GLOBAL INFORMATION SOCIETY WATCH 2008

Focus on access to infrastructure



Association for Progressive Communications (APC), Hivos and the Third World Institute (ITeM)

Global Information Society Watch 2008





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CONGO, DEMOCRATIC REPUBLIC OF (DRC)

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Introduction

Africa remains a continent where access to the internet is uncommon and expensive. It is partly due to this that it faces real lags in its scientific, technological and social development. The Democratic Republic of Congo (DRC) is no exception. The deplorable state of communications infrastructure in the country is an undeniable deterrent to development and the fight against poverty. High-speed computer connections are via satellite, which is very costly. The rate is sometimes 1,000 times higher than in Europe!

The need to develop national backbone infrastructure in the DRC is not an isolated case. Many regional and international forums and institutions, including the New Partnership for Africa's Development (NEPAD), recognise that fibre-optic networks hold the solution to reducing the digital divide between the haves and have-nots. There have been a series of international, regional and local policy initiatives that all have the overarching goal of promoting the inclusion of citizens in the information society by assuring connectivity.

In the DRC, a national broadband backbone would enable an improvement in communications in a country four times the size of France, several regions of which continue to be very isolated. But national initiatives need to link to regional initiatives. For instance, the Pan African Research and Education Network (PAREN) was created to facilitate collaboration between universities and establish an Africa-wide broadband network. That said, PAREN's final design cannot be completed without a central interconnection point linking the different networks of West, East, South and North Africa. Being geographically central, the DRC can strategically position itself to become the core of these networks.

This report draws largely on a feasibility study produced in 2007 by Alternatives, in collaboration with the Association for Progressive Communications (APC), XitTelecom, and the non-profit multi-sectoral organisation DMTIC (Dynamique multisectorielle pour les TIC). Alternatives is an international non-governmental cooperation organisation that has been working in the DRC since 1998.

National context

After 30 years of dictatorship and two short presidencies, each interrupted by war, the DRC's first democratic elections were held in 2006, and Joseph Kabila was elected president. The DRC remains a country engaged in post-conflict reconstruction. While Kabila has identified five priority sectors – water and electricity, health, education, infrastructure, and employment – there has not been much change in any of these sectors over the past year. Proposed constitutional

reforms have not progressed to any significant degree over the same period, and the government has been unable to implement its 2007-2011 agenda. National actors are reportedly preoccupied by the government's lack of transparency, specifically how it awards mining concessions and nominates the executive staff of public enterprises. Nevertheless, certain advances have been made to improve the state's efficiency and coordination capacities, notably through the reduction of government staff from 60 to 45 ministers and vice-ministers.

In 2006, the DRC's population was estimated at 62,660,551 inhabitants, giving it a density of on average 27 inhabitants per square kilometre. Households are concentrated in the mining region of Shaba and in lower Congo. Less than a third of the country's population inhabits urban areas.

Given the DRC's chronic deficit due to poor productivity and weak revenues, it is very vulnerable to external events. In recent years, macroeconomic indicators have stabilised given conditions imposed by international financial institutions regarding the liberalisation of commercial imports and exports. External aid accounts make up nearly half of the state's revenues.

Physical access to technology

In spite of the political crises that have plagued the DRC since its independence, as well as its failing economy, the information and communications technology (ICT) sector has grown, defying all predictions to the contrary. Between 1998 and 2006, the private sector invested more than USD 5 million in mobile technologies. Thousands of jobs have been created and the sector's fiscal revenues have contributed to putting the country on the path of economic growth.

Consisting of about 11,000 lines in Kinshasa, the fixed-line network is managed by the Congolese Office of Post and Telecommunications (OCPT). As it stands, though, the network is practically non-existent. A private operator, Congo Korea Telecom, has stepped in to sink fibre-optic cables linked to a satellite connection, but its network only serves an estimated 3,000 subscribers in the downtown area of Kinshasa.

The sector further developed thanks to the infrastructure of four mobile GSM telephone operators, which linked the country's main centres. The number of mobile subscribers has correspondingly surged from 20,000 in 1997 to approximately 4.5 million in 2007.

There are fifteen recognised internet service providers (ISPs) in the country, accounting for an estimated 140,625 users in 2005. The same year, wireless local area network (WLAN) subscribers were estimated at 24,000 and broadband

internet subscribers numbered 15,000. According to World Bank statistics, in 2005 the average monthly cost for an internet connection stood at USD 93, or 40,641 Congolese francs (CDF). There are an estimated 200 cybercafés in the DRC, concentrated in Kinshasa and other large cities.

The absence of broadband is the main obstacle to the proliferation of ICTs. Public operators OCPT and the National Network of Satellite Telecommunications (RENATELSAT) have not had the capacity to develop a national backbone, even though it was part of their mandate. Alternatives' feasibility study, commissioned by OCPT, recommended the deployment of a 5,467-km network made up of 48 fibre-optic routes integrated with Congo's national electricity grid. It was also recommended that the fibre be laid alongside national roads and railroad tracks to help with its management and maintenance. Following up on the technical recommendations of the research, the government recently committed itself to a contract, in collaboration with the Chinese government, to build the line between the SAT-3 cable at Muanda and Kinshasa.

Legal and regulatory framework

On 18 February 2006 the president presented a new Constitution for the DRC, which stated:

All people have a right to the respect of their private life and to the secrecy of their correspondence, telecommunication and all other forms of communication... This right is inalienable except in cases described by the Constitution.

In spite of its vagueness, we can deduce from this that the legislators intended to nurture a strong civil society and citizen protection. Communication is also presented as a fundamental human right.

Several laws and decrees regulate the ICT sector. Among other things, these laws establish a separation of responsibilities between the Ministry of Post and Telecommunications, the regulator, and public operators OCPT and RENATELSAT. The management of ICT development is conferred to the minister, while OCPT is designated as the manager of the .cd domain.

The construction of a national backbone does not need a different institutional configuration because the two existing state enterprises (OCPT and RENATELSAT) are sufficient to do the job.

Political will and public support

The creation of the Regulating Authority for Post and Telecommunications (ARPTC) was certainly one of the highlights of recent telecommunications reforms. Nevertheless, after four years of activity, the overall achievements of the ARPTC are not encouraging. The decisions taken by the new regulator are too few, have had little impact, and the paths that have been timidly opened have proven to have little relevance. Yet a number of factors weaken the regulator, including the minister's almost non-existent follow-up to technical recommendations put forward by it.

The backbone's use should be continuously overseen by the regulator, especially with regards to managing the conflicts that will certainly arise between operators over the transmission of their signals. But a general lack of cooperation between the minister and the ARPTC can have the effect of preventing the regulator from doing its job properly.

Policy, as it stands, consists of a draft telecom plan. However, work is being done by Alternatives and the multi-stakeholder non-profit organisation DMTIC, amongst others, to develop the country's first national ICT policy document.

Action steps

The DRC's strategic position at the heart of Africa holds implications for the development of Central Africa, and the continent more generally. The country's African responsibility requires linking up with different international transmission networks such as SAT-3, the West African Festoon System (WAFS), and the Eastern Africa Submarine Cable System (EASSy).

The construction of an internet backbone in the DRC will surely create economic synergies conducive to combating poverty, promoting national unity and relaunching the national economy. At the international level, the project is integral to the development of a global information society, the realisation of the Millennium Development Goals (MDGs), and the goals of NEPAD and the Common Market for Eastern and Southern Africa (COMESA).

It is important to guarantee the sustainability of the project through:

- Inclusiveness: The success of the project will depend on the participation of public and private sector partners.
- Efficiency: Measures should be taken to ensure that the project can attain its objectives, notably by rereading the present legal context and involving institutions in the day-to-day management of the project.
- Optimisation: In order to efficiently reply to potential demand for bandwidth and permit universal access to ICT services.
- Reliable framework: To guarantee sustainability, it helps to establish legal precedents, reliable institutions and a reliable economy.

The legal and regulatory framework is relatively capable of supporting the backbone. Mechanisms need to be put in place to ensure that the financing of the project is transparent, and the beneficiaries are clear. An open access approach is favoured. To do this, it is important that the backbone is not monopolised by any one institution, that it is managed contractually, and that there is transparency on all pricing.

Reference

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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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