Good intentions, poor outcomes: SA telecom reform in review

Alison Gillwald

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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.
Household communications ownership

* Results for Zambia and Nigeria are extrapolations at the national level but are not nationally representative

RIA 2007/2008 Household and Individual User Survey
Policy, regulation, market linkages
Policy/Law

- ECA - no guiding policy, no vision for sector
- ICASA Act - Ministerial veto power removed but Council appointment powers
- Extension of state state ownership and conflicts of interest
- Ministerial directives
- Relief from the courts - Altech declarator but regulatory bottlenecks may nullify gains
Market structure/conduct

- Despite horizontal licensing regime, operators remain vertically integrated with same patterns of dominance
- Anti competitive incentive in market remain requiring constant adjustment by regulator
- Regulator largely ineffectual due to constraints on authority and lack of competencies.
OECD HHI Scores 2008

Source: RIA Communications Sector Performance Review 2009
State ownership

Source: RIA Communications Sector Performance Review 2009
Regulation

- Resource intensive access regulation
- Human capability and institutional capacity constraint
- Independence and accountability
- Information asymmetries
Telecommunications regulatory environment (2006/7)
### Telecommunications regulatory environment

<table>
<thead>
<tr>
<th>Fixed line sector</th>
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<tbody>
<tr>
<td>Market entry</td>
<td>Ineffective</td>
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<td>Access to scarce resources</td>
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<td>Universal service obligations</td>
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<th>Mobile sector</th>
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<td>Market entry</td>
<td>Neither effective nor ineffective</td>
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<tr>
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<td>Highly ineffective</td>
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<td>Universal service obligations</td>
<td>Neither effective nor ineffective</td>
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Institutional design and delivery

- Statutory process and delays
- Licensing - some resolution in the courts
- Interconnection - not concluded - Chap 10
- Essential facilities - Hearings March 2008
- Spectrum - revised band plan delayed
- LLU - delayed resume in November
Comparative FDI: SA vs Nigeria

Source: RIA Communications Sector Performance Review 2006
Market performance as policy outcomes

- Inefficient and expensive
- Lack of access to full range of services
- High cost of services
- High input cost to business
- Not globally competitive
Mobile subscribers - 65 million

Source: RIA Communications Sector Performance Review 2009
Vodacom South Africa

MTN South Africa
Mobile phone users

16+ with mobile phone or active sim: 62.1%
16+ with duplicated sim cards: 10.8%
16+ without mobile phone and active sim and willing to pay R58.40 (US$ 5)* or more: 17.9%
Share of prepaid users: 78.6%

Average monthly WTP for mobile expenditure of non-users that would be interested in getting a mobile phone - R 46.70 (US$ 4.40)*

* At Dec 2007 prices and exchange rates
Have you used a public phone in the last three months?

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>without mobile phone or active sim</td>
<td>43.8%</td>
<td>56.2%</td>
</tr>
<tr>
<td>owning a mobile phone or active sim</td>
<td>41.1%</td>
<td>58.9%</td>
</tr>
<tr>
<td>total users</td>
<td>42.2%</td>
<td>57.8%</td>
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</table>

Average monthly public phone expenditure – R 34.82 (US$ 3.24)*

* Exchange rates at Dec 2007

RIA 2007/2008 Household and Individual User Survey
Mobile and fixed line traffic (mins)

- Fixed Originated (mins)
- Mobile Originated (mins)
Source: RIA Communications Sector Performance Review 2009
Termination Rates April 2009

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
South Africa
Peak
Telkom Residential vs. Business subscribers

Source: RIA Communications Sector Performance Review 2009
Urban share of residential fixed lines

- Uganda: 100%
- Mozambique: 100%
- Botswana: 67%
- Namibia: 73%
- Cameroon: 100%
- Benin: 92%
- Ghana: 93%
- Kenya: 54%
- Cote d'Ivoire: 85%
- Burkina Faso: 95%
- Ethiopia: 69%
- South Africa: 96%

RIA 2007/2008 Household and Individual User Survey
Households with a working fixed line

- Households with working fixed line – **18.2%**
- Urban share of total working fixed lines – **95.7%**

- Average monthly fixed line expenditure – **US$ 31.31**
- Average monthly price a household without fixed-line is willing to pay for the service – **US$ 3.05**

RIA 2007/2008 Household and Individual User Survey
OECD residential fixed-line basket: medium usage

Source: RIA Communications Sector Performance Review 2009
Telkom Data vs. Voice Revenues

- Data revenues
- Fixed to fixed local revenues
- Fixed to fixed long distance revenues
- Interconnect revenues

Source: RIA Communications Sector Performance Review 2009 - Telkom Annual Reports
OECD Internet portal with SA collated data

Broadband subscribers per 100 inhabitants, 2008

- Denmark: 37.2
- Netherlands: 35.8
- Norway: 34.5
- Switzerland: 33.5
- Iceland: 32.8
- Korea: 32.8
- Sweden: 32.0
- Finland: 32.0
- Luxembourg: 30.7
- Canada: 30.0
- United Kingdom: 29.0
- Belgium: 28.5
- France: 28.1
- Germany: 28.0
- United States: 27.4
- Australia: 25.8
- Japan: 25.4
- New Zealand: 23.6
- Austria: 21.9
- Spain: 21.6
- Ireland: 20.8
- Italy: 20.6
- Czech Republic: 17.2
- Hungary: 16.8
- Portugal: 16.0
- Greece: 13.5
- Slovak Republic: 11.5
- Poland: 10.5
- Turkey: 7.8
- Mexico: 7.2
- South Africa: 2.8

Source: RIA Communications Sector Performance Review 2009
Source: RIA Communications Sector Performance Review 2009 - Annual Reports, World Wide Worx
Range of OECD broadband (Sep 2008) and SA ADSL prices (Aug 2009) per megabits per second of advertised speed, in USD PPP

Data from OECD Communications Outlook, SA pricing data from Hellkom.co.za

Source: RIA Communications Sector Performance Review 2009
Range of OECD broadband (Sep 2008) and SA ADSL prices (Aug 2009) per megabits per second of advertised speed, in USD PPP

Senegal $6000 per megabit per month on SAT 3, SA $11000 per megabit per month (2008)

Source: OECD Communications Outlook, SA pricing data from Hellkom.co.za
Leased line comparison - South Africa vs. OECD - PPP(US$)

Source: RIA Communications Sector Performance Review 2009
Telecom ownership

RIA 2007/2008 Household and Individual User Survey

* Results for Zambia and Nigeria are extrapolations at the national level but are not nationally representative
SA Internet access, usage and familiarity

- Households with a computer at home: 14.8%
- Households with a working internet connection: 4.8%
- Know what the internet is (16+ yrs): 15.0%
- Use the internet (16+ yrs): 15.0%
Internet usage

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

RIA 2007/2008 Household and Individual User Survey
Outcomes - Presidential reviews

- Policy failure - strategies of state ownership/protection - privatisation, SNO, Infraco, effective duopoly in mobile.
  - Remedy: increased competition but requires more effective regulation OR effective access regulation

- Regulatory failure: bound by onerous statutory requirements demands/time-spans, absence of capacity and disabling law
  - Remedy: Capacitate regulator, amend law

- Market failure: Fixed, no competition, no access mobile no effective regulation of effective duopoly, high prices
  - Remedy: enable entry of low ARPU revenue, low margin, high volume models.

- Services Internet: no adequate backbone investment/pricing
  - Remedy: Enable market entry with service neutral licensing, open access networks.

Remedy: Enable market entry with service neutral licensing, open access network
Conclusions

- Review of bottlenecks in ECAct.
- Policy review - market structure - state ownership - broadband
- Institutional arrangements - remove conflicts of interest
- Institutional design - reduce number on Council and professionalise, increase regulatory staff/skills
- Create conditions conducive to investment through accountable capacitated institutions, certain regulatory environments and flexible policy frameworks
- Remove protectionist strategies, open markets to competition to meet pent up demand, while developing strategies for backbone investment
- Create enabling regulatory environments through removal of barriers to entry, service neutral licensing, cost-based \( \text{\textbackslash} \) (removal of artificial priced asymmetrical termination), prevention of abuse of market dominance
- Open access regime for optimal use of networks and facilities and spectrum to enable entrepreneurship and innovation

- Development of dedicated human capital strategies for sector institutions
- Targeted, competitively implemented universal services strategies rather than scattergun approach