Data Service Market Inquiry

Dr. Onkokame Mothobi, Senior Researcher
Research ICT Africa, South Africa
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Research ICT Africa - Evidence based policy

**BIG DATA**
- Digitisation, mass processing, storage, analytics from large public/private data sets (Privacy/surveillance)
  - cost reductions
  - time reductions - real time
    - planning
    - evaluating

**ADMINISTRATIVE DATA**
(Supply Side/regulated)
- Data from operators, service providers, equipment suppliers
- ICASA/ITU (Indicator Expert Group)
  - (Demand side)
- Nationally representative User Survey
  - (ZADNA/IDRC)
- ITU/UNCTAD Partnership on Measuring Information Society

**NATIONAL STATISTICAL DATA**
(StatsSA)
- Macro-economic/
- Census/labour force/
  households survey
- ICT Satellite Account
• **Voice/ SMS basket**: the cost of 30 prepaid mobile voice calls for a total of 50 minutes, distributed between destinations and ‘peak’ periods, added to that of 100 SMSs, and divided by the subscription value for the period of one month.

• **Data baskets**: the cost of 1 GB, 500 MB and 100 MB prepaid mobile data bundles, valid for monthly, weekly and daily periods.
Are data prices in South Africa high?

- The cost of cheapest of 1 GB of data (international standard indicator) is used to compare prices in South Africa with other African countries.

- South Africa performs poorly in the RAMP index, coming 35th of out of 49 African countries.

- The cost of cheapest 1 GB of data in South Africa is USD 8.28 (ZAR 99) seven times higher the cost of 1 GB in Egypt (USD 1.13) and nearly three times the cost of same data in Ghana, Kenya and Nigeria.

- Though this is not how data is used in pre-paid markets – very high value low cost products that make ‘effective’ price much lower.

- But best value in >10GB products and post paid products that are the best value but not affordable to majority of citizens.
Comparing apples with oranges – price vs QoS

- In a regulated data environment, a number of other important factors that have to be considered when comparing price.
- Licensee obligations – coverage, quality of service
- And progress towards policy objectives - policy outcomes
- QoS – increasingly important in broadband environment - QOS flip side of price.
  - Penetration (access)
  - Usage (intensity of use)
  - Quality of service
- Even price sensitive users choosing to pay premium for quality services (or just to get signal in their area).
SA’s Cheapest 1GB data Compared to Africa’s Top Performers

FIGURE 4: SA’S CHEAPEST PREPAID MOBILE 1GB BASKETS COMPARED TO AFRICA’S TOP PERFORMERS (USD)

Source: RAMP Index, 2018
# Benchmarking SA against large African Markets

## Table 1: Benchmarking South Africa against Ghana, Kenya and Nigeria

<table>
<thead>
<tr>
<th>Affordability</th>
<th>Comparison average</th>
<th>Traffic Light</th>
<th>Country-level indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile prepaid 1GB basket (USD)</td>
<td>2.64</td>
<td></td>
<td>8.28</td>
<td>RIA, 2018</td>
</tr>
<tr>
<td>Dominant operator: mobile prepaid 1GB basket (USD)</td>
<td>4.06</td>
<td></td>
<td>10.94</td>
<td>RIA, 2018</td>
</tr>
</tbody>
</table>

*Source: Competition Commission, South Africa*
Despite high prices, Internet penetration in South Africa is higher than any other surveyed African countries.

But lower than Argentina, Colombia, Paraguay and Peru and Guatemala.
But Internet remains unaffordable to the low-income earners

- The 2017 RIA After Access Survey shows that low-income earners pay a significantly high proportion of their disposable income to access telecommunication services.

- The cost of Internet or the affordability divide between the low-income and high-income South Africans is creating barriers to connecting the low-income earners.

- The Survey shows that almost 50% of South Africans do not use the Internet and further these 50% are those in the bottom of the pyramid.
Cost drivers

- **High rand-dollar exchange rate**: Which affects equipment import required for the constant upgrading of mobile network.

- **Increasing costs of key inputs**: Power in particular has inflationary effects on data prices.

- **In the absence of high-demand spectrum being released to operators for 4G**: High bandwidth services are also not being deployed in the cost-effective manner which further exacerbate the high cost of data.

- **Regulatory issues**: Failure of ICASA to complete market review to determine dominance in wholesale markets, which is highly imperfect by nature, does not produce the intended competitive results – wholesale facilities and IP transit costs result in high telecom input costs for service providers and corporates.
Competition in fibre network roll-outs in South Africa was initiated by the high court ruling that ended Telkom’s monopoly in 2005.

The appointment of Vumatel to provide fibre to home (FTTH) in Parkhurst intensified competition in the FTTH market.

Though the number of players in this market has increased to 35, the main players: Vumatel, MTN, Vodacom and Openserve owns 80% of the market.
The south African mobile market is dominated by two players: Vodacom and MTN.

Using the HHI the market is found to be highly concentrated which an index higher than 2500.

Despite smaller players (Cell C and Telkom) adopting a number of competitive strategies they have failed to gain substantial market share.
Pricing strategy and competition

MTN offers the cheapest 500 MB data bundles for daily (ZAR 50) and weekly (ZAR 55) periods, but Telkom again offers the cheapest 500 MB monthly bundle at ZAR 69. Similarly, MTN offers the cheapest 1 GB weekly bundle (ZAR 70) but does not compare well in the 1 GB monthly comparison. Vodacom’s ZAR 149 promotional package (2 GB) offers the most value with an effective rate of ZAR 74.50 per GB, but Telkom’s 1 GB is still the cheapest at a nominal price of ZAR 99.

- Rain now offers the cheapest tariffs across the board: a 100 MB bundle will cost a customer ZAR 5, significantly less expensive than the previously lowest ZAR 29 100 MB offering of Cell C, MTN and Telkom. Rain’s 500 MB costs less than half that of Telkom’s 500 MB bundle and also out-competes its 1 GB bundle price by being just about half the cost (ZAR 50).
Mobile operators have made significant network infrastructure investment to be able to carry vast volumes of data.

Vodacom coverage - 3G - 99.97%, 4G (80%)

MTN coverage - 3G - 98%, 4G (80%)

Competition in the mobile market is no longer about pricing only, quality is more critical especially in the data market.

Big operators are likely to win this battle as they are able to re-invest revenues gained from their large market shares.
Quality adjusted prices

Represents the ratio between the 1GB data basket and the average download and upload speeds, shows that the two dominant operators Vodacom and MTN offer higher quality, respectively.

In the same period Telkom’s quality was the lowest. However, since Q1 2016, it seems that smaller operators improved their quality, catching up with dominant operators in Q2 2016 (in line with increased network investments). Vodacom SA’s high prices are accompanied by higher Internet speeds, compared to MTN SA and Cell C, which are performing less well on the measure based on average download/upload speed (in Mbps) divided by 1GB basket costs.
Quality and Coverage

- South Africa is connected to six submarine cables.
- Telkom, Liquid Telecom South Africa (previously Neotel) and Broadband Infraco have made considerable backbone and backhaul investment over the past decade, giving South Africa the most extensive coverage in the continent.
- Supplemented by recent expansion of fibre networks in larger metropolitan areas and complementary investments in secondary intercity routes (high levels of redundancy).
South Africa performs well in comparison to other African countries.

Download speeds in South Africa have been improving due to innovations and technological developments.

A development which can be associated with investments by telecommunication
Recommendations

• It is clear from supply demand side analysis that even if effectively regulated, prices are not affordable to majority of South Africans.

• Contradiction that even prices sensitive value quality of service and pay premium to be on highest quality network – regulate value for money. Beware of regulation (on timing, expiry that may inhibit product innovation/prices).

• Current national exclusive spectrum use licences and associated USO need to be reviewed
  • nationally allocated spectrum not in use in should be made available through low cost or licence-exempt spectrum for communities, non-profit providers or micro-networks;
  • remove Universal Service levies, rather enforce spectrum linked rollout requirements
  • use accumulated funds for public and private extension of free public Wi-Fi to towns and rural areas with the connection of all public buildings as per SA Connect (national anchor tenancy incentives)

• ICASA must regulate wholesales in markets where there is dominance as this is critical to creating the fair and competitive environment required to produce lower prices, better quality and range of services;

• create incentives/regulate where necessary for infrastructure-sharing and support complementary investments in broadband networks;

• review wholesale regulation in facilities and bandwidth markets - will reduce input costs for service providers and private networks

• Biggest barrier to getting online cost of smart devices - remove all excise duties on feature and entry level smart phones.