

GLOBAL INFORMATION SOCIETY WATCH 2008

Focus on access to infrastructure



Global Information Society Watch

2008



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Printed by

CinnamonTeal Print and Publishing
Printed in India

Global Information Society Watch 2008
Published by APC, Hivos and ITeM
2008

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ISBN: 92-95049-65-9
APC-200812-CIPP-R-EN-P-0058



Introduction

This report provides an update of ongoing and planned information and communications technology (ICT) initiatives in Nigeria, and suggests areas that deserve attention. Going by the series of activities since the last report on Nigeria (GISWatch 2007), it appears that the level of awareness within policy circles and the country at large has been raised. This report looks at two areas of ICT development in Nigeria: physical access to technology and human capacity training.

The new government of President Musa Yar'Adua came into power on 29 May 2007 and has initiated the review and/or reversal of some ICT policies and actions of the previous administration:

- Reversal of the initial agreement on issuing a licence to Nigerian Communication Satellite (NIGCOMSAT) Ltd. (Aluko, 2008).
- Review of the National Rural Telephony Project (N RTP) (Binniyat, 2007).
- Revocation of the sale of Nigeria Telecommunications Ltd. (NITEL) and its mobile subsidiary, Mobile Telecommunications Limited, to the Transnational Corporation of Nigeria (TransCorp) (Onyedika et al., 2008).
- Creation of two new ministries – the Ministry of Communications and Information Technology (MCIT) and the Ministry of Information – out of the Ministry of Information and Communications.
- Scrapping the Nigerian Broadcasting Commission (NBC), whose functions were to be transferred to the regulator, the Nigerian Communications Commission (NCC) (Nwankwo, 2008).

Physical access to technology

Nigeria boasts a broad base of ICT infrastructure, but access to the technology remains a critical factor in its effective contribution to the nation's development.

Among the available technologies are wireless broadcasting technologies (radio and television), fibre-optic cables, metallic cables, mobile networks and satellite. The Nigerian National Petroleum Company (NNPC), Power Holding Company of Nigeria (PHCN), NITEL and Globacom have provided the backbone networks.

However, Nigeria is still essentially a rural country: 70% of its 140 million people live in rural areas. It is therefore important to assess ICT infrastructural availability in this context.

In terms of access, the global system for mobile (GSM) has become ubiquitous in most Nigerian cities. This is one of the reasons why Nigeria now has the fastest growing telecoms market in Africa. By April 2008, Nigeria's GSM subscriber base had increased to 47,205,063. In 2001 the teledensity ratio was 0.73%, but this has steadily increased over the years to 33.72% in April 2008.

The remarkable growth in the industry has seen an inflow of USD 12 billion in foreign direct investment from 2001 to April 2008.¹ But the increase in GSM subscriptions has not been matched with improvements in service quality: entry costs and tariffs are still high, as are complaints about poor service delivery. This explains why the Nigerian regulator has given subscribers a voice through the Telecom Consumer Parliament. The "parliament" has complained of an inability to recharge airtime, a high rate of dropped calls, poor audio quality, call interference, non-delivery of short message service (SMS), multiple billing systems for SMS, and poor customer care services. The regulator had to impose bans and fines on some Nigerian telcos because they were taking on many more customers than their infrastructure could cope with, leading to the poor service quality (Wireless Federation, 2007). The regulator acknowledges these deficiencies, but says they are due to the inability of the service providers to expand and meet demand.

According to the NCC, mobile coverage also only extends to 20% of the country, covering largely urban and peri-urban areas. Out of Nigeria's 76.53 million phones, about 13 million are in rural areas, serving 80% of the population. To bridge this gap, the NCC plans to offer fixed wireless access (FWA) telephony licences, allocated on a geographical basis, to ensure coverage of underserved populations. Fixed wireless access is the use of wireless technology to replace copper to connect subscribers to the telephone network (Trinkwon, 1996).

The Nigerian regulator's decision in 2003 to unify fixed and mobile licences became a disincentive for fixed-line operators, because new unified access operators were not under any obligation to provide rural connectivity. This concern partly informed the awarding of a contract of USD 93 million in 2006 to the National Information, Communication and Education Programme (NICEP), in the high hopes that it would significantly reduce the rural-urban information gap in Nigeria. Galaxy Backbone, a private sector initiative, was mandated to use a combination of satellite and very small aperture terminal (VSAT) to facilitate infrastructural access

¹ Nigerian Communications Commission: www.ncc.gov.ng

for people in rural Nigeria (This Day, 2008). As at June 2008, the company has started the installation of 5,000 nodes for the VSAT network in the 36 state capitals and 774 local government areas.

It was also partly in recognition of the need to reach the underserved rural population that the government set up the National Poverty Eradication Programme (NAPEP)² through its Rural Communication Programme (RCP). The aim of NAPEP was to ensure that Nigerians in rural areas would be within one-day walking distance from a telephone. The regulator has also proposed a new licence category for fixed-line services in so-called short distance charging areas (SDCAs), or those with less than 1% teledensity, which may also be attractive to some private investors.

Besides these, the NCC now has two major strategies for the roll-out of broadband access throughout the country: the Wire Nigeria (WiN) project, through which it will subsidise the building of a core, high-capacity fibre-optic layer, and the State Accelerated Broadband Initiative (SABI). The Accelerated Broadband Initiative was designed to make broadband infrastructure available in all the 36 state capitals of the country as well as urban and semi-urban centres. The regulator's intention is to use SABI to provide wireless broadband services in Nigerian cities as widely as possible in order to stimulate demand and increase usage, at affordable prices. The WiN project will provide fibre-optic cable backbone infrastructure across the country to complement SABI.

Human capacity training

The level of awareness within the Nigerian government of the role ICTs can play in national development has gone past the stage of debating ICTs versus other development challenges, such as combating disease and poverty or ensuring food security and potable water. There is now an appreciation that connectivity is essential for development and that high-level human capacity training, such as is available through university education, is essential to meet these development challenges. Sustainable, long-term development is only possible where there are adequately trained scientists, engineers, doctors, and businesspeople, all products of Africa's universities (Juma & Moyer, 2008). The under-utilisation of the existing capacity of the wired and wireless networks in Nigeria is partly due to low skills, or lack of adequately qualified personnel, and the poor state of the nation's universities.

However, a major achievement has been the completion of Nigeria's ICT-for-development (ICT4D) draft policy document. This comprehensive document will go a long way to address the gaps in the levels of physical access to technology and human capacity training in Nigeria.

Action steps

Civil participation

The participation of civil society in ICT development is crucial. Yet the country's recent track record of civil participation is not looking good. Since its inception in 2004, the Freedom of Information Coalition has provided a voice for civil society in Nigeria. The GISWatch 2007 report for Nigeria mentioned that this coalition was at the forefront of lobbying for the passage of the Freedom of Information (FOI) Bill. The bill was unanimously passed by the Nigerian Senate on 15 November 2006, but suffered an unforeseen setback when the former president declined to support its enactment into law. The FOI – a cornerstone of democratic government in any country – had been pending before the National Assembly since 1999, and was re-presented to the new National Assembly in 2007. On 29 April 2008, the House of Representatives, for the fourth time in two months, refused to debate the bill.

In 1996, the previous administration saw the possibility of using community radio to address the high illiteracy rate in Nigeria. With 51% of the population illiterate, the 2008 Education for All (EFA) Global Monitoring Report suggests that Nigeria may not achieve the EFA goals – which include increasing adult literacy by 50% – by the 2015 deadline (UNESCO, 2008).

In our GISWatch 2007 report, we said that the government's decision was still pending following a report by the Community Radio Policy Drafting Committee, which was submitted to the federal government on 12 December 2006. But nothing further has been heard about it.

These omissions need to be addressed by civil society.

A different kind of power

One of the reasons two GSM operators, Celtel and MTN, argued in their legal action that the NCC should not impose fines on them for persistent poor quality of service was that poor power and security infrastructure has led them to incur huge installation and running costs (AAGM, 2007).

Whatever the ICT infrastructure is, it needs to have enough power to make it accessible for use at any time of day or night. The power situation in Nigeria has not improved under the new administration, despite huge financial investments. The new minister of energy recently intervened and released 600 electricity transformers of various capacities, electrical breakers, switches, and cables locked up in storage at the Power Holding Company of Nigeria (PHCN) in Abuja for ten years (Binniyat, 2008). The power sector has also been tabled before the National Assembly for investigation.

GSM for development

As a largely private sector-driven enterprise, the Nigerian mobile sector remains the major driver of the Nigerian ICT industry. However, it does not have the development orientation that is needed for rural connectivity. As a result, the exponential growth of GSM in Nigeria may have been at the

2 www.napep.gov.ng

expense of underserved rural communities, because most GSM operators have not gone beyond urban areas where it has been possible for them to recover most of their investments. The licensing strategies that have promoted the mobile phone revolution may have actually exacerbated the urban-rural digital divide, and inadvertently worked against the government's vision of providing affordable access to unconnected rural dwellers.

GSM is also an expensive technology, whose limitations for carrying data do not make it competitive with other technologies, such as fixed lines, fibre optic and other high-speed data services. This means that the recent GSM growth may not translate into sustained ICT growth, nor facilitate Nigeria's effective participation in the global economy.

The regulator has to find ways to bring competition to rural telephony in order to engage the private sector. The regulator is responsible for the administration of the Universal Service Provision Fund (USPF), which provides incentives to operators to extend services to less lucrative, unserved and underserved rural areas. The USPF was established in 2002, and is funded by contributions of 5% of the gross revenues of all major telcos; but it has up to USD 800 million unspent.

National ICT4D policy

The challenges and opportunities for Nigeria's ICT development are enormous, and these are best anchored within a national policy. The renewed efforts by the Nigerian IT Development Agency (NITDA) to provide a roadmap for ICT4D initiatives is a step towards getting ICT-enabled development down to the grassroots. This policy needs a comprehensive public awareness programme to encourage buy-in, and the government's commitment to more coherent infrastructural development and deployment.

Nigerian universities are often located in peri-urban or rural communities. Getting adequate connectivity to the universities can therefore be one way of providing affordable access to the rural population. One of the goals of the USPF has been to underwrite the costs of infrastructural deployment by private operators. This policy needs to be applied more vigorously with verifiable targets given to the selected operators.

At the same time, access for different disadvantaged groups needs attention. For instance, physical access is of fundamental importance for people with disabilities – a key point of focus for the current administration. However, one year on, there is not much evidence of a policy dealing with the issue, although the new ICT4D policy holds out some hope.

With Nigeria's population of 140 million still largely rural dwellers, the 50 million phone subscribers and 10 million internet subscribers do not amount to adequate coverage. A technology that can provide affordable broadband at the last mile of connectivity must be promoted (Oruame, 2008).

The move by the regulator to issue spectrum licences in the 2.5-gigahertz (GHz) band (which so far has been used for broadcasting) will open up the market, and will hopefully encourage more private operators to explore last-mile access. The NCC, in addition to its efforts with WiN and SABI, has also endorsed WiMAX broadband access.

Physical access to technology is not an end in itself. The main purpose for access must be kept in clear focus: it is the access to content that is important. The exchange of information and knowledge through these technologies is what will bring about development for Nigeria. All of these require the implementation of an integrated and sustained human resource development programme, as recommended in the draft ICT4D policy. ■

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GLOBAL INFORMATION SOCIETY WATCH 2008 is the second in a series of yearly reports critically covering the state of the information society from the perspectives of civil society organisations across the world.

GLOBAL INFORMATION SOCIETY WATCH or **GISWatch** has three interrelated goals:

- **Surveying** the state of information and communication technology (ICT) policy at the local and global levels
- **Encouraging** critical debate
- **Strengthening** networking and advocacy for a just, inclusive information society.

Each year the report focuses on a particular theme. **GISWatch 2008** *focuses on access to infrastructure* and includes several thematic reports dealing with key access issues, an analysis of where global institutions stand on the access debate, a report looking at the state of indicators and access, six regional reports and 38 country reports.

GISWatch 2008 is a joint initiative of the Association for Progressive Communications (APC), the Humanist Institute for Cooperation with Developing Countries (Hivos) and the Third World Institute (ITeM).

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2008 Report

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