



## Telecommunications Development Fund in CHILE

*Enhancing Rural Connectivity*  
August 2005

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## General Facts

- Spanning more than 4,000 kilometers of coast from North to South.
- 341 communes in 13 regions
- 15 million inhabitants
- 13% rural population
- Strong Macroeconomic Fundamentals
- Economy open to International Trade
- Strongly taking steps into becoming a springboard for ICT in Latin America.
- Spanish Speaking Population



## Networks along the Country



- **Terrestrial Fiber Optic.**  
Connecting 11 out of 13 regions with a minimum of 5.0 Gbps.
- **Submarine Fiber Optic.**  
Current Capacity: 82.5 Gbps.
- **Mobile Telephony.**  
Base Stations: 1.964.
- **Fixed Telephony.**  
Switching centers: 601
- **Satellite.**  
Capacity: 270 Mbps.
- **Microwaves.**  
Capacity: 140 Mbps.

**Extensive Service Coverage**

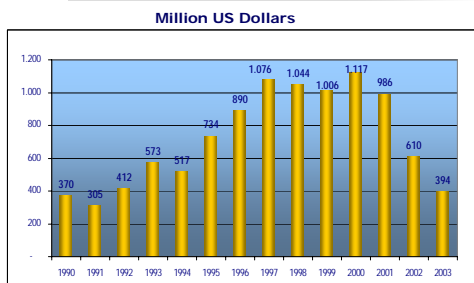


## Connectivity Snapshots (Dec/04)

- **326.000 Dial Up Internet Connections**
- **479.000 Broadband Internet Connections**
- **9,6 Million Cell Phones (59.6%)**
- **3,3 Million Phone Lines (20.7%)**
- **82% Households covered by cell or fixed**
- **41,2 Million Text Messages (a month)**
- **800 Node NationWide InfoCenter Network**
- **More than 300 WiFi Hotspots along the country**



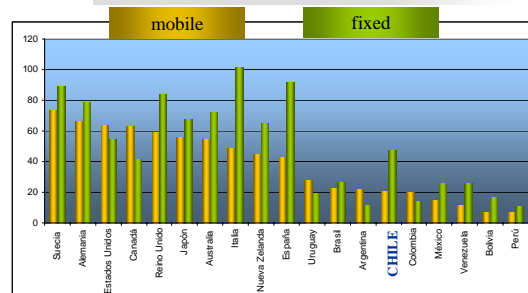
## Investment in Telecoms



**Investment has decreased but remains at high values.**



## Fixed vs. Mobile (Dec/2003)

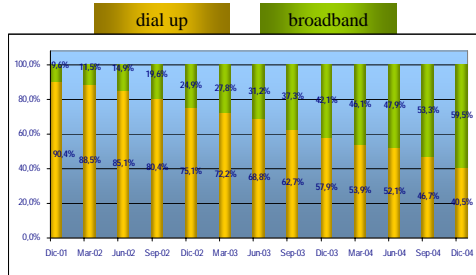


developed countries

latin america



### Internet: Connection Composition



BroadBand is increasing faster than dial up!



### Universal Access

- In Chile there is no Universal Service obligation to any telecommunication service provider.
- Instead, Chilean Government since 1994 developed the Universal Access Policy.
- In 2001 the law was modified in order to include internet access and other services.



### Telecommunications Development Fund

To promote telecommunications coverage in rural and low income urban areas, especially in distant or geographically isolated locations.



### Telecommunications Development Fund Operation

#### LEGAL FRAMEWORK

- General Telecommunications Law
- Telecommunications Development Fund Rules
- Budget Law of the Nation

#### MANAGEMENT

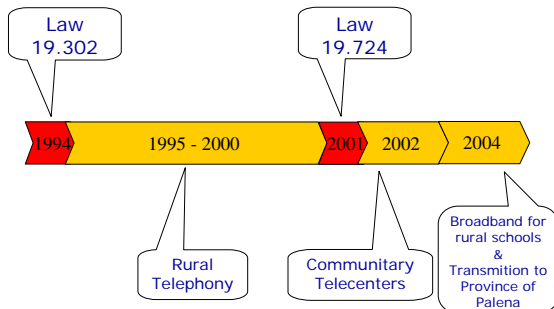
- Telecommunications Development Council

#### DUTIES

- Definition of criteria to assess projects.
- Establishing a Yearly Project Programme
- Awarding Subsidies
- Preparing and distributing the Annual Report



### Telecommunications Development Fund Evolution



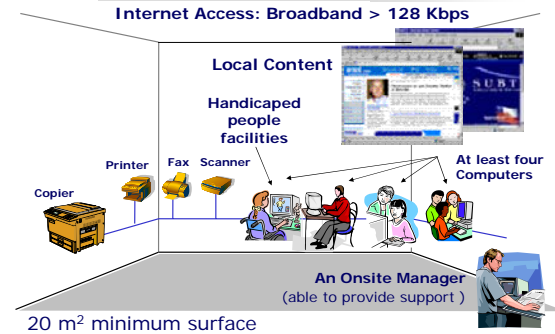


## After Rural Telephony... A Law Reform (Law No 19.724)

- 10 More Years of Fund Operation
- Diversified Eligible Projects to:
  - TeleCenters ("InfoCenters")
  - Sound and Television Broadcasting, and
  - Other Telecommunication Services
- More Community engagement through City Councils (municipalities)



## Telecenter Facilities



## TeleCenters' Information Resources

- Access (TrámiteFácil; Chilecompras; SII; etc)
- Trade Announcements
- Job Opportunities
- Local/National News Services
- Information about Government Services and Aid Programmes
- Business and Trade Information (Indap, Sernac)
- Local Government Information
- Address Service



## TeleCenter Objectives

- Giving access to ICT for most vulnerable and marginalized social groups.
- Diminishing information asymmetries
- Improving job opportunities
- Creating more participation opportunities
- Supporting people's creativity
- Strengthening social cohesion and economic integration



## Success Factors

### Commitment

From people, local authorities and local leaders

### Local Content

Language, local reality identification, resources

### Effective Onsite Manager

A facilitator, a cultural bridge, a transmitter

### Training

To compensate for low educational stds, disability issues

### Promotion

In the rural context, media available (radio)



## Critical Success Factors

### Demand

Forecast: volume and uses

### Management

Budget balance, financial support

### Competition

Rate of "death telecenters" versus new entrepreneurs

### Right Incentives

Operators evaluation: one day income versus income flow

### Operator Commitment

Insurance, financial guaranties, etc



## TeleCenter Contest 2002

### First Contest (February)

Telecenters participating: 102 (Regions IV to X)  
Awarded: 83  
Subsidies: USD 1.3 millions

### Second contest (June)

Telecenters participating: 253 (Regions I to XII)  
Awarded: 211  
Subsidies: USD 3.3 millions



## Backbone Project: Palena Province



## Objective



To establish better quality and wider capacity transmission system that allows the development of all different telecommunication services, in Palena, Futaleufú and Hornopirén, at accessible price for people living there.

Palena,  
Futaleufú,  
Hornopirén



## Transmission System Connecting Hornopirén County

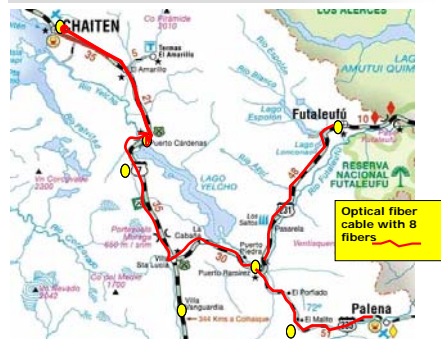
Amount of  
Subsidy  
granted to  
this project:  
US\$580.000



Microwave links —  
Optical Fiber —



## Transmission Systems to Futaleufú and Palena



Optical fiber  
cable with 8  
fibers



## Broadband Access to Internet: Rural Schools

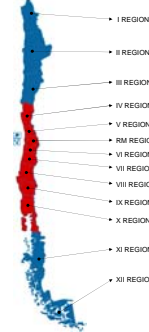


## Objective

To provide High-speed Internet connectivity to rural schools for free during a period of three years



## Selection Process of Rural Schools



Rural schools were divided in two groups according with the number of students registered

■ Extreme Zones (north and south)  
I, II, III, XI, XII and Palena Region

■ Rest of the country  
IV, V, VI, VII, VIII, IX, X and Metropolitan Region



## Selection Process of Rural Schools

- Internet penetration of the locality is between 0% y 3%.
- Participation in the "Proyecto Enlaces", developed by the Education Ministry, at least from 2004.
- More than 10 students registered in the Extreme Zones schools or  
More than 100 students registered in the rest of the country schools



## Contest Results

REGIÓN	PROJECT	SUCCESSFUL BIDDER	SUBSIDIES (US\$)	SCHOOL NUMBER
I	2004-14	ITACA S.A.	300.000	32
II	2004-15	ITACA S.A.	164.039	15
III	2004-16	ITACA S.A.	210.184	25
IV	2004-17	ITACA S.A.	228.897	21
V	2004-18	ITACA S.A.	103.300	10
VI	2004-19	ITACA S.A.	396.359	37
VII	2004-20	ITACA S.A.	961.543	91
VIII	2004-21	ITACA S.A.	1.025.226	95
IX	2004-22	ELECTRONET S.A.	1.418.182	137
X	2004-23	ITACA S.A.	1.328.384	124
XI	2004-24	ITACA S.A.	290.909	28
XII	2004-12	ITACA S.A.	13.636	2
RM	2004-25	ITACA S.A.	177.670	13
PALENA	2004-26	ITACA S.A.	347.273	37
TOTAL			6.965.602	667



## Expected Benefits

- ✓ 108.716 students along the country will have broadband Internet access.
- ✓ 667 Rural Schools will not pay for this service for three years
- ✓ Possibility to use this capacity for social purposes too
- ✓ Public Investment = US\$ 6.95 millions
- ✓ Private Investment = 30% of the public investment aprox. (US\$ 2.09 millions)



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