Current State of Telecommunications/ICT Infrastructure in Southern and Eastern Africa

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Agenda

- ICT Market and Regulatory Trends
  - Market structure
  - Convergence of Services

- National /Regional Infrastructures
  - Regional/Sub-regional Associations
  - Existing and planned networks
Current market situation in the sector

- Most countries in the region have established Regulatory Authorities
  - Separation of Network Operations/Service Provision from Policy and regulatory function
  - Competition and service provision by Private Sector
Regulators Associations

- SADC Region → CRASA former TRASA
- COMESA → ARICEA
- EAC → EAPTO (?)

Driving the Regulation harmonization within the Community Members
Current Market Situation

- Current licenses in many countries

  - **Fixed Line Services** (some private but many still parastatals - competition in few countries)

  - **Mobile Services** (mostly GSM, competition, private and public)

  - Value Added Services (private, competition)

  - Etc
PRIVATIZATION STATUS OF INCUMBENT OPERATOR

More than 50% shareholder to Government
Less than 50% shareholder to Government
Not privatized

Source: ITU Regional Office for Africa
Overview of the telecom/ICT sector

Privatizations of telecom incumbents, 2007

Source: ITU World Telecommunication Regulatory Database

July 2008
Number of MOBILE Operators

More than 2 Mobile operators
2 Mobile operators
1 Mobile operator

Source: ITU Regional Office for Africa
TYPICAL EVOLUTION OF ICT'S

ICT USERS (millions)

THIS INTERCEPTION VARIES FROM COUNTRY TO COUNTRY/ REGIONS

Source: ITU World Telecommunication Indicators Database
Number of mobile subscribers greater than 10 times the number of fixed subscribers
Number of mobile subscribers between 5 and 10 times the number of fixed subscribers
Number of mobile subscribers between 2 and 5 times the number of fixed subscribers
Number of mobile subscribers between 1 and 2 times the number of fixed subscribers
Number of mobile subscribers less than the number of fixed subscribers
Growth in competition, selected services, worldwide

Number of countries that permit competition in international services is twice as many as in 1997.

Source: ITU World Telecom Regulatory Database.
Today’s ICT trends -- Global

- Growth in mobile networks, both in terms of coverage and capacities
  - Mobile overtook fixed in most countries
- Rise of broadband
  - Broadband is overtaking dial-up Internet access
- Convergence of IP-based networks with telephone, mobile and TV networks
- Reduced cost of deploying new networks that have more capabilities (voice, broadband, multi-media)
- N-play: towards bundling and flat-rate pricing
- Always on: anywhere, anytime, anything
- Increased competition
- Will voice remain the main driver?
Telecom/ICT sector in transition – the challenges

- from (relatively) static market environment to dynamic fast-paced innovation driven by competition
- from heavy-handed regulation to light-touch regulation
- from narrowband to broadband
- from fixed to mobile
- from wired to wireless
- from sometimes-on to always-on
- from PSTN to IP (NGN)
- from low volume, high margin to high volume, low margin
- from consolidation to separation of services and infrastructure
- from traditional business models to emerging business models
Regulation in an era of convergence

- Universal service and access
- Quality of services & Consumer protection
- Investment incentives and specific tools to boost development
- New issues: Cybersecurity and privacy
- Convergence changes the game
- Flexibility & forward-looking approach being adopted worldwide, but tailored to local circumstances
Out of 50 LDCs, commercial broadband services were available in only 24 economies in 2006, with a total number of broadband subscribers just over 30’000 in all LDCs.

Submarine cables in Africa
EASSY CABLE
OPERATORS ASSOCIATION

- REC Season 19

- REC have within their mandate to address the Regional Infrastructure gaps are addressed

- SADC → SATA → Project SRII

- COMESA → COMTEL

- EAC → EAPTO (& EAC Committees)

- etc
SATA - SRII

- SRII = Southern Africa Information Infrastructure
- Strategic approach: Short (immediate urgent digitalization gaps), Medium and Long Term (final vision) projects

→ NOT ADDRESSING ACCESS NETWORK I.E. LAST MILE
SR II Project Status

[Map of Southern Africa with various countries marked and connectivity lines indicating network infrastructure.]

- Europe
- India & Far East
- South Africa
- Lusaka
- Mozambique

Symbols:
- D/Radio STM1
- O/F System
- Planned
- EASSy Project

24 July 2006
2008
Projects Status in Summary

- 100% of the links on Short-Term Plan completed i.e. digital connectivity
- 100% of links on Medium-Term Plan completed i.e. larger digital capacity
- 75% of links on Long-Term Plan completed i.e. Fibre optic cable connectivity Broad-banding.
- Universal Service/Access Fund already approved by the SADC Communications/ICT Ministers
- **Connecting to the East and West Southern Africa Undersea Submarine Cables – there are some missing links**
SRII Intra-Regional Connectivity
Long Term – Fibre Optic Cables
SRII Intra-Regional Connectivity
Long Term – Fibre Optic Cables
EAC AND COMESA

- Similar projects are being implemented
- Focus also on Broadband inter-regional (extending national backbones wherever possible)
ACCESS TO ICT SERVICES

- Less than 3% of rural villages have access to fixed line
- About 45% covered by mobile signal
- Kenya, Malawi, Mauritius, South Africa = 90%
CONCLUSION

- Broadband Regional Networks linking capitals quite advance but provision of access still low
- Mobile is providing faster signal coverage but affordability is a challenge
- Satellite phones still expensive
- New regulatory framework allowing WLL deployment by fixed line operator may accelerate the access provision.
THANK YOU

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