

## **WiMax Services enhancing the tele services across India**

The WiMAX services in India are getting delayed every month. The extended process is now raising many eyebrows amongst the bidders and mostly amongst the target audience. The reason for delay is basically seen as a space crunch in network for the implementation. Despite the delay, many corporate telecom services have taken forward the need for WiMAX services in the Indian grounds; enabling better coverage, capacity, high spectral efficiency, low latency, better QOS, high reliability and security.

Introduction of WiMAX and 3G technologies in India are coming up with services based on mobile, many are apprehensive of the success rate. Despite the similar concepts of high transfer of data access, the system and requirements remain different from each other. The WiMAX technology is designed for the mobile broadband which any one can access from anywhere. The technology is available as IEEE 802.16D (fixed) and IEEE 802.16E (mobile), offering downloads up to 70 mbps in comparison to 15mbps of 3G technology. Further the mobile WiMAX provides download speed of around 20mbps. The broadband service broadens in mobile technology expands where the 3G technology limits.

Services of WiMAX has shown enhancements for the betterment of India such as distance learning, telemedicine, safety, security & disaster, e-Governance, to name a few. With the implementation of the service, it would benefit the rural sector as well with telemedicine, safety, security and disaster management. The other applications can further help in eliminating the digital divide in underserved areas; supporting economic development. The most important service would be the telemedicine service that would highly benefit the rural sector. WiMAX will usher a new era of growth in Ajmer with facilities such as payment of bills, issue of birth certificates, land records, and vehicle registration. Village Panchayats may also come under connectivity along with initiation of ATMs, and Railway Reservation Centres.

Telemedicine service provider with the help of WiMAX technology provides advanced care in remote locations and increases the bandwidth to remote clinics. In the rural places or calamity stricken region this service will be very beneficial. Another window to this point is remote surveillance and improving roadway safety. Understanding the needs, the Indian Government has realized the importance of broadband, and made broadband a national priority today.

The explosion of technologies in the last 5 years has witnessed an up-gradation in the communication technology, which has helped to position India amongst the BRIC (Britain, Russia, India and China) globally. The adaptability of 3G, WiFi has shown a positive acceptance to WiMAX. These services is said to overcome the limitations of the rural spectrum allocation. The wireless broadband services also help the urban population to stay

connected through their mobile broadband. This system of WiMAX is different from that of commonly known GPRS and 3G technology. These two services are designed specifically for the voice and data transfer where as WiMAX is a separate forum similar to the Wi-Fi mesh.

It is also a difficult task to get consumers to adapt to new technologies in urban and rural sectors. WiMAX technology when compared to the 3G technology, the condition of technical support is different. The technical support system of 3G is expensive and is available in limited handsets. These services offered provide varied opportunities to address enterprise mobility in sectors like transportation, aviation, and manufacturing.

As the confusion between WiMAX and 3 G technologies about the technology services and deliverance bound the consumers, it is made that the WiMAX can be used in 2.5GHz bands globally, to build out its own network. To enable the WiMAX technology in India, the mobile broadband has been enhanced with deliverance of 70 megabits per second over 50km at an affordable rate. When compared the prices of 3G spectrum which costs Rs 3500 crore, the WiMAX is Rs 1750 crore. The entire spectrum is counting on 27.5 million users by 2012. Supporting the WiMAX system, the Telecom Regulatory Authority of India has set a target of 20 million broadband aims to bridge the gap of 20 million broadband connections in 2010 from the current 4.3 million consumers.

The WiMAX technology with varied services for the mobile and broadband mobile, the internet service providers would be shaping a new technology of connections, helping not only an individual but at times of crisis across the globe.