



### **Overview**

In South Africa, the lack of affordable, reliable, highspeed broadband access has negatively impacted the country's development. The high cost of communication has constrained investment in South Africa as a regional business hub. To improve the broadband penetration of the country, South Africa Connect, a national broadband policy has been implemented.

Galela Telecommunication Holdings (Pty) Ltd ("Galela") is a trailblazer in deploying broadband networks and offering internet connection services in under-serviced areas of South Africa including townships and rural areas. Galela has successfully deployed a WiFi hotspot network in one of the large District Municipalities in South Africa, Dr. Kenneth Kaunda District Municipality ("Dr.KKDM"). Galela chose to use the Altai Super WiFi solution for their network deployment as it requires fewer base stations and access points per square kilometer. Altai Super Wifi Solution uses a patented long range technology. This technology significantly lowers the total project cost and shortens the deployment time.

The WiFi service in Dr.KKDM was launched in February of 2016; it provides free internet connectivity to local residents. The rollout is part of the South Africa Connect program to provide fast, reliable and secure internet to all citizens. Phase two of this program will cover all the provinces in the north-western part of South Africa; it is targeted to be completed by the second quarter of 2016.

#### **Customer Name:**

Galela Telecommunication Holdings (Pty) Ltd (solution and service provider)

#### Deployment Location:

Dr. Kenneth Kaunda District Municipality

#### **Application**:

Free WiFi hotspots for local residents in under-serviced areas

#### Products used:

Altai A8-Ein, A2-Ei, A2, A2e, C1n and AltaiCare

### **Result:**

The Altai Super WiFi hotspots cover a total of 225 areas such as government buildings, schools, taxi ranks, clinics, police stations, internet cafes etc. At peak hours, there are over a thousand of simultaneous users with an average speed of 15Mbps per users.



## The Challenge

- Large area coverage with many WiFi hotspots scattered around the district
- A large number of simultaneous users
- Lack of Ethernet backbone



# **The Solution**

Owing to the huge coverage area and high user capacity, Altai A8-Ein and A2-Ei are deployed on the rooftops of various buildings to provide WiFi access while C1n's are used as CPE's to extend the WiFi coverage. In some areas such as internet cafés, schools and clinics, A2 and C1n are used to provide small area wireless networks.

The operator used AltaiCare; a cloud-based network management solution that manages the WiFi network and configuration, due to many base stations and access points installed in different locations. This helps the service operator to manage the network more efficiently.

## **The Result**

There are 225 WiFi hotspots in the city of Tlokwe located in the Dr. KKDM. The WiFi hotspots are deployed mostly in underserved areas such as townships and settlements. At peak hours, there are over a thousand simultaneous users with an average speed of over 15Mbps per user. The local residents can now enjoy 24x7 seamless WiFi services for free.



### About Altai

Altai Technologies is a leading supplier of carrier-grade WiFi products and technologies with a distribution network reaching 100 countries. Altai Super WiFi is the leading solution for vertical industrial markets, covering over 180 terminal ports and airports globally.

The Altai Super WiFi Solution includes a complete portfolio of indoor and outdoor products for carriers, WISPs, and enterprises to support a wide range of applications such as mobile data off load, public access, WLAN access, and backhaul.

Utilizing patented smart antenna technology, as well as a cloud-based management system called AltaiCare, the Altai Super WiFi Solution is designed from the ground up to deliver WiFI networks that have unprecedented performance, reliability, scalability, and manageability.

## Contact Us

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