

AFRICAN TELECOMMUNICATION INDICATORS 2004





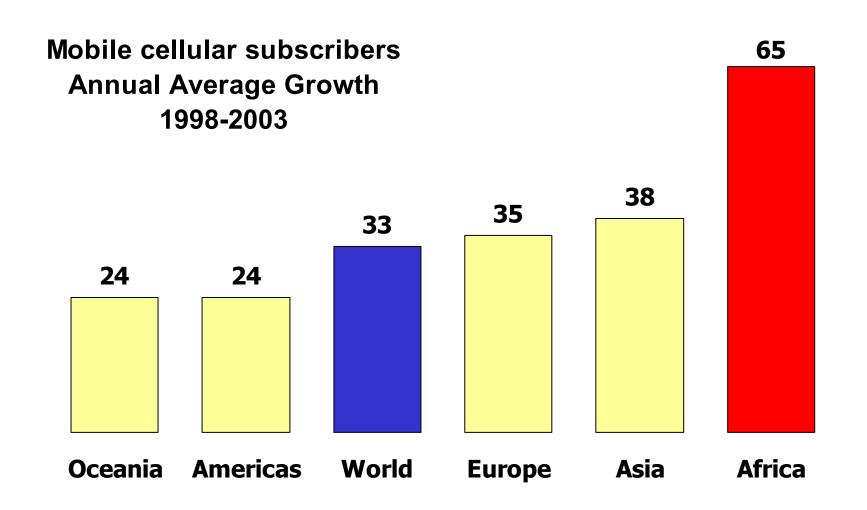


Contents

- Mobile sector overview
 - Mobile Africa
 - Mobile business
 - Mobile policy
 - Wireless Internet
 - Mobile future
- 22 Topical Tables
- 55 Country Pages
- Directory of ministries, regulators & operators



MOBILE AFRICA: World's fastest growing mobile market

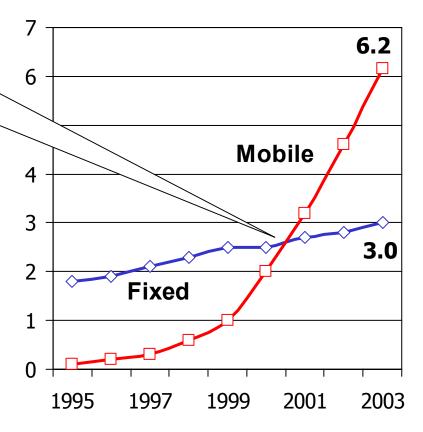




Mobile predominant method of telecommunications in Africa

- Mobile passed fixed in 2001
- 43 African countries
 (78%) have more
 mobile than fixed
 telephone subscribers
- Almost 70% of African telephone subscribers use mobile

Subscribers per 100 inhabitants

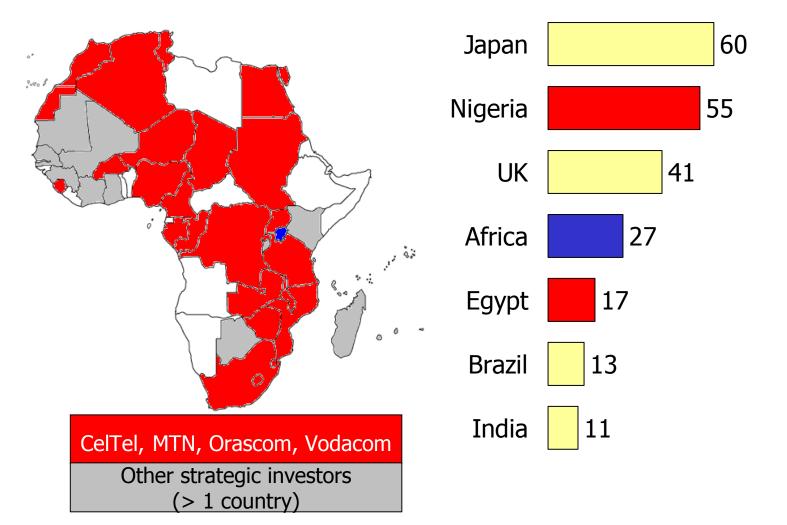




MOBILE BUSINESS

Strategic investors in Africa, 2003

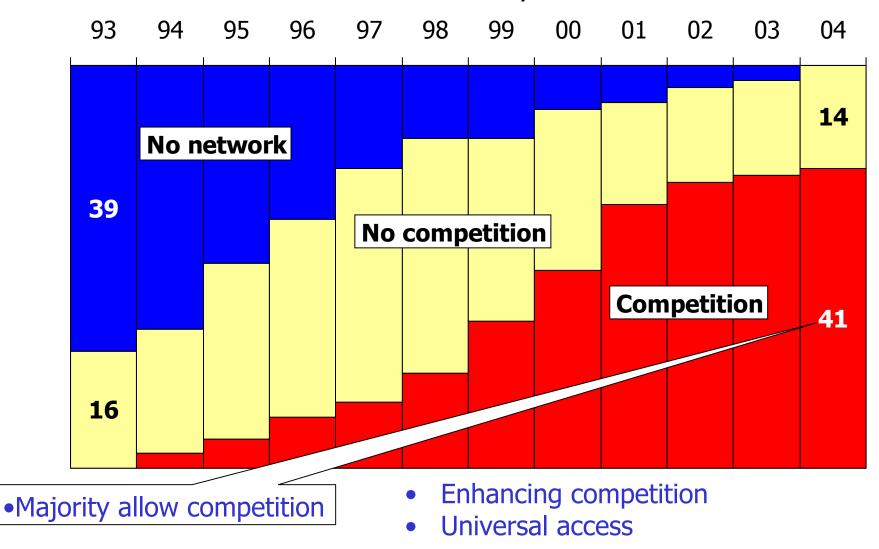
Average Revenue Per User (ARPU) Per month, 2003, US\$





MOBILE POLICY

Mobile market structure in Africa, number of countries

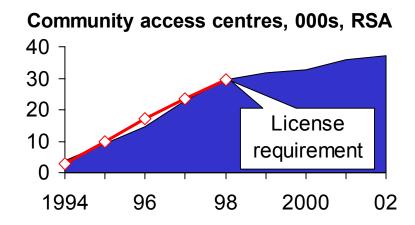


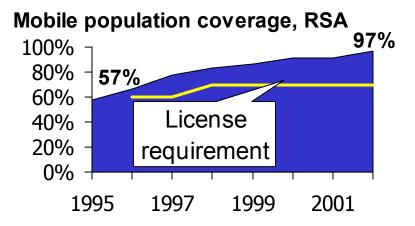


Universal service

Community access centres

Coverage





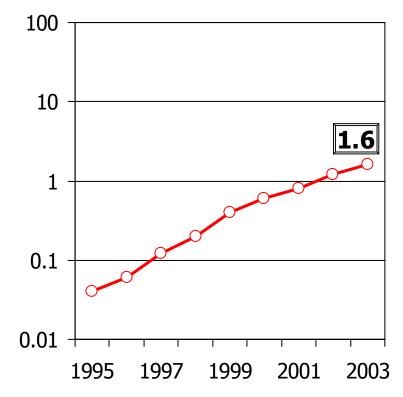
Subsidizing low income users



WIRELESS INTERNET

- 1. Second Generation (2G)
- 2. Second and a half (2.5G)
- 3. Third Generation (3G)
- 4. Fixed wireless

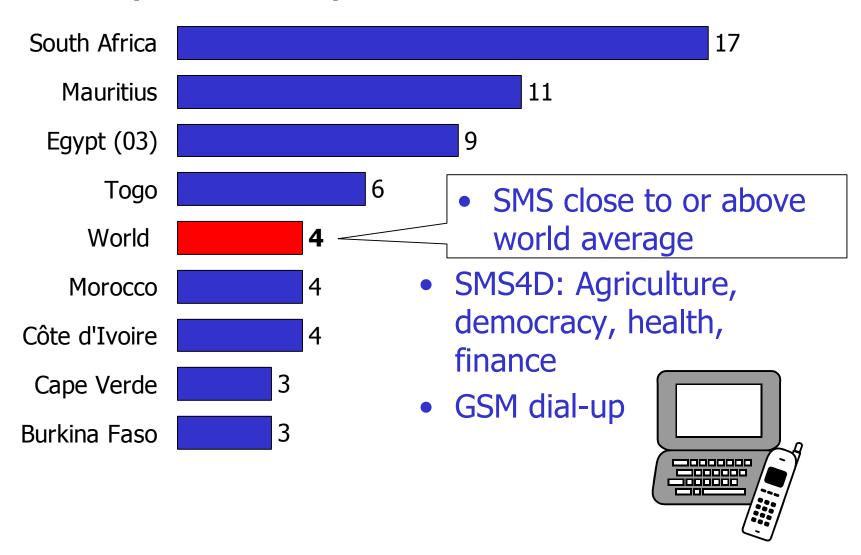
Internet users per 100 inhabitants, Africa





2G

SMS per subscriber per month, 2002





2.5G

Commercial GPRS networks in Africa, Dec. 2003									
				Subscribers					
Country	Operator	Launch	Name	Total	Date	% total subs.			
South Africa	MTN	Jul.02	dataLIVE	30'000	Jun.03	0.6%			
South Africa	Vodacom	Oct-02	MyLife	36'000	Sep.03	0.4%			
Egypt	Vodafone	Apr.03	live!	25'000	Dec.03	0.9%			
Egypt	Mobinil	Sep.03	Life	70′000	Dec.03	2.3%			

3G

- No "formal" launches or licensing procedures
- Fixed wireless
 3G using
 CDMA2000 1x
- First mobile 3G network in Angola



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

Source: Uganda Communications Commission.



Fixed wireless

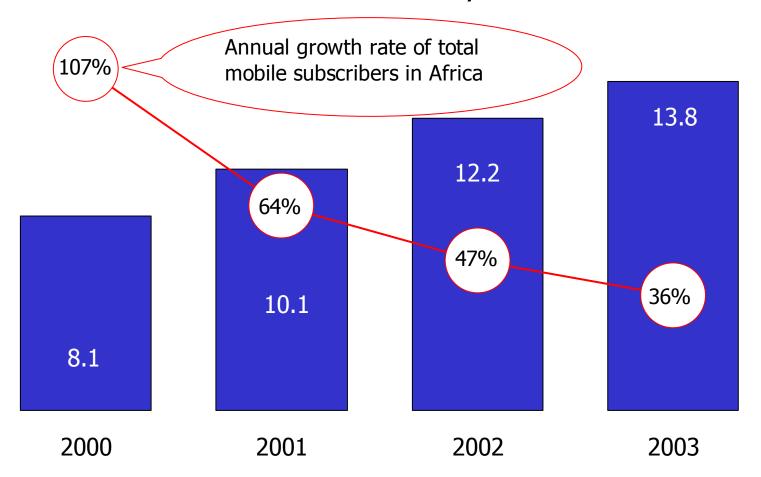
Nigerian F	Fixed Wireless	s Access	operators
deploying	CDMA2000 1	Lx, 2003	

Operator	Frequency	Infra- structure Vendor	Date announced	Coverage
Intercellular	800 MHz	Motorola	July-03	Lagos
Multi-Links	1900 MHz	Nortel Networks	March-03	Lagos
Reliance	1900 MHz	Ericsson	April-03	Nationwide
Starcomms	1900 MHz	Ericsson	March-03	Lagos
Starcomms	1900 MHz	Huawei	August-03	Kano, Lagos



MOBILE FUTURE Can growth be sustained?

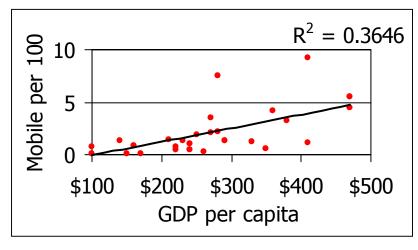
New mobile subscribers in Africa, millions



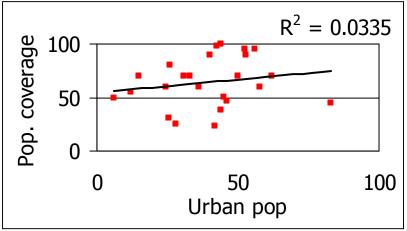


Barriers?

 Little relation between mobile penetration and low levels of income



 Little relation between mobile coverage and urban population

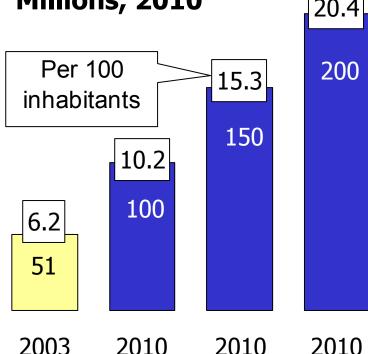


ITU

Expanding mobile

- Government
 - Minimizing / eliminating taxes/fees
 - Promote infrastructure sharing
 - Full service licenses
 - Interconnect
 - Minimize inefficiencies
 - Universal access policies
 - Market information
- Operators
 - Lower interconnect rates
 - Expand coverage
 - Roaming/data services
- Manufacturers
 - Cheaper & appropriate equipment
 - Poverty reduction
- Donors
 - Capacity building
 - Recycle handsets
 - Backbones

Forecast mobile subscribers in Africa under different scenarios. Millions, 2010



Low: annual growth 10% Medium: annual growth 16% High: annual growth 21%

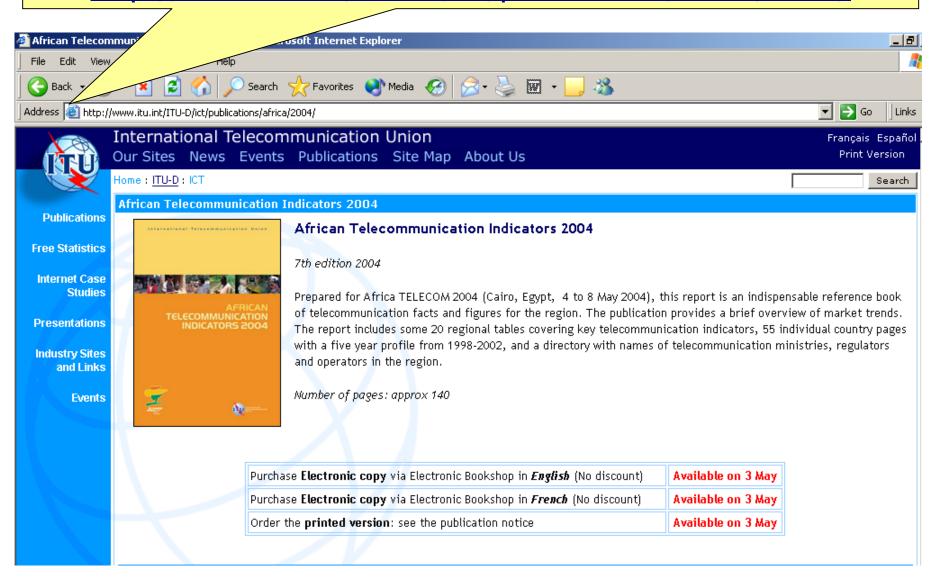
Low

Medium

High

Report available here:

http://www.itu.int/ITU-D/ict/publications/africa/2004/





Internet users per 100 inhabitants Top African countries, 2003

