GREATER TAUNG
LOCAL MUNICIPALITY

Tel: Administrative Office (053) 994 9400
Fax:Administrative Office (053) 994 3917
Tel: Political Office (053) 994 9600
Fax:Political Office (053) 994 9611
Website: www.gtlm.gov.za

Postal Address:
Private Bag X1048,
Taung Station, 8580

Physical Address:
Station Street,
Taung, 8580

OFFICE OF THE MUNICIPAL MANAGER

INVITATION TO SUBMIT FORMAL WRITTEN BIDS FOR:

DESCRIPTION	BID NO	LOCAL CONTENT	DOC FEE	EVALUATION CRETERIA & CIDB GRADING	CLOSING DATE	CONTACT PERSON
Upgrading of Manthe Sports Facility (Soccer Pitch) (Re-Advert)	GTLM/INFR45/2020/2021	Steel Conveyance Pipe (80-100 %)	R 500.00	80/20 (Points Functionality) CIDB Grade 2CE or Higher	25/08/2021 @12:00	Mrs B Matebele 053 994 9477 nthaub@gtlm.gov.za
Provision for Automation of Municipal Records and Archiving System for a Period of 36 Months (Re-Advert)	GTLM/MM05/2020/2021	N/A	R 1000.00	80/20 (Points Functionality	25/08/2021 @12:00	Mr. L Thotse 053 994 9447 thotsel@gtlm.gov.za
Provision for the Implementation of Public WIFI IN GTLM for a Period of 36 Months (Re-Advert)	GTLM/MM06/2020/2021	N/A	R 1000.00	80/20 (Points Functionality	25/08/2021 @12:00	Mr. L Thotse 053 994 9447 thotsel@gtlm.gov.za

Tender documents will be available from the 26/07/2021.

No documents will be sold at the office. To purchase the documents, bidders must pay the tender fee into the account below or at the municipal cashiers. Documents should be downloaded from E-Tender portal and proof of payment be attached to the document on submission. Tenders can still be couriered, but they must be in the tender box before 12:00 on the date of the closing, no faxed or emailed tender documents will be accepted. Documents can still be viewed on the National Treasury website to assess if the bidder qualifies. **All enquiries regarding the tender's administration must be directed to supply chain management office @ 053 994 9471/2/3/4 or 436.** All submissions are to be made to Greater Taung Local Municipality, clearly marked with the Contract Number and description addressed for attention of the Municipal Manager and should be submitted in the Tender box situated in the foyer at the Administration Building of the Municipality on or before the indicated closing date and time. NOTE: The Greater Taung Local Municipality does not bind itself to accept the lowest or any tender and reserves the right to accept in whole or part. The tenders will also be evaluated based on the experience, capacity, and references where relevant. If you do not hear from us after the expiry of the validity period, please accept that your bid is unsuccessful. Please **note** that it is a requisite of the municipality that all suppliers must be registered on the Central Suppliers Database (CSD). **The tender validity period is 90 days.**

Banking Details:-

Bank Name	: ABSA
Account no	: 2650560046
Branch code	: 630273
REF	: Bid Reference number
Email	: scm.rfq@gtlm.gov.za

A. Makuapane
Acting Municipal Manager
22 April 2021

INVITATION TO BID

APPOINTMENT OF SERVICE PROVIDERS FOR THE PROVISION FOR AUTOMATION OF MUNICIPAL RECORDS AND ARCHIVING SYSTEM FOR A PERIOD OF 36 MONTHS (RE-ADVERT)

BID NO: GTLM/MM05/2020/2021

Bids are hereby invited for the Appointment of a Service Provider for the PROVISION FOR AUTOMATION OF MUNICIPAL RECORDS AND ARCHIVING SYSTEM FOR A PERIOD OF 36 MONTHS (RE-ADVERT) as and when needed for **GREATER TAUNG LOCAL MUNICIPALITY.**

Invalid or non-submission of the following documents will lead to immediate disqualification of the tender:

- **A valid Tax Compliance Certificate(s) with pin must be attached**
- **A copy of Company Registration Certificate(s) must be attached**
- **CV`s of Key Personnel (Identity Document and certificates must be certified)**
- **Certified ID copies of all directors (Not older than three months)**
- **Proof of residence of all directors and business (Not older than three months): (Statement of municipal account, lease agreement or proof of res for traditional council**
- **Certified copy of a valid BBBEE Certificate/Affidavit**
- **Professional Indemnity (Underwritten by a Registered Insurer)**
- **Price quoted must be firm and inclusive of VAT (if applicable)**
- **All MBD forms MUST be completed and signed**
- **Smart card ID copies should be certified on both sides**
- **Registration summary must be attached as a proof that the bidder is registered with Central Suppliers Database (CSD)**
- **A firm completion period must be indicated**
- **Copies from certified copies are not allowed.**
- **When documents certification is done by the commissioner of oath, ensure that the date of certification is indicated**
- **All certified copies should not be older than 3 months.**
- **A person in the service of state shall NOT be considered**
- **This bid will be evaluated in terms of the 80/20 preference point system as prescribed by PPPFA regulations implemented on the April 2017,**
    - **Where 80/20 is below the transaction value up to R 50 000 000 &**
    - **Where 90/10 is above the transaction value of R 50 000 000**
    - **N.B FAILURE TO ADHERE TO THE ABOVE-MENTIONED CONDITIONS WILL AUTOMATICALLY DISQUALIFY YOUR BID**

Bids documents with detailed bid specifications and detailed information are obtainable at the Finance Department office hours 08h00 to 15h00 of the GREATER TAUNG LOCAL MUNICIPALITY, Station Street Taung from **26 July 2021**. A non-refundable cash deposit fee of **R1000** is required on collection of the bid.

Sealed Bids clearly marked **"GTLM/MM06/2020/2021: APPOINTMENT OF A SERVICE PROVIDER FOR THE PROVISION FOR THE IMPLEMENTATION OF PUBLIC WIFI IN GTLM FOR A PERIOD OF 36 MONTHS (TURNKEY)** "must be placed in the tender box situated at the offices of the **GREATER TAUNG LOCAL MUNICIPALITY,** Station Street, Taung on or before 12h00 on **25 August 2021**

The GREATER TAUNG LOCAL MUNICIPALITY does not bind itself to accept the lowest or any bid and the Municipality reserves the right to accept the whole or part of any bid and further reserves the right to appoint or not to appoint if it so wishes to.

Bids will be adjudicated according to the GREATER TAUNG LOCAL MUNICIPALITY's Supply Chain Management Policy, the Preferential Procurement Policy Framework Act (Act 5 of 2005) and the Preferential Procurement Regulations, 2011, as well as the Broad Based Black Economic Empowerment Act (Act 53 of 2003). The tender will be evaluated on the 80/20 Preference Points system as prescribed by the Preferential Procurement Regulations, 2011

NB: BIDS WHICH ARE LATE, INCOMPLETE, UNSIGNED, COMPLETED BY PENCIL, SENT BY TELEGRAPH, FASCIMALE, ELECTRONICALLY (FAX), OR E-MAIL AND WITHOUT THE COMPULSORY REQUIREMENTS SHALL BE DISQUALIFIED.

Enquiries should be addressed to **Mr. L Thotse at Tel: 053 994 9447 or email to: thotsel@gtlm.gov.za** and Supply Chain queries to **Ms. Neo Dibelane** at **Tel. 053 994 1000** or by **e-mail to: dibelanen@gtlm.gov.za**

	Points		Points
Qualification of Key Personnel and Company Structure	**35**	**Project Manager has;** • BSc Engineering Degree or IT Degree • MSc Engineering Degree or IT Degree	10
		Site/ Contract Manager has; • National Diploma in Engineering /Electronic/IT or relevant B-degree (4)MSc Engineering Degree or IT Degree • NQF 5 (Labour Intensive) Qualification	10
		General Foreman has; • Trade Qualification • NQF 2 (Labour Intensive) Qualification	10
		Safety Agent has; • Relevant Safety Qualification • Completed min of 2 projects • Three years' experience	5
Company and/or Personnel Experience	**30**	Company must be able to demonstrate that it has the inhouse knowledge/ experience of the following;	
		Experience with monetising and building a self sustaining **WiFi network system in conjunctiom municipalities**	5
		Rural coverage solutions, and optimisation and performance of communication networks in rural areas	5
		Work in telecoms in multiple **African markets**	5
		Trials and Proof of Conceps on IoT technologies in partnership with vendors	5
		Experience working with marketing teams to define and refine **device strategies** that balance cost of ownership with keeping up with technology evolution and global industry trends	5
		Optimisation of network utilisation with limited network degradationEstablishment of transmission department for telecoms network in South Africa and Provinces. Experience in other African Countries will be an advantage	5
Method Statement	**15**	Method statement demonstrates **advanced understanding** of the rural environment,	15
		Method statement demonstrates a **fair understanding** of the rural environment,	10
		Method statement demonstrates **limited understanding** of the rural environment,	5

		Method statement demonstrates **a lack of understanding of** the rural environment,	0
Company Registered address	**15**	Registered in Dr RS Mompati District	15
		Registered in Northwest Province	10
		Registered in South Africa	5
Financial References	**5**	Bank Rating of "B" or better	5
		Bank Rating of "C"	3
		Bank Rating of "D" or lower	2
		Bank Rating of "E" or lower	0
Total Maximum Points	**100**		
Bidders must obtain a minimum of **70%** to be evaluated further			

TENDER FOR THE PROVISION, MAINTENANCE, AND EXPANSION OF THE PUBLIC FREE WI-FI SERVICES WITHIN THE GREATER TAUNG LOCAL MUNICIPALITY FOR A PERIOD OF THREE (3) YEARS

Version 1.1: Draft Version

Date: March 2021

1.1 INTRODUCTION

The GTLM has established a public Wi-Fi network need throughout the Municipality that provides free Wi-Fi services to its constituents. The Municipality is therefore requesting respondents to provide responses to provision public Wi-Fi network.

Respondents must also include initiatives to provision Wi-Fi services at no or little cost to the Municipality. Preference will be given to:

- self-funding and sustainable solutions

The potential bidders must supply a turn-key public Wi-Fi solution and the Municipality will prescribe some technical specifications and criteria. All bids must meet the minimum criteria.

Some of the key services are listed below:

- Install Hotspot sites as per receive site list from the Municipality;
- Prepare a project plan aligned to the planned commission date;
- Conduct site surveys for each hotspot, high site or backhaul
- Plan the Wi-Fi Network, in consultation with the Municipality, in a reasonable manner to provide the service;
- Procure, configure, install and maintain the equipment needed to establish the Wi-Fi Network;
- All cabling and installation work shall be carried out by the selected bidder;
- Implement IP network security measures for the service;
- Provide own equipment for the installations (e.g cherry picker, ladders), testing- and safety equipment;
- Apply for all electrical connections required to provide electricity to the required elements of the Wi-Fi network inclusive of the hotspot, high sites etcetera. For the purpose of this tender, it must be assumed that all electrical connections are metered and therefore the contractor will be responsible for all electrical costs inclusive of administrative, connection and usage fees.
- Maintain the entire Wi-Fi network and the phases of the network in terms of the agreed service levels agreement.
- To ensure that at termination of this Tender, the municipality will own a complete network that is fully functioning. All other relevant information relating to the transfer of the network is to be provided to the GTLM.
- Provide GTLM with the details of all licenses used in the project and provide proof of same.
- To provide proof of Wi-Fi installations and updated maps and network diagrams
- Upon termination of this Tender, hand over all keys to the high-sites or other Municipal property.

This Tender Document seeks a comprehensive and complete requirement of hardware and software for the successful installation and commissioning of the public Wi-Fi. In case the Bidder has not quoted for any of the item that are essential for the completion of the project, a formal quotation will need to be submitted to the client within 72 hours upon the realization of the omission. The Successful Bidder shall be required to supply all material/goods/services required to make the equipment operative as per the requirements, after integrating with the existing network. The bidder shall include for all costs, maintenance, material, installation, configuration, and commissioning charges in the bid. Furthermore, the bidder is to submit costs related to monitoring and travelling.

1.2 DURATION OF CONTRACT

This tender shall be for a duration of 3 years.

1.3 BUSINESS MODEL

Business model should include Business Case, feasibility study, cost analysis, profit sharing proposals and all other documentation related to the Business Model. Approval of the tender does not mean that the Business Model is approved. The Business Model will be referred to Management for approval, changes, and any other input. Only after deliberation and negotiations and after both parties agree, the business model will be considered. This applies to any profit-sharing proposals as well. The GTLM also reserves the right to appoint an independent Financial Consultancy/Audit Firm to scrutinize the Business Model. The proposals will need to stipulate exactly how income can be generated to reduce the costs to install, operate and maintain the network. Ideally the GTLM wants the Wi-Fi network to be self-sustainable.

1.4 STATUORY REQUIREMENTS

The successful tenderer will be required to comply with the requirements of the applicable laws of the Republic of South Africa inclusive, but not limited to the:

- Occupational Health and Safety Act, Act 85 of 1993 and regulations as amended.
- Municipal Finance Management Act 53 of 2003
- The Protection of Personal Information (POPI) Act No 4 of 2013
- And all relevant by-laws of GTLM

Respondents are responsible for SHEQ (Safety, Health, Environment and Quality) for all employees and their subcontractors, as it relates to the roll-out and the operations of the public Wi-Fi network and shall provide a Health and Safety Strategy.

The Contractor shall indemnify GTLM against any claims and proceedings arising from any infringement by the Contractor, his/her employees and their dependents of such laws and regulations.

1.5 WARRANTIES

The Contractor warrants that:

- Materials used shall be new and free from all defects and faults and manufacture shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The successful bidder shall be responsible for any defect that may develop under the conditions provided by the contract and under proper use, arising from faulty material, design, or workmanship such as corrosion of the equipment, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in circuit design and/ or otherwise and shall remedy such defects at its own cost when called upon to do so by the GTLM. Were applicable the materials should be SABS approved.
- Workmanship shall be of the highest quality.
- For the duration of this Tender, the contractor has the valid title to all new assets being installed. At the end of the Tender, the Contractor shall transfer ownership of a complete and functioning Wi-Fi network to the Municipality and all assets installed under this tender shall be transferred to the Municipality. If the Contractor fails to provide a complete network to the villages the municipality will be entitled to recover all funding paid over to The Contractor.
- At the end of the Tender, valid guarantees will also transfer ownership from the contractor to the GTLM.
- The Contractor will always ensure that all personnel and agents appointed by themselves are sufficiently qualified and/or skilled to perform their duties.

- The Contractor will be fully accountable for all actions taken by themselves, as well as any personnel and agents which are appointed by the Contractor who will be acting for and be considered an extension of the Contractor.

- Any cost for maintenance required within the 12 months after commissioning of the project will be the sole responsibility of the Contractor

1.6 INSURANCE

Full Comprehensive insurance should be carried by Contractor on all new equipment for the full term of agreement.

1.9 INCIDENTAL DAMAGES

The bidder shall protect, defend, indemnify, and hold harmless GTLM and its employees from and against any, and all liabilities, damages, fines, penalties, and costs (including legal costs and disbursement) arising from or relating to:

- Any breach of any statute, regulation, direction, orders or standards from any governmental body, agency, or regulator issued with respect to the product/services being supplied/provided under this Contract.
- Any claim made by third parties arising out of the use of the Wi-Fi services being provided using the equipment supplied under the Contract to the extent these are attributable solely to the poor quality or non-compliance of the product/services to the respective specifications.
- Any claims arising from the customers or other service providers, about interruptions or degradation of services due to non-availability of services.
- Any claim that the equipment, services, or any value addition component offered and supplied by the Supplier in this Contract, infringe any patent, trademarks, or copyright of any third party.

1.8 BENIFICIARIES (SITE LIST)

GTLM will provide a list of places where hotspots need to be provided. The list will include input from the Councilors, and other GTLM constituents. Generally, the following is included:

- Educational facilities like Schools and Libraries
- Health facilities like Clinics, Hospitals etc.
- Parks or other recreational facilities
- Sport Centres
- Community Service Points like Customer Care Sites
- Transit hubs
- Town and Community Halls
- Economically Disadvantaged Communities
- Tourism sites like heritage sites, museums etc
- Council Offices
- Retirement Homes

Additional sites may include:

- CBD or other populated business areas (possibility of providing a Wi-Fi blanket)
- Residential areas where AP's are located within walking distance (every 4 to 5 km)
- Any area that the GTLM may deem necessary for Wi-Fi services.

1.9 SERVICES TO CONSIDER

Bidders need to consider the following services as part of their bids:

- Backhaul Internet connectivity
- Current services as listed in Annexure A
- Call Centre for users to report incidents (location would be discussed with the client)
- Management/Monitoring solution to monitor the network to respond to any offline Hotspot/AP's.
- Security: URL (Uniform Resource Locator) filtering (prevent access to prohibited websites) and other security solutions.
- Back-up Power at High-Sites
- Website
- Wi-Fi Kiosks: If a kiosk solution is considered, the kiosk needs to provide broadband for anyone in Wi-Fi range, as well as charging outlets, free phone calls, emergency number access and maps and directions.

1.10 ARCHITECTURE

The bidder must define and include technical pamphlets of all architecture that will be used broadly defined in the following categories:

- Access Level i.e Access Points and related equipment
- Backhaul (radio, aerial or underground fibre, mesh networking etc)
- Network management and monitoring

The bidder must indicate how new future technologies will be supported.

1.11 INTERNET SERVICES

Current Scenario: The GTLM will not provide any bandwidth to the Service Provider.

Post Take-over: After the installation, the Service Provider must provide its own bandwidth and at an ISP of its choice. The Municipality will therefore not be responsible for the ISP/Internet cost and all cost associated with the ISP needs to be included in this bid.

Sizing: Internet Breakout to be sufficiently sized to provide services to the current ± 750 hotspots and must be scalable to accommodate future growth. Bandwidth calculations must be included in the response.

1.12 ICASA COMPLIANCE

The Municipality holds no License, and the Service Provider must have an ECNS Class License, and it recognizes the benefits that the public Wi-Fi service will bring to the community.

1.13 WI-FI NETWORK MANAGEMENT/MONITORING SYSTEM SPECIFICATIONS

The bidder should describe the network management solution and should describe main characteristics of each element that compose the network management solution.

The Management System must:

- Monitor performance and faults.
- Support for event notifications.
- Support of SNMP protocol standard and NTP Integration
- Display alarms based on violation of traffic thresholds of each of the interfaces.
- Interconnection links with other nodes and system performance indicators (KPI)
- Display alarms based on thresholds violation system parameters.
- The solution shall provide at least the following statistics and reporting. Number of login attempts; Number of successful sessions; Number of failed sessions; Number of unique users per day\month\year; Number of unique new users per manually defined period; user usage statistics.
- Support full backup and restoration of the system configuration, system database, reports, configuration profiles, views, maps, etc.
- Management platform should include the following functionalities:
    - Configuration management
    - Fault management
    - Performance management
    - Security management
- Must support following features:
    - Network Monitoring and Troubleshooting
    - Indoor location monitoring capability
    - Centralized Software updates

The Management Solution should encompass all network elements that are part of Wi-Fi Network including access points, switches etc. Network and Wireless Management can be provided through one umbrella Management suite or as separate management systems.

The Management System should provide a solution for comprehensive lifecycle management of the wired/wireless networks. It should have full FCAPS (Fault, Configuration, Accounting, Performance, Security) facility in respect of wireless /wired elements and should be compatible with IPv4 and IPv6. The Management system should support configuration, administration, monitoring and troubleshooting of switches and network elements.

The Management System must be modular and scalable and should be dimensioned according to the network size and incorporate future growth. Bidder should describe the scalability and capacity of the system in all supported configurations.

The Management System must provide FCAPS functionality and web-based management capabilities for managing the Wired and Wireless Network Elements:

- Extensive wireless management capabilities
    - Radio frequency (RF) management
    - User access visibility
    - Reporting
    - Troubleshooting
- Network infrastructure lifecycle functions
    - Discovery
    - Inventory
    - Configuration
    - Image management
    - Integrated best practices and reporting

Deploy
Schedule the rollout and implementation of network changes.
New configuration or monitoring templates created in the design phase, software image updates, and support for user-initiated ad-hoc changes and compliance updates.
Set of guided and advance flows to bulk provision new devices (including the converged access switches on the network) or push an initial configuration to a device to bring it up within a few minutes, thereby drastically reducing IT operational expenses.

Operate
Monitor the overall health of the network using predefined dashboards that provide up-to-date status. Simple one-click workflows and views to enhance troubleshooting and reduce the time to resolve network issues. Unified alarm display provides actionable information and links to automatically open service requests.

Report
Access a wide variety of predefined reports for up-to-date network information, including detailed inventory, compliance, audit, capacity, end-of-sale, security vulnerabilities, and many more. Operations monitoring and quality of experience workflows reduce instrumentation configuration and data collection complexity to provide real-time insight into network and application performance. Network inventory auditing.

Administration
Role-based access control provides flexibility to segment the network into one or more virtual domains controlled. Virtual domains help network operators deploy both large, multisite networks and managed services.

Converged management
Single pane-of-glass solution provides complete end-to-end infrastructure management, reducing the need for multiple tools and lowering operating expenses and training costs.

Complete lifecycle management on Wireless
Converged solution delivers wireless management capabilities, including RF management, user access visibility, reporting, and troubleshooting - along with network infrastructure lifecycle functions such as discovery, inventory, configuration and image management, and reporting.

Fault Management
Bidders should describe their fault management solution for the various network elements.

- Enhanced alarm management: Fault management solution should support alarm filtering, alarm suppression, change of severity, alarm delay, alarm forward to e-mail and SMS, alarm toggling, on-line help etc.
- Management system should support Alarm on threshold that allows alarms to be blocked if a variable number of alarms occur in a variable amount of time.
- Management system should support alarm correlation. Correlation rules perform alarm grouping and finds dependencies between root causes and symptoms.
- Management system should support the alarm history browsing capability. Bidder to state the capability of number of alarm storage / duration for which alarms can be stored.
- Alarm display capabilities including support of components in the alarm display, support of probable cause and specific problem and additional text fields in the alarm display, as well as support of viewing the entire raw alarm should be supported.

Configuration Management

Management system shall support the following configuration management functions:

- Installation of network elements
- Installation tests which can be performed on the network elements.
- Automatic installation of Wi-Fi AP
- Modification and removal of network element components
- Automated download of new network element software

Device inventory management feature should be supported.

Management system should enable policy-based automation of device configuration and management. Bidder to describe available policies.

Management system should support offline configuration of Wi-Fi network.

Security Management

User authentication should be supported through RADIUS/ TACACS server and operator should be able to define the roles and profiles of the users.

The management system should have a Logging capability and Centralized Security Log Auditing and Log Browser Utility should also be provided.

Password management: Support of centralized password authentication including complex password acceptance, password dictionary support, Password Storage Encryption should be provided.

User authorization and administration: Centralized User Administration, Centralized User Authentication and Authorization, User Session Management should be supported.

Software Management

The NMS shall provide a Software Management application via a GUI/ web-based interface.

The Software Manager shall provide remote software download to all managed network elements. Application shall include reporting of current software status, version number, date of last update, checksum, software installation error and status reporting. Application shall include download functionality for Release, Update, Feature and Patch delivery, installation, and activation.

Schedule software download: It shall be possible to schedule software downloads of any purchased Network Elements configured on the NMS. Software download shall provide capability to allow downloads based on stored start and stop time for each network element, type of element, percentage of network element type and an editable list of network elements.

Hardware Requirements

Hardware sizing shall be sufficiently sized to accommodate all NMS requirements.

Bidder should provide ample storage. The bidder shall design the system taking in consideration the interface and other requirements of the storage.

Bidder to include for all hardware, software and licenses that are needed to meet the requirement of this tender document.

If any specific module of the application requires separate hardware for proper functioning, the same shall allowed for.

1.14 GENERAL SERVICE LEVEL REQUIREMENTS FOR WI-FI SERVICES

The contractor undertakes to provide free Wi-Fi serves limited Internet Usage to minimum of 2 gig per user per month (Internet Bandwidth Usage Capacity) and ensure that all phases of the network comply with the following general service levels:

Aspect	Service Level requirement	Measure
End user maximum bandwidth	4 Mbps download	Speed tests showing some results reaching the maximum speed
End user average bandwidth	2 Mbps per user download 1 Mbps per user upload With 50 concurrent users connected at 30m from the AP.	Minimum of 100 speed tests a month from 50 different locations
Latency	100ms maximum	Tests of 1,000 pings should have an average latency of less than 100ms.
Uptime (High Availability)	98% excluding power and fiber breaks outside of the service providers responsibility	Overall up time of the network measured monthly.
Issue reporting	Issues outside of the service providers control to be reported daily.	Monthly report showing communication of issues
Scope	+-750 Free Internet zones. New ones to be installed.	Reporting on all Free Internet zones.
Range	±100m	The user can access the network within ±100m from the physical Access Point.
Concurrent devices per FIZ	±400	Network Monitoring System

Bidder to include options to upgrade the Bandwidth per user.

1.15 NON-PROPRIETARY TECHNOLOGY

GTLM requires non-proprietary technology for the future Wi-Fi Network in order to avoid supplier lock-in and promote futureproofing of end-subscriber devices and networking technology.

The non-proprietary technology requirement will be evaluated mainly based on interface standards and the ability to replace equipment from one manufacturer with another. The requirement of non-proprietary technology will also facilitate the requirement of the open access network. The technology provided must be based on non-proprietary interfaces and conform to the latest accepted international standards applicable to each technology class.

In this context, the term "technology" refers to autonomous equipment and software, such as a router, switch, radio, Access Point, dependent on the technology type.

Respondents should submit documentation detailing the inventory, including:

- A list of inventory classes used in the provisioning of services.
- An indicative marketing of the network and brand which can be expected.

1.16 OPEN ACCESS

Open Access is defined as an innovative, transparent technology-neutral framework with competition at all layers of the IP network and therefore allowing a wide variety of physical networks and applications to interact in an open architecture.

The intention with the Open Access fundamental requirement is to provide consumers with more choices for customer premise equipment, network access and services. The open access model allows multiple service providers to compete over the same network.

1.17 IP-BASED (INTERNET PROTOCOL)

Design to be based on the IP platform as to facilitate the Open Access requirement in addition to following global trends. IP ranges to be discussed with the Municipality and to be approved by the Municipality.

1.18 SECURITY

Security is a serious concern in connection with Hotspots and bidders need to take the following into account:

- The wireless connection between the client and the access point. This needs to be encrypted, so that the connection cannot be eavesdropped or attacked by a man-in-the-middle-attack.
- The Hotspot itself as the WLAN encryption ends at the interface.
- The traversing of the traffic from the hotspot over the network to the ISP.

Bidders should consider security solutions such as:

- Authentication Method
    - One click authentication
    - 802.1x
    - PKI Certificates
    - Hotspot 2.0
- Firewalling (NGFW) and Unified Threat Management Gateway
- Content, Application and URL filtering and blocking
- Traffic inspection
- WPA/WPA2 and enterprise variants encryption
- End-to-end encryption like HTTPS and SSH
- Cameras
- Any additional security measurements

Security solutions must be upgraded continuously and must always be on the latest release.

Respondents shall ensure that the Municipality private network is segmented from the public Wi-Fi network that it provides confidentiality, integrity, and availability.

1.19 SCALIBILITY

The Wi-Fi network must be easily scalable inclusive of additional Internet Bandwidth if needed.

1.20 COVERAGE

The Hotspots coverage should always be better than the mobile devices connecting to it. In most cases mobile devices is limited to approximately 50-100m. Bidders must therefore indicate that the equipment offered will be able to provide suitable coverage and the range should extend up to 80-100m in accordance with the Wi-Fi standard.

1.21 EASE OF MOUNTING

Equipment must be easily mountable as to speed up the installation process.

1.22 PoE (POWER OVER ETHERNET)

Equipment to support PoE for connection of possible other devices.

1.23 FIELD PROVEN EQUIPMENT

All equipment shall be field-proven high reliability and high performance.

1.24 ENVIRONMENTAL

Equipment used in the public Wi-Fi network shall be compatible within the South African electrical operating environment e.g a 220V, 50Hz AC power supply. All equipment must be able to withstand extreme weather conditions as most of equipment will be utilized outdoors and must have an International Protection Marking of IP67. Boxes to be hermetically/dust sealed with sufficient ventilation vends. Equipment to be protected against lightning surges.

1.25 STANDARDS

All Wi-Fi equipment to comply to IEEE 802.11 standards which allows Wi-Fi-enabled devices to connect to the Wi-Fi Network when within range of a Wi-Fi Network.
Bidders to provide list of all standards that equipment complies to.

1.26 ACCESS OF A WIDE VARIETY OF DEVICES

The Wi-Fi network must provide access for a wide variety of devices like smart phones, tablets, notebooks etc.

In addition, bidders also need to indicate how future technologies will be supported for example:

- Hotspot 2.0 is a requirement. Hotspot 2.0 is an approach to public access Wi-Fi for mobile devices to automatically join a Wi-Fi subscriber service whenever the user enters a Hotspot 2.0 area, in order to provide better bandwidth and services-on-demand to end-users and relieve carrier infrastructure of some traffic. If the device supports 802.11u and is subscribed to a Hotspot 2.0 service, it will automatically connect and roam.

1.27 CAPTIVE PORTAL

Bidder to allow for captive portal (Web page that the user of a public-access network is obliged to view and interact with before access is granted). The portal must contain the EULA (End User License Agreement) as it is a legal contract between a software application author or publisher and the user of that application. It must also display the TOU (Terms of use). Both the EULA/TOU as well as the look and feel of the Captive Portal will need to be approved by GTLM.

The Captive Portal must also offer:

- Support information
- Self-services for example the ability to log calls
- User input for example suggestion of additional hotspots locations

1.28 ISO 9001

The GTLM is committed to ISO 9001 quality management systems standards. All activities need to be planned and executed as per ISO practices as defined w.r.t the GTLM ISO Wi-Fi process.

1.29 JOB CARD

In accordance with the process above, a GTLM Job Card needs to be concluded as soon as a site is concluded and has passed testing.

1.30 WAYLEAVES/ENGINEER/LANDLORD PERMISSIONS

It is the responsibility of the successful bidder to obtain all the Way-Leaves (GTLM and third parties like Telkom, Transnet, SANRAL etcetera) and landlord permissions necessary to implement the Wi-Fi network. Bidders should also note the municipality By-Laws with regards to Way-Leaves as published in the Government Gazette No 38, Local Authority Notice 217, Work in the Public Road Reserve By-Laws.
In terms of the Wayleave-By-Law, the bidder will be required to appoint an Engineer to supervise all work undertaken in the Public Road Reserve. All costs associated with the Way-Leave application will be for the successful bidder.

Respondents are responsible for securing any authorization required to use existing municipality assets. Any actions by the respondents that will impact the municipality, its operations, and its constituents must be pre-approved by the Manager ICT. No installation requiring the use of GTLM infrastructure may commence without proper authorization. Respondents should provide official documentary proof for the authorized use of GTLM infrastructure. Only written authorization will be acceptable – no verbal authorization will be accepted.

Respondents will be responsible for ensuring that their Wi-Fi networks do not cause interference with any of the Municipal infrastructure, services, and applications.

1.31 HIGH SITES

It is the responsibility of the successful bidder to obtain permission to utilize High-Sites. Applications to utilize High-Sites must be via the Municipality. All costs associated with this application and rental costs will be for the successful bidder.

1.32 EPA

It is the responsibility of the successful bidder to obtain EPA permissions when erecting masts. All costs associated with this will be for the successful bidder.

1.33 ELECTRICAL

It is the responsibility of the successful bidder to apply for electrical connections if these are provided by GTLM or ESKOM. For the purpose of this tender, it must be assumed that all electrical connections are metered and therefore the contractor will be responsible for all electrical costs inclusive of administrative, connection and usage fees.

In cases where an electrical outlet is required, it is the responsibility of the contractor the install the outlet and to also to certify these installations i.e. a CoC (Certificate of Compliance) must be issued.

Earth Leakage Circuit Breakers, Circuit Breakers, Isolators and Surge Arrestors shall be sufficiently sized to protect the equipment.

Additional:

- Solar Power can be considered where an electrical connection is difficult however costs related to the item would need to be submitted to the client for approval.
- Backup power must be supplied on all high sites.
- GTLM will only maintain electrical connections that was applied and installed by GTLM. The successful bidder will be responsible for all maintenance and related cost on all electrical infrastructure that are utilized for the Wi-Fi solution beyond this connection point. In other words if the isolator in the Wi-Fi box needs to be replaced, then the successful bidder will need to replace it as it was not installed by Council.

1.34 RADIO FREQUENCIES

Bidders can use either licensed or unlicensed frequency bands (2.4 and 5GHz). The successful bidder will be responsible for costing associated with licensed bands.

1.35 GTLM NETWORK INFRASTRUCTURE

It is the responsibility of the successful bidder to obtain permission to utilize GTLM Network Infrastructure.

1.36 NETWORK OPERATIONS CENTRE (NOC)

The NOC needs to be preferably housed on GTLM premises. The detail w.r.t NOC deployment on GTLM premises must be discussed and approved by ICT Management. The contractor still needs to provide monitoring and such like services one would expect to be provided by a NOC deployment.

1.37 SERVICE NETWORK NAME

The Wi-Fi Brand Name is **Tauwi-fi** will remain the property of the Council.

1.38 SIGNAGE/BANNERS/LOGOS

The Contractor must liaise with the GTLM Marketing and communication department for any brand promotion or advertising initiatives. Any public promotional material, branding or advertising involving the use of the municipal official brand and logos must be approved by GTLM Marketing prior to publication.

The Contractor may make application to the Municipality for the erection of responsible signage within the vicinity of each agreed site to promote the FIZ and display details of each FIZ sponsor. However, it is the responsibility of the contractor to provide and install said signage and no additional cost to the GTLM. The following signage is mandatory:

- Identification of a Free Wi-Fi hotspot
- Site Id
- IP Addresses

1.39 SOFTWARE AND LICENSING

Bidders to provide list of software to be used as well as licensing requirements – this could include:

- NMS (Network Monitoring)
- Support/Help Desk
- Subscription Management System to register user and for procurement of additional bandwidth
- Filtering and site restriction software

- Performance metrics
- Security platforms

The contractor will be responsible for all software licensing. All software, inclusive of operating system and applications software, shall be authentic and legal and all software licenses should be up to date. Documentary evidence or declaration to the effect that the type of software to be utilized in the system/equipment shall be furnished by the bidder.

Note:

- All the software licenses supplied against this Tender Document shall be perpetual without any limitations on use and shall be licensed in the name of GTLM.
- Licensing matrix shall be indicated for each of the applications.
- Software versions for the equipment being supplied shall be latest version.
- Firmware must be upgraded on a regular basis and GTLM must be notified of all firmware releases. Firmware to be upgraded via Change Control processes.
- Certified and licensed copies of the application software required shall be supplied.
- Only Freeware software (i.e. Linux and Apache) that is supported by respective OEMs can be supplied bundled with application/solution.
- Unsupported software with no provision of bug fixing, upgrades and updates shall not be accepted.
- All the software upgrades and/ or patches required for the system supplied shall be implemented free of cost.
- All system interfaces should be industry standard open interfaces.
- If Wi-Fi controllers are deployed then info w.r.t license limitations, redundancy, number of licenses etc needs to be provided in the bid.

1.40 DOCUMENTATION

In order to preserve the integrity of the Municipality processes and infrastructure, the Wi-Fi network must be properly documented. All installations co-located and installed in and on Municipal property must be properly documented. "As Built" documentation must be submitted, containing at least the following:

- Installation/network diagrams;
- IP addresses;
- Frequencies and relevant licenses;
- Location and type of equipment; and
- Identification and detail on cable runs.
- As part of the "As-Built" plan to be submitted, respondents should list the frequencies utilized in their Wi-Fi networks with documentary proof that they have the requisite legal access to those frequencies should the frequencies be in licensed bands.

Any ad hoc documentation/reporting as required from time-to-time.

1.41 STATISTICS

Statistics typically needs to include:

- Total sessions logged
- Sites that are most visited
- Number of users since launch
- Number of users logging in daily
- Views on Wi-Fi Tv (if applicable)
- Statistics on calls completed within SLA, out of SLA, not completed (and reasons for not completing)

- Usage or bandwidth usage statistics

1.42 CALL CENTER/HELP DESK/ TECHNICAL SUPPORT CENTRE

The successful bidder must establish a Technical support center within six months of award of Contract to provide technical support to ensure smooth functioning of equipment supplied by them and to meet additional requirements from time to time. The bidder shall submit details of location, number of personnel, facility to be made available at the technical support center in the Bid. Subscribers can log calls either via the phone or via e-mail. The number and e-mail address need to be provided to the Municipality for advertising purposes and be advertised by the successful bidder. The number can for example be provided at every FIZ for ease of reference.

Respondents should log all inbound and outbound calls to the call center that are related to the Wi-Fi network. A detailed report on call center activity will be required on a two-weekly basis,

1.43 LEGAL OBLIGATIONS AND PRIVACY

Service providers need to take into account any legal obligations and privacy requirements. The privacy of users and user information needs to be respected and contractors will be held liability if information is used for unlawful purposes. Information required by law must be logged. Information may not be shared or sold to third parties. All services should be transparent and the purpose of cameras, sensors etcetera should be publicly stated. The landing page can for example be used to notify users of information that will be logged while they are using the service.

Bidders must also include in their bid the Privacy Policy. However, the successful bidder's privacy policy will be scrutinized and workshopped and may be subjected to public input to ensure that the policy is acceptable before implementation. GTLM Legal Services will need to approve the policy.

Bidders must also address the following:

- Concerns w.r.t misuse and social issues:
    - Protection against cyber-harassment inclusive of cyberstalking and trolling
    - Exposure to objectionable content
    - Other illegal behaviour
- Concerns w.r.t child and public safety
- Prevention of loitering
- Moving of hot spots due to public demand

1.44 DISCLAIMER/LIABILITY

Bidder to compile disclaimer and liability statements and submit to GTLM for approval. The idea is to display these on the Captive Portal.

Bidder to implement futures and to indicate in the bid the following:

- Protection of copyrighted material
- Prevent of illegal activities
- Protection and handling of privacy concerns

1.45 CONSEQUENTIAL DAMAGES

The GTLM will not be responsible for any damages (direct or indirect) resulting from the interaction between the appointed service provider and the public.

1.46 BANDWITDH SHAPING AND RATE LIMITS

Bandwidth Shaping is a requirement, for example GTLM owned pc's that are utilized in libraries for public internet access will have no bandwidth capacity limitations. Additional considerations would be to include for service tiers.

1.47 TIME SLOT USAGE

The service must include the ability to configure individual FIZ locations to only be active during certain time slots for example some libraries close after certain hours and no Wi-Fi service will then be required.

1.48 QUALITY OF SERVICE

Once implemented, the Wi-Fi network will be tested for quality of service. For each of the services, the following may be tested, and the successful bidder needs to provide all test equipment needed for the testing:

- Availability;
- Jitter;
- Latency; and
- Packet loss ratios.

Respondents shall provide a strategy to ensure that a consistent quality will be maintained during the expansion and implementation of the public Wi-Fi network.

1.49 INSPECTION AND TESTS

GTLM shall have the right to make modifications or additions to any test or techniques of measurement as considered necessary by it.

Appointment of Independent Testers

GTLM reserves the right to appoint independent testers to verify hotspot/FIZ performances. Should the test results indicate that the solution does not comply with the specifications and requirements, then the successful bidder must rectify at own cost to comply with said specifications and requirements.

1.50 ASSETS

During the duration of the project, the contractor will compile an asset register and provided it to the Municipality on a continual basis, which shall include, but not be limited to, the following:

- A list of all assets included in the network which assets will be owned by the Municipality at the end of the contract term.
- All location information related to the assets inclusive of Site ID, Site Name, Site Type, Site Area, Region, Ward and GPS Coordinates.
- Photos of all installations.
- Signed Job Cards of concluded installations.
- Details of what can be done with the assets that will be transferred.

Once the contract is concluded, all assets will be handed over to the Municipality – therefore a fully functional network inclusive of all hardware, software, licenses etcetera shall be handed over to the Municipality.

Although newly installed assets will remain the property of the contractor for the duration of this contract, GTLM will still provide asset tags as to avoid cumbersome processes after the conclusion of the contract.

1.51 GIS (GEOGRAPHIC INFORMATION SYSTEM)

During the duration of the project, the contractor will ensure that all FIZ and High Site locations are recorded on the GIS system of GTLM. Job Cards will only be signed-off once the site is recorded on the GTLM GIS system and the GTLM representative has confirmed this. Positional data must be very accurate.

GTLM needs this data is certain formats and spatial data must be captured by contractors in a file geodatabase format:

- ESRI file geodatabase (.gdb) format - ESRI (ArcGIS) and the preferred format.
- ESRI shape file (.shp) format - this is a universal spatial data exchange format for users that are utilising other GIS software packages.

On request GIS information must also be provided in Google Earth (.kmz) or AutoCAD (.dwg) format.

1.52 RESOURCES

The contractor shall provide all resources required – this may include but are not limited to:

- Project Teams
- Maintenance teams
- System Integrators
- Security Engineers

- Software Experts
- Network Engineers
- All other resources

Within the scope and scale of the Wi-Fi networks, the necessary operational support systems must be operational to provide the required support for the following functions – this may include but are not limited to:

- Public Wi-Fi network Management Functions:
- Provisioning of network resources;
- Event monitoring of network resources
- Performance monitoring of network resources;
- Access Network Management Functions:

To monitor SLA's, should these SLA's not be met, GTLM will instruct the service provider to provide sufficient\additional resources to comply with the SLA.

1.53 EQUIPMENT/TOOLS/VEHICLES

The contractor will furnish all vehicles, equipment and tools used to provide the services required by this Tender. It is the responsibility of the contractor to issue test equipment to the required resources. This will include all test equipment such as RF signal testers and optimizers, OTDR's or any other relevant tools.

1.54 BACKUP CONFIGURATION

Configurations of all the equipment should be back-up monthly and should be supplied to GTLM. A Complete layout of All Wi-Fi Network related equipment should be audited every 6 months and should be presented to GTLM which includes the following:

- GPS Location
- Make & Model
- Condition
- Method of connection (Fibre/Radio) including drawing of the method

All new installations should be added to existing layout

1.55 QUALITY ASSURANCE REQUIREMENTS

The successful bidder shall have Quality Management System supported and evidenced by the following:

- A Quality Policy.
- A management representative with authority and responsibility for fulfilling QA requirements and for interfacing with GTLM in the matters of Quality.
- Procedure for ensuring quality of material and workmanship.
- System to calibrate and maintain required measuring and test equipment.
- Configuration management and change-control mechanism.
- Periodical internal quality audits.

1.56 PROJECT MANAGEMENT PRINCIPLES

As part of the GTLM public Wi-Fi network implementation focus should be placed on the people, process, and technology. The processes enforced through the network implementation should be

efficient and reflect an understanding of the organization. Sound project management principles need to be utilized.

1.57 IMPLEMENTATION FRAMEWORK AND PROJECT PLAN

As part of the implementation of the public Wi-Fi network a formalized implementation and project plan should be created to ensure that the respondents' project lifecycle can be clearly understood.

Progress meetings may be scheduled based on the project milestones defined by each respondent. Technical representatives must attend these project meetings to be able to answer questions of a technical nature. Please note that meetings will not be rescheduled if technical representatives are not on site.

1.58 RISK MANAGEMENT

Risk and security management on a network of this scale is of paramount importance. Respondents will be required to demonstrate their approach to security and risk management through policies, procedures, design, and operation of their Wi-Fi networks. Respondents shall submit a detailed risk management plan detailing project risks and mitigation strategies.

1.59 SITE SURVEYS

Site surveys will be necessary for new installations:

- Identify feasible AP locations.
- Identify feasible location for installation of switches required for Wi-Fi Solution.
- Identify any constraints for equipment installation.
- Identify feasible location for installation of Switches, availability of power supply.
- Identify availability of backhaul transmission medium.
- Identify feasible cable route.
- Public participation/consultancy/liaison for example Ward Councillors.
- Issue notice of intent to install FIZ and liaise with adjacent properties and obtain approval from adjacent properties.

1.60 ACCESS POINT INSTALLATION AND COMMISSIONING

- Cabling and installation of Access Points, Racks and Consolidation Switches
- Procurement of other ancillaries like Clamps, conduit for cable, rack, connectors, weather proof kit etc which would be required for execution and completion of the work.
- Configure the Access Points and the Switches as per the planning guidelines (IP Addressing and VLAN Configuration).
- Coordinate for integration of the Access Points with the public Wi-Fi network

1.61 POST INSTALLATION VALIDATION AND OPTIMIZATION

- Wi-Fi RF measurement test tools must be supplied by the contractor and will remain the property of the contractor.
- Conduct internal and external venue walk tests to collect RF data at the premise post Wi-Fi Deployment.
- Coordinate for performing RF Optimization activities.

- Perform Acceptance Testing as per the Acceptance Test Plan provided to them.
- Revisits may be required during the RF optimization phase if the Acceptance Criteria are not met.

1.62 OPERATIONS, MANAGEMENT AND MAINTENANCE

After successful installation and commissioning of a hotspot location, the bidder shall be responsible for its operations, management, and maintenance.

The bidder shall include for the maintenance of all components, equipment and materials used and the maintenance activities shall truly reflect the efforts required to maintain equipment in good working order as prescribed by the supplier. The bidder need to include for:

- Backup of AP and core network equipment configurations
- Field operations team for providing services for all network nodes
- The units and systems must be serviced regularly
- Preventive maintenance to be performed on each site
- Handling of the spare parts needed for carrying out corrective, preventive or planned maintenance activities
- Ensure end-to-end delivery of Wi-Fi Solution
- Perform all activities related to Optimization required for Wi-Fi Solution as per KPIs and SLAs defined
- UPS\battery maintenance

Management of Network shall include inter alia all activities and processes which are equipment specific and overall operations, like performance management, security management, configuration management, network and systems administration, data-base administration, and fault management.

The successful bidder shall put into operation (but not limited to):

- set of maintenance procedures
- maintenance schedules like log registers, test schedules, performance, and fault recording
- periodic test schedules
- traffic Report generation and analysis and remedial measures to be taken in each occasion
- extraction of performance statistics from the various network elements
- parameters for fault, performance, and planning of network expansion

Any other activity or equipment, which is not explicitly covered in this document but is essential, as part of the operations and management of Wi-Fi offload solution, Wi-Fi central location and hotspot location shall also be performed by the successful bidder.

1.63 FAULT MANAGEMENT

Manages alarms and problems for Wi-Fi services. Maintains availability of Wi-Fi services through resolving problems and performance. Field Visit of AP for fault management, preventive maintenance, software upgradation etc.

1.64 PERFORMANCE MANAGEMENT

Manages the throughput, percentage utilization, error rates and response time's areas.
Security management- secure access points & other equipment at hotspot locations w.r.t theft etcetera.

1.65 CONFIGURATION AND CHANGE MANAGEMENT

Respondents must demonstrate adequate attention to configuration and change management in the design, expand and operation of the Wi-Fi networks.

1.66 TRAINING

The successful bidder shall provide training to GTLM personnel w.r.t installation, operation, testing, maintenance of system and software including the NOC and all relevant training regarding to the Public Wi-Fi.

- The quality and content of the training shall be so designed that the GTLM personnel shall be sufficiently exposed to all the aspects of planning, engineering, installation, testing, provisioning, operations, etcetera of the networks.
- The training shall also cover necessary hardware and software architecture details.
- The bidder shall specify in its bid the number of trainees, quantum of proposed training, pre-training qualifications required of the trainees and duration of the proposed training.
- The bidder shall provide all training material, modules, and documents.
- Training shall be conducted at the GTLM premises.

The successful bidder must also allow user training i.e. assisting users to connect.

1.67 SPARES

The successful bidder shall supply, at its own cost, all necessary spares which may be needed for the duration of the contract. Furthermore, the contractor must maintain a list of all spare parts.

1.68 SAFETY HAZARD

The successful bidder shall ensure that any installation carried out by them under this project including at hotspot location shall not become a safety hazard and is not in contravention of any statute, rule or regulation and public policy.

1.69 TECHNICAL AUDIT OF NETWORK

GTLM reserves the right to carry out a technical audit of the network through any designated agency from time to time and the successful bidder shall take necessary corrective measures to conform to the performance parameters stipulated in the Tender Document.

1.70 REPAIR OF SURFACES TO ORIGINAL FINISH

The contractor shall be responsible for damage to any surfaces or work disrupted as a result of his/her work. All surfaces damaged during the installation process must be repaired to its original state. Repair of surfaces, including painting, shall be included as necessary. It is the contractor's responsibility to obtain the matching paint etc. It is also required of respondents to return the Municipality infrastructure in the same or better condition than received.

1.71 RELOCATION OF FIZ

The service provider must monitor usage at all FIZ's. FIZ wit low usage will need to be redeployed/relocated. The relocation must be approved by GTLM Management and Change Control Procedures must be followed. Due to public demand, some FIZ locations may also be moved.

1.72 REMOVAL OF FAULTY/UNUSED EQUIPMENT

Contractor to include for removal and disposal of all faulty and unused equipment. In some cases, this will include the asset disposal procedures of the GTLM, and equipment must then be delivered to the GTLM store.

1.73 POLICIES

Where required, the contractor will develop policies w.r.t Wi-Fi network – this could include but is not limited to:

- Security
- Access
- Management
- Ad-hoc policies

1.74 APPLICATIONS

Is there any applications that will be made available to users at no cost – examples include:

- Wi-Fi Chat
- Identify Hot Spots

1.75 VALUE ADDED SERVICE

The contractor must stipulate what Value Added Services it will provide. Below list is by no means complete but is intended as a guideline of possible Value Added Services:

- Digital Signage
- Emergency Services
- IoT (Internet Of Things)
- Telemetry
- Smart Lighting
- Security/CCTV
- Viewing bills
- Municipal Communications or possible video streaming required by the Municipality.

1.76 HARDWARE REFRESH

EOL (End Of Life) equipment (applicable to the current Wi-Fi network and the newly deployed sites) must be replaced and the bidder must indicate the Hardware Refresh Cycle.

1.77 NETWORK AND SERVICE PLAN

Respondents shall submit a combined detailed Network and Service plan to GTLM.

The Network Plan must address the following aspects:

- Network diagram (architectural, topology);
- Motivation for technology choices;
- Network design approach and methodology
- Drawings of planned coverage;
- Location of network elements and devices;
- Security architecture;
- Planned devices and interfaces;

- The respondent's plan to remove the Wi-Fi network from GTLM property at the end of the Wi-Fi network period; and
- Description of differences between original RFP submission and the planned network, including reasons for differences.

The Service Plan must address the following aspects:

- The services and bundling to be offered on the public Wi-Fi network;
- The services and bundling to be offered to subscribers;
- Service levels to be offered for each service;

1.78 SKILLS DEVELOPMENT STRATEGY

Respondents shall submit a strategy to facilitate skills development on how to operate the public Wi-Fi network.

1.79 SERVICE LEVEL AGREEMENT

Respondents shall expand on the Service Level Agreement which will be a requirement between the GTLM, and the successful vendor selected. Additionally, explain the SLA process which will be implemented as part of the proposed network.

1.80 CONFIDENTIALITY

The contractor will be required to sign the GTLM Non-Disclosure Agreement when appointed.

SITE LIST

The site list below provides information on the current locations of the installed FIZ's in the Municipality. It includes the Site Name and Area, and Kilometers.

Facility Name & Type	Region	Location	Distance from CBD (Km)
Kammelputs Community Hall	Ga-Mothibi	Kammelputs Village	75.00
Ga-Mothibi Tribal Office		Sekhing Village	50.00
Sekhing Economic Hub		Sekhing Village	50.00
Sekhing Sports Facility		Sekhing Village	50.00
Seoding Community Hall		Seoding Village	57.00
Gataote Community Hall		Gataote Village	85.00
Lower Majeakgoro Community Hall		Lower Majeakgoro Village	40.00
Mmamutla Community Hall		Mmamutla Village	80.00
Picong Community Hall	Ga-Maidi	Picong Village	23.00
Khudutlou Community Hall		Khudutlo Village	60.00
Manthe Sports Facility		Manthe Village	20.00
Manthe Economic Hub		Manthe Village	20.00
Tlapeng 2 Community Hall		Tlapeng 2 Village	30.00
Tlapeng Community Hall		Tlapeng Village	28.00
Matsheng Community Hall		Matsheng Village	35.00
Longaneng Sports Facility		Longaneng Village	32.00
Molelema Communty Hall		Molelema Village	45.00
Ga-Maidi Tribal Office		Manthe Village	20.00
Qhoo Community Hall	Ga-Phuduhucwana	Qhoo Village	28.00
Vaaltyn Community Hall		Vaaltyn Village	24.00
Lokgabeng Community Hall		Lokgabeng Village	10.00
Reivilo Rec Club		Reivilo Town'	60.00
Boipelo Library		Boipelo Township	60.00
Matlapaneng Community Hall		Matlapaneng Village	20.00
Dryharts Library		Dryharts Village	26.00
Taung Community Hall		Taung Depot	5.00
Matlhako 2 Community Hall		Matlhako 2 Village	20.00
Podumoe Community Hall		Podumoe Township	17.00
Podumoe Library		Podumoe Township	17.00
Maphoitsile Community Hall		Maphoitsile Village	10.00
Buxton Community Hall		Buxton Village	18.00
Randstad Communty Hall		Randstad Village	10.00
Gamokake Community Hall		Gamokake Village	18.00
Mokassa 1 Sports Facility		Mokassa 1 Village	25.00
Podumoe Sports Facility		Podumoe Township	20.00
Manokwane Sports Facility		Manokwane Village	10.00
Taung Library		Taung	5.00
Diphitshing Community Hall		Diphitshing Village	20.00
Ga-Phuduhucwana Trabal Office		Taung Chiefscourt	7.50