



Communications  
Commission  
of Kenya

# WiMAX EAST AFRICA 2009

COUNTRY EXPERIENCE:-

EVALUATING THE FUTURE OF  
WiMAX IN KENYA

Presenter: Mr. P.N. Ngige

Tel. 4242303

Fax: 4242407

email: [ngige@cck.go.ke](mailto:ngige@cck.go.ke)



Communications  
Commission  
of Kenya

# *Scope*

1. Pre-WiMax period
2. Current Situation
3. Future of WiMax in Kenya



Communications  
Commission  
of Kenya

# Pre-WiMax period



Communications  
Commission  
of Kenya

- The first public data network operator's (PDNO) licenses were awarded in 2003 on a first-come-first-served basis
- These companies were assigned spectrum in the 3.5 GHz band depending on their business plan requirements
- They deployed a number of proprietary technologies in the FDD mode
- Most of these operators complain of lack of enough spectrum and have applied to expand their existing assignments



Communications  
Commission  
of Kenya

# Current Situation



Communications  
Commission  
of Kenya

- The operators have been migrating their networks to WiMax due to suitability as broadband wireless technology
- Presently there are 7 commercial data network operators deploying the WiMax in the 3.5 GHz band and 4 operators deploying WiMax in the 3.3 GHz band offering voice, data and video services



Communications  
Commission  
of Kenya

- Presently there are 9 licensed operators awaiting frequency assignments to deploy WiMax technology yet there is no available spectrum
- Some operators have deployed TDD while some are on FDD mode which often causes frequency interference at co-located sites
- This situation hampers service delivery due to lack of enough capacity, service disruption and degradation of quality of service



Communications  
Commission  
of Kenya

- Most operators have confined their operations in a few major towns despite their licenses having a nationwide coverage
- This has been largely due to lack of adequate funding of the local data operators



Communications  
Commission  
of Kenya

# Future of WiMax in Kenya



Communications  
Commission  
of Kenya

- The Government of Kenya has designated the ICT sector as one of key drivers of Vision 2030
- The recent development in the ICT sector such as the undersea fibre optic cable and NOFBI in Kenya will stimulate demand for broadband services countrywide
- WiMax was admitted into IMT family in Oct 2007 during the WRC-07 making it eligible to access any IMT band such as 450, 800, 900, 1800, 1900, 2100, 2.3, 2.5, 3.3 & 3.5



Communications  
Commission  
of Kenya

- 290 MHz (2.3-2.4 & 2.5-2.69 GHz) of spectrum will be available for assignment on a market based approach
- This being a technology neutral regulatory environment, means that WiMax has to compete with other similar technologies such as LTE
- Current operators (3.3 & 3.5 GHz) will migrate to the TDD mode to minimise frequency interference and ensure efficient utilisation of spectrum resource



Communications  
Commission  
of Kenya

- Rollout obligations and quality of services conditions will be imposed to ensure countrywide coverage especially to rural areas
- This scenario might lead to market consolidation resulting to better service delivery to the customer.



Communications  
Commission  
of Kenya

# Thank you

## [www.cck.go.ke](http://www.cck.go.ke)