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Nicaragua

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Telecommunications development in Nicaragua fell behind the general growth of telecommunications in Latin America and the Caribbean beginning in the 1970s, and particularly after the 1972 earthquake. Thus, between 1975 and 1980 the annual growth of lines was only 7.2 percent, compared with 10.8 percent in the region. In the 1980s this relative underdevelopment became even more pronounced: annual growth of just 4.7 percent against 6.6 percent. However, in the early 1990s the situation began to improve as a result of substantial state investment in both the expansion and modernization of the system.

This chapter looks briefly at the improvements in the network and then discusses the pending plan to privatize the state-owned operating telco, including the regulatory issues it raises.

5.1 Background

Nicaragua has a population of 4.1 million (July 1994 estimate) and a high birthrate. Migration to the cities in search of jobs and because of the dislocations of the civil war has made the country predominantly urban. The country has a total area of about 129,000 square kilometers. The low (generally under 2,000 meters) Sierra Amerique separates the Caribbean watershed from those of Lake Nicaragua and the Pacific Ocean.

As a republic, Nicaragua has a unicameral National Assembly and a president. During the 1980s the country was ruled by a junta dominated by the Sandinista National Liberation Front (FSLN), which had come to power in 1979 after a civil war that overthrew the Somoza government. The United States, which has a long history of intervention in Nicaraguan affairs, reacted to the Sandinistas' revolution by imposing a trade embargo.

The war and the embargo have increased the difficult socioeconomic situation in Nicaragua, given that the government has not found an adequate solution to the crisis, which has destabilized the economy and, in the second half of the 1980s, caused hyperinflation. During 1980–89 GDP per capita declined an average of 5 percent a year, real wages by 35 percent (World Bank 1991).

Because of its share of charges for calls made into the country from overseas, TELCOR, the state-owned phone company, became the main source of foreign currency for the Sandinista government. The government used the funds for its other needs. As a result of the embargo and lacking foreign exchange, TELCOR could not buy modern equipment on the international market. The technological changes spreading through the industry elsewhere in the world thus passed Nicaragua by.

Elections held in February 1990 brought Violeta Barrios de Chamorro to office as president and gave a majority to the UNO, a ten-party alliance. The Sandinistas (FSLN) became the major opposition party. The country has subsequently moved toward a more market-oriented economy, helped by substantial foreign aid, including amounts from the United States and the international banks like the World Bank and the International Monetary Fund. Many problems remain, including the significant gaps in wealth that contributed to the FSLN's success in the 1978-79 revolution and the power and influence the FSLN still has. In 1995 GDP per capita was only about U.S.\$415, according to World Bank estimates (although on a purchasing-power basis it was substantially higher).

It should be stressed that Nicaragua's telephone density is eighth among the fifty-four countries with a 1992 per capita GDP of less than U.S.\$635 per year (UIT 1994a). Underdevelopment of the telecommunications network is a reliable indicator of overall economic underdevelopment in Nicaragua.

5.2 Previous Structure

The evolution of telecom services supply was from the beginning closely linked to the military. From 1944 to August 1971 an administrative department of the Ministry of Defense, the Dirección General de Comunicaciones (DGC), was in charge of telecommunications. Then, under the presidency of Anastasio Somoza Debayle, the Dirección General de Telecomunicaciones y Correos (DGTC) was formed as a state corporate entity. DGTC supplied all postal and telecom services, with the exception of the National Radio, and it could establish companies or acquire participation in domestic and foreign companies with similar goals. These companies could have the same franchises and privileges that TELCOR received.

When they came to power in 1979 the Sandinistas did not implement significant formal changes in the structure of the sector; it was, after all, already owned and controlled by the state.

In June 1982, the Instituto Nicaragüense de Telecomunicaciones y Correo (TELCOR) was founded, inheriting the powers and duties of the DGTC. This meant TELCOR was a state monopoly but was open to the possibility of an association with private capital to form new communications companies. An essential difference between TELCOR and DGTC was in matters of planning and project execution: TELCOR had greater decision-making power regarding organization and internal rules and could draft general regulation and tariffs subject to approval by the junta.

Although formally independent, both TELCOR and its predecessor DGTC were very dependent on the executive power, specifically three members of the Junta de Gobierno de Reconstrucción Nacional, which was the supreme power in

the country, because their heads (who held the rank of minister) and three principal deputies (ranked as vice ministers) all were appointed by the junta.

The regulatory framework of the sector was extremely weak. In addition to the omission of important procedures, such as a methodology for setting rates, the regulatory framework had been created before the spread of microelectronics and, consequently, is not able to face the challenges posed by new technology. The governing legislation also does not address such things as the conditions for interconnection between domestic networks. The reasons are understandable: the issues did not have any importance when the only services that could be supplied were those of voice transmission, and the services were considered natural monopolies already in the hands of a totally state-owned company.

5.3 The Telephone System in the Early 1990s

At the end of 1993 the basic services network had an installed capacity of 93,026 lines, equal to a density of 1.6 telephones per 100 people. Behind this there are deep regional inequalities: metro Managua has 63 percent of installed lines and a density of 5.2, while the rest of the country has a density of only 0.7.¹

The introduction of digital technology started in 1991, along with a policy of diversification of equipment suppliers. Of the 58,000 digital lines in 1993, 1,247 were installed in the metropolitan area in 1991 and the rest in 1992. This means over 60 percent of the country's total lines in 1993 were installed in 1992, and that 62 percent of total lines are digital. Digitalization was focused on two regions (the third and the fourth) and was almost completely nonexistent elsewhere. Information and data transportation services are completely digital.

Samsung and Alcatel have become the major suppliers. Prior to the Sandinista government, Siemens had been the almost exclusive source. During the Sandinista period, as a consequence of the economic embargo, TELCOR bought crossbar exchanges from RFT, an East German company, for use in the second region.

There are no reliable data on the quality of services. From interviews it can be inferred that, even though the scope of services is very limited—basic wire and wireless telephony, fax, telex, and a very modest data transmission network—the quality is relatively high, as is appropriate for what has become in large part a relatively new system.

5.3.1 Pricing and Installation

Service applicants pay U.S.\$33 for installation of an automatic telephone, U.S.\$132 for a telex. (All calculations use the February 1995 exchange rate, approximately 7.55 córdobas per U.S. dollar.) The monthly tariff is U.S.\$6.62, which includes 600 message units. Additional message units cost 0.73 U.S. cents. A one-minute call requires two units locally, six within a region, and twelve if interregional. These rates are not high, but a large part of the population does not have the means to afford them. The national public services offered from TELCOR branches or a phone booth cost U.S.\$0.132 for the first three minutes of a local phone call.

These rates have been in effect since February 1, 1994, and represent a substantial price increase for domestic calls, but a major decrease for installation (the fee had been U.S.\$182, so the charge dropped some 80 percent) and international calls (which fell by up to 27 percent). The previous monthly fee had been U.S.\$1.75 and the cost of a message unit had been 0.22 U.S. cents, so the new rates were more than 278 and 233 percent higher, respectively.

5.4 Toward Privatization of TELCOR

The government headed by President Chamorro, which assumed office in April 1990, plans to expand the participation of private capital to every sector. Thus, in 1992 it allowed private parties to begin supplying wireless telephone services and public phone booths, as well as radio communications and television.

On October 15, 1992, a "bonds compensation system" (*sistema de compensación por medio de bonos*) was created. Its purpose is to compensate the owners of property that, in the judgment of the current government, was improperly seized by the Sandinistas. Payment is with fifteen-year bonds that will be redeemed from the proceeds of privatizing some state-owned companies, including TELCOR. The decree establishing the system provides for privatization of TELCOR within four years.

As a condition of receiving foreign assistance, the Nicaraguan government had agreed with the World Bank, the International Development Bank, and the International Monetary Fund to implement privatization within this period. Nicaragua has one of the highest per capita levels of external debt in the world and desperately needs external resources.

Immediately after approval of the compensation system, some important steps were taken toward privatizing companies. A temporary regulatory entity was created (DIGITEL) as a department of TELCOR. An evaluation of companies interested in becoming the main shareholder and administrator of TELCOR was begun. On January 12, 1994, it was announced that nine (of eleven) applicants fulfilled the requirements. These were AT&T, Cable & Wireless, France Telecom, GTE, Korea Telecom, Singapore Telecom, Sprint, Stet, and Telefónica International (a subsidiary of Telefónica España). The next step was to evaluate their bids.

5.4.1 Delay

The original schedule for privatization had to be modified because of passage of Law 169 of January 19, 1994. This law prevents privatization of services provided by the state unless the legislature has approved the specific proposed privatization, the creation of a regulatory entity, and the regulatory framework.

The consequence has been a freeze of the process for many months. The authorities had to; they could not continue until the National Assembly approved two laws introduced by the executive to meet the requirements of Law 169. Approval had become hostage to discussion regarding constitutional reforms. The executive earlier had refused to agree to changes to the National Constitution that

had been approved by the Assembly. These changes have given the legislature power over some functions that have been exclusively under the authority of the executive. They have also made it impossible for the current president's brother-in-law to be a candidate in the next (November 1996) presidential election. This is intended to impede creation of family dynasties and is motivated by the country's memory of the Somoza family, which ruled from 1936 to 1979.

The circumstances in which the new telecommunications law will finally be approved (creating a new regulatory body), permitting the privatization of TELCOR, will give rise to a political war over the passage of constitutional reforms. The specific questions concerning the sector that need regulation are relatively secondary to the discussion in the National Assembly.

5.5 The Draft Laws

In what follows, I analyze the main characteristics of the draft of the two laws introduced by the executive to meet the requirements of Law 169.

5.5.1 *The Law of Telecommunications and Postal Services*

The draft of this law (*Ley de Telecomunicaciones y Servicios Postales*) addresses only the development of telephone and related services; it is relatively incomplete regarding broadcasting. Still, it is adequate in everything related to the regulation of the convergence of telephony, television, and radio that will determine telecommunications development during the next decades.

An independent regulatory organization, named TELCOR (the same as the operating telco, which certainly can create confusion), will be created. Its structure, rules, and budget are not defined by the law, which means it is not possible to know if it will be able to effectively perform the functions for which it is being created. Its powers are to decide the level of competition for each type of service; to modify the classification of services created by the law (a classification that is very confusing); to authorize transfer of control and share ownership to private companies (that is, in effect, privatization); and to oversee transfers of licenses and of concessions (which will be granted by auction).

It is intended to create a competitive environment. Firms having more than one concession or license must manage the businesses independently, including separate accounting systems.

Regarding pricing, the law is imprecise, except that rates will be determined in a way that does not allow cross-subsidies. Charges for interconnection can be established by individual agreement between the companies and do not have to be published; regulators will intervene only if the parties cannot reach an agreement.

Foreign governments will not be allowed as shareholders in companies granted concessions or licenses. This could be interpreted as an obstacle to the participation of several European operators having their home state as an important shareholder. For example, subsidiaries of France Telecom and Telefónica de España both passed the prebid qualification process for purchasing TELCOR.

Based on available information, it is difficult to determine what the characteristics of the sector's structure will be and, in particular, what the possible levels of competition are. This is because these issues will be defined by decisions taken by the regulatory body once it begins functioning.

5.5.2 Privatization Ratification

The draft law ratifying privatization (*Ley de Ratificación del Instrumento Legal de Incorporación de Particulares en la Operación y Ampliación de los Servicios Telefónicos*) makes some specific points about the new company but leaves unanswered a number of others.

The new company is to provide nationwide basic telephone services, the maximum rates for which will be set by the regulatory authority. There are obligatory goals regarding expansion, modernization, and increase of service quality to be reached by the end of 1997. For one, the company must by then provide 6 telephones per 100 people. However, goals related to rural areas and additional public telephones have not been defined with precision.

The company will have monopoly rights to supply certain services, but it is not precisely specified which services these are. Indeed, there are inaccuracies regarding classification of services spread throughout the draft of the law. In addition, it can operate in areas open to competition. There is an obligation to permit interconnection of other networks, but the criteria regarding conditions and tariffs are not defined.

The state will retain a "golden share," giving it veto power on issues such as increases in capital or the company's liquidation, and initially it will hold 49 percent of the equity, with the probability of selling it later. Employees will be given 1 percent and have the option to buy an additional 10 percent. Administrative control and 40 percent of equity will be awarded in an international public auction. It is not explicit what type of shares each category of buyer will receive: in Mexico and Argentina, for example, different groups of buyers have received different classes of shares with different rights and restrictions.

The conditions regarding resale of shares by employees are not established. In particular, it is not clear how employees will participate in management. If participation is linked directly to share ownership, it is possible restrictions would be placed on marketability of the shares. It does seem that the general public will not be shareholders, at least initially.

5.6 Conclusion

The pending regulatory framework proposes that a privatized TELCOR hold monopolistic power in several services for seven years and, at the same time, grants it the possibility of supplying other, competitive services. This type of arrangement has a tremendous potential for abusive practices, and international experience shows it requires a sophisticated regulatory structure to prevent them. The regulator must be able to gather information, process it, and make decisions regarding such complex issues as predatory pricing and using profits from monop-

oly services to subsidize competitive ones. Moreover, in Nicaragua's case, where the administrator and principal owner of the operating telco will be foreign, regulators may face negotiations where the international companies' interests are supported by its home government through diplomatic pressure.

Indeed, this type of regulatory situation has generated difficulties even in developed countries. Therefore, in Nicaragua, given the imprecise way in which the scope of the monopoly has been demarcated and the indefiniteness regarding the conditions and costs of interconnection, this mix of monopoly and competition can easily become the source of ongoing conflict among the companies and between them and the regulatory entity.

Having a monopoly is what will allow the company to finance the investments needed to fulfill the agreed goals of expansion and quality improvement. This suggests the government's intention is to authorize rates that would not be possible in a competitive situation.

In addition, allowing a monopoly of international service with "excess" profits can be justified if the intention is to increase the price someone will pay for TELCOR. It should be emphasized that accepting a lower price is a subsidy to the investment required of the buyer, which can make the granting of monopolistic power superfluous.

At the same time, one of the problems the country faces is the difficulty of part of the population to pay rates that reflect real costs, let alone generate profits that can be reinvested in the system. It can therefore be understood that the government is thinking of allowing cross-subsidies among customers who have different price elasticities. Some TELCOR officials have expressed opposition to the cross-subsidy alternative, and the draft Law of Telecommunications also expresses a philosophy contrary to such subsidies. So far, rate restructuring has presumably reduced cross-subsidies because the cost of long-distance calls has fallen relative to the cost of local service.

Granting a monopoly in international services to finance investment in local services and then saying you will not permit cross-subsidies among services are contradictory positions.

If international telephony is not going to be allowed to generate "excess" profits to finance investments in the domestic network, there is no reason not to permit immediate competition in this area, which has many potential players and relatively low capital costs to establish service.

If the drafts of these two laws are approved and implemented without substantial modifications, the issues of universal service and the level of resources available for it will be unresolved. Any intention to provide universal service would, almost inevitably, mean setting up an explicit system of public subsidy for the network expansion this entails. It is also possible the business sector will not be able to access special services at prices and quality that are internationally competitive.

The reasons the privatization of TELCOR has been delayed relate more to politics than to the substance of the proposed structure of telecommunications. But the draft laws are in serious need of debate in order to clarify not only basic regulatory procedures but also the actual goals and intentions of the government regarding telecommunications.

Notes

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1. Quantitative data are limited and were obtained primarily from interviews in the country and from *Anuario Estadístico TELCOR* 1993, TELCOR's data book (which unfortunately provides no historical data).

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