

COLOMBIA

Colnodo¹

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Introduction

Although the Colombian government has invested significant time and resources in social information and communications technology (ICT) programmes, Colombia continually ranks below world and regional averages if we look at ICT statistics, such as the number of internet users and indices for digital opportunities, e-readiness and ICT dissemination.

Even though topics such as the use of free and open source software (FOSS), alternative licensing methods (such as Creative Commons), and community telecentres have earned a place on the ICT agenda, both in the government and private sector, important issues like the inclusion of a gender perspective in ICT policies are still missing.

Analysing the possible scenarios for participation and the limits to achieving full dialogue between the government and its citizens on ICT policies, it is evident that, except for certain instances convened by the government within the last year, no formal mechanisms exist to facilitate this dialogue. Nor do citizens have strategies for monitoring ICT plans or for seeking ways to influence them.

This report is based on data obtained through background research and interviews. Official websites and research on ICTs in Colombia were reviewed, as well as the annual reports of international organisations.

Country situation

Colombia's public policy on ICTs is implemented through three programmes: the Connectivity Agenda, Compartel and Computers for Education.

The Connectivity Agenda and Compartel were among the first e-strategies created in Latin America and have served as models for other countries. At the moment Compartel is formally advising some eight countries in the region, as is Computers for Education. These initiatives are now under Colombia's Ministry of Communications, although from February 2000 to June 2003 the Agenda operated as a presidential programme, independent of any ministry. Computers for Education is part of the Ministry of Education.

Connectivity Agenda

The Connectivity Agenda³ was created as a long-term policy programme through the National Council on Economic and Social Policy (CONPES). It is one of the strategies aimed at improving quality of life for Colombians, increasing competitiveness of production and modernising public institutions (MC, 2000).

The Agenda targets three groups: citizens, the business sector and public administration. For the public sector the goal is to modernise public administration, make it more efficient and transparent, and support the "policy of democratic security" (MDN, 2003). For the private sector, the programme seeks to increase productivity and competitiveness. For citizens, the goal is to increase community access to

ICTs, build bridges across the "digital divide" and facilitate the interaction between government and citizens.

The development and management of the Agenda as a programme has been influenced by each new government. We can identify three phases in its development. In the first phase, the "Leap to the Internet" (April 2001-August 2002), the use of ICTs to improve services was strengthened and a great deal of information was placed online by public institutions. In the second phase, "Towards a Knowledge Society" (August 2002-May 2003), the focus was on decentralising work through alliances with regional bodies and sectors outside government.

Phase three is the current one, which began in June 2003. Since then the Agenda has aligned its work with the government's online strategy.⁴ The goal is to facilitate interaction between citizens, the business sector and government bodies.

The programme has benefited some 620 mayors' offices, which now have internet access, email and a webpage, which they use to share information about the municipality, public administration operations, the mayor's activities and contracting procedures. It is hoped that 1,051 municipalities will benefit by 2007.

Compartel telecentres

The Compartel programme⁵ was created to democratise access to telecommunications infrastructure through telecentres, community telephone systems and community internet access centres in isolated rural areas and municipal centres (MC, 2002).

In the first phase of the programme, 670 telecentres were installed in municipalities with less than 8,000 inhabitants. In the second phase, 270 telecentres were installed in municipalities with more than 10,000 inhabitants. In the third phase, 550 telecentres were installed in municipal centres not being served and areas with more than 1,700 inhabitants. As of February 2007 Compartel had installed 1,490 telecentres throughout the country, benefiting an estimated 5.2 million inhabitants (MC, 2007a). Between 2001 and 2002 Compartel implemented the Community Outreach Strategy so that telecentres could be used for local development projects.

In August 2006 Compartel began to evaluate the socioeconomic impact of the telecentres, including 249 telecentres set up by companies such as Colombia Telecomunicaciones, Orbitel and the Empresa de Teléfonos de Bogotá (ETB). The organisations and people who are developing community telecentres in Colombia hope that this evaluation will connect faces and stories to the Compartel telecentres, and that the initiative's achievements, success stories and lessons learned will be shared.

Besides the telecentres, 10,045 rural telephone points have been installed which benefit six million inhabitants in rural areas.

1 <www.colnodo.apc.org>.

2 Background research support: Paola Liévano and Patricia Romero.

3 <www.agenda.gov.co>.

4 In 2000, Presidential Directive No. 02 was issued to set up three phases of online government strategy: i) to provide information; ii) to provide online services and iii) to provide online transactions and information that can encourage the development of viewpoints among the citizenry.

5 <www.compartel.gov.co>.

It is important to point out that Compartel was a programme created to provide infrastructure, and that it is only in recent years, by government mandate, that it has begun to increase its impact through a strategy of capacity-building and content provision.

Linked to the Connectivity Agenda's online government project, Compartel has the potential to allow people in remote locations to be in contact with local and national governments without having to travel great distances. Because of the opportunities they provide, it is important to guarantee the sustainability of the telecentres. The survival of a telecentre depends on building alliances with local government and organisations, and on the involvement of the community. This is one of Compartel's major challenges, especially since the government plans to have 10,000 telecentres located in public schools by 2010.

Computers for Education

The Computers for Education programme⁶ has operated since 2000 with the goal of providing the country's public education institutions with access to ICTs and promoting their use in educational processes. The computers are donated by private companies and governmental entities and then reconditioned. This programme receives advisory services from the Canada-based Computers for Schools programme. As of 2006, a total of 71,474 computers had been distributed, potentially benefiting 2,048,908 students in some 6,545 schools around the country (MC, 2007b).

Investment

Of the approximately 750 billion Colombian pesos (roughly USD 326 million) invested by the Ministry of Communications in social programmes from 2001 to October 2006, approximately 57% was assigned to Compartel, 12% to the Connectivity Agenda, and 5% to Computers for Education. The remainder went to regular postal services and other investments.

Like Compartel, Computers for Education has conducted an impact study. However, this study has not been made public. It would be important to know what contribution these programmes have made to digital inclusion as an engine of socioeconomic development, and, in particular, to analyse their part in fulfilling the country's development goals, including the Millennium Development Goals (MDGs).⁷

Statistics

Table 1 shows the increase in internet access in Colombia since 1995.

| Table 1: Internet access (1995-2006) | | |
|--------------------------------------|---------------------|----------------------|
| Year | % of internet users | Total internet users |
| 1995 | 0.1 | 37,635 |
| 2000 | 1.9 | 715,067 |
| June 2003 | 6.1 | 2,295,741 |
| December 2003 | 6.9 | 2,596,821 |
| June 2004 | 7.9 | 2,973,172 |
| December 2005 | 9.9 | 4,166,960 |
| June 2006 | 13.2 | 5,555,946 |

Sources: Biannual reports of the Telecommunications Regulation Commission (CRT) and National Statistics Department (DANE)

6 <www.computadoresparaeducar.gov.co>.

7 <www.un.org/millenniumgoals>.

According to the Telecommunications Regulation Commission (CRT), a significant percentage of internet users continue to be concentrated in the country's four major cities: Bogotá, Medellín, Cali and Barranquilla. However, Compartel maintains that the CRT's methodology does not include the total number of telecentre users, and that the impact of the programme is not properly reflected. Nevertheless, despite the increase in internet users, Colombia's ranking with respect to other countries in Latin America has not improved.

Internet World Stats⁸ reports that Latin America and the Caribbean have 88,778,986 internet users. This number represents barely 8% of the total number of internet users in the world. South America, with 370,225,923 million inhabitants – 41.5% of the population of the Americas – has 16.5% of the Americas' internet users. According to this same source, Colombia has 5,475,000 internet users, which means 12.9% of the country's population. This number is well below countries such as Argentina (34%), Chile (42%), Costa Rica (22.2%), Mexico (19%) and Venezuela (16.5%).

In the UN Global E-Government Readiness Report 2005, Colombia had an index of 0.5221 in 2005, holding 54th place in the world and 6th in South and Central America. In 2004 Colombia was in 44th place. The government says the drop in Colombia's position is due to a drop in webpage statistics, as a result of e-government facilities being underutilised (MC, 2005). The Latin American countries that rank above Colombia are Chile (22nd), Mexico (31st), Brazil (33rd) and Argentina (34th). Below Colombia are found Venezuela (54th), Peru (56th) and Panama (64th) (UN, 2005).

In 2005, in the Economist Intelligence Unit's e-Readiness Index (EIU, 2005), Colombia occupied 48th place among 65 countries analysed. The index measures a country's level of e-preparedness, the environment for doing e-business and market opportunities related to internet use. Colombia dropped seven places compared to 2004, and was down eleven places from 2003. The government says this drop is due to changes in measurement methodologies and the incorporation of new indicators, among other factors.

According to the Digital Divide Report of the United Nations Conference on Trade and Development (UNCTAD), in 2004 Colombia held 85th place among 180 countries, with an ICT diffusion value of 0.328 (on a scale from 0 to 1). This can be broken down into a value of 0.531 for "access", a calculation based on the number of internet users, literacy and the cost of a local call, and 0.124 for "connectivity", based on the available physical infrastructure: internet, computers, fixed and mobile telephone systems. Colombia's position has also dropped notably over the years: from 73rd place in 1997 to 80th in 1999 and 85th in 2004 (UNCTAD, 2004).

The Digital Opportunity Index (DOI) published by the International Telecommunication Union (ITU) assigned Colombia a value of 0.38 (on a scale from 0 to 1) in 2005. The DOI measures three elements: opportunity, infrastructure and the use and quality of ICTs. Ranked in first place was Korea (0.79), followed by Japan and Denmark (0.71). In Latin America, Chile (0.52) and Argentina (0.47) hold the highest spots. Colombia ranks below Latin American countries such as the Dominican Republic (0.39), Peru (0.39) and Panama (0.39) and above Ecuador (0.36), Bolivia (0.30), Paraguay (0.30) and Guatemala (0.30) (ITU, 2005).

Despite the apparent negative trend in many of these indices, Colombia does stand out in the area of electronic government. The country's official electronic government website⁹ has been recognised

8 <www.internetworldstats.com/stats2.htm>.

9 <gobiernoenlinea.gov.co>.

as one of the best in the world, along with those of Belarus and Brazil. The e-Participation Index of the UN Global e-Government Readiness Report measures, on the one hand, a country's disposition to increase citizen participation through the use of electronic government and, on the other, the quality, usefulness and relevance of the information and services provided by the government. In the 2005 report, Colombia held 10th place worldwide in electronic participation, along with Chile, surpassing developed countries like Germany, Finland, Sweden and France.

Free and open source software (FOSS) and Creative Commons

In the past, there have been attempts by non-governmental actors to promote FOSS legislation in Colombia. However, these were largely unsuccessful and did not reach the country's Congress. Today there is a growing critical mass, especially in the education sector, that uses FOSS. For example, Moodle is a virtual education platform built using open source that is now being used by several educational institutions. This includes the National Learning Service (SENA) and the "Colombia Learns" Portal,¹⁰ an educational content strategy operating under the Ministry of Education.

One of the most important advances in licensing models has to do with the adaptation of Creative Commons to the Colombian context. Creative Commons establishes a legal model to facilitate the distribution and use of content in the public domain. In 2004, a group of lawyers at the Colombian University of Rosario decided to adapt this type of licence, already adapted to suit the legal environments of other countries, to Colombian legislation. As a result, the Creative Commons licence has been available in Colombia since 22 August 2006 and has been adopted by well-known institutions in the country, such as the newspaper *El Tiempo* (CC, 2004).

Media

The government faces a number of challenges in developing the Colombian media sector. This includes coordinating departmental strategies where developmental programmes are in place. It is also necessary to link efforts in the area of regulation between the CRT, administrative supervision departments ("superintendencies") and ministries. This need was evident, for example, in the discussion on a standard for digital television, which placed the Ministry of Communications and the National Television Commission (CNTV) at odds.

There are interesting government initiatives in the area of community media. Recently a tender was issued for the installation of community radios that will benefit some 400 small localities. This process is part of the Ministry of Communication's National Technical Plan for Radio Broadcasting. The ministry has promoted the Community Radio Draft Law, which seeks to create public policies on community radio broadcasting. The Ministry of Culture, for its part, is supporting the development of media in rural communities by creating spaces on public radio where citizens can air their views. The project increases citizen participation, cultural diversity and democracy in the sense that it benefits populations far from large urban centres.

Participation

Participation in ICT policies is not a priority for Colombia's social sectors. Participating in the information society seems to be a subject of lesser interest, and its relationship to the improvement of peoples' living conditions is not obvious.

ICT programmes in Colombia have been created by trial and error. When they were designed, few countries in Latin America had implemented e-strategies. This allowed for greater learning but also meant more time and effort in determining priorities and reaching goals.

While Colombia has been creative in capitalising on opportunities and changes in the field, as seen in its leadership on the issue of electronic government, there have been few opportunities for participation by non-governmental actors in defining policies, goals and approaches. In contrast, there is significant participation by the private sector in the development of plans prepared by the government, the execution of the projects, and the establishment of alliances with those programmes.

Although national ICT programmes have on several occasions looked to experiences outside government (as in the case of Compartel), the models established for the operation of these programmes do not allow for the active participation of actors with experience, nor for the possibility of making substantive changes in the models and development of the programmes.

One way for civil society to have an impact on public policy in a practical way is to offer the government the use of tools, methodologies and models developed by civil society organisations.

For example, one tool used in the online government strategy was developed within the framework of the Internet Accountability Project (IPRC),¹¹ which is being implemented by the Colombia Transparency Corporation and Colnodo, two Colombian non-governmental organisations (NGOs). This project, financed by the United States Agency for International Development (USAID) through Casals and Associates, seeks to strengthen transparency in mayoral offices and municipal finance departments through software that facilitates the publication of information on the internet. The project aims to increase accountability and foster the right and duty of citizens to inform themselves, express opinions and monitor the actions of government officials.

The Colombia Transparency Corporation and Colnodo donated the IPRC tool to the Colombian government after employing it in several municipalities around the country. In this way, a tool developed by two NGOs, with the active participation of municipalities, is placed at the disposal of the federal government. From there it is extended to the rest of the country, in a combined bottom-up/top-down model which, in addition to being very novel, offers many learning opportunities. So far, 628 websites have been installed using the IPRC tool and the plan is to reach approximately 1,000 municipalities during 2007.

A similar example is the Management and Exchange of Experiences between Community Telecentres and Compartel Telecentres in Colombia project, financed by the International Development Research Centre (IDRC) and coordinated by Colnodo in conjunction with the Universidad Autónoma de Occidente (UAO) and the Compartel Programme. This project seeks to share the experiences of organisations that have developed community telecentres with Compartel telecentres, in order to generate collective methodologies, resources and processes aimed at achieving the social appropriation of ICTs and a greater impact for the Compartel telecentres.

Outside of the public and private sectors, many diverse actors in Colombia (such as universities, unions, NGOs, research centres, etc.) promote the social use of ICTs. Some of these actors establish alliances among themselves in order to develop initiatives; however, few take a position on the government's ICT or telecommunications strategies.

10 <www.portalcolombiaprende.edu.co>.

11 <www.iprc.org.co>.

Beyond the CRIS (Communication Rights in the Information Society) Colombia initiative, which brought together a good number of groups around a common agenda, there have not been initiatives at the national level that link social organisations, unions and universities in a common strategy that critiques government ICT programmes, policies and plans.

Throughout the entire process of the World Summit on the Information Society (WSIS) there were only a few meetings called by the government prior to the Geneva and Tunis Summits. In the post-Tunis phase, some channels for dialogue were opened. The Ministry of Communications, for instance, tried to schedule an ICT Thematic Roundtable in November 2006, led by civil society, in order to provide input to the National Development Plan. Unfortunately, this roundtable was not held due to insufficient time to organise it before the deadlines for the definition and design of the Plan.

In January 2007, the president held the First Community Council on Telecommunications in which the president, the minister of communications and programme directors presented their e-strategies. The government showcased the development of its ICT programmes and the advances towards its WSIS commitments and the country's 2010 goals.

According to the presentations, the ICT sector is dynamic in Colombia and has a significant impact on the country's gross domestic product (GDP). The decrease in prices in telephony has contributed to the expansion of the sector without impacting on inflation. Even if Colombia is behind other countries in the region, there has been an important evolution in terms of internet connectivity from 2002 to 2006, particularly in public administration and educational centres.

At this first council, the government announced the creation of an advisory committee that would help develop a definition for a standard for digital television, based on international norms. The government also announced the reformulation of national e-strategies (such as the extension of the Compartel programme to cover rural telephony) and the establishment of discussion forums where various issues could be discussed and analysed, such as the consequences of renaming the Ministry of Communications the Ministry of Information and Communications Technologies.

Hundreds of people participated in this event, among them union representatives, universities, NGOs and other national organisations (including Colnodo).

In 2006 the Ministry of Culture promoted a broad, participatory process on citizen and community media, with the idea of designing a national plan. Many of the country's organisations had the opportunity to present their demands in this process. It goes without saying that the issue of ICT and development was raised and was included as an important focus of the plan.

However, these opportunities offered by the national government should be more open to dialogue and not consist solely of plans being presented without the ability to question them. It is in these settings that an alliance of various sectors could act with greater strength, and would have arguments and legitimacy to discuss the plans presented. Such an alliance could also monitor implementation. In practice, this does not yet exist.

Colombia stands out in the region for its level of e-participation, which would in theory indicate that the opinion of citizens is taken into account in decision-making, that citizens' concerns are taken care of, and that government-citizen feedback on public issues is encouraged. However, the truth is that this does not reflect reality.

The Colombian e-government initiative is still in a first phase of development in which the local and national governments are making preparations to provide information needed by their citizens. From there it should evolve into a model for the provision of services and transactions, and finally towards a model of deliberative electronic democracy, where citizens can use ICTs to demand accountability in public administration, participate in the design of government plans and programmes, and question government leaders. This, of course, requires strengthening the public sphere and broadening access to and use of ICTs.

Conclusions

Colombia has invested a great deal of effort in its three major ICT programmes. However, there are still major challenges facing the country's ICT strategy. In particular:

- There is still no communications law that promotes the development of the ICT sector, the provision of services at a reasonable cost and, above all, access to telecommunications services and the information society for all citizens.
- The government's three ICT programmes do not currently include affirmative action policies that favour access to and use of ICTs by vulnerable groups. The current plan for 2010 includes accessibility to ICTs by persons with disabilities, but does not consider women, youth, the elderly, or ethnic populations, among others.
- Current statistics on national ICT trends can be misleading. For example, the CRT reports do not break down their internet user statistics to show the percentage of users who are peasants, indigenous people, women or youth. They also do not say if the users are based in rural areas, and what work they do. The impact of national ICT programmes is also not measured. Departments¹² in the Pacific region, such as Nariño and Chocó, have the highest levels of poverty in Colombia, and also experience the greatest "digital divide". However, this cannot be seen in the official statistics.
- There is little synergy between the ICT programmes in different government departments, despite attempts by the government to create cooperation and teamwork at an institutional level. In order for other social sectors to form alliances with the government, a minimal framework of cooperation between government departments would be necessary.
- In addition to the national programmes, there are departmental and municipal initiatives that seek to broaden the use of ICTs among the public,¹³ but there is no coordination or joint efforts between these projects.
- The production of local content that reflects the country's cultural diversity should be strengthened.
- Technological convergence is important in Colombia, given that barely 13.5% of the population has access to the internet, but more than 50% has access to mobile telephones. In many remote rural areas, the population went from having no telephone service to having mobile phones. Although the Ministry of Communications has spoken a great deal in the last year about the

12 Colombia is divided into 32 *departamentos* (departments) and one capital district.

13 Such as the Infocentres programme and the "common point" centres in Medellín, among others.

importance of technological convergence, this convergence is also about services, knowledge, and content, and requires a stable regulatory framework. To prevent any communications law from becoming obsolete, it should be designed to allow for the entry of new services.

- In general, ICT support for micro enterprises, helping less-favoured sectors use ICTs, and the use of ICTs to promote urgent national issues such as human rights should be among the targets set to resolve the concrete needs of Colombians. ■

References

- Casasbuenas, J. (2006). *Convergencias: Tecnológicas, Políticas y Cultural: Paper presented at "Encuentro Nacional de Medios Ciudadanos y Comunitarios"*. Bogotá, 11-14 July 2006.
- CC (Creative Commons) (2004). *Atribución 2.5 (Colombia)* [online]. Available from: <creativecommons.org/licenses/by/2.5/co/legalcode>.
- EIU (Economist Intelligence Unit) (2005). *The 2005 e-readiness rankings. A White Paper from the Economist Intelligence Unit* [online]. Available from: <graphics.eiu.com/files/ad_pdfs/2005Ereadiness_Ranking_WP.pdf>.
- Guerra, M. (2006). *Conversatorio sobre los lineamientos del Plan de Gobierno 2006 – 2010* [online]. Available from: <mincomunicaciones.gov.co/mincom/src/user_docs/Noticias/ConversatorioMinistra1109.pdf>.
- ITU (International Telecommunication Union) (2005). *Digital Opportunity Index* [online]. Available from: <www.itu.int/osg/spu/statistics/DOI/ranking2005.html>.
- MC (Ministerio de Comunicaciones) (2000). *Documento Conpes 3072. Agenda de Conectividad* [online]. Available from: <www.agenda.gov.co/documents/files/CONPES%203072.pdf>.
- MC (2002). *Documento Conpes 3171. Lineamientos de Política en Telecomunicaciones Sociales 2002 - 2003* [online]. Available from: <www.dnp.gov.co/archivos/documentos/Subdireccion_Conpes/3171.pdf>.
- MC (2005). *Panorama internacional y nacional: Tablas de índice de tecnología* [online]. Available from: <www.agenda.gov.co/documents/files/TablaIndicadores2005web.pdf>.
- MC (2006). *Informe Día de Internet* [online]. Available from: <www.mincomunicaciones.gov.co/mincom/src/user_docs/Noticias/InformeDiaInternet.pdf>.
- MC (2007a). *Seis millones de colombianos han accedido a la telefonía rural* [online]. Available from: <www.compartel.gov.co/noticias.asp?idnoticia=113>.
- MC (2007b). *CPE en cifras* [online]. Available from: <www.computadoresparaeducar.gov.co/cpe_en_cifras.html>.
- MDN (Ministerio de Defensa Nacional) (2003). *Política de Defensa y Seguridad Democrática* [online]. Available from: <alpha.mindefensa.gov.co/dayTemplates/images/seguridad_democratica.pdf>.
- Paz, O. (2006). *Uso e Impacto de la herramienta Internet para la Rendición de Cuentas en el Municipio de Pasto, al suroccidente de Colombia. Case Study: Experiencias andinas de gobierno electrónico: la problemática de la participación ciudadana*. Quito: FLACSO Ecuador.
- UN (United Nations) (2005). *Global E-Government Readiness Report 2005. From E-Government to E-Inclusion* [online]. New York: UN. Available from: <unpan1.un.org/intradoc/groups/public/documents/un/unpan021888.pdf>.
- UNCTAD (UN Conference on Trade and Development) (2004). *The Digital Divide: ICT Development Indices 2004* [online]. Geneva: UN. Available from: <www.unctad.org/en/docs/iteipc20054_en.pdf>.