Between two stools: Broadband development in South Africa

Alison Gillwald

Acorn-Redecom, Mexico, 5 September 2009

This report is presented as received by IDRC from project recipient(s). It has not been subjected to peer review or other review processes.

This work is used with the permission of Research ICT Africa.

© 2009, Research ICT Africa.
Network of researchers conducting ICT policy and regulatory research in 20 African countries across the continent in the absence of data and analysis required for evidence based policy.

Policy research based on series of supply and demand side research undertaken by 20 country African research network which is triangulated with a telecommunications regulatory environment survey.
While voice divide reducing, the Internet gap between Africa and rest of world increasing expanding...

South Africa, way ahead of sub-Saharan Africa, but way behind global average and flattening out...

Source: Orbicom Infostates 2005
Average retail price for basic broadband in Sub-Saharan Africa $366 p/m vs. $40 in Europe (and India)....
South Africa lags other developing and emerging economies in terms of ICT adoption: Network Readiness Index (NRI) and Digital Opportunities Index (DOI).

Source: Mariscal, UCT GSB, 2009
Early policy reform (1995) seen little of the anticipated benefits

- 1994 - First democratic elections (Monopoly operators and 2 new GSM licensees)
- 1995 - White Paper on Telecommunications (facilities vs. service based competition)
- 1996 - Telecommunications Act (est. of regulator and create conditions for privatisation of incumbent, and further mobile liberalisations, liberalised ISP/VANS market, but must use Telkom facilities)
- 2000 - ICASA Act - creation of joint telecom + broadcasting regulator
- 2001 - Telecommunications Amendment Act (SNO + feasibility of further mobile competition - 4th operator)
- 2002 - Electronic Communications & Transaction Act
- 2005 - Electronic Communications Act (effective 2006)
- 2007 - Infraco Act (infrastructure)
Market structure/conduct

- Despite horizontal licensing regime, operators remain vertically integrated with same patterns of dominance

- Anti-competitive incentives in market remain requiring constant adjustment by regulator

- Regulator largely ineffectual due to constraints on authority and lack of competencies.
Regulation

- Resource intensive access regulation
- Human capability and institutional capacity constraint
- Independence and accountability
- Information asymmetries
Telecommunications regulatory environment (2006/7)
With negative outcomes for sector investment: FDI in telecom in Nigeria vs. South Africa.
Market performance as policy outcomes

- Inefficient and expensive
- Lack of access to full range of service
- High cost of services
- High input cost to business
- Not globally competitive
- Backbone competition in metropolitan areas primarily
- Regional backbone undeveloped (other than submarine cable)
OECD residential fixed-line basket: medium usage

OECD residential fixed-line basket: low usage

Canada, Norway, Denmark, USA, Ireland, Spain, Netherlands, Germany, Luxembourg, Iceland, Sweden, Switzerland, UK, Japan, Portugal, Austria, New Zealand, Australia, Korea, Italy, Belgium, France, Finland, Greece, Mexico, Hungary, Slovak Republic, Czech Republic, Poland, Turkey, South Africa.
Termination Rates April 2009 MTR

- India: 0.04
- Cyprus: 0.24
- Austria: 0.54
- Sweden: 0.55
- Finland: 0.59
- Kenya: 0.62
- Tanzania: 0.63
- Botswana: 0.71
- Slovenia: 0.77
- France: 0.83
- Uganda: 0.86
- UK: 0.93
- Namibia: 1.06
- South Africa Peak: 1.25
- South Africa Off peak: 0.75

(researchICTafrica.net)
Broadband subscribers per 100 inhabitants, 2008
Broadband penetration (2007)

1. Sweden
2. Netherlands
3. Korea
4. Canada
5. United States
6. Japan
7. Ireland
8. Spain
9. Argentina
10. Mexico
11. Brazil
12. Morocco
13. South Africa
Internet usage in South Africa

50% know what the internet is, but only 5% use it

Where do they use it?

- Cyber/Internet, Cafe: 45.9%
- Library: 6.6%
- At home: 5.4%
- Using a mobile phone: 32.4%
- At another person's home: 29.2%
- At work: 3.8%
- At an educational institution (school, university, etc.): 19.9%
OECD HHI Scores 2008

Source: RIA Communications Sector Performance Review 2009
State response creation state broadband company, concentrating state ownership in sector...
Incorporation of power and transport communications networks into new state owned broadband company...

- Broadband Infraco Act 33 of 2007, but as at August 2009 it had still not been licensed by the regulator, ICASA.
- Infraco describes itself as “state led intervention to rapidly normalise telecoms market efficiency by commoditising only those part of infrastructure that impeded private sector development and innovation in telecom services and content offerings.” (Infraco Annual Report 2008).
- Practically the intervention has two components.
  - National long distance fibre optic network, building on the original fibre optics assets deployed by the power utility Eskom’s power transmission liens and the railway infrastructure of Transnet.
  - The international marine cable network between South African and the United Kingdom, in competition with the club consortium monopoly cable, SAT 3.
Network investment and development...

- Transnet and Eskom 6000km extended to 11750 km
- Four year agreement with Neotel to provide backbone to their metropolitan network.
- Costed as utility - ROR.
- Private funders withdrew - IDC (state funding agency) 26% and state 74%.
- Total investment R1.4billion ($140 million) R140m ($14m equity) R650m ($65m debt).
- R90m committed to West African Cable Submarine (WACS).
Policy and regulatory issues arising

- Lack of state policy and regulatory co-ordination (managed liberalisation in sector with infrastructure development as part of developmental state).
- Clash of utility and sector regulation cultures
- Concentration of state ownership in sector and potential conflict of interest
- Access to backbone
- Pricing - ROR - anti-competitive, low cost of capital
- Squeeze out private investment
- Quality
- Regional integration