II. TELECOMMUNICATIONS IN LATIN AMERICA TODAY

II.1 Introduction

In the 1990s the telecommunications sector in Latin America like in most of the rest of the world evolved from one of exclusive provision of both basic and value added services to one where virtually all services (with a few exceptions) are provided in an open market. The process, which has to date not been fully completed, saw large amounts of foreign capital (especially European and North American) attracted by the huge growth potential of the market enter the region. Investors brought not only money but also the technical and management know how to stimulate a moribund sector.

During the initial phase of privatizations in the late 1980s and early 1990s state owned monopolies were often replaced by private monopolies with fixed periods of exclusivity awarded as part of a privatization package. It was only during the second phase of the liberalization process after periods of exclusivity had expired that telecommunications markets were fully opened to competition. In Colombia liberalization preceded privatization. Independent telecommunications regulators were established in most Regulatel member countries during the initial privatization phase and many countries participated in the Uruguay Round trade in services negotiations which ended in the February 1997 and with 12 of these countries making “basic telecommunications” commitments.

Three waves of privatizations can be identified: in Regulatel member countries: (i) the initial “pragmatic” wave, which included Argentina (1990), Chile (1987), México (1990) y Venezuela (1991); (ii) the second involving Bolivia (1995), Peru (1994) and Cuba (1995); and (iii) the last involving Brazil (1998) and the several Central American countries (Panama (1997), El Salvador and Guatemala (1998), Nicaragua (2001), leaving Ecuador, Honduras and Paraguay where along with Colombia privatization is still being contemplated.

The following sections review the process of privatization and the introduction of competition in the Regulatel member countries and their 1997 WTO (“Basic telecommunications”) commitments. A more detailed summary of each country’s legal and regulatory framework, including the entity responsible for setting policy and regulating; and market access policy can be found in Appendix 2 of this report.

II.2 Privatization

One of the main driving forces behind the privatization and also the liberalization policies for the public sector in the 1980s was the need for governments in the region to confront difficult economic situations and the serious external debt burdens which they were facing at the time. In the telecommunications sector there were also other factors which supported the policy of privatization. The state telecommunications monopolies had been incapable in providing services that people wanted evidenced most clearly by the long wait lists and the time it could take (measured often in years) to get connected even in large cities. Box II.1 summarizes these and other factors which precipitated reform in the telecommunications sector in many countries in Latin America at this time. Governments also started to realize the growing importance of telecommunications for economic development. It was therefore not surprising that the first sector to experiment with privatizations in Latin America was the telecommunications sector. Chile, Argentina, México and Venezuela were the first countries to privatize their state owned telecommunications monopolies. Other countries followed soon after. The Dominican Republic where the sector was privatized in 1930 was an exception.

Box II.1: Factors resulting in privatizations in the 1980s and 1990s in Latin America

- High degree of unsatisfied demand evidenced in long waiting lists.
- Demand of large users to be able to build their own infrastructure and networks in the absence of the monopoly's being able to satisfy demand.
- Traffic congestion during peak hours.
- Poor quality of service (unreliable, frequent outages especially during rainy periods and long time to repair failures).
- Many users valued services more than operators were charging for them.
- Limited territorial coverage with only a few cities covered and with huge pockets of people without even a public telephone. Absence of any telecommunications infrastructure in most of the country.

The model used by most countries to privatize their telecommunications monopolies was to grant concessions for a given period with a limited number of years of exclusivity. The new investors agreed to build out their networks in a certain time frame as stipulated in their concession contracts agreements with the government and to have their tariffs for basic services regulated. Often they also agreed on meeting certain build out and service quality obligations. The consortium that won the bid for a 40% share of CANTV in Venezuela in December 1991 had a set of obligations specified in its concession contract including the installation and modernization of a certain number of telephone lines, developing a plan for services in rural areas, shortening the time for getting dial tone and repairs, improving call completion rates and operator response times and reducing the wait time for getting connected to a maximum of 5 days by 1998[1]. Similarly in Mexico, the consortium led by Grupo Carso (with Southwestern bell and France Telecom) that acquired about 20% of the shares of Telmex in December 1990 had a number of network expansion and quality of service improvement obligations including increasing the payphone density in the country form 0.8 per 100 population to 5.

[1] Aileen A. Pisciotta, Privatization of Telecommunications: The Case of Venezuela, in Bjorn Wellenius and Peter A. Stern, Implementing Reforms in the Telecommunications Sector, Lessons from Experience, World Bank Regional and Sector Studies, Washington, 1994, ISBN 0-8213-2606-6

Box II.2: Telecommunications sector reform in Latin America

Similarities

- Sector reform was articulated around the privatization of the state owned monopoly.
- Privatization involved an international bidding process.
- In most cases competition was introduced in non basic services immediately alter privatization.
- The new investors were given a limited number of years of exclusivity.
- Most privatizations involved foreign (mainly European and North American) telecommunications operators.
- In all cases ownership was shared among a wide number of national and international, large and small, strategic and financial investors with however one or two strategic investor gaining control.

Differences

- Given the political will which was present the process was focused and rapid in Argentina, Brazil, México and Venezuela, taking less than two years. In Chile in spite of starting earlier than in most other countries the process dragged on for 10 years because of a lack of incentives.
- In Mexico there was a deliberate policy to increase the value of the company before privatizing it by introducing a number of improvements. In the other countries the companies were sold in their existing state with the new investor having the task of bringing the network and administration up to date.
- In México and Venezuela quantitative build out and quality of service obligations were contained in the companies' concessions along with a statement of the period of exclusivity. In Argentina these were contained in the sales contract. In Chile pricing policies and rules for establishing marginal costs were described in legislation. The price cap formulas used were defined in either the concessions or the sales contracts.
- In Colombia liberalization was achieved without privatization of state and local government enterprises.

The policy of privatization did not, however, receive the same political and popular support in each country. There was substantial political and union opposition to replacing a state with a private monopoly in several countries resulting in delays and even abandonment of the process in some countries. In Uruguay, for example, the privatization of the state owned telephone monopoly was rejected by a popular referendum. Antel today continues to be a state owned fixed line monopoly. In Costa Rica ICE is the state owned monopoly and in Colombia where most local companies are owned by their municipalities. Colombia telecom was partially privatized only in 2006 when Telefonica acquired 50 % plus one of its shares.

III.3 Introduction of competition

The significant resistance to awarding of extended periods of exclusivity to these private monopolies was in part overcome by policy makers' gradually opening markets for value added services and in many cases cellular mobile services for which exclusivity was generally neither requested nor offered. Policy makers and private investors at the time did not foresee the enormous growth potential of this new service. In 1990 the cellular mobile market in the 19 Regulatel member countries was just 2.1% and Chile and Mexico had the highest penetration rates at 10.6% and 7.7%, respectively. Twelve of the 19 (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, México, Peru, the Dominican Republic and Venezuela) made commitments at the conclusion of the negotiations on basic telecommunications (NGBT) in February 1997. These are summarized in Table II.1[2].

[2] Source: J. Monedero "Las Telecomunicaciones Latinoamericanas en las negociaciones de la OMC"

Table II.1: 1997 WTO commitments of Regulatel member countries

Country	% of foreing ownership permitted	Fixed services	Mobile services	Satellite services	Adopted reference paper?
Argentina	100%	- LT, NLDT, ILDT: Nov.2000 - National DTS - Leased circuit services	- Two cellular operators per region - PCS subject to a means test - Paging, trunking and mobile data	- SPCS - FSS excluding geostationary. MFN exemption	Adopted in its entirety
Bolivia	100%	- NLDT, ILDT: Nov.2001 - Private services - Callback prohibited - LT exclusivity for the 16 cooperatives - CUG	- all	- mobile	Partially adopted
Brasil	49% for mobile and satellite services until July 1999	- Voice and data in mod1 1 - Mode 3 not bound until one year after adoption of Telecom Law - CUG and VAS	- Two operators per resgion (one in bande A; the other in bande B) 49% foreign ownership limit until 1999 - Paging	- Embratel: has exclusivity for Intelsat and Inmarsat services - Same restrictions as for fixed services	Not adopted.
Chile	100%	- Everything but local voice telephone servics	- PCS, paging and mobile data	- all	Adopted in its entirety
Colombia	70%	- LT - Monopoly provision of NLDT and ILDT - Economic means test for all other services - Callback prohibited - Restrictions on routing of international traffic	- Number of operators limited until 1999	- Only geostationaray satellites - Same restrictions as for fixed services	Adopted in its entirety with various provisos
Ecuador	100%	- Unbound	- Cellular but not in mode 1	- Unbound	Not adopted.
El Salvador	100%	- Todos	- Todos	- Acceso Intesat por signatario	Adopted in its entirety
Guatemala	100%	- all - Restrictions on routing of international traffic	- all	- all	Adopted in its entirety

Table II.1: 1997 WTO commitments of Regulatel member countries

Country	% of foreing ownership permitted	Fixed services	Mobile services	Satellite services	Adopted reference paper?
México	49%	- all - Restrictions on routing of international traffic	- all	- Telmex has exclusivity for Intelsat Inmarsat connections - Various restrictions on use of satellite infrastructure until 2002	Adopted in its entirety
Perú	100%	- Voice telephone service and infrastructure : June 1999 - Callback prohibited - TD, telex fax - connections among CUGs prohibited - Restrictions on routing of international traffic	- all	- all	Adopted in its entirety
Rep. Dominicana	100%	- Todos - Modes 1 and 2 unbound	- all - Modes 1 and 2 unbound	- all - Modes 1 and 2 unbound	Adopted in its entirety
Venezuela	100%	- Monopoly until 2000 - Callback prohibited - DTS, paging andVAS only in mode 3	- Cellular mobile with its own infrastructure: Nov.2000	- Same restrictions as for fixed services	Partially adopted

<u>Abreviations</u>

LT	local voice telephone service
NLDT	national long distance voice telephone service
ILDT	international long distance voice telephone service
DTS	data transmission services
SPCS	satellite based personal communications services
FSS	fixed satellite service
CUG	closed user group
VAS	value added service
MFN	most favorite nation
Mode 1	cross-border supply
Mode 2	consumption abroad
Mode 3	commercial presence
Mode 4	presence of natural persons

Given that these commitments are embodied in an international treaty and have precedence over national laws once they are ratified by governments of these countries they served as a clear and unambiguous indication of the timetable for opening of telecommunications markets in these countries once the period of exclusivity had expired

Today of the 19 Regulatel member countries only Cuba, Costa Rica, and Uruguay continue to maintain exclusive arrangements for basic fixed telephone services. Uruguay has competition in cellular mobile and value added services and Costa Rica in value added services.

Basic parameters (penetration rates and number of operators) and the year in which telecommunications markets were completely liberalized in the 19 countries are shown in Table II.2.

Table II.2: Year of full liberalization, penetration rates and number of licenced operators in Regulator member countries

Country	Year fully liberalized	Penetration (lines/100 pop.)			Number of licenced operators				
		Fixed telephone	Mobile telephone (2005)	Internet (2004)	Fixed telephone	Cellular mobile	Domestic long distance	International long distance	ISPs
Argentina	2000	22.8	57.3		2 national; 350 local	4	138		
Bolivia	11/2001	7.0	26.4	0.81	16 regional	3		7	
Brasil		23.5	46.3	10.00	6	Up to 6 per area	> 5	3	10
Chile	1982	22.0	67.8	8.70	9	3	18	18	
Colombia	08/1997	17.1	47.8	8.00	40 TPBCL	3	3	3	15
Costa Rica	n/a	32.1	25.5	0.002	1	1	1	1	2
Cuba	n/a	7.5	1.2	0.13	1	1	1	1	2
Ecuador	04/2001	10.0	40.7		4	3	4	7	4
El Salvador		12.9	47.2	1.70	11	4	4	4	10
Guatemala		14.1	35.1	3.00	19	4		19	
Honduras	12/2005	8.9	25.0	0.13	1	2	1	1	> 6
México	1996	6.9	17.8	0.13	8	4	12	9	381
Nicaragua		18.2	44.3	0.03	1	3	1	1	
Panamá		3.8	19.7	0.02	2	2	4	4	14
Paraguay	n/a	13.6	41.9	2.41	1	4	1	1	14
Perú	08/1998	5.2	30.6		5	4	19	19	9
Rep. Dominicana		8.1	20.0	8.70		3		3	
Uruguay	n/a	30.9	18.5	9.20	1	3	1	10	22
Venezuela	11/2000	13.5	46.7		5	5	5	4	3

II.4 Regulators

As mentioned an important aspect of sector reform was the establishment in these countries of independent telecommunications regulators whose initial function in some but not all countries was to ensure that the newly privatized companies met the obligations in their concession contracts return for which they were given periods of exclusivity[3]. In addition to supervising the privatized companies they also developed the framework for the future competitive environments including regulations for tariff rebalancing, interconnection, transparent licencing and spectrum assignment schemes and universal access programs. While there are broad similarities among them there are important differences with respect to their internal structure, responsibilities, degree of independence, functioning, how they are financed, etc.

With the exception of Cuba and Chile, where they are departments within the ministries responsible for the sector including policy setting, these regulators were established as technical, economical, financial, administrative and functionally autonomous bodies. In Guatemala, Nicaragua and Venezuela they are autonomous but report directly to the minister responsible for the sector. In most other countries they are headed by commissions or boards with their members appointed by the government for fixed periods of time[4]. In the Dominican Republic where there is no separate ministry responsible for telecommunications the head of the commission is a state secretary in the government.

In El Salvador, Costa Rica and Panama these regulators also regulate other public services such as electricity, water, gas and transport. In Argentina, Cuba, Nicaragua and Uruguay they also regulate postal services and in Cuba the regulator is responsible for technology, informatics, automation and the electronics industry. Table II.3 summarizes the regulatory and policy making functions (awarding of licences, definition of technical plans, spectrum management, control and supervision, standardization,

[3] Whereas in Peru and Venezuela privatization coincided with the establishment of an independent regulator in Argentina, Bolivia, Chile, Cuba and México privatization took place before the regulator was established. All meet the criteria of independence in the WTO's Regulatory Principles Reference Paper.
[4] Argentina, Brazil, Colombia, Ecuador, El Salvador, Mexico, Paraguay, Peru, and the Dominican Republic.

consumer protection, international representation) for which each of these regulators is responsible[5].

[5] Source: Regulatel, “Reguladores de telecomunicaciones en América Latina”, Cuzco noviembre 2004

Table II.3: Responsibilities of regulator

Regulator	Responsibilities											
	Policy	Licencing	Technical plans	Spectrum management	Regulation	Control	User protection	Intl.	Competition	Autonomous	Information society	Broadcasting
CNC- Argentina	-	-	-	yes	-	yes	-	yes	yes	-	yes	yes
SITTEL - Bolivia	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
ANATEL - Brasil	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
SUBTEL - Chile	yes	yes	yes	yes	yes	yes	yes	yes	-	-		yes
CRT - Colombia	-	-	yes	-	yes	-	yes	-	-	yes	-	-
ARESEP – Costa Rica	-	-	-	-	yes	yes	yes	-	-	yes	-	-
MIC - Cuba	yes	yes	yes	yes	yes	yes	yes	yes	-	-	yes	-
CONATEL - Ecuador	yes	yes	-	yes	yes	-	yes	yes	yes	yes	-	yes
SIGET – El Salvador	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	-	-
SIT - Guatemala	-	yes	yes	yes	yes	yes	-	yes	-	yes	-	-
CONATEL - Honduras	-	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
COFETEL - México	-	-	yes	yes	yes	yes	-	-	-	yes	-	-
TELCOR - Nicaragua	-	yes	yes	yes	yes	yes	yes	yes	-	yes	yes	yes
ERSP - Panamá	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	-	yes
CONATEL – Paraguay	-	yes	yes	yes	yes	yes	yes	-	yes	yes	-	yes
OSIPTEL - Perú	-	-	-	-	yes	-	yes	-	yes	yes	yes	yes
INDOTEL – RD	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
URSEC - Uruguay	-	yes	yes	yes	yes	yes	yes	yes	yes	-	yes	yes
CONATEL - Venezuela	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes