

Submission to the Public Hearings for the Data Services Market Enquiry

Dr David Harrison
Chief Executive Officer
DG Murray Trust
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The DG Murray Trust is a South African grant-making foundation committed to developing South Africa's potential (www.dgmt.co.za). Its three main goals are to help ensure that: i) All children are on Track by Grade 4; ii) All Young People get their first Decent Job and iii), Together we build an Inclusive and Innovative Society. Among others, DGMT supports projects promoting early childhood development, prevention of nutritional stunting, reading and learning, navigation into the world of work and youth leadership.

It is our experience that the high cost of data inhibits access to essential resources for early learning, education and job mediation, among others. DGMT has conducted its own review of data costs inhibiting socio-economic development, and has identified specific strategies that will enable access and reduce the costs of social innovation in South Africa.

In summary

- Apartheid's structural barriers to development still drive poverty and marginalization in South Africa. These barriers continue to choke national development.
- Mobile technology provides an opportunity to leapfrog some of these structural barriers and build a more inclusive and innovative society. It could also reduce the costs of social innovation.
- This opportunity has been lost over the past decade in particular, as high data costs have excluded the poorer half of the population from access to information that could lower transaction costs and provide opportunities for learning and access to jobs.
- In practice, poorer people have been discriminated against through the cost structures of data bundles.
- We must now seize the untapped opportunity of mobile for development, by:
 - Zero-rating the mobile applications of public benefit organisations and government, with costs offset by network operator statutory obligations (Socio-economic development or universal access obligations);
 - Making the unit costs of pre-paid and contract prices the same;
 - Ensuring the same unit price for all bundles, regardless of size.
 - Suppliers would still compete on unit prices, or bundle configurations not determined by pre- or post-payment or bundle size.
- In the interests of both accountability and improvement, Government should provide a full account of the real costs and benefits of universal service and socio-economic development obligations imposed on network operators.

1. Structural barriers continue to choke national development

Apartheid's social and economic divides persist and continue to choke national development. According to Statistics South Africa, in 2015, 30.4 million South Africans (>55%) lived below the poverty line of R992 per month.¹ On the other hand, 10% of South Africans own 90-95% of wealth. The poorest 50% of the population have no wealth at all, implying extreme polarization.²

Consequently, poorer people are directly prejudiced by

- Massive information gaps for opportunity seekers (work, study and access to bursaries);
- Disproportionate and generally futile spending on opportunity-seeking;
- Weak service delivery through insufficient support and feedback (ECD centres, schools, clinics).

Indirect effects stem largely from a sense of exclusion from real and imminent possibility, which contributes to numerous causes of social harm (including rates of crime, alcohol and drug abuse)³.

The polarized nature of income and wealth in South Africa has significant implications for efforts to reduce the cost of data. It means that incremental reductions in the price of data will not achieve commensurate gains in access and utilization. There is a market failure that requires either specific government intervention, or recognition and sufficient response from network operators.

2. Mobile technology provides an opportunity to leapfrog some of these structural barriers and build a more inclusive and innovative society

Mobile technology provides almost singular opportunity to release the chokes on national development and social innovation over the next decade. Mobile technology can rapidly address the massive gaps in access to information and services in poorer communities reaching job seekers, parents and practitioners for early childhood development, parents and teachers for education, and those requiring access to social welfare services.

¹ Statistics South Africa (2017). Poverty Trends in South Africa: An examination of absolute poverty between 2006 and 2015. Report 03-10-06. <https://www.statssa.gov.za/publications/Report-03-10-06/Report-03-10-062015.pdf>

² Orthofer A (2016). Wealth and inequality in South Africa: Evidence from survey and tax data. RED13x3 Working Paper 15. SALDRU, University of Cape Town.

³ Weber E, Hsee C (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. Management Science 44(9): 1205-1217

There is significant demand for mobile information and communication services, with very high rates of utilisation of data-light services but the use of relatively data-rich applications is limited by the high costs of connection and data transfer. There is opportunity to fast-track user cost reduction for specific socio-economic development initiatives.

The DG Murray Trust and its funding and implementing partners have together designed and tested a number of mobile platforms for development. These mobile platforms include:

- **Nal'ibali** – a national reading-for-joy campaign (including mobisite) that provides access to reading material in six of South Africa's official languages (Afrikaans, English, isiXhosa, isiZulu, Sepedi, Sesotho) and is targeted specifically at children; where literacy begins. The Nalibali MobiSite enables users to have personalised access to reading materials. Nalibali aims to inspire everyone to get involved in telling and reading stories everywhere – at home or at a reading club, on the bus or the train, at clinics or at school. Average utilization of 13,500 new users per month. <http://nalibali.mobi>
- **CareUp** – resources for practitioners and young parents on early learning and parenting for 4-5 yr olds) <http://careup.mobi>
- **FunDza** – a mobile platform for teenage readers who download chapter-by-chapter and can publish their own stories. Current readership about 60,000 per month. <https://live.fundza.mobi/>
- **SmartStart** – an early learning social franchise of over 3,000 practitioners and 35,000 children who need continuing training and support (www.smartstart.org.za)
- **JobStarter** – a mobile platform for workseekers (combining information, on-line training and work links). It currently has over 40,000 users a month. (<http://jobstarter.co.za>)
- **Activate! leadership** – a network of 3500 young innovators across South Africa who require mentorship and the benefits of networking. (www.activateleadership.co.za).

Outside of DGMT-supported initiatives, there are several large-scale mobile platforms providing essential information. They include

- Pregnant women and young mothers (**MomConnect** – sms and whatsapp-based – 800,000 women per year)
- **Hi4Life** provides South African women and their partner's access to relevant, up-to-date health information on HIV (hi4life.co.za).

These are just a few examples of the type of mobile applications that can help overcome the information and communication divides and promote development. Our experience is that the biggest constraint to their use is the cost of mobile data.

3. **Opportunity has been lost over the past decade in particular, as high data prices have excluded the poorer half of the population from access to available information**

Data prices are simply exclusionary – by a long way

In its Broadband Policy published in 2013,⁴ Government states: “In line with the broader vision of the NDP, the 2020 vision for broadband is that by 2020, 100% of South Africans will have access to broadband services **at 2.5% or less** of the population’s monthly income.”

With just over a year to go, over half of South Africans would currently have to spend up to 15% of their income to buy a modest 1GB of mobile data. Even if the cost of 1GB of prepaid data (currently ±R150/GB on most networks) is divided by three and reduced to R50/1GB, this remains entirely unaffordable to the majority of South Africans. The actual cost is much higher. More than one Mobile Network has aggressively been marketing a 30MB bundle for R12, a price point that those living in poverty could possibly afford. Yet, this equates to R400/GB of data or over 40% of the monthly income of > 30 million South Africans. A best-case scenario for reduction in data prices (R50/GB - <https://mybroadband.co.za/news/cellular/234760-mobile-data-could-be-r50-per-gb-mtn.html>) would still require individuals to spend an unaffordable 5% of their income on mobile data alone, provided they can afford to buy larger bundles of data. Until mobile data prices fall to below R15/GB – regardless of the amount of data that is bought at a time – mobile data will remain unaffordable to the majority of South Africans, national development through communication will remain hamstrung and the digital divide is unlikely to be closed.

Network operators charge the poorest South Africans disproportionately high rates

- Wealthier individuals that qualify for post-paid contracts pay approximately half the cost of prepaid users for 1GB of mobile data and receive even greater discounts when purchasing more data. Poorer individuals, who pay R12/30MB (equal to R400/GB) often pay 10-30 times more for their data than wealthier individuals that, for example, can afford to buy 100GB of data (valid for 1 year) at a time for R16/GB.
- South Africans living in poverty are more likely to run out of data and be exposed to excessive out-of-bundle data rates. Mobile data operators have been known to promote certain data bundles that expire within a few days, making it more likely that users will end up using very expensive out-of-bundle data, potentially without their knowledge.
- Consumers of monthly data bundles lose their unspent data at the end of each month. This constitutes a waste for those users who seek to parse out their data requirements for when necessary. ICASA has stated that there must be a rollover of data before it expires, it has elected not to prescribe the required rollover period.
- While mobile operators try to appear to reduce data prices through special offers, these offers are often complicated, difficult to understand and redeem, designed as to not be easily comparable to other offers, are often temporary in nature and require extensive effort on the part of the user. Prepaid mobile offerings can be highly confusing, even to the most astute users.

⁴ Dept of Communications. South Africa Connect: Creating Opportunities, Ensuring Inclusion. South Africa’s Broadband Policy, 20 November 2013, p15

The specific advantage of mobile for national development has been largely squandered

Furthermore, it is our view that the specific advantages of mobile technology i.e. to be accessible right in people's homes at relatively low cost, has been largely squandered in the implementation of the universal service and socio-economic development (SED) obligations of network operators.

While government spends tens of billions of Rand to install an ever-expanding fixed data network to provide South Africans with internet access at clinics, schools and other selected nodes, the majority of South Africans are still not be able to afford to access the internet in the safety and comfort of their own homes. In particular, this has meant that the over 50% of young people aged 15-34 years who are unemployed have no regular access to the internet – which could be their only real point of connection to interactive sources of information outside of their immediate community.

Network operators have been required to provide connectivity, hardware and software to a targeted number of schools. Given the difficulty of sustaining hardware and software in public facilities, and with few exceptions, we contend that this has resulted in massively inefficient expenditure. Unfortunately, the full costs and benefits of the implementation of universal service and socio-economic development obligations on network operators have not been made public. Thus we stand to be corrected, but there appears to be little to show for the substantial investments made by network operators in this regard. We can no longer afford to throw any money down the drain.

A further consequence of high data prices has been to keep the costs of social innovation through mobile technology unsustainably high. The result has been that investors in social innovation, including the DG Murray Trust, have been reluctant to fund new innovations with the prior knowledge that user numbers will plateau quickly and the applications will become unsustainable. Even the sustainability of critical large-scale initiatives such as MomConnect (providing weekly sms messaging to pregnant mothers) is currently under threat.

The fundamental question that was either never asked or ignored in the framing of these obligations was: *How can the specific advantages of mobile technology be used most effectively in expanding access to digital technology for national development?*

4. Recommendations

We fully endorse the call to reduce the general cost of data in South Africa. It will improve access to and increase the utilisation of data. However, given the extremely polarized income patterns in South Africa, even an across-the-board halving of the cost of data will not be sufficient to expand access for the poorest half of the population. There are no easy solutions,

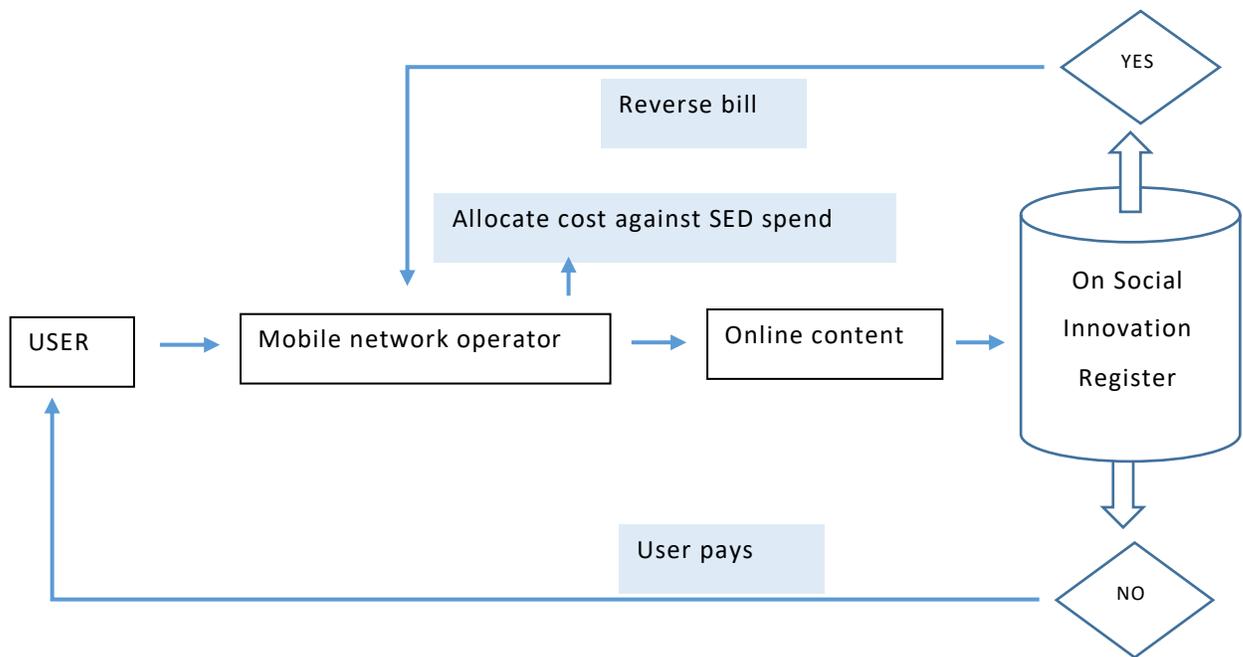
but we must start to implement specific, pro-poor strategies to expand access to digital information.

4.1 Zero-rate mobile data costs for services provided by PBOs and government

We propose that all mobile data services, offered by *registered* Public Benefit Organisations (PBOs) and government entities that promote socio-economic development should be zero-rated to the user. This will be managed through a Social Innovation Register (SIR) where approved PBO’s would be able to provide users with free mobile data access to their ICT4D services. The Social Innovation Registry will be kept small, registering bona fide NPOs and monitoring content use to ensure no abuse of the system.

The below diagram shows a simple overview of the operating model of the Social Innovation Register and proposes the roles of key stakeholders to ensure its successful implementation.

Figure 1 Proposed structure of zero-rated mobile services for PBOs and government



The technology for zero-rating for users already exists in network operators, both in supporting specific non-profit projects and in commercial partnerships. In partnership with the DG Murray Trust, the new network operator RAIN has already started to implement zero-rated services for public benefit organisations. We have found that it is possible to achieve zero-rating of specific services of the PBO, while alerting the user to paid-for data when they leave the zero-rated site.

Similarly, the Group CEO and EXCO of MTN has committed to implement zero-rating of public benefit organisations, but this is yet to be implemented. We will be approaching the other network operators shortly. The Board of the DG Murray Trust has made available an amount of R10 million to initiate and support the social innovation registry, while it becomes embedded within the systems and financing frameworks of universal service obligations.

4.2 Specific pricing strategies to stop poorer consumers being disadvantaged and address market failure

- Make the unit price of pre-paid and contract data the same
- Ensure the same unit price for all bundles, regardless of size. Suppliers would still compete on unit prices, or bundle configurations not determined by pre- or post-payment or bundle size.
- Data should also be rolled over for at least 3 months to allow for changing usage patterns – no minimum roll over period is currently specified by ICASA.
- Ensure effective implementation of current requirements that users are notified when 50%, 80% and 100% of their data is used.
- Require that prepaid mobile data offerings and data bundles are consistent, clear, easy to understand and comparable between mobile networks.

2.3 Government should provide a full account of the real costs and benefits of universal service and socio-economic development obligations imposed on network operators.

In the interests of both accountability and improvement, Government should make available a review of the benefits and financial costs of the implementation of mobile network operator universal service (USO) and socio-economic development (SED) obligations. This should serve as the basis for optimizing the use of these funds going forward.

Thank you for the opportunity to make a submission to the Data Services Enquiry.

Dr David Harrison
DG Murray Trust
021 670 9840
www.dgmt.co.za