ITU Forum
“Bridging the ICT standardization & development gap”

ICT Backbone Implementation for Broadband Access in Tanzania

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Broadband Access in Tanzania?

- Aiming at having high speed broadband access in all district centres
- The Government aims at connecting using fibre optic cable all district headquarters
- This backbone will make it possible to deploy e-applications to all districts
- Service providers and Operators will take advantage of this deployment and extend their services to all Districts and subsequently all rural areas
Broadband Access in Tanzania

- Current broadband Deployments in Tanzania
  - ADSL – TTCL
  - 3G /HSDPA
  - Wireless Internet (Wifi/Wimax)
  - Cable Tv
Background to ICT development in Tanzania

- Country background and demographics
- Legal and Regulatory Framework
- ICT development in the Last Decade
Tanzania: Country Profile

• Location: East Africa
• Total Area: 945,000 Km²
  • Land area: 883,749 Km²
  • Water: 61,251 Km²
• Population: 39.8 million
  • Women: 51%
  • Men: 49%

• Per Capita Income: UD$ 365
• GDP growth: 6.8% (2006)
• Inflation: 7.2% (June 2007)
• Currency: T. Shillings
• Official Languages: English & Kiswahili

• Economic Occupation: 70% of the population work in agriculture and live in Rural areas
• Political system: Multiparty democracy
Legal and Regulatory Framework

ICT Sector Overview:

- A fully liberalized market:- regulation is for creating a level playing field to enable fair competition among licensed service providers.

- **Telecommunications services:**
  - Four licensed international gateway operators
  - Six licensed mobile telephones providers
  - Two licensed fixed telephones providers
  - Over 40 licensed Internet Service Providers (ISPs)
  - Telephone subscribers 6.3 million (March, 2007)
  - Tele-density of 16%
A decade of very high growth

Subscriber Growth

FIXED LINES

MOBILE

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Lower tariffs

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This is where we would like to be
(This is just a high level map)
How do we achieve it?

- Government intervention planning to build over 6000km of fibre
- Utilities
  - TANESCO – 2600km so far
  - TRC – 800 km so far
  - SONGAS – 200 km so far
Challenges

- Investment
- Public Private Partnership projects
- Interconnection
- Reliance on standard interfaces and regulatory practices
- Operation and Maintenance
- Human capacity and human resources training
Looking Ahead

- E-Applications
- E-education, e-health, e-everything
- NGN service deployments
  Networks capable of offering voice, video and data (triple play)
- E-Government
Role of stakeholders

- Operators
  Build infrastructure and deploy services
- Regulators
  Promote competition and level playing field
- Users
  Adopt
- ITU
  Continue with the standardisation work
Conclusion

- Tanzania is aiming for 2010 full deployment of ICT backbone for broadband access
- Competitive market environment is envisaged to take advantage of this network and deploy services close to the people
Services provided:
Mobile telephones and associated services
Fixed telephones and associated services
Broad band services
Internet services
Public payphones services

Types of networks in use:
GSM/GPRS/3G, Copper wire, coaxial, Fixed wireless, CDMA, WiFi/WiMax for access networks
Fiber, terrestrial microwave and Satellite transmission systems,
ICT Sector Overview cont’d

- **Broadcasting Services:**
  - Licensed National Television broadcasting stations
  - Licensed Regional Television broadcasting stations
  - Licensed Cable Televisions
  - Non commercial Television broadcasting stations
  - Licensed National Radio broadcasting stations
  - Licensed Regional radio broadcasting stations
  - Licensed District radio broadcasting stations
  - Non commercial radio broadcasting stations
Communications Sector Policies

- Tanzania Development Vision 2025
- National Telecommunications Policy (1997)
- Rural Development Policy (2001)
Policy Statements on ICTs

- Provide each village with telecom facilities by year 2020
- Achieve a Tele-density of 6% by 2020; by 2006 Tele-density was 16%
- Liberalize to accelerate investment and customer choice
- Facilitate competition by divesting government shares in the then dominant operator (TTCL)
- Every licensed telecom service provider to extend services to cover rural areas
Institutional Arrangement

- **Government** responsible for strategic Policy guidelines for development of the communications sector

- **The Tanzania Communications Regulatory Authority (TCRA)**; responsible for regulation of Postal, Broadcasting and Electronic Communications sectors

- **Operators** are responsible for building, maintaining info-communication infrastructure, providing efficient and affordable ICT services to Tanzanians (rural & urban)
Sector Arrangement

GOVERNMENT
- Policy issues

REGULATOR
- Licensing & regulation

OPERATORS
- Provision of services

MINISTRY OF INFRASTRUCTURE DEVELOPMENT
MINISTRY OF INFORMATION, SPORTS & CULTURE
TANZANIA COMMUNICATION REGULATORY AUTHORITY
CCC
INVESTORS/OPERATORS
TANZANIA COMMUNICATION REGULATORY AUTHORITY

- SEVEN BOARD MEMBERS
- BOARD CHAIRMAN
- VICE BOARD CHAIR - CHAIRS CONTENT COMMITTEE
- DIRECTOR GENERAL
- 4 OTHER BOARD MEMBERS

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Sector Legislations

- Tanzania communications Regulatory Authority Act No. 12/2003;
  Complemented by 14 regulations

- Tanzania Communications Act No.18/1993;
- Tanzania Broadcasting Act No.6/1993;
- Universal Communications Service Access Act #12/2006
Sector Legislations (cont)

There is a current initiative to converge the Communication Act no. 18/1993 and Broadcasting Act no. 6/1993 to taking consideration convergence of services and institutional framework.