# 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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#### Introduction

This report is an overview of information and communications technology (ICT) initiatives in Zambia. It examines ICT indicators in three key areas: telephony, broadcasting and computer technology. The author outlines achievements and challenges in ICT accessibility and participation. Emphasis is placed on the regulatory and policy frameworks and the infrastructural network – how they support or inhibit the participation of the majority of the people, especially in the outlying rural areas.

The report has been compiled mainly through the use of existing documents on policy and regulatory frameworks on ICTs in Zambia, online research, interviews with persons in key institutions in the ICT industry, newspaper reports and other relevant literature on ICTs in Zambia and globally. The author acknowledges the support he received from Panos Southern Africa and other concerned parties.

#### **Country situation**

Once known as Northern Rhodesia, Zambia attained independence from British colonial rule in 1964 and was ruled by President Kenneth Kaunda until 1996, when Frederick Chiluba assumed power in a multiparty election ending Kaunda's one-party rule. In 2001, Levy Mwanawasa ascended to power. He ruled for seven years until he died in August, 2008.

Since Mwanawasa took over power, Zambia appears to have been on a track of economic recovery following the mismanagement of the economy by the Kaunda and Chiluba regimes. The country's poor economic performance was also the result of a rise in world oil prices and falling copper prices, on which Zambia's economy depends. At independence, Zambia was a middle-income country, but by the 1990s it had become one of the poorest countries in the world. In 2006, however, the country managed to reduce the double-digit inflation that had been recorded since the late 1980s to a single digit of about 9%. Macroeconomic indicators appear to have stabilised, with an average economic growth of 5% to 6% in the last four years (Times of Zambia, 2007).

It can be assumed that Zambia's economy, which had been on the decline for many years, was unable to support the growth of many industries, including ICTs. However, bold steps were taken by the government from 2004 to enhance the ICT sector, including a reduction of duty on computer equipment, introduction of an ICT policy and a project to lay a fibre-optic backbone.

Notwithstanding, there are still many challenges that the ICT industry faces, among them the lack of an appropriate infrastructure to support the growth of the industry, and the absence of electricity, good roads and reliable communication equipment. These factors have hindered ICT accessibility, especially in rural areas where the majority of Zambians live. At the same time, the operational and licence fees charged by regulatory authorities to service providers are high. These tariffs have been passed on to the consumer, making access prohibitive to many people. These challenges need to be addressed to enhance ICT participation.

#### Policy context

#### Broadcasting and telecommunications policy reforms

Liberal market reforms were introduced in 1991 to stimulate the liberalisation and deregulation of various industries. This was in line with the ruling Movement for Multiparty Democracy (MMD) election manifesto of moving away from Kaunda's socialist policies. The broadcasting and telecommunications sectors were no exception (Kasoma, 1997).

This saw the enactment of the 1993 Zambia National Broadcasting Corporation (ZNBC) Licensing Regulations Act, the 1994 Telecommunications Act, and the 1994 Radio Communications Act. These legal instruments were designed to liberalise and deregulate the communications sector. Prior to this shift, ZNBC was a monopoly that was unchallenged. However, with the coming of liberal reforms, a number of radio and television stations emerged to challenge ZNBC's monopoly (Banda, 1998). The Telecommunications Act of 1994 established the Communications Authority of Zambia (CAZ) as the independent regulatory body to supervise and promote the provision of telecommunication services. Under this act, the authority is mandated to manage and administer the utilisation of radio frequency spectrum.

In 2002, the Independent Broadcasting Authority (IBA) Act and the ZNBC Amendment Act were passed. However, the implementation of both acts has been frustrated by a lack of political will, and the state has yet to submit names of prospective board members to parliament for ratification. The old ZNBC board members appointed by the government under the 1987 act continue to serve, effectively defying the provisions of the 2002 ZNBC Amendment Act. This compelled the media fraternity to take the state to court in an effort to force it to submit the recommended names of both the IBA and new ZNBC board members to parliament for endorsement.

Initially the media community won the case in December 2004 when the information and broadcasting minister was ordered by the court to send the names to parliament for ratification (Matibini, 2006). However, the government

appealed against the ruling and the Supreme Court overturned it in March 2007 on grounds that "the minister could not be used as a rubber stamp or conveyor belt in the process of appointments of the two boards" (Musenge, 2007). Since then, there have been no serious efforts to implement the two boards, as the current set-up seems ideal for the state's political expediency: to control ZNBC as a political mouthpiece for the ruling party.

#### Impact of technological change

Convergence and digitalisation have brought together media platforms that were once isolated. For instance, content which was conventionally classified as falling under the realm of print media is now suited to mobile and audiovisual internet services, while broadcasters are increasingly making data services accessible through the TV set. In other words, "content has become *cross-media* or, as generally put, *multimedia*" (Arino & Ahlert, 2004).

Owing to these technological changes, policy and regulatory frameworks all over the world are under pressure to adopt structures that respond to technological convergence (Collins & Murroni, 1996; Levy, 2001; Golding & Murdock, 1999; Steemers, 1998). The Independent Communications Authority of South Africa (ICASA), which is a converged regulator of telecommunication and broadcasting, is a typical example in Africa (Taylor & Berger, 2006).

The Zambian IBA Act is a replica of the outdated IBA Act of 1993 of South Africa. There are suggestions that the act be repealed and be replaced by one that will consider converged regulation for all communication sectors (MCT, 2006).

#### ICT policy

Zambia's ICT policy was adopted in 2005 and subsequently launched in March 2007. The ICT policy framework suggests proposals to re-establish the regulatory framework of all communication sectors to recognise convergence of technologies through the enactment of an ICT Bill. The policy seeks, among other issues, to bridge the digital divide between Zambians living in urban and rural areas (MCT, 2006).

The policy envisages the transformation of Zambia into an economy based on information and knowledge, supported by the consistent development of and access to ICTs for all citizens by 2030. The policy informs the framework for Zambia's participation in the global economy. As it states: "At the national level, the importance of ICT in national development is demonstrated by the approval of the ICT Policy and the inclusion of ICT as a priority sector in the Fifth National Development Plan 2006-2010" (MCT, 2006, p. ii).

#### **Access to ICTs**

### Technology change and broadcasting market influence

The advent of convergence has seen the upswing of a competitive communications market in Zambia, especially in the broadcasting and telecommunications sectors. Satellite

broadcasting opened up in 1995 when MultiChoice South Africa entered the Zambian airwaves by transmitting analogue and digital satellite pay television for the first time in the country. For well-to-do Zambians, this was a point of departure from being permanently exposed to ZNBC to a situation where they could enjoy the many genres offered by the new satellite services.

The implication of this challenge was that ZNBC had to rethink its programming if it was to continue attracting an audience and advertisers on whom it depended for its survival. ZNBC radio reaches out to 80% of the country, while its single television channel is mostly limited to the main cities and towns, and has yet to reach most rural areas. Some rural communities have access to community radio, an alternative media platform, whose presence is increasing rapidly in the country.

ZNBC has also been challenged by other new entrants, such as the relatively affordable digital satellite pay TV service British Gateway Television (GTV), and My TV. GTV has been instrumental in bringing a competitive atmosphere to pay television, which was previously dominated by MultiChoice.

After three months of being operational in Zambia, GTV recorded 4,000 subscribers in December 2007 (Chitala, 2007). GTV offers different packages that can also be accessed by low-income groups. This has forced MultiChoice to introduce affordable family "bouquets". My TV, which became operational in 2006, had a subscriber base of 5,000 in January 2008 (Chitala, 2008). It has fewer channels than MultiChoice or GTV.

#### Rural access

Access to ICTs, particularly the internet and telephone services, is still at its lowest in the rural areas compared to urban areas. The lack of infrastructure such as electricity, telephone lines, communications equipment and road networks has made it difficult for rural communities to access the information economy. Less than 3% of rural areas in Zambia have access to electricity, yet about 70% of Zambians live in rural areas (Phiri & Chanda, 2008).

Most rural areas lack ICT outlets such as internet cafés and telecentres, which are concentrated in the urban areas. However, with the advent of mobile telephony, the situation appears to have improved in a number of areas, and communities are able to use mobile phones at public make-shift phone kiosks. Some people in rural communities now own mobile handsets, which have become cheaper compared to five years ago when an average set cost about USD 300 – the same now costing about USD 50.

Comparatively, urban areas have better infrastructure and more people have access to the internet and phone services.

#### Zamtel monopoly

The state-owned Zambia Telecommunications Company (Zamtel) is the sole provider of land-line telephony. Zamtel is also the only authorised company that provides an international gateway to MTN and Zain, the two mobile phone

Table 1: Mobile phone access					
Period	Subscribers	Per 100 inhabitants	Growth rate		
1 March-31 March, 2008	2,653,203	22.66	6.9%		
		Source: Quarterly ICT Indicators (CAZ, 2008)			

Table 2: Public switched telephony network (PSTN) access					
Period	Subscribers	Per 100 inhabitants	Growth rate		
1 January-31 March 2008	90,951	0.77	-0.91%		
Source: Quarterly ICT Indicators (CAZ, 2008)					

Table 3: Internet access					
Period	Subscribers	Per 100 inhabitants	Growth rate		
1 January-31 March, 2008	16,464	0.14	-2.17%		
Source: Quarterly ICT Indicators (CAZ, 2008)					

service providers. However, MTN and Zain have expressed concern over high tariffs charged by Zamtel for using its gateway, the Mwembeshi satellite (Cho, 2007).

Additionally, Zamtel distorts competition by being both a fixed network and mobile phone operator: Cell-Z is its mobile arm, with automatic access to its own gateway. This was acknowledged by the Zambia Competition Commission in 2003 in its submission to the Select Committee on Transport and Communication: "The position of Zamtel means that it has the power to prevent, restrict or distort competitor access to this essential infrastructure which was built with public funds" (Cho, 2007). Zain and MTN have made appeals to allow them to use their own gateways, but this has drawn a negative response from the authorities (Mwale, 2008).

On the internet platform, which is generally open to competition, Zamtel's dominance as a fixed-line operator eliminates the level playing field. Since most of the internet services in Zambia are through dial-up connections using the fixed-line telephone network controlled by Zamtel, the company offers better access conditions to its own internet subsidiary than to competitors (Cho, 2007). As a result, it can be argued that Zamtel, representing the state, is a dominant player in the political economy of the communication landscape in Zambia (Golding & Murdock, 2000).

Nevertheless, despite Zamtel's market influence, its mobile and internet services still remain unattractive to most consumers. This could be attributed to a sloppy working culture and bureaucratic tendencies adopted from government (Zamtel is a former government department). Currently Zamtel has the lowest number of mobile subscribers, standing at 155,000 (Mwape, 2008). Zain, from the Middle East, which took over Celtel in July 2008, had the highest subscriber base of 1.3 million in January 2008 (Shacinda, 2007). MTN, a South African company, had a subscriber base of 119,000 in December 2006, which rose by 34% in March 2008.

#### Internet

There are many internet service providers (ISPs) in Zambia. However, the majority are corporate providers, and include key players such as Zamnet, Coppernet and Zamtel. While Zambia was among the pioneers of internet in sub-Saharan Africa outside South Africa in the early 1990s, this advantage has not been exploited (MCT, 2006).

Because internet cafés and telecentres are mainly concentrated in urban areas, this leaves the rural population with literally no access worth recording. The reason for this disparity is the lack of infrastructural growth to support ICT enhancement and accessibility in rural communities. Another factor is the high cost of operating licences (USD 40,000) charged by CAZ to ISPs. This amount is prohibitive to many Zambians who wish to invest in this service.

#### Fibre-optic access

In response to the imperative to bridge the digital divide between urban and rural areas, the government, through the state-owned Zamtel and the Zambia Electricity Supply Corporation (ZESCO), has embarked on an initiative to install a fibre-optic cable system across the country. This system will enable the transmission of various forms of electronic data over longer distances at higher speeds, essentially feeding into all forms of communication platforms: computers, television, radio, telephony and other related technologies (Mwale, 2008; Kanyungu, 2008). The fibre network will offer options for international connectivity and will link to the Eastern Africa Submarine Cable System (EASSy) project (Kanyungu, 2008).

#### **Action steps**

The ICT industry in Zambia is still struggling – especially owing to the fact that participation is still very low in the rural areas where 70% of Zambia's 10.1 million people reside. It is therefore critical to scale up rural ICT infrastructural support programmes, including electrification, building accessible

roads, and rolling out communication equipment, in order to enhance the presence of ICTs in rural communities.

Additionally, regulatory practice that inhibits access to ICTs should be shed – for instance, Zamtel's gateway monopoly and the high licence costs for internet operators. This will genuinely liberalise the market and promote competition, ultimately passing the benefits of reduced costs of services on to consumers.

It is gratifying to note the remarkable efforts made by the government to promote ICT participation. The development of an ICT policy, the installation of the fibre backbone and introduction of ICT training in schools are typical examples. However, the support of the corporate world, non-governmental organisations, the donor community and the general public at large remains vital if ICT participation is to be enhanced in line with the objectives of the World Summit on the Information Society (WSIS).

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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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