



**Airtel Kenya (part of Bharti Airtel Limited) is the country's second largest operator with over 5 million mobile and fixed subscribers.**

*"We seek the most cost-effective, high-performance solution for every aspect of our network to guarantee that our customers receive the highest quality of service available."*

*"VectaStar is a cost effective solution for our mobile backhaul and enterprise access needs, and this has enabled us to invest heavily in our services to business and the public. This supported our launch of 3.75G and helped us serve more businesses across Nairobi with fast and reliable connectivity."*

**Chandra Tiwari,**  
Network Director for  
Airtel Kenya

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## Airtel Kenya and CBNL bring next generation mobile and enterprise access services to Nairobi



### The challenge

Kenya continues to experience high growth in internet and smartphone subscribers. Mobile phone penetration increased from 60 per cent in 2010 to over 77 per cent in 2013, with subscribers now standing at over 30 million. Nairobi in particular is seen as Kenya's tech hub following the advent of the city's iHub which supports research and start-ups in the technology sector.

Airtel Kenya recognised at an early stage that Nairobi required cutting edge mobile and internet services to fully realise its economic potential. To help support this vision, Airtel Kenya needed to develop its own strategy that would enable them to efficiently scale the capacity, coverage and quality of their services in the region.

Until 2011, Airtel Kenya had largely used a point-to-point (PTP) infrastructure strategy, however this no longer provided a universal business case to invest in new services. The Operator required a more efficient backhaul and enterprise access strategy which would work in compliment with their existing network and help lay the foundations for their next generation infrastructure.

### The solution

The inherent cost efficiency and technical evolution of point to multipoint (PMP) microwave made this the technology of choice. As the market leader, CBNL was the first point of call.

CBNL first supported Airtel Kenya in 2011 by providing network planning and project management to support the operator's immediate and long-term growth. During the first phase, CBNL used its VectaStar product to deploy high capacity sectors of backhaul coverage. In many cases this replaced legacy PTP equipment and provided upgraded throughput to existing mobile sites. VectaStar's ability to connect cell sites in less than half a day enabled Airtel Kenya to quickly uplift capacity and connect new areas with 3G services.

Welcome to  
next generation  
thinking

Welcome to  
CBNL

Pioneering the development and deployment of next generation microwave transmission equipment since 2000, CBNL is the global market leader in point-to-multipoint microwave backhaul and enterprise access solutions.

Our carrier-class VectaStar platform serves over 70 communication providers across 42 countries, including 7 of the top 10 world's largest mobile operators.

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With VectaStar now widely deployed across Nairobi, Airtel Kenya had the carrier-grade infrastructure to support the launch of 3.75G in 2012. High-capacity backhaul was fundamental to the success of their 3.75G services which enabled high speed mobile broadband on internet-enabled devices.

Throughout the partnership, CBNL's value added services and software provided intelligence on network performance and optimisation strategies. This visibility was central to Airtel Kenya fully utilising its VectaStar infrastructure in 2013 by deploying additional connectivity to businesses.

By utilising spare capacity in the backhaul network, Airtel Kenya was able to maximise their spectrum by rolling out fast, reliable and secure enterprise access connectivity.

By using licenced spectrum, VectaStar offered a guaranteed quality of service which matched the requirements of many large corporates establishing themselves in the city. This approach not only proved highly cost effective, but enabled Airtel Kenya to connect businesses in a matter of hours without the need for extra hub site equipment.

### The results

With VectaStar, CBNL was able to provide Airtel Kenya with a solution at the right price and performance points to make a large scale investment in improving their services. By enabling the cost effective deployment of next generation services, CBNL supported Airtel Kenya in growing its customer base and strengthening its position as one of the leading communication providers in the country.

Through backhauling new 3G and 3.75G services, VectaStar helped Airtel Kenya develop a fast, reliable and more modern mobile network. This supported increasing the operator's mobile subscriber-base from 3.7 million in 2011 to over 5 million in 2014. The new networks have also had a significant social impact; enabling mHealth, social media uptake and the new 'Airtel Money' service.

Through utilising existing infrastructure and spectrum, VectaStar provided Airtel Kenya with an ultra-efficient solution to roll out fast connectivity to businesses. In addition to providing an uplift in capacity to existing customers, this enabled the Operator to bridge the digital divide and connect previously underserved areas. The new enterprise access networks had the added benefit of enabling Airtel Kenya to acquire and retain a new portfolio of large multinationals – attracted by the guaranteed quality of service the network can now provide.