

EVALUATING THE FUTURE OF WiMAX IN TANZANIA

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Agenda

- Introduction
- Band plan
- Current
- Way forward
- Conclusion

Introduction

- WRC-07 agenda 1.4 dealt with the issue of IMT systems
- The conference globally identified bands 450 - 470 MHz; 790 -862 MHz and 3.4-3.6 GHz for IMT systems in addition to 2.5 – 2.6 GHz identified by WRC -03
- The decision to identify bands has multi effect
- It gave a clear go ahead to manufacturers to start building IMT systems
- It signaled an advent of broadband systems

Introduction

- The broadband systems will bring high quality mobile multimedia communication
- With the same capability of delivering data as a fixed line.
- The increased use of broadband will speed up processes of achieving MDGs
- Creative and economical access to IMT bands is an absolute priority for increasing broadband penetration.

Current situation

- World trend shows that broadband equipment are already being manufactured in; 2.5 – 2.69 GHz
- US, Brazil, Singapore, Japan, Hongkong and Canada have allocated the referred band for broadband wireless.
- 2.3 -2.4 GHz band is used for broadband wireless access in Korea
- Tanzania being non manufacturing country opted to peg its spectrum planning such that 2.3 and 2.5 -2.69 GHz are bands for broadband systems.

Current situation

- Tanzania like many other countries in the world the bands identified for IMT systems are currently allocated to various operators.
- i.e 2.3 -2.4 GHz is currently used by first generation of Wireless Local Loop system
- i.e 2.5 – 2.6 GHz half of the band is allocated to MMDS for pay TV and half for Broadband

Spectrum demand/Allocations

Spectrum band (mHz/gHz)	Usage	Number of operators		
		with allocations	available space	requesting allocations
450	CDMA	1	0	0
800	CDMA	4	0	0
900	GSM	4	0	3
1800	PCS	5	1	2
1900	PCS	2	1	3
2100	3G/UMTS/IMT-2000	1	1	4
2.3	WiMAX	3	1	3
2.5	WiMAX	4	2	6
3.3	WiMAX	4	0	0
3.5	WiMAX	13	0	2
4.9	WiMAX	0	3	1
TOTAL		41	9	24

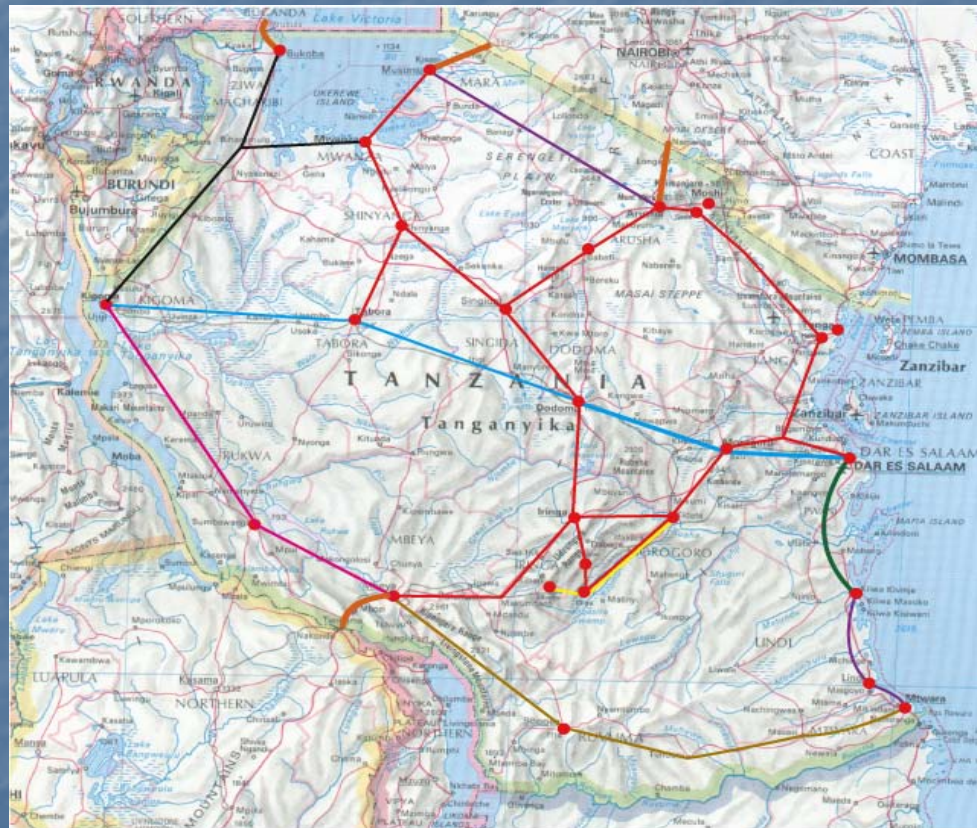
Review of 2.3/2.5 Bands

- Plan to review the bands is in progress
- Spectrum Audit exercise was initiated to take stock of current usage of referred bands.
- Refarming is anticipated
- Change conditions for allocation in the bands
- Combination of beauty contest and auction will be used

Current use of Wimax

- Some of ISPs have been deploying Wimax but in the small scale
- One gsm mobile operator is also providing Wimax to corporate clients.
- Signal footprints are in region headquarters only.
- Step has been taken to commercialise the private fibre cables own by Electric, Railways and Gas Companies.

Fibre networks



'IDEAL' National ICT Backbone Infrastructure

Tanzania Railway Corporation

TanESCO

TTCL

SONGAS

TAZARA

Southern Circuit

Western Circuit

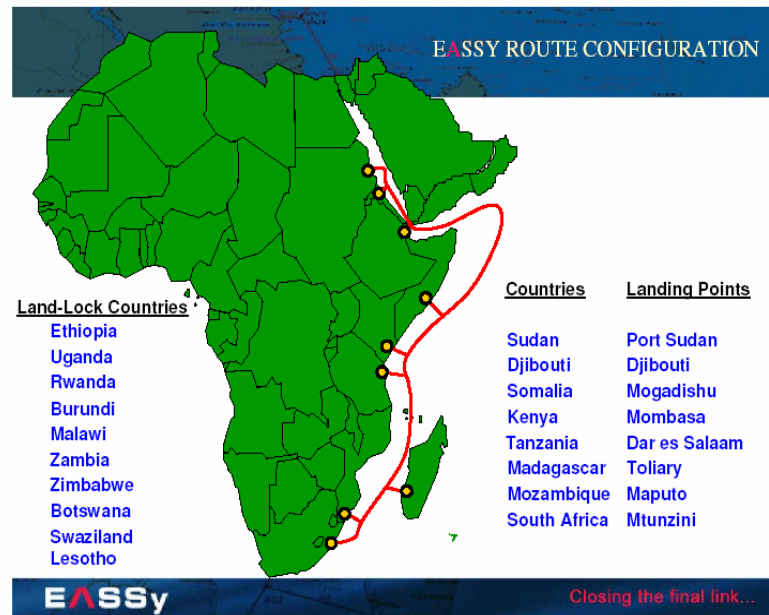
North Western Circuit

Trans-Border Link

Future of Wimax

- Tanzania Government has signed contract with Chinese company to deploy the 7,000 km national fibre backbone.
- Fibre will cover all districts (over 121 districts)
- The project is expected to take two years (due in 2010)
- This will reduce capex to new entrants as they will concentrate on wireless access network .

Eassy and Seacom cable are due to land in Dar 2009/10



Results

- It is expected that the cost of national and international connectivity will go down hopefully retail prices.
- Growth of demand for telecommunication services especially internet and broadband

Conclusion

- The Government commitment for construction of the national fibre backbone is catalyst for broadband investment by private partners
- PPP is anticipated to increase broadband penetration in Tanzania.

■ THANK YOU FOR YOUR TIME