

HotZONE Solution Value Offer

This application note details how a complete HotZONE solution can be implemented that includes prepay billing; Wi-Fi user access and VSAT internet access.

The solution for the South African market is based on the complete HotZONE concept as it is currently sold into the African market. In addition to the complete HotZONE solution, service providers in South Africa have the option of making use of their own billing platforms and using it as a pay-as-you-use satellite bandwidth solution only.

Benefits

Uncongested Internet Access via Satellite

The Internet connectivity is supplied on Q-KON's Linkstar platform running of T11N. Each site receives an unrestricted 256/4096kbps connection on a pre-paid voucher or per-megabyte basis.

ZERO contract risk

The prepay business model enables partners to source satellite access services in an ad hoc "pay-as-you-use" manner, which offers ZERO contract liability.

Prepay Service

The HotZONE service is 100% prepay and eliminates the frustrations of revenue collection for all parties.

Reliable Service

No cable theft problems and no waiting for Telkom lines. Designed to be a reliable business connectivity platform, Q-KON's Ku band service allows for a no-hassle, always-on reliable service.

Flexible

Service providers have the option of only taking the bandwidth on a pre-paid (or post-paid account for qualifying providers) basis, or the complete HotZONE solution including the wireless



equipment, billing platform and customized voucher option.

Solution Overview

Satellite Internet Access

The que-Vi Ku-band satellite access solution from Q-KON provides fast and reliable Internet access to any location within West and Southern-Africa. The service is swift to install and provide seamless growth for future expansion.

HotZONE Gateway

The HotZONE gateway provides the on-site control and authentication of users. The HotZONE gateway authenticates on voucher user name and password. This ensures connectivity to all users regardless of user PC settings.

Prepay Billing System

Prepay billing of data used over the link is administered by a centralised billing server that provisions access through the Internet.

Wireless Access Network

User access to the Internet can be over standard cabled networks for fixed stations or via Wi-Fi wireless networks. Wi-Fi wireless hotspot networks are deployed using standard Wi-Fi access points that support all the functional requirements of a HotZONE.

Operational Description

Components of the system

The complete HotZONE solution is made up from a three main components.

1. Ku-band satellite bandwidth
2. Client Premises Access Controller
3. Vouchers

Ku-band Satellite Bandwidth

The main connection to the Internet is supplied on Q-KON's Linkstar platform on T11N that is directly connected to a first tier backbone at the teleport in The Netherlands.

Each site is provisioned with a 256/4096kbps connection and is billed according to the data volume used at the site. This is done either through pre-paid vouchers (when using Q-KON's HotZONE solution), pre-paid data bundles without using vouchers or post-paid data usage account for qualifying service providers.

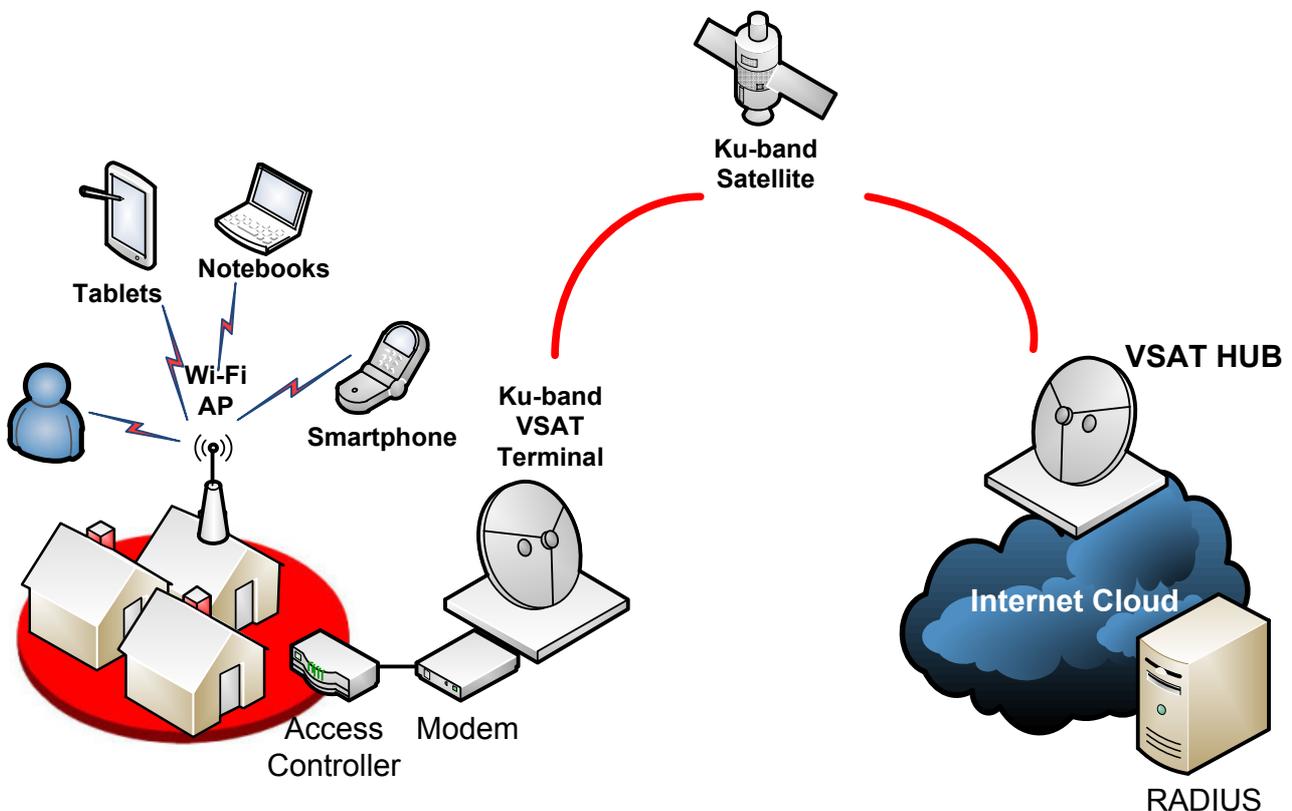
Client-premises Access Controller

When making use of Q-KON's voucher system or pre-paid data bundles, an access controller will be put down at the site that will communicate to Q-KON's RADIUS server dedicated to this task.

Service Providers may also apply for a post-paid account option, in which case the service provider must use their own access controller at the client's premises. For qualifying service providers, the site will be provisioned with an uncapped connection and will be billed at every month-end for the amount of data used by the site.

Vouchers

For service providers who would like to be provided with a complete end-to-end HotZONE solution, Q-KON can offer the option to generate customised vouchers on their behalf. These vouchers can then be bought as they are needed directly from Q-KON on a pre-paid basis.



HotZONE Voucher Solution Details



User Access

The HotZONE partner sells pre-paid Internet Access cards with a unique username and password to end-users. As soon as the user logs on to the Network the *Home Page Redirection* feature intercepts the user's browser settings and directs them to the HotZONE webpage requesting the login credentials. The HotZONE solution niche above similar solutions is the fact that Authentication, Access as well as Accounting is done completely based on the username and password credentials allowing the actual user not to be bound to a specific location or computer

User PC Configuration

The dynamic address translation or universal client technology within the HotZONE gateway offers transparent network connectivity by resolving IP configuration and browser proxy issues. This principle of operation provides a "Plug and Play" option for hotspot users that are not as knowledgeable in terms of IP and Proxy setting. This is one of the biggest advantages of the unit.

User Profile Management

Session Rate Limiting (SRL) and other advanced networking capabilities provide additional functionality for a flexible solution for user and session management.

HotZONE Management

The HotZONE gateway and custom designed billing server enables full control of all the usage profiles created as well as reporting of the HotZONE users.

The HotZONE gateway and RADIUS server is managed by Q-KON on behalf of the service provider and requires no special knowledge by the service provider. This allows the service provider to focus on the business while Q-KON will take care of the technical aspects.

User Access Portal

The User Access Portal implements the interfaces between the billing platform and the user. The portal page can be uniquely developed per billing gateway and provides excellent branding and advertising options.

Username and Password Fields

The user enters his access voucher username and password in these fields to gain access to the Internet under control of the centralized billing server.

User Navigation Tools

Various user support and navigation aids are provided to ease user support and services.

Commercial Options

Prepaid Voucher Bundle Options

For sites where connectivity is provided on a pre-paid bundle or voucher basis, the following pricing structure applies.

Data Bundle (MB)	End-user Recommended Pricing	Service Provider Pricing
- 10MB	R 8.50	R 5.10
- 20MB	R 17.00	R 10.20
- 50MB	R 42.00	R 25.20
- 100MB	R 80.00	R 48.00
- 625MB	R400.00	R 240.00
- 1250MB	R800.00	R 480.00

HotZONE Equipment Options:

Equipment Specification for self-provide or supply of HotZONE equipment:

- a. Ku-band Remote System includes;
 - i. 1.2m antenna with feed and kingpost mount
 - ii. 3W Ku-band BUC
 1. NJT5037F
 - iii. Ku-band LNB
 1. DRO NJR2784H
 - iv. Modem
 1. LinkstarS2A
 - v. Miscellaneous installation material
 1. RG6 cable with f-type connectors for TX and RX path
 2. Weatherproofing, cable ties, etc.
- b. Access Controller
 - i. Mikrotik RB750 or bigger (Q-KON will prepare and provide the configuration file for download onto the access controller)
- c. Wi-Fi Access Point
 - i. Any standard 802.11b/g/n access point suitable for in- and or outdoor use

Limited time supply offer, only while stocks last

Q-KON will supply the following subject to terms and conditions;

1. Complete 1.2m Ku-Band VSAT kit
2. Mikrotik RB750 Access Controller preconfigured for the HotZONE prepaid platform
3. Sundry items for installation and implementation of the HotZONE satellite and access equipment
4. Shipping / Delivery, installation and configuration of the HotZONE satellite and access equipment

Rental Offer

- Monthly rental fee of R1500-00 excluding 14% VAT is payable monthly in advance, with initial 3 months in advance
- 2GB monthly usage data bundle included for back office use.
- Installation fee for baseline satellite access terminal and HotZONE access controller is included in the above offer within a 350km radius from Gauteng. Q-KON reserve the right to raise, discuss and negotiate additional labor, travel, accommodation and S&T expenses for installation locations outside a 350km radius from Gauteng

ISP is requested to supply and install the following equipment;

1. Outdoor Wi-Fi access-point
2. Standard wall bracket and aluminium pole mounting kit for outdoor Wi-Fi access-point

General Terms and Conditions

- Satellite internet access service to be provisioned via Q-KON platforms
- Service provider to abide and comply with local and regulatory laws of the country
- Service provider is responsible for first line support to end-users.
- Q-KON will provide technical support directly and only to the service provider.
- Equipment and Service is offered on a rental basis and stays the property of Q-KON
- Monthly rental fee payable in advance while equipment and service is active
- A minimum usage or sessions baseline of 100x 100MB will be applicable and should this baseline not be met Q-KON will have the mandate to raise the concern, discuss and negotiate the relocation of the HotZONE and or the removal of the equipment for redeployment at which time the monthly payable fee will also cease to be billed.