

COLOMBIA

INCLUSION FROM THE COMMUNICATIONS FOR PEOPLE WITH DISABILITIES

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In the same way that the Ministry of Communications is called to regulate, management and control the use of the radio electrical spectrum; has the responsibility to warrant the effective access, use and social benefits to the technologies and services in communications, to the different social groups of the society.

By this means, we had recognize the situation of exclusion that the people with sensorial disabilities (visual or auditory) had been to face, because of their difficult for their communication or information access; and in this way to their social integration, in education or labor live; or simply for their daily interaction with family and friends.

So then, the Ministry had been implementing projects to acquire, to fit out and to put in service appropriated technologies to blind people, whom had received training for the effective management an use of these technologies. Screen readers, intelligent scanners (reader – speaker), Braille printers; whichever, the objective is to give them the opportunity to obtain information access and the possibility of have a work and an educational performance similar the other members of the society.

For the deaf people, the Ministry had work in two lines: in designing of policies an rules in order to establish access systems in the public service of television, and by the other hand, in the planning, managing and following up of relay systems for an effective telephonic communication between deaf and listener people. On December 2006, the Ministry and TELEFONICA TELECOM inaugurated the national project “Accessible Telephony” like a relay service to deaf people, with remote access by Internet and a free national telephonic line.

Ministerio de Comunicaciones
REPÚBLICA DE COLOMBIA



Libertad y Orden

**Seminary to share experiences in the
best practices and services
for people with disabilities**

(Geneve, 17th september/2007)

Ministerio de
Comunicaciones
República de Colombia



Colombia:
Inclusion from the communications to
people with disabilities

Public policies and experiences for incorporation of
technologies



COLOMBIA IS A SOCIAL STATE OF RIGHT, organized as an unitarian, decentralized, with autonomy of its territorial organizations, democratic, participative and pluralist republic form, founded on the respect of the human dignity, on the work and the solidarity of the people who integrate it and on the prevalence of the general interest.

The 20th article of the National Constitution by 1991, indicates that it has to guarantee to all individuals "the freedom to express and to disseminate to their thought and opinions, to inform and to receive truthful and impartial information, and to found massive means of communication".

GOVERNMENT COMMITMENT

All colombians connected and informed

All colombians connected and informed

To guarantee the right to the access to information and communication services, is a fundamental tool to advance towards the **social integration** of the **people with disabilities**

Some **technological developments and other tools for the information and the communication**, allow to the population with a sensorial disability (visual and/or auditory) to exert their **constitutional right** to the information, in order to remain communicated totally and to access to the education and the work in equality of conditions.

TECHNOLOGIES FOR BLIND PEOPLE

Ministerio de
Comunicaciones
República de Colombia



There has been an improvement in appropriate technologies installing for blind and low vision people (reading programs of screen, Braille printers, computers, hardware and software, digital book readers) in public libraries, Telecentres, educative institutions, and universities, distributed in different subregions of the country.



Computer with reading software of screen



Braille Printers



Digital book reader



Intelligent scanner of reading

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Damian Steven Roa Roa from La Capilla – Boyacá (8 years old), who was born blind, wrote a letter to his aunt during his second training.



La Capilla, 16 de noviembre de 2004.

Señora
MARINA ROA FERNANDEZ
Huila.

Querida tía:

Espero que te encuentres bien, y que vengas sana i salva.

Te cuento que he estudiado mucho, también que pasé el año.

Además te cuento que ya aprendí a manejar el computador con el jaws que es un programa que habla, que me donó Computadores Para Educar.

Adiós tía, y que este año nos volvamos a ver muy pronto.

Te quiere mucho

Tu sobrino:

DAMIAN STEVEN ROA ROA.

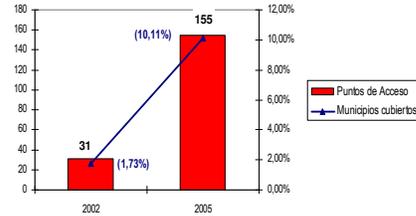
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All colombians connected and informed



TECHNOLOGIES FOR BLIND PEOPLE

INVESTMENT:
An investment has been made of:
US \$375.660



	2001-2004	2003	2004	2005
Investment	US \$69.395=	US \$ 31.459=	US \$46.264=	US \$228.542=
Access points	31	5	19	100
Partner	INCI	BANREP	CPE	COMPARTEL
Technologies	JAWS – Víctor Reader –Braille Printer	Intelligent scanner	JAWS	JAWS
Beneficiaries	Libraries, Universities	Regional Libraries	Educative Institutions	Telecentres

TECHNOLOGIES FOR DEAF PEOPLE



Access to the information and the communication through the public service of television

Incorporation of systems of **access for the deaf people** in the **Public Service of Television** (Closed Caption, **Subtitulation** o sign language).



INVESTMENT:
Between 1998 and 2002, the investment has been made of:
US \$169.701

TELEPHONY FOR DEAF PEOPLE

Ministerio de
Comunicaciones
República de Colombia



The project Accessible Telephony for deaf people began its operations in December of 2006 through a **National Relay Call Service Telefónica-Telecom**, with access from 100% of the towns of the country; deaf people can connect to the Relay Call Service from any center of Internet.

The project has, in addition, a **Properly Network of Access** that includes computers or text telephones – TTY, duly signalized.

PROJECT "ACCESSIBLE TELEPHONY"

Ministerio de
Comunicaciones
República de Colombia



Comuniquémonos.

Ahora comunicarte es más fácil con el nuevo Centro de Relevo Telefónica Telecom, para personas sordas.



TTY



CHAT

Ingresar a www.telefonica.com.co para acceder al servicio desde cualquier computador con tu tarjeta prepago Telefónica Telecom o para conocer el punto presencial más cercano o llama a la Línea Centro de Relevo 01 8000 979090



MINISTERIO DE COMUNICACIONES
REPUBLICA DE COLOMBIA



Description of the Relay Call Service



The **Relay Call Service** is a service of telephone communication that allows **deaf, hard-of-hearing and with limitation of the speech people** to establish contact with listener persons, organizations or services that they wish. **It connect people** who use text telephones (TTY), and/or CHAT with people which been using conventional telephones.



The communicative bridge is established by a communication assistant of the **Relay Call Service** that has a conventional telephone, a computer and a TTY. This allows to send the message (writing in a keyboard) and to read the message received through its reading in a screen.

Description of the Relay Call Service



The communication can occur in two directions:

First direction:

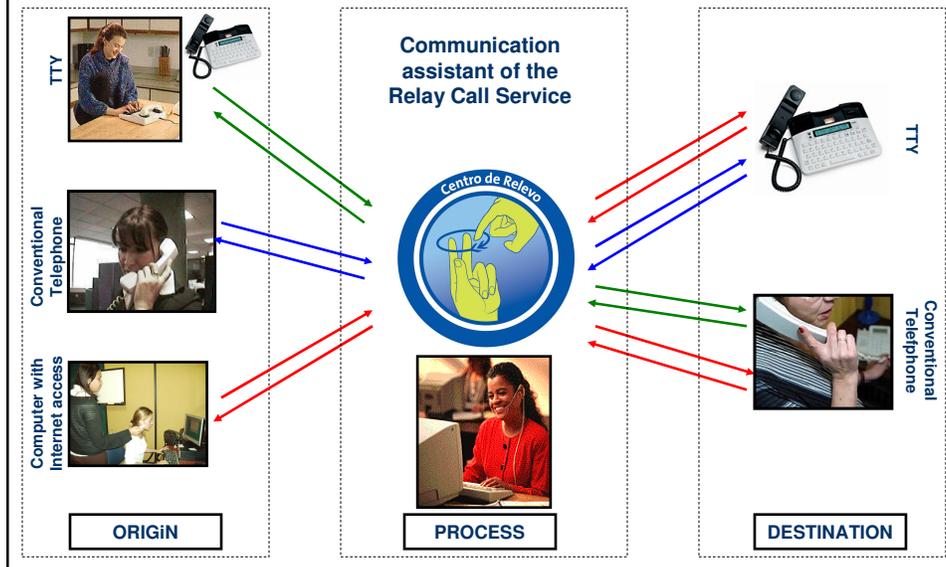
- The deaf person, who wishes to communicate with a listener, makes a call by TTY or chat to the Relay Call Service and transmits her message to the communication assistant.
- The communication assistant, when receiving the message sent by the deaf person, communicates by means of a conventional telephone with the listener to who he goes directed the call and he transmits the message in verbal form until hearing his answer.
- Then the communication assistant transmits the message from the listener by means of the text telephone or chat of the Relay Call Service to the person who made the call.

Second direction:

Opposite process in which the call is initiated by the listener person or organization.

Graphical representation

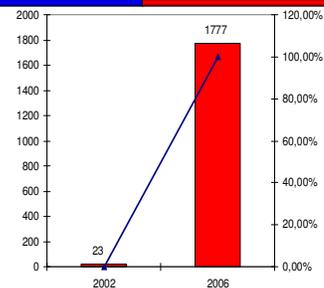
Centro de Relevo



Made Investments

TECHNOLOGIES FOR DEAF PEOPLE

INVESTMENT:
An investment has been made of:
US \$1'471.229=



	2000-2004	2004 - 2006	2006 - 2008
Partner	FENASCOL – ALCALDÍA – ETB	EPPM	TELEFÓNICA TELECOM
Investment	US \$118.216=	US \$80.776=	US \$1'272.247=
Access Points	21	28	238 (1490)
Technology	Text telephones TTY	Computers	Computers - TTY
Location	CADES – Schools – Organizations	EPM Points –Libraries – Schools	Telecom Points – telecentres Compartel

Pilot projects in operation



Relay Call Service **Medellín** - EEPPM



Text lines : 444 4115
Chat : <http://www.epmcc-pob.com/contacto.html>
Email : centrorelevo@epmcc-pob.com

28 access terminals

Relay Call Service **Bogotá** – ALCALDÍA / ETB



Text lines : First digit 195, and then 5
Chat : <http://centrorelevo.etb.net.co>
www.bogota.gov.co
Email : centrorelevo@alcaldiabogota.gov.co

21 access points (TTY)

Antecedents



From the experiences acquired through the Relay Call Service in Bogota and Medellín, and the purpose of extending the service to all the country, the Ministry of Communications structured and promoted the project "Accessible Telephony".

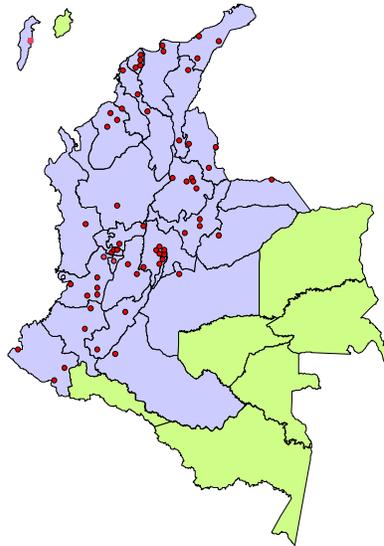


This project "Accessible Telephony", began from an advanced public supply through the National Fund Financial of Development Projects - FONADE, whose awarding became to Colombia Telecommunications, that are responsible for their operation.

Access Network

The service of the Relay Calls actually operates in 100 access points in 66 municipalities (26 departments) distributed in all the country, where the computers and text telephones are located.

Actually the project has 238 technologies (217 computers and 21 text telephones).



Selected Technologies

Advantages and Disadvantages

Characteristic	TTY	Computer
Communication quality	Cumple	Cumple
High speed of the communication	Direct	It depends on the type and speed of connection, and the capacity of the equipment
It satisfies the communication requirements	Yes	Yes
Access	Through the screen	Through the screen
Type of service	Text messages	Text messages, video, multimedia system



Advantages and Disadvantages

Characteristic	TTY	Computer
Universality	Limited, for use only between users of TTY	Open. Distributed world-wide network of computers
Handling of calls	It allows to make a single call in simultaneous form by equipment	It allows handling of call tails.
Technology of last generation	No	Yes
It allows connection to other types of networks	No	Yes
It allows connection to Internet	No	Yes
Possibility of connecting the system to the project of mass of Internet	No	Yes

Services – National Level



Calls that are taken care of through the Relay Call Service

- All the requests related to information and communication services.
- Local calls, extended local calls, nationals, internationals and mobil telephony.
- Calls of personal, familiar, judicial, labor, businesses type, in aim all type of calls that it requires.



Service users



- Deaf people and hard-of-hearing persons, nationals and internationals.
- Relatives and people related to the deaf and hard-of-hearing population.
- People with speech difficulties, old people, people related to these populations and the society in general.



Benefits



The main benefit of the Relay Call Service for the deaf community is to facilitate its access, to the different services, in equality of conditions.

In addition, it provides an additional value: to promote a better level in the handling of the language writing of the deaf people, specially by children and young people.



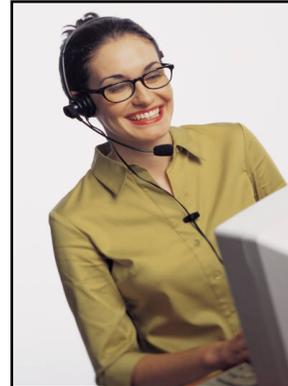
Communication Assistant (AC)

Description:

The Communication Assistant is a civil employee of the Relay Call Service, that acts like communication facilitator between a deaf person and a listener person.

Profile:

- Listener person, with knowledge in language sign.
- To have knowledge about deaf community.
- With abilities in the handling of the different types and levels of Spanish interlanguage used by the deaf people.



Communication Assistant (AC)

Criteria:

- It must be certified.
- Fidelity and exactitude.
- Confidentiality to save professional secret.
- Not to take part nor to opine.
- Label.
- Formation y qualification.

Protocol:

- The AC must conserve the grammar when transmitting the message .
- In case of being necessary, the AC must indicate to the user the time available for their call.
- Not to keep messages to be communicated later.

Communication Assistant (AC)

Standards to offer an effective service:

- In order to greet to the user who makes the call: *"Hello, Relay Call Service GA"*
- To greet to the text telephone user: *"Hello, Relay Call Service, a call from "Peter" to "John" GA"*

Always, the AC must use and take care of the following conventions:

- **GA:** It is put at the end of each message to indicate the other person who is her turn to write.
- **SK:** It is used to ask for the other person who waits. The one that writes it lets write for a moment but another person does not write either until receiving signal "GA".
- **SK o GA:** It is a previous signal to the act to hang. It is asked to him thus the other if it has something more to say before hanging.
- **SKSK:** It is used to indicate the other person who one is going to hang, and it is due to respond in the same way.

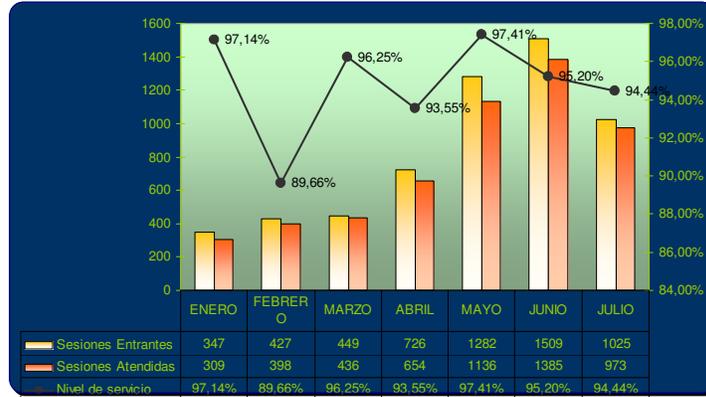
Interlingua

The Interlingua is "a species of hybrid language that contains linguistic elements of a maternal language and language that the subject is learning".

To know and to handle the "interlanguage" of the deaf people imply not only to learn sign language, but to have a good knowledge of the grammar of this one, as well as to handle interpretation and translation processes. The practice in all this is very important. .

- *"this test written badly in question"*
- *"I if to understand that this information my I want to see telefonica words....."*
- *"pleas help me many to deaf people some boring not either better development"*
- *"good late with me ok"*
- *"so that many delay by the time and listener says like writing in language spanish sign nontranslation."*
- *"Me happy first Relay Call Service"*

Use statistics



CONSOLIDADO CENTRO DE RELEVOS TOTAL	
AÑO	AÑO
Sesiones Entrantes	5765
Sesiones Atendidas	5291
Nivel de servicio Real	95,05%

Totals in the year considering the 3 means of access to the Relay Call Service.

Definition of indicators

- **Service level (%)**: Percentage of calls answered before an established time, it is meaning the Threshold.
- **Average time of conversation DCP (seg.)**: Time of duration of the call, also it is known like average time of conversation.
- **Average time of Answer (ASA seg.)**: Speed in which the call is responded.
- **Answered calls within service level**: Attended calls within established time (Threshold).
- **Answered calls before 10 seconds**: There are attended calls before 10 seconds of delay of the user..
- **Answered calls**: Number of attended calls.
- **Incoming calls**: Number of calls that enter CALL CENTER for this line.

Definition of indicators

- Attended : Total of attended sessions.
- Incoming Chat Sessions : They are established communications through Chat of Web Page of Relay Call Service.
- Chat Sessions DCP (Seg.): Average time of the total of the skilled sessions by chat.
- Number of connected assistants / 7,5: Number of assistants during the day calculated on 7.5 hours (time).
- Maximun number of work stations: Maximun numer of work stations to attend the channel during the day and according to the turns of the communication assistants.
- Spoken minutes: Number of used minutes in the communication with the user.

Consolidated indicating 2007

CONSOLIDADO CENTRO DE RELEVOS EN 2007	AÑO
Abandono Total (%)	3%
Abandono Después del Umbral (%)	1%
Nivel de Servicio (%)	95,05%
% Ocupación.	1%
DCP (seg)	273,99
Tiempo Promedio de Respuesta (ASA seg)	3
Llamadas Contestadas dentro del Nivel de Servicio	538
Llamadas Contestadas < 10 Seg.	533
Llamadas Abandonadas Después del Umbral	3
Llamadas Abandonadas Total	19
Llamadas contestadas	547
Llamadas Entrantes	566
Asesores Conectados	5
Estaciones Ocupadas	3
Minutos Contestados	2713,1
Sesiones No Atendidas	446
Sesiones Atendidas	4753
Sesiones Entrantes	5199
DCP	244,64

It corresponds to the sessions by telephone (conventional telephone or TTY)

It corresponds to the chat sessions

Opinion of the users



- "I like happy many thank you"
- "kind it knows to count all happens well that in chat difcil you accustom to use "
- "that the service to the 24 hours, so that my they did not take care of my request to me"
- "thanks for relay call service, fine ... And I want if yes or not can serve beeper to communicate with relay call service.. Too cellular phone (text messages), yes, to open relay call service.. Thank you"
- "please suggestion , this slow so that I need to fast so that I am already custom in Internet... and thanks for attention"
- "To transmit complete bad words sent"
- "Internet more card pre payment telecom I difficult expenses... money many many"
- "my interest to communicate relay call service much in better propose Telecom us the deaf people better change project video for relay call... It waits for Thanks to you all deaf people"
- "None.. But I am from Ecuador ... I want communicate directly in my country through Relay Call Service.. But the problem is the card pre payment.."



Libertad y Orden



Thank you

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