

Internet for the poor

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Why don't most South Africans use the Internet? The most common answers, if you ask them, are: a lack of access (to devices like computers or smart phones, and to networks that you need to connect), not knowing how to use the Internet and the costs of using it¹.

Even amongst those who do go online, research shows that for those on low incomes, the Internet, for them is a rationed resource offering something far less than the all-encompassing network of information, communication and entertainment that richer users have at their fingertips. Instant messaging using tools such as WhatsApp is hugely popular because it actually saves money – it's much cheaper than sending SMS texts - but video and other 'rich media' is rationed because of data costs, and to a lesser extent because of slow connectivity. In other words the poor experience a poor woman's or poor man's Internet.

South Africa has a national policy on broadband², 'South Africa Connect', approved by Cabinet in December 2013. This aims not only to enable more people to connect, but to increase the speeds at which they connect. It sets "ambitious but realisable" targets - 90% broadband connectivity by 2020. By next year (2016), according to the policy, at least half the population should be using broadband³

¹ de Lanerolle, I, The New Wave. University of Witwatersrand, 2012, p.20 available at <http://www.networksociety.co.za/internet-report.php>

² 'SA Connect: Creating opportunities, ensuring Inclusion. South Africa's Broadband Policy', Government Gazette, 6th December 2013, No. 37119, . Available at <http://www.gpwonline.co.za>

³ The policy defines the minimum broadband speed as 5Mbps and above. For international comparison, its worth noting that the FCC, the telecommunications regulator in the USA, recently adopted a definition of broadband as being 25Mbps and higher. By this definition there are very few broadband Internet users in South Africa.

Internet and 50% of schools, government and health facilities should be connected at speeds of 10Mbps.

The policy document doesn't only set targets. It includes a detailed, evidence-based analysis of the obstacles to reaching them and how those can be addressed. As it points out, the major block to accessing the Internet at broadband speed and at affordable cost, especially in urban areas, is the 'last mile' - the path that connects the user's device to the national and global Internet network. For most low income users, that path is mobile networks. More and more people have mobile phones that are capable of connecting to the Internet. Last year, MTN and Vodacom both introduced android devices at under R500. But paying for data - the fuel of the Internet - on mobile networks is very expensive. More than ten times more expensive than buying data if you have access to a fixed line (like an ADSL connection or, even better, a fibre link)⁴. So while mobile networks provide the most common means of getting online, in South Africa and in many African countries, it is, for now, much too expensive to offer affordable broadband for all.

So what actions or policies will enable and encourage affordable connectivity?

The way to lower prices is well known to regulators throughout the world: increase competition. But price competition between mobile operators has been limited - as evidenced by the major operators increasing their voice charges earlier this year. History shows that increasing competition between highly regulated and established mobile operators is very challenging. Another way of enabling more competition would be to increase the number of ways most people can connect. For the major urban areas at least, this is achievable. One route would be to 'unbundle' the copper line that Telkom has in many homes and allow competition in fixed-line. If the fixed-line ADSL prices fell, and especially if genuinely pay as you go internet services were introduced on fixed-line that didn't require long term contracts, this could provide a viable alternative to mobile networks in urban areas at least. The unbundling of fixed lines is envisaged in the legislation governing

⁴ Price comparisons of internet charges can be complex. However, for a household with an ADSL line, 3GB of data can be bought for R27 from Axxess for example. On a mobile network 3GB on CellC will cost R375 and on Vodacom over R450.

telecommunications but the regulations to enable it have never been completed so for the moment it doesn't seem likely to happen. Building fibre networks to the home (FTTH) is another option which in the last year had emerged in rich suburbs in some urban areas but more work will need to be done to make the costs of building these networks low enough to connect even middle income homes. Even if municipalities do create enabling environments for FTTH, there are limits to how far the private sector alone is likely to wire even urban working-class townships⁵.

But another low cost route to affordable broadband exists and has been proven: public wifi. In many major cities in the world, you can move almost continuously between public wifi networks. Because wifi uses unlicensed spectrum, there tends to be plenty of competition and because it can connect to the fibre infrastructure running through many cities, it can offer data at close to wholesale prices. South Africa's metros now have a lot of fibre cable buried underground that could be made accessible through public wifi. Tshwane has already shown this can be done on scale. Working with an NGO, the City has created 650 hotspots in the capital offering average speeds of more than 5Mbps with free access up to 200MB per day. The cost to the city is only R1 per GB of data. Tshwane is one of the few parts of the country likely to exceed the government's target to connect schools and government buildings by next year. And the private sector is also beginning to act. One company has more than ten wifi hotspots in Diepkloof, Meadowlands and Orlando in Soweto, offering 1GB of data for R19 or 15GB for under R100.

More than ten years ago, then President Thabo Mbeki made a speech in which he said: "Many of our own people ... do not ask about computers, telephones and television sets. They ask - when will we get a road..." But he went on to say: "They do not ask the question, which they should - when shall we reach the stage that the challenge will be to move forward towards the ever-expanding and all-round fulfilment of every African who enjoys a decent standard of living; who reads books; who participates in constructive recreation; who has mastered modern technology.." That stage is now. The Internet will not get roads built; it will not ensure every South

⁵ Dense middle and low income areas may be viable targets for FTTH. In Nairobi, and Harare low and middle income high density suburbs are being cabled by the private sector offering services at as little as \$10 per month.

African enjoys a decent standard of living or that every South African can reach their full potential. It is only a channel or path - like a road in fact - on which the tools needed to build those lives can be found. But increasingly, in South Africa and across the world, the Internet is the only place where what is required to access that life - educational and training resources, government information, and knowledge about job vacancies - can be efficiently acquired.

The SA Connect policy recognises that some combination of private and public actions will be needed to realise the targets it commits to. And so it urges the development of a 'shared common vision' between public and private sectors. At Wits, in July, as part of Wits Internet Week, the Vice Chancellor will host a roundtable meeting which the University hopes can contribute to the development of such a shared vision. It is urgently needed.

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