

APPOINTMENT FOR THE SUPPLY OF WAN, INTERNET AND TELEPHONE MANAGEMENT SOLUTIONS FOR A PERIOD OF 36 MONTHS

- Supply of Voice Over Internet Protocol (VOIP) Telephone Management System
- Supply of WAN
- Supply of internet
- Call centre
- Soft phones

SCOPE OF WORKS

The scope of work will be to provide voice & data services, hardware, maintenance, support and monitoring of the necessary hardware, software, and network infrastructure for a hosted IP-based Unified Communication.

Tswaing Users:

1. Delareyville main office (110 users, 50 handsets required)
2. Delareyville traffic (15 users, 10 handsets required)
3. Delareyville stores office (10 users, 6 handsets required)
4. Delareyville technical office (40 users, 22 handsets required)
5. Delareyville LED office (5 users, 4 handsets required)
6. Atamelang office (20 users, 10 handsets required)
7. Sannieshof office (20 users, 15 handsets required)
8. Ottosdal office (15 users, 6 handsets required)
9. Khunwana library (5 users, 3 handsets required)
10. Ganalaagte library (5 users, 3 handsets required)
11. Delareyville library (8 users, 4 handsets required)

Telephone lines at the sites:

1. Delareyville main office – 053 948 9400/053 948 0900 (Switchboard)
2. Delareyville traffic - 053 948 9400/053 948 0900
3. Delareyville stores office – 053 948 1943
4. Delareyville technical office – 053 948 0787/053 948 0073 (Switchboard)
5. Delareyville LED office – no line
6. Atamelang office – 018 334 2664 (Switchboard)
7. Sannieshof office – 018 683 0019 (Switchboard)
8. Ottosdal office – no line
9. Khunwana library – no line
10. Ganalaagte library – no line
11. Delareyville library – no line

Current handsets Grandstream GXP1625

Switches BDCOM S1526-24P-400

The bidder to provide all the necessary resources needed including network points, routers, switches, firewall, cabling and fly lead to link offices for an efficient internet and VoIP system. The VoIP system will depend entirely on the internet provided by the bidder.

Softphones

150 x Softphones

First phase

1. Delareyville main office
2. Delareyville traffic
3. Technical offices
4. Stores
5. Sannieshof
6. Atamelang
7. Ottosdal
8. LED offices

Second phase

9. Ganalaagte library
10. Khunwana library
11. Delareyville library

Coordinates

- Delareyville main office - -26.686062873195787, 25.457350361553132
- Delareyville stores - -26.69318784087673, 25.450350813493024
- Technical/Community service offices - -26.69326212776498, 25.454218558748863
- LED offices - -26.69291226006167, 25.454771093785414
- Atamelang - -26.504807133075573, 25.36566467222634
- Sannieshof - -26.529642443838302, 25.809199335530977
- Ottosdal - -26.811299139499354, 26.003320280337608
- Khunwana Library - -26.372064086863297, 25.330280363470305
- Ganalaagte Library - -26.46947293938225, 25.53568136935729

Solution Requirements

The solution should provide for the below services with the necessary voice functionalities required to meet the onsite and remote users such as users working from home; the scope is not limited to the below services/ features;

- a) Provide an end-to-end hosted IP PBX solution.
- b) Provide a stable network connectivity to the service provider hosting environment.
- c) Provide the voice infrastructure (SIP).
- d) Provide voice equipment for onsite users- handsets; headset; softphones and user profiling.
- e) Provide workforce mobility.
- f) Provide a main contact centre service for onsite users and external clients that can route calls to different municipal units.
 - Provide full Automatic Call Distributor (ACD) functionality.
 - Cater for 10 agents as well as the expected growth to 20 agents.
 - Provide Split queues/multiple call flows/different agent groups across the organisation.
 - Provide Interactive Voice Response (IVR) allow for multiple tier announcements and selections.
 - Facility should record and insert an ad hoc message as part of the Interactive Voice Response (IVR). The recording and uploading of this message to be done by the Tswaing system administrator.
 - Should cater for softphones.
 - Solution should provide full statistical reports.
 - Provide “abandoned call search”.
 - Supervisor to add/move agents between call queues.
 - Provide Supervisor assist.
 - Provide silent monitoring by the Supervisor.
 - End-user competency training is required.
 - Provide Executive handsets for five (5) senior management and their secretaries.
- g) Provide a hybrid switchboard capability.
 - Flexibility in the configuration of operator positions as well as the maximum number of operator terminals which can be connected to the system,
 - Switchboard consoles to cater for disabilities such as visual impairment or any other impairments,
 - The type of headset recommended for use on the System offered should be provided (name, model number and performance specifications),

- h) Provide access for remote / home users to the business voice services.
- i) Provide Fax2email; voice recording, voice logging and bulk SMS.
- j) Provide integration of smart phones and softphones (Teams/Zoom – Capability to use Ms Teams/Zoom to dial other telco/network service providers) to the business voice service.
- k) Provide Call routing – Follow me option; redirect calls.
- l) Provide voice conferencing.
- m) Provide telephone number porting.
- n) Provide Helpline / Hotline numbers.
- o) Provide reduce call rates.
- p) Provide monthly reports. Each user to have a weekly/monthly limit. User must be able to extract their call reports from the system and receive weekly email notifications.
- q) Provide an end-to-end maintenance and support for three years.
- r) Provide a transition plan.
- s) Solution should integrate to Outlook, for voicemail to email.
- t) Provide centralised telephone management (TMS)
 - TMS system should be able to be accessed from a web portal.
 - Calls made on behalf of any extension in the network should be correctly reflected against the extension to which the call was transferred.
 - Soft barring (call block)
- u) Provide extension features
 - Call forward to another extension or an external number when required.
 - Conference facilities should cater for at least 5 parties i.e. either external or internal parties.
 - Provide conference bridging facilities to cater for 20 parties.
 - Flexibility pin codes required by multiple users on one phone instrument.
 - Telephone handset capability to toggle between 2 calls.
 - Capability for pin codes to be re-set by Administrator.
- v) Unified interface to any collaborative platforms e.g. Microsoft Teams, Zoom platforms, etc. MS Office E3 & E5 integration
- w) Voice services to include at least fixed mobile convergence, smart access number capabilities and geographic number portability from the current system.
- x) Switchboards with auto-attended options.
- y) Direct Dial-in

2. WAN Services & Internet

Solution UCS for Tswaing Local Municipality

1. Delareyville (100Mbps for 160 users)
2. Atamelang office (40Mbps for 20 users)
3. Sannieshof office (50Mbps for 20 users)
4. Ottosdal office (40Mbps for 15 users)
5. Khunwana library (20Mbps for 5 users)
6. Ganalaagte library (20Mbps for 5 users)

Point-to-Point Connectivity between remote sites and main office. Delareyville sites to use fibre for connectivity. Switches must be PoE.

Internet Connectivity

- Uncapped Unshaped Business connectivity
- Synchronous Bandwidth Profile
- Internet Router
- Firewall Device

Must include following managed services:

- Internet for data and voice
- Firewall management
- Web-content Filtering
- Route maintenance
- VPN service for remote login
- Remote VPN service must include an OTP (one-time-PIN) system for security reasons. (Demo of such system should be provided upon request).
- Internet service must be supplied via 2 last-mile links (primary and secondary) with network diversity & automatic failover.

Call Centre

- Installation and Configuration of contact centre services must include emails, webchats, and social media interactions.
- Contact centres must take an omnichannel approach, enabling Tswaing to refine customer service, increase efficiency and improve insights into customers' behaviours
- It must include chatbots to cloud technology.
- Define the role of Artificial Intelligence in the contact centre.
- Provisioning of Telecommunication devices (headsets, desk phones, softphones etc.)

- Interactive Voice Response

WhatsApp Integrated ticket system Service.

- Issue Support Ticket Number numbers
- Manage interactions between community and support staff
- Support media and text messages
- Support location sharing
- Reports and Dashboards for municipality staff
- Should include training for the municipality call centre
- Should integrate with VoIP Server for "click-to-dial"

Shortlisted bidders may be invited to do a presentation of the proposal.

GENERAL REQUIREMENTS

- a) The specific warranty requirement is for a 3-year next business day on-site replacement or repair. The option to extend such a service should be an available option.
- b) The proposed solution must incorporate and implement Least Cost Routing functionality / interconnect facility with all South African telephone networks to provide substantial cost savings on call charges.
- c) The successful bidder must retain existing phone numbers of Tswaing Local Municipality. The bidder's solution should address how this can be achieved.
- d) The system must have built-in redundancy mechanisms to overcome failures such as component and power failure.

SUPPORT AND SLA AGREEMENTS

- a) Minimum of 98% of outbound call volume must be routed through the VOIP data circuit.
- b) 99% uptime of the voice services (carrier grade voice quality).
- c) Mean time to respond must be within 4 hours and mean time to repair must be within 24 hours.
- d) Measures taken to attain Network redundancy.

SECURITY

- a) Tswaing requires that communication is secure and that appropriate security measures are taken to reduce potential interruptions / interception of communication.
- b) For enhanced security, the Unified Communication System should be able to encrypt the IP calls end to end with appropriate securities.
- c) Access to the system should be secure and appropriate protocols must be utilized.

SPECIAL CONDITIONS (MINIMUM QUALIFICATION CRITERIA)

Bidders not able to provide evidence of the following items will lead to their disqualification from evaluation.

- a) The bidder needs to have completed a minimum of 3 (three) medium to large UCS installations (with at least 100 end user extensions) successfully completed within the last 5 years, with contactable references. All necessary permissions to contact them and contact details to be updated as Tswaing Local Municipality will contact these references with a list of assessment questions.
- b) The bidder to attach the following documents in the proposal/bid submission
 - i. Design documents (security, configuration, etc.)
 - ii. Detailed project plan that outlines tasks, milestones, durations, and resource needs.
 - iii. Model that demonstrates how the solution will save costs.
 - iv. Model that demonstrates how the bidder will monitor and maintain outgoing and incoming digital voice services infrastructure.
- c) The bidders project team to consist of a minimum of three specialists:
 - i. Certified network specialist
 - ii. Certified IP telephony specialist
 - iii. Project manager

COMMUNICATION AND REPORTING

- a) A Project Manager to be appointed by the bidder as the delegated responsible person for fulfilling bidder's obligations, during implementation.
- b) A Project Team comprising representatives nominated by Tswaing and the bidder, including the bidder's Project Manager shall be established, to oversee implementation progress.
- c) In this regard the bidder shall be expected to attend progress meetings biweekly.
- d) The Project Team shall report to the IT Manager.

STRUCTURE OF THE TECHNICAL PROPOSAL DOCUMENT

Notwithstanding the structure of the rest of the bid, the technical solution in response to the terms of reference needs to be submitted in the following format.

Section 1: Introduction

This section must describe the bidders understanding of the scope of work, necessary skills, and company profile.

Section 2: Executive summary

An overview of the main points contained in the proposal with reference to section where more detailed discussion of each point can be found.

Section 3: Proposed solution design

This item should include the design documents the migration plan. The method of routing outgoing calls to ensure cost reduction, maintain acceptable Quality of Service (QOS) and security must be covered. Acceptance testing plan must be included in this section.

Section 4: Work plan and duration (implementation plan)

The work plan and duration for the overall work (from project kick-off date till the Final delivery date), including any dependencies between the separate items in the Scope. The bidder should provide deliverables and milestones as specified.

Section 5: Track Record

Provide at least 3 reference letters demonstrating the work completed.

Appendix I: Methodology

The bidder should provide details of any appropriate methodologies. This section needs to also cover the acceptance test plan methodology.

Appendix II: Cost savings

The pricing model demonstrating the cost savings for the bid as well as supporting material of previous projects and the cost savings achieved on the call charges and other related information.

Appendix III: Detailed CVs

The bidder should provide detailed CVs of staff team members who will implement the project and their certifications.

Appendix IV: Organization Chart

The bidder should provide an organization chart and project organization structure. Provided CVs must be mapped to the provided organization structure.

Appendix V: Other material

Other technical material relevant for the solution and requested need to be added here.

Note 1: Academic Qualifications

In case of supply of WAN, Internet and telephone management system, Team Leader and Technical Support must possess academic qualifications related to Wide Area Network - WAN, Internet Service Provider - ISP and Telephone Management, Proof of academic qualifications in the form of copies must be attached to the Team Leader/Project Director's CV. Foreign qualifications must be accompanied by a certificate from Qualifications Certification Body. The proposed Project Director/Team Leader shall be in any specialised

qualification in firewall. The proposed Support Technician / Technologist shall be in possession of at least a networking qualification. Failure to provide this proof of academic qualifications will result in the project Leader/Director and/or Support Technician / Technologist being regarded as not having minimum prescribed qualifications, and will eliminate the tender from further evaluation.

Note 2: Specialised Qualification

Proof of registration of the Project Leader/ Director as special qualification with any of proposed firewall solution must be attached. Failure to provide this proof of specialised qualification registration will result in the project Leader/Director being regarded as not qualified, and will eliminate the tender from further evaluation.

Note 3: Experience after qualification

A minimum of 5 years post qualification experience as well as a minimum 3 year post special qualification experience is required for the team leader. Any Project Leader/Director's post qualification and registration below 5 years and 3 years respectively will eliminate the tender from further evaluation.

Note 4: Employment History (Involvement in comparable projects)

Proof of employment history must be contained in the Curriculum Vitae (CV) and must include references and contact details. The CV must contain only necessary and relevant information for the purpose of this project (not marital status, hobbies, number of children, etc.). Failure to provide the employment history on CV shall warrant an automatic elimination of tender from any further evaluation.

Note 5: Current Employment

Confirmation of current employment must either be in the form of letter from Employer or must be reflected or contained in the CV attached. Where a proposed Team Leader is seconded from a rival Consulting Firm, an agreement between the two entities as well as a written undertaking confirming the person's full-time availability for the duration of a project must be attached to the CV.

Guideline to experience on similar or comparable projects

a) Experience on supply of Wide Area Network (WAN) Projects implemented and successfully completed

The Tenderer must attach copies of Appointment Letters or Completion Certificates as evidence of Supply of Wide Area Network (WAN) projects implemented and

successfully completed. Points claimed without these requested evidence documents will not be considered.

b) Experience on Supply of Internet Service Provider (ISP) Projects Implemented and Successfully Completed

The Tenderer must attach copies of Appointment Letters or Completion Certificates as evidence of supply of Internet Service Provider (ISP) Projects Implemented and Successfully Completed. Points claimed without these requested evidence documents will not be considered.

c) Experience on Supply and maintenance of Telephone management Projects implemented and successfully completed

The Tenderer must attach copies of Appointment Letters or Completion Certificates as evidence of supply and maintenance of telephone management Projects implemented and successfully completed. Points claimed without these requested evidence documents will not be considered.

PRICING SCHEDULES / BILLS OF QUANTITIES (BoQ)

Once-off Costs

| | Telephone | Internet & WAN |
|---|-----------|----------------|
| Phase 1 Site Establishment & Installation | | |
| 1. Delareyville Main Office | | |
| 2. Traffic | | |
| 3. Stores | | |
| 4. Technical Offices | | |
| 5. LED Offices | | |
| 6. Sannieshof Offices | | |
| 7. Atamelang Offices | | |
| 8. Ottosdal Offices | | |
| | | |
| Phase 2 Installation | | |
| | | |
| 9. Khunwana Library | | |
| 10. Ganalaagte Library | | |
| 11. Delareyville Library | | |
| | | |
| Sub Total | | |
| Vat | | |
| Total | | |

Monthly Maintenance & Support

| | Telephone | Internet & WAN |
|----------------------|-----------|----------------|
| Year 1 Monthly Costs | | |
| Year 2 Monthly Costs | | |
| Year 3 Monthly Costs | | |

| | | |
|-----------|--|--|
| | | |
| Sub Total | | |
| VAT | | |
| Total | | |

Total Cost of the Project for 36 Months

| | Telephone | Internet & WAN |
|--|-----------|----------------|
| Site establishment & Installation | | |
| Monthly Maintenance for 36 Months | | |
| | | |
| Total Cost of the Project, VAT inclusive | | |

Call Centre (Optional)

| | Amount |
|-----------------------------------|--------|
| Call Centre Once-Off Installation | |
| Year 1 Monthly Costs | |
| Year 2 Monthly Costs | |
| Year 3 Monthly Costs | |
| | |
| Sub Total | |
| VAT | |
| Total | |

DATES FOR DELIVERY AND COMPLETION

1. The Bidder shall state the proposed start and completion dates, estimated appointment is three (3) months after closure of the bid.
2. The Bidder shall simultaneously fill in the period required to complete the work in days or weeks from the date of acceptance of the offer by the Employer. This shall be used to adjust dates should the Contract placement date vary.

| Item | Start Date | Completion Date | Working Period |
|------|------------|-----------------|----------------|
|------|------------|-----------------|----------------|

| | | | |
|---|--|--|--|
| 1: Sourcing and provisioning of Telephone equipment | | | |
| 2: Project Kick-off | | | |
| 3: Installation, Configuration, Testing and Go-Live of the IP PBX. Solution documentation (high level designs/technical solution designs) and test results. (Completion certificate per site). | | | |
| 4: Project sign off, hand-over and closure. | | | |
| 5: Hardware/Software maintenance and support for the IP PBX for a period of three years | | | |

SOCIO-ECONOMIC DEVELOPMENT

Tswaing Local Municipality intends to achieve the objective of promoting an environment that is health, safe, efficient, productive, harmonious, free from disruption and localises opportunities.

The Bidder shall submit a plan with regard to SED targets set by Tswaing for each respective SED element during the Request for Bid (RFB) phase. Bidders have to submit SED plans as part of their proposals in reaction to the RFB. Bidders are required to demonstrate through their SED plans how the involvement of black persons and historically disadvantaged individuals (HDIs) will be secured, as well as their commitment to the respective SED elements.