OVERVIEW OF THE UGANDA TELECOMMUNICATION SECTOR AND STRATEGIES FOR MIGRATION TO 3G TECHNOLOGY



2. TOPICS FOR DISCUSSION

- Uganda The country
- Regulatory Environment
- Overview of Uganda's Telecommunications Market
- 3G Licensing Issues
- Proposed Migration Strategy to 3G
- Challenges of implementing 3G Technology
- Conclusion





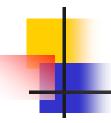
- Population 23 million
- Surface Area 241,000 sq. km
- GDP per capita US\$ 320
- Economic Growth(1999-2001) 5% p.a



REGULATORY FRAMEWORK

- Uganda Communication Commission (UCC) established by Communication Act of 1997
- UPTC restructured into 3 entities; UTL, UPL and Post Bank
- 51% shares of UTL divested to Consortium of Telecel, Detecon and Orascom
- MTN licensed as SNO to compete with UTL in provision of all services; fixed, mobile etc
- CELTEL licensed in 1995 to operate mobile services only

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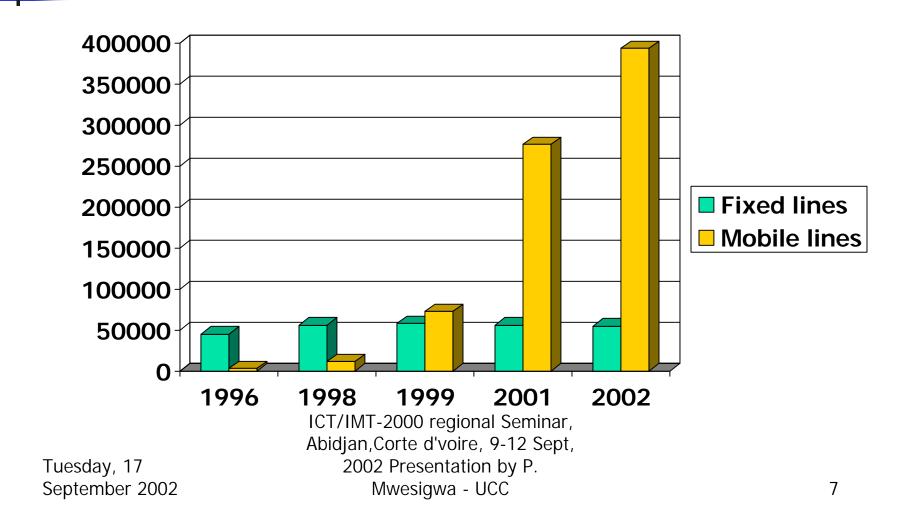


OVERVIEW OF TELECOM MARKET

Service	1996	1999	2002
Fixed lines	45,145	58,261	54,976
Mobile lines	3,000	72,602	393,310
National Operators	1	2	2
Mobile Operators	1	2	3
ISPs	2	9	17
FM Radio Stations	14	37	130
TV Stations	4	11	22

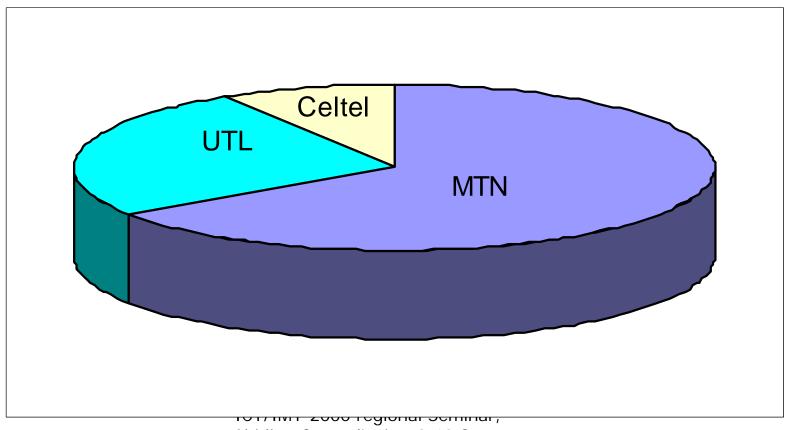
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GROWTH OF MOBILE SERVICES



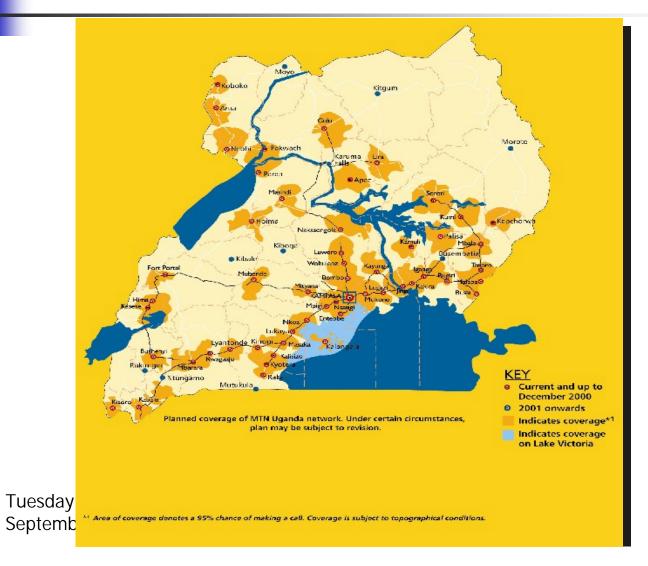


MOBILE MARKET SHARE



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GSM NETWORK COVERAGE





MEASURES TO STIMULATE RURAL COMMUNICATIONS

UCC has formulated a Rural Communications Development Policy which entails:

- Provision of public phone facility in every subcounty by end of 2005.
- Provision of PoP in each district by end of 2004
- Established a Rural Communications Development Fund built from 1% levy on revenues of Operators
- Provision of roll-out obligations in the licences of National Operators



UCC'S PLANS FOR IMPLEMENTATION OF 3G

- ITU Recommended Spectrum in the 2 Ghz Band to be reserved for 3G Licences
- Implementation of 3G will depend on market demand
- Choice of the mode of licensing; Comparative Selection Process and Auction will be decided at a stakeholders' conference.
- Licensing of new Operators can only be done after June 2005 when the existing duopoly expires.



CHALLENGES OF MIGRATION FROM 2G TO 3G IN UGANDA

- Mobile market predominantly voice based
- No relevant local content on the Internet
- Lack of Internet Applications (Airline Ticketing, Banking, Restaurant Reservation etc)
- High Cost of Evolution Path:
 (2G GPRS EDGE W-CDMA)
- Availability and affordability of Handsets
- Market dominated by pre-paid customers

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- Introduction of SMS is attracting use of text rather than voice
- SMS-Email service is bringing data and the Internet world closer to the customer



PROPOSED STRATEGIES FOR MIGRATION TO 3G

- To consider by-passing GPRS and EDGE interim steps
- To encourage Infrastructure Sharing e.g. masts
- As with 2G, provision of pre-paid services will be crucial
- Tailor 3G Applications to suit local market



CONCLUSION

- The dramatic growth of mobile services in Uganda has made a significant impact on the overall growth of the economy.
- Migration from 2G to 3G will be carried out cautiously taking into account the unique telecommunication environment in the country.



THANK YOU FOR YOUR ATTENTIONS

Tuesday, 17 September 2002