

## HotZONE Solution Value Offer

Public broadband access networks are ideal for Internet Café's, hotels, airports, shopping centres, campus areas, etc. that provide Internet access to ad hoc users.

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

### Benefits

The HotZONE solution provides the following benefits to partners:

#### Unlimited internet access via satellite

Internet access for public broadband access is provided by a Ku-band satellite solution.

#### ZERO contract risk

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

#### Prepay Service

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

#### Additional revenue at zero costs

With unlimited access to satellite bandwidth partners are free to secure additional sales revenue without the need of incurring additional fixed costs for monthly bandwidth services.

#### Improved Profitability

The HotZONE solution implements strict control on sales income and cost and eliminates the risk of loss due to poor financial control.



#### Immediate Market

The HotZONE service employs standard Wi-Fi technology to ensure immediate service to all users within the area.

### Solution Overview

#### Satellite Internet Access

The que-Vi and que-X 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 user access is administered by a centralised billing server that provisions access through the Internet. The billing server is configured with rates and commercial parameters for each HotZONE operator respectively.

#### 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

#### 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 complete based on the username and password credentials allowing the actual user not to be bound to a specific location or computer. Below is diagram of a typical deployment.

#### 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 and eliminates the

requirement for operators to duplicate scarce and expensive skills on short notice.

#### User Profile Management

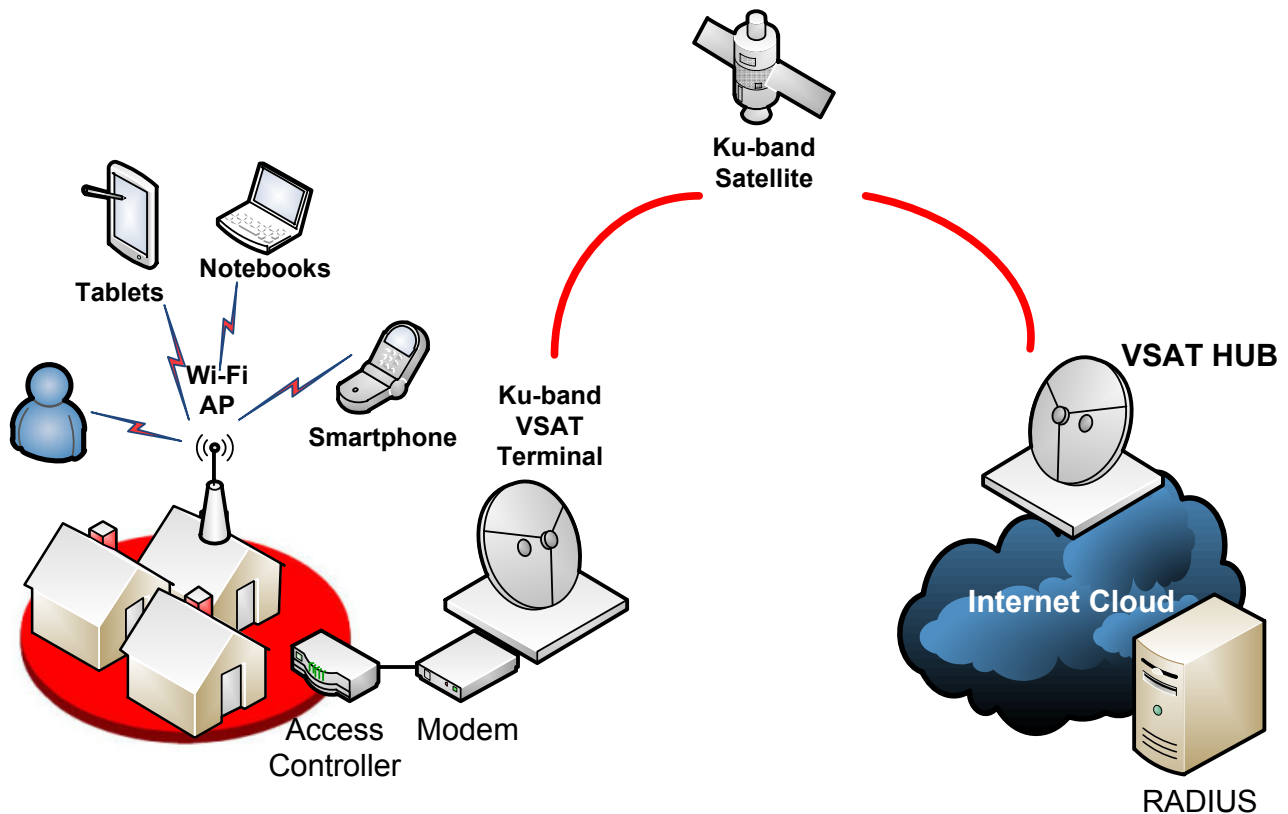
Session Rate Limiting (SRL) and other advanced networking capabilities provide additional functionality for a flexible solution for user and session management.

#### 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.

#### HotZONE Internet Access and Distribution Networks

This Application Note describes the que-Vi and que-X Satellite platforms as Internet Access mechanism but is not limited to only these two platforms.



### User Access Portal



#### 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.

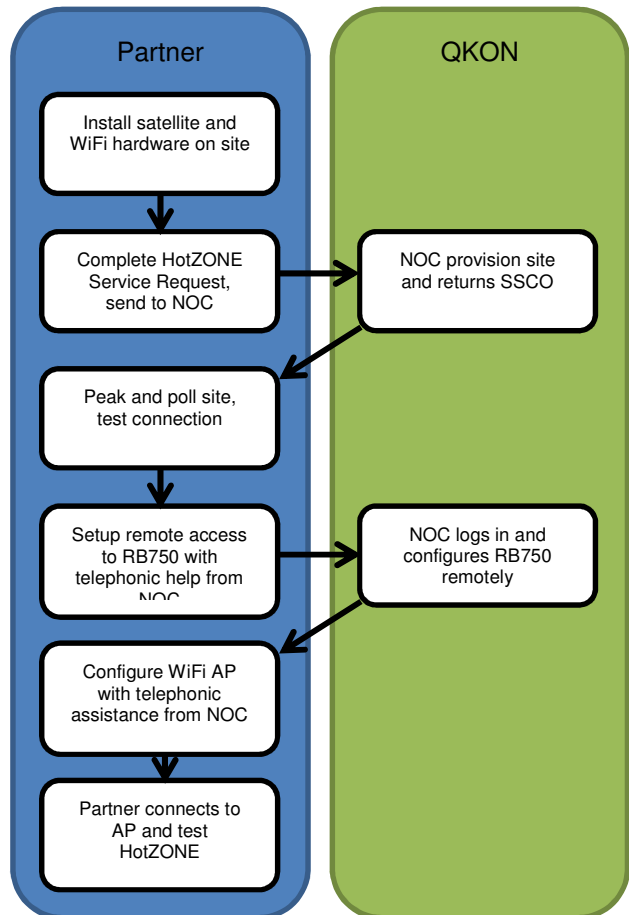
#### User Navigation Tools

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

#### Free Access Sites

The Service provider can select a limited number of web sites to which the user can gain free access.

### Business Activation Flowchart



### Commercial Options

#### HotZONE Equipment Options:

1. Self-provide or supply of HotZONE equipment – see equipment specifications below
2. Q-KON can scope, cost and offer a proposal for the supply of HotZONE equipment – please enquire

#### 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. West-Africa – NJT5037F
    2. Southern Africa – NJT5097F
  - iii. Ku-band LNB
    1. West-Africa – DRO NJR2784H
    2. Southern Africa – PLL NJR2836S
  - iv. Modem
    1. West-Africa – LinkstarS2A
    2. Southern Africa – iDirect X3
  - 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. RB750 by Mikrotik (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

#### Prepaid Voucher Bundle Options

Data Bundle (MB)	End-user Pricing	Service Provider Pricing
10MB	\$1.00	\$0.60
20MB	\$2.00	\$1.20
50MB	\$5.00	\$3.00
100MB	\$10.00	\$6.00
625MB	\$50.00	\$30.00
1250MB	\$100.00	\$60.00

### Terms and Conditions

#### General Terms and Conditions

- Satellite internet access service to be provisioned via Q-KON platforms
- Own satellite equipment may be used upon approval of the Q-KON platform engineer
- HotZONE service provisioning exclusively for HotZONE business model
- Additional service provisioning can be accommodated on the HotZONE equipment for office or private use at an additional service fee
- Excludes miscellaneous installation material i.e. CAT5 UTP cable, connectors etc.
- Excludes mounting structure and hardware
- Excludes engineering support services
  - o \*\* On a time and material basis
  - o \*\* Daily rate \$540 includes S&T
  - o \*\* International travel and accommodation at cost + 15%

#### Agent Responsibilities

- Choosing a suitable host site along with Q-KON
- Installation and maintenance of the equipment at the host site
- Provide safe and secure space for equipment hosting
- Provide stable and reliable power to HotZONE equipment
- Partner to abide and comply with local and regulatory laws of the country
- Technical support for end-users. Your number will be on each of the vouchers for support purposes
- Marketing of the HotZONES under your control, with Q-KONs support
- Selling vouchers to end-users
- Informing the Q-KON NOC if there are any problems or if more vouchers are required
- Assist in marketing (e.g. making sure the marketing material is displayed)

#### ISP Responsibilities

- ISP to abide and comply with local regulatory and laws of the country, offering license coverage of the deployed HotZONE/S

Should the HotZONE not return the expected revenue it will be mutually considered and agreed to move the HotZONE to a more lucrative area.