

# GLOBAL INFORMATION SOCIETY WATCH 2008

*Focus on access to infrastructure*



# Global Information Society Watch

## 2008



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# BRAZIL

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## Introduction

Access to information and communications technologies (ICTs) in Brazil has grown steadily in the past years, with a few notable exceptions. Access to traditional media equipment, such as radio and TV sets, has almost become universal, although the presence of radios in Brazilian households seems to be declining. The new frontier in extending access to such media is now digital radio and TV, and the main regulatory issue has been the definition of standards. At the same time, access to computers and the internet continues to form the backbone of the country's public ICT policy.

The Brazilian Internet Steering Committee (CGI) has been surveying the use of ICTs for the past three years (2005-2007) and is now the main source of data relating to access to ICTs (CGI, 2008). Additional data is available from the National Household Sample Survey conducted by the Brazilian Institute of Geography and Statistics (IBGE), whose most recent available data is for 2006 (IBGE, 2007). These will be the main sources for reporting on the present state of access to ICTs in Brazil.

The country's key demographic, economic and social indicators are presented in Table 1.

| Table 1: Main demographic, economic and social indicators                 |             |
|---|-------------|
| Population (2007)   | 183,987,291 |
| Gross domestic product (GDP) per capita by purchasing power parity (2005) | USD 8,402   |
| Gini index (2005)   | 0.57        |
| Human development index (2005)  | 0.800       |
| Adult literacy rate (2005)  | 88.6%       |
| Population aged 18-24 in higher education (2006)                          | 12.1%       |

## Key policy and regulatory challenges

After heated controversy, Brazil opted in 2007 for the Japanese standard ISDB for digital TV. The decision was received with strong criticism from civil society and academia for being a poor interactive standard, and not allowing greater plurality of broadcasters. In fact, the implementation of the standard was made in such a way that companies who were licensees of the analogue TV spectrum automatically retained the right to provide the new digital TV services. A similar dispute is now underway regarding the adoption of the digital radio standard, and civil society defenders of

greater plurality are again objecting to the government's proposed standard, IBOC.

There is also ongoing dispute over the idea defended by TV companies of imposing technical protection measures (TPM) on digital TV broadcasting to limit the recording of aired content. The adoption of TPM to restrict copying of digital TV is being debated in Congress. The proposal is to limit copies of aired content to one high quality copy per TV set (Bill 6915/2006). Another bill being debated (Bill 89/2003) proposes to criminalise the circumvention of TPM.

A last point of controversy in digital TV is what to do with the spectrum now used for analogue broadcasting once the system is entirely converted to the digital standard. Civil society organisations are proposing that this portion of the spectrum should be considered a "commons" – an open spectrum to be used for citizens' networks (Silveira et al., 2007). TV companies, on the other hand, want to retain the right to use the spectrum for new services.

Certainly more impressive than the slight decline of analogue radios in households is the pronounced decline of fixed telephones (from 54% to 45% in the past three years). This might be explained by the accentuated rise in mobile telephones, whose presence in Brazilian households has risen from 61% to 74%. Mobile telephones are clearly the medium with the highest growth rate in households, especially among the poor. The CGI survey noted that 49% of the very poorest households (with monthly family incomes below USD 240) already have access to mobile phone devices, and 73% of those devices can be connected to the internet (although only 3% of them actually do). On the other hand, only 17% of the poorest households have fixed telephone lines. With the increased availability of internet services on mobile phone devices, this should clearly be a focus in policy for extending internet access.

A clearer point for policy regulation is the concentration of telecom operators. There has been heated debate since early 2008 on whether Brazilian authorities should allow the merger of telecom operators Oi and Brasil Telecom. On the one hand, the merger is criticised by some analysts for using public funds, and for concentrating the telecom market. Defenders of the merger, however, say that it will prevent the two smaller Brazilian companies from being acquired later by the largest operators in Latin America, the Spanish company Telefónica and the Mexican company TelMex. Additionally, it is argued that the new merged company will have a large share of public capital, and so the state will have greater power to intervene should the

market become dysfunctional. It is now up to regulating agency Anatel to redefine the rules that will allow or block the merger.

## Access initiatives

Not surprisingly, access to computers and the internet has been the main focus of recent public ICT policy. This includes offering subsidies for buying desktop and laptop computers, and providing public access to the internet.

There are two main policies for subsidising the acquisition of computers, both implemented at the federal level: the programme Computers for All and the complementary tax incentive law called *Lei do Bem*, and the programme One Computer per Student.

Since 2004, the Computers for All programme<sup>1</sup> has been giving tax exemptions to businesses and low-interest credit to consumers so that they can buy low-cost desktop and laptop computers with free and open source software (FOSS).<sup>2</sup> The programme aimed to sell one million computers annually, but data indicates it has failed to meet such high goals. In 2006, Computers for All was responsible for selling 530,000 computers. Surprisingly, an additional 1.5 million computers with FOSS software, but unrelated to the programme, were sold in 2006 too. In 2005, the programme was complemented by a tax exemption law (*Lei do Bem*) which, among other things, aimed at subsidising the acquisition of higher-end computers with or without free software. All together, these initiatives were largely responsible for the sale of over 10 million computers in Brazil in 2007. These figures make Brazil the fifth largest world market for personal computers.

The One Computer per Student programme is still in the planning stages. Originally inspired by Nicholas Negroponte's One Laptop per Child project, the programme aims at acquiring laptops for every student in the country. During an experimental phase in a few schools, the first attempts to implement the programme were thwarted in 2007 when bids for buying the laptops through a public tender did not match the government's budget.

Regarding access to the internet, public policies have been focusing on filling a gap clearly observed in surveys. Although 17% of Brazilians have an internet connection in their households, twice as many (or 34% of the population) had accessed the internet at least once in the three months prior to the CGI survey. This means that 17% of the population accessed the internet away from home: while at work, at school or in public or private internet access centres. Among the poor, the survey found that most access occurs in private venues, such as "LAN houses" and cybercafés.<sup>3</sup> When it comes to the very poorest Brazilians (with a monthly family

income below USD 240), 78% of internet access is through these commercial venues.

Figures like these demonstrate the urgent need for policies to provide free and public access to the internet. There are several government programmes at municipal, state and federal level trying to provide free internet access to citizens. However, as the data demonstrate, such initiatives are deficient and uncoordinated. Among several ongoing programmes, four of them stand out: the GESAC programme, coordinated by the Ministry of Communications; the Culture Hotspots programme by the Ministry of Culture; the Telecentres programme in the municipality of São Paulo; and the newly announced Broadband in Schools programme.

The GESAC (Electronic Government – Citizens' Support Service) programme<sup>4</sup> aims to provide satellite internet access to communities with low human development index scores, through internet access centres. The latest available data indicate that currently there are 3,482 GESAC internet access centres offering over 22,000 terminals running free software in 2,145 different municipalities.

The Culture Hotspots programme<sup>5</sup> is somewhat different. It not only provides internet access, but offers multimedia equipment for cultural communities to produce and digitally record and share their content, mostly using free software. At this moment there are 781 hotspots across the country.

The Telecentres<sup>6</sup> are centres offering internet access to citizens in the city of São Paulo, also using free software. It is the largest municipal programme in Brazil, providing internet access in 273 centres with 5,400 terminals and 1,362,984 registered users. Although programmes such as GESAC, Culture Hotspots and Telecentres try to compensate for the lack of internet access in households, they seem to be out of sync with demand. While 78% of the poorest citizens who use the internet pay for access in places like cybercafés, only 8% of them access the internet in public centres.

To face this huge challenge, the federal government recently announced the new programme Broadband in Schools. This programme plans to install broadband internet infrastructure in all public schools by December 2010, thereby offering internet access to most school-going youth. The programme was the result of an agreement between the federal government and telephone companies, where the government replaced the contractual requirement that phone companies build telephone service points in every city, with the requirement that they build broadband infrastructure across the country and offer free access in every school until 2025. According to the federal government, 55,000 public schools will receive broadband internet connectivity, which will then be offered to the schools' 35 million students and staff members.

1 [www.computadorparatodos.gov.br](http://www.computadorparatodos.gov.br)

2 Although the programme required that computers be sold only with free software, a survey of purchasers showed that 73% of them had switched to a Windows operating system after sale (ABES/Ipsos, 2006).

3 LAN (local area network) houses are essentially cybercafés devoted primarily to internet gaming.

4 [www.idbrasil.gov.br](http://www.idbrasil.gov.br)

5 [www.cultura.gov.br/programas\\_e\\_acoes/cultura\\_viva/programa\\_cultura\\_viva/pontos\\_de\\_cultura](http://www.cultura.gov.br/programas_e_acoes/cultura_viva/programa_cultura_viva/pontos_de_cultura)

6 [www.telecentros.sp.gov.br](http://www.telecentros.sp.gov.br)

Critics of the programme say two things: that through this deal, the project of building a public broadband infrastructure was abandoned; and that by privately controlling the broadband infrastructure, telephone companies will be able to exploit commercial broadband services in remote locations with no market competition (Gindre, 2008). Finally, there is potential for policy extending internet access by making use of the FUST fund – a fund composed of 1% of the telcos’ revenue, collected for the purpose of providing universal access to telecommunication services. Due to conflicting legislation and the use of the fund’s resources to pay public debt, the fund has been barely touched since 2002.

### Action steps

This short overview of the state of access to ICTs in Brazil, and policies for universalising access, could help define a few points for priority action:

- TPMs restricting the recording of digital TV content and the criminalisation of circumventing TPM restrictions are about to be voted on in Congress. At the same time, the standard for digital radio that might or might not increase the plurality of broadcasters is about to be defined by the Ministry of Communications. These require progressive intervention.
- The spectrum now used by analogue TV will be vacant and could be used for building open spectrum citizen networks.
- Policies on public internet access centres have failed. The very poorest Brazilian citizens are paying for internet access in cybercafés and have not been widely using the public centres. The FUST fund could be used to drastically improve the reach of public access policies. ■

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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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