNA Wireless CCNA Voice CCIE Security or CCNP Security or Fortinet Certification Project Management	10 05 05 05 05
In order to claim points the bidder must attach skills matrix and original certified certificates not older than 6 months.	
Valid Electronic Communication Network Service License from ICASA	20
Methodology	Total = 25
Downtime response Less than 8 Hours – 15 points 9 to 24 hours - 10 points 2 to 5 days – 5 points More than a week 0 points Detailed work plan with time frames - 05 Successful bidder should commence work within 7 working days of appointment - 5 NB: Training plan on the new system is compulsory	25

Bidders should take note of the above technical (quality) evaluation criteria.

All the necessary documentation must be submitted for the Evaluation Panel to make an informed evaluation. Evaluation of the Technical (Quality) Requirements will be based on the information provided by the bidder.

[i] **Experience** - The experience annexure must be completed. Only list projects of a similar nature undertaken focusing on managed services and their value.

[ii] **Expertise** – The qualifications and capacity of the company/team to undertake the work must be provided for evaluation purposes.

[iii] **Methodology** – The bidder must clearly state timeframes for the delivery of the required services.

Bids that do not meet a minimum of 70 points in total out of 100 for the criteria listed above will not be considered further.

8. DELIVERABLES / KEY OUTPUTS

- Signing of Service Level Agreement (SLA)
- VPN and Internet Connection

- Routers and Switches (external I/O ports, rack mounting, management features, and routing/switching capacity)
- QOS (Quality of Service)
- Wi-Fi Solution
- Secure Wi-Fi network for employees
- Multiple SSID's
- Survey and analytics
- Security for the Network Solution
- All LAN equipment
- VoIP telephone system

For any queries regarding this tender, please contact Ms Mrwetyana-Zembe at telephone number 039 492 0011 or Email: dmrwetyana@anda.org.za/mrwetyanad@anda.org.za during office hours.

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