An efficient and modern telecommunications infrastructure has been recognized by most nations as vital to economic development. The expansion and modernization of a country’s telecommunications network is looked upon as an engine of employment and technological improvement.

The globalization trend of the world economy has indicated the imminent need for reliable telecommunication networks. Thus, there has been increased interest in telecommunications technology and in network development in many countries.

The great impact of the British Telecom privatization in the 1980’s and the move towards liberalizing the telecom sector in some large Latin American countries, have reinforced the consensus as to the need for modernizing this sector in most of the developing world.

The challenge faced by most developing nations today is to evolve from a closed regulated telecom structure to one that is able to attract a share of the world’s investment resources. The resulting economic benefits would reinforce the growth potential and the ability of developing actions to participate in the globalization process.

The Brazilian federal government, aware of the worldwide trend towards liberalization, has been developing a privatization program that will affect Telebrás' operations significantly in the near future.

Considering the high returns in the telecommunications industry, and especially in the emerging markets, the federal government has decided to encourage aggressively private sector investments in modernizing and restructuring the country’s telecommunications network, although attracting such capital has become increasingly more competitive.
Investment opportunities follow a selective process that international investors tend to analyze very carefully. Today, the existence of an increasing number of alternative investments, both within and outside this field, makes the investors’ approach even more selective.

This paper presents an updated overview of Brazil’s transition towards a more market oriented structure and its main implications for the Telebrás System.

1. The Telebrás system

1.1. Historical Background

During the 1960’s and early 1970’s, i.e., prior to the incorporation of Telebrás (Telecomunicações Brasileiras S.A.) as a holding company, the role of the state in telecommunications was minimal; no formal regulation existed, telecommunication services in Brazil were divided along geographic lines and were operated by some 900 foreign firms using incompatible technology that provided poor quality telephone services.

The Federal Government scenario deemed to be undesirable. By August 1962 the Brazilian Broadcasting Code, Law 4117, had been adopted and an executive branch agency, Contel (Conselho Nacional de Telecomunicações) had been created. This law permitted the creation of an operating company, Embratel (Empresa Brasileira de Telecomunicações) in 1965, to install an interstate and international telecommunication network. It also created a financing source for its own implementation, the National Telecommunications Fund (FNT-Fundo Nacional de Telecomunicações).

In an administrative reform, a Ministry of Communications was created to upgrade the status of the above-mentioned Contel. Embratel was charged with its primary task of completing the country’s integration through the National Telecommunications System by 1972.

On November 9, 1972, the creation of Telebrás was authorized by Law 5972 for the principal purpose of developing the country’s national telecommunication system and of coordinating Embratel and the other recently-created state operating companies. By 1975, Telebrás had acquired almost all the existing telephone companies in Brazil and had created an improved telecommunications structure in the country. The following years saw further telecommunications system development and basic network integration due to an extensive development program directed by the federal government.

Despite the establishment of the Brazilian telecommunications system in 1972, four operating companies remained independent, namely CRT - Companhia Riograndense de Telecomunicações of the state of Rio Grande do Sul; Sercomtel and Ceterp, owned by Londrina’s (PR) and Ribeirão Preto’s (SP) municipalities, respectively; and CTBC - Companhia Telefônica Brasil Central (since 1972 the only private telecommunications concession operating in the country). Such independent companies now represent approximately 9% of all lines in service in Brazil.

Advancing industrialization in Brazil, in addition to the increasing need to integrate the country’s vast territory, was the basic rationale for the state takeover of the telecommunications sector. This process facilitated the implementation of basic telecommunication services throughout the country, including many remote areas that were finally connected to the national network. Public telecommunications faced rapid growth and, most importantly, began improving their quality. With the creation of Telebrás, Brazil extended at least pay phone services to most villages and was able to extend its telephone penetration.

Telebrás created an efficient network to support technologically advanced business communications, a service that gradually became comparable to those of other developing nations.

Currently, Telebrás ranks globally as the 11th company in terms of installed network. At the same time, it has the largest installed telecommunications network in Latin America, with 17.7 million installed lines by December 31, 1996. Through its 28 operating subsidiaries, it is today the dominant supplier of public telecommunications services in Brazil, owning approximately 94% of all public exchanges and 91% of the local telephone lines.

According to Federal legislation, Telebrás is required to own more than half of the voting stock of its individual 28 subsidiaries, each of which has a certain degree of autonomy in the conduct of its operational, financial and personnel policies. At the same time, Telebrás seeks to control its operating subsidiaries by setting their growth and investment guidelines, along with their financial and operating rules in order to ensure the effective implementation of the Ministry of Communications’ national telecommunications policy. The following table sets forth the percentage of total capital stock that Telebrás, as of September 30, 1996, holds in Embratel and in its six largest publicly-traded local operating subsidiaries.

<table>
<thead>
<tr>
<th>Subsidiary</th>
<th>Telebrás Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telepe</td>
<td>98.8</td>
</tr>
<tr>
<td>Telef</td>
<td>77.0</td>
</tr>
<tr>
<td>Telej</td>
<td>62.1</td>
</tr>
<tr>
<td>Telemg</td>
<td>84.2</td>
</tr>
<tr>
<td>Telepar</td>
<td>75.5</td>
</tr>
<tr>
<td>Telebahia</td>
<td>95.6</td>
</tr>
<tr>
<td>Teleuc</td>
<td>87.9</td>
</tr>
</tbody>
</table>

Of the 28 operating subsidiaries, 27 are the primary providers of local and intra-state long distance service in Brazil. The remaining one, Embratel (Empresa Brasileira de Telecomunicações), operates all of the inter-state domestic long distance and the international transmission facilities in Brazil.

Within their respective operating areas, all of the domestic operating subsidiaries, with the exception of Embratel, provide all telephone services, including mobile cellular telephone and data transmission services. Recently, Telebrás, through its Research and Development Center (CPqD), was
able to implement the inductive card-operated public telephone, which has drastically reduced the operating costs of public telephones for the subsidiary companies.

*Embratel*, as the national and international long distance carrier, provides 40 telecommunications services, including data transmission throughout Brazil. Its domestic service relies upon the Brazilian domestic satellite system, the microwave trunk network, and the expanding fiber-optic connections. The international service is provided through two analog submarine cables to Europe (Brus - Columbus); a digital one to the United States and the Caribbean (Americas 1); a microwave ground system to Argentina, Bolivia and Paraguay; coaxial cables to Uruguay; and the recently implemented fiber optic cables to Venezuela and the Mercosur countries (Unisur).

Revenues generated by inter-state domestic long distance and outgoing international telephone services are divided among *Embratel* and the involved operating subsidiaries. Telebrás’ revenues generated by local and intra-state domestic long distance calls accrue exclusively to the operating subsidiary within the originating area. The revenues generated by incoming international calls accrue exclusively to *Embratel*.

The map bellow illustrates the location of the 28 operating subsidiaries of Telebrás. The seven largest operating companies, according to revenues, are presented in different colors. Their gross revenue represented 77% of the Telebrás System’s in 1996.

1.2. The Regulatory Framework

The federal government has considerable influence over Telebrás because it owns a majority of its shares, regulates the Brazilian telecommunications sector, and has granted Telebrás’ concession pursuant to Decree 74,379 of 1974. That decree was the legal basis for the creation of Telebrás’ monopoly in the provision of public telecommunications services in Brazil.

The Brazilian federal government is required by law to own a majority of the company's voting stock (common shares). As the majority shareholder of the company, it is able to control the election of Telebrás' Board of Directors and the company’s expansion and investment plans.

The following table sets forth the capital stock structure of Telebrás, demonstrating the percentage of its total capital owned by the federal government, by private domestic investors and by foreign shareholders as of June 30,1996:

<table>
<thead>
<tr>
<th>Stock Ownership</th>
<th>% of Total Shares</th>
<th>% of Common Shares (ON)</th>
<th>% of Preferred Shares (PN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government</td>
<td>21.4</td>
<td>50.0</td>
<td>3.3</td>
</tr>
<tr>
<td>National Investors</td>
<td>41.5</td>
<td>38.3</td>
<td>43.5</td>
</tr>
<tr>
<td>Foreign Investors</td>
<td>37.1</td>
<td>11.7</td>
<td>53.2</td>
</tr>
<tr>
<td>Total Outstanding Shares (in billions)</td>
<td>320.7</td>
<td>124.4</td>
<td>196.3</td>
</tr>
</tbody>
</table>

Telebrás is subject to the regulatory supervision of the federal government as defined by the Ministry of Communications, which is required to approve all of the company's strategic decisions, capital expenditures and tariffs for public telecommunications services.

The rate structure is also subject to the final approval of the Ministry of Finance. Telebrás submits its requests for rate adjustments to the Ministry of Finance through the Ministry of Communications.

In addition, proposed capital expenditures by Telebrás and its subsidiaries must be included in the annual budget of the federal government and approved by the Congress.

The company’s financial records are audited annually by a federal administrative court, *Tribunal de Contas da União*, that assists the Congress in the fulfillment of its constitutional obligation to ensure that companies controlled by the federal government, such as Telebrás, pursue sound and legal business practices.
One area of the government's regulatory role over public companies has been the tariff control. The objective of this rate control has been basically to restrain the inflationary affects of repeated rate increases.

Recently, the state’s regulator role of companies like Telebrás has been widely questioned. This discussion regarding the telecommunications sector has generated a study which led to the program called Paste (recovery program) under the direction of the Ministry of Communications. This program seeks to set new limits for investments and plant expansion through the year 2003. The Paste program will be the subject of a deeper analysis in section 2 of this paper - The Impact of Liberalism.

1.3. Review of Telebrás Statistics

The federal government has recognized that an efficient and modern telecommunications infrastructure is crucial to the continuing economic development of the country.

In compliance with the federal government’s program, Telebrás has been investing more resources in recent years. The total investment for 1996 was US$6.1 billion and for 1997 the company is authorized to invest US$ 7.2 billion.

In recent years, the growth perspectives of the Telebrás System have been improving because of its larger installed capacity, the traffic expansion, and the tariff increases. The company's net income has risen from R$810 million in 1995 to R$2,756 million in 1996, a growth of 240%. Net operating revenue grew 44.9%, from R$8,618 million in 1995 to R$12,487 million in 1996.

In 1996, 2.9 million new telephone lines were installed, of which 1.6 million were fixed lines and 1.3 million cellular lines. Hence, the total installed network reached 17.7 million lines, of which 14.9 million were of fixed lines and 2.8 million of cellular lines. The average telephone density in Brazil (installed lines per 100 inhabitants) increased 17.5% that year, from 10.3 lines in 1995 to 12.1 lines in 1996 (including residential and commercial fixed lines and mobile cellular lines).

Despite the steady expansion of the telecommunications network, the largest number of lines continue to be concentrated in large urban areas. Of all the Telebrás System lines in service as of September 30, 1996, 56.7% were located in the states of São Paulo, Rio de Janeiro and Minas Gerais. Some 31.4% were in the state of São Paulo alone. In these and in the other more-developed areas of the country, the telephone density per 100 inhabitants is naturally higher than the average for the entire country. There are, in fact, many major Brazilian urban areas in which the telephone density is higher than the total density of some Latin American comparable telecommunications companies.

Because of Telebrás’ lack of independence from the federal government, the company’s operational results are usually affected by the government’s policies. Its current and historical tariff structure reflects this situation.

The absence of periodic rate increases, i.e. the inability of tariffs to keep pace with inflation, greatly reduced Telebrás’ ability to fund capital expenditures out of operating revenues.

In order to minimize the disparities in the company’s rate structure, the federal government, through the Ministry of Communications, permitted a tariff rebalancing in November 1995. This rebalancing intended mostly to start cutting the “crossed subsidization” between profitable and non-profitable services. The basic monthly subscription increased 513%, from its original R$0.61 to R$3.73, and domestic long distance rates increased on average 22%. The international long distance service rates, unaffected by this tariff rebalancing, were kept flat in nominal terms.

Regarding the international rate structure, the government has taken some very important steps to make Telebrás’ rates more compatible with international standards. In November 1994, when the first adjustment was made, the international rates were cut by 13%; in September 1996, they were reduced another 17% when the government exempted such service from the value-added tax (ICMS).

Despite the last tariff adjustment, Telebrás’ telecommunications rates continued below current international levels. Therefore, a second step of this tariff rebalancing was announced last March by the federal government, with the clear intention of providing the company with a more competitive rate structure.

2. The Impact of Liberalism

A new trend has come to dominate thinking about the political economy in much of the Western world in recent years. A growing advocacy of liberalism has been permeating economic discussions since the end of the 1970's, promoting ideas such as deregulation of state-controlled sectors, privatization of state-owned enterprises and, most important, competition as the only economic arrangement able to deal with the complexity and variety of today’s world economy.

In order to clarify this issue and to set the pace of these changes, it is very important to analyze why, suddenly, so much interest has been focused on telecommunications companies and on the economic development of emerging markets.

The dominance of this liberal view in economic and government circles has ensued for a variety of reasons. To begin with, the series of oil price increases, the inflation of the late 1970's and 1980's, expressive unemployment, the Balance of Payments desequilibrium, and other troublesome trends in most of the developing nations shook the consensus in the efficacy of protectionist policies.

At the same time, the stagnation and backwardness of the socialist economies as well as economic instability in Latin America, led most observers to focus on the negative consequences of state intervention. The progressiveness provided by the vital ingredient of entrepreneurship was being thwarted by the heavy hand of government, either in the extreme forms of ownership or in the lesser form of excessive regulation. The only way to avoid this government control was through the introduction of competition in many sectors of the economy.

The failure of the socialist regimes in Eastern Europe helped to accelerate the reorganization of the world economy. The transition economies of Eastern Europe were finally able to establish links to the prevailing economic forces of the Western world. Since then the triad of deregulation, privatization and competition has been given different emphasis throughout the world
As these stages were taking place, driven by fast technological innovations and market forces, telecommunications in the 1980's became one of the world's most dynamic economic sectors. During this period, concepts like liberalization and privatization gained prominence, especially under Reagan’s and Thatcher’s administrations, leading to major changes in the telecommunication structures of many industrialized countries.

The market concluded that the traditional policy of “laissez-faire” is the only acceptable mechanism capable of economic and social self-regulation. Moreover, the conviction that the state could serve as an entrepreneur started to erode, and the trend of liberalization and privatization began to gain force. The privatization of British Telecom is the most representative example for this period.

In such notion, because the challenges faced by the developing nations are enormous, reliance on market arrangements to enhance welfare is limited. In contrast with the United States and Europe, the developing countries had followed an economic model based on harmonious interaction between the government and the private sectors.

The different economic development processes that Brazil has experienced since its colonial period have created ample precedent for government intervention. The Brazilian government’s involvement in the construction of the country’s basic infrastructure can be easily understood in that the conditions in Brazil traditionally have not favored the private sector initiative. In addition, especial interest groups often pressured the government to engage in activities that promoted the welfare of those groups and in most of the cases has led the country to inadequate public policies.

Industrialization and modernization in Brazil were largely stimulated by conscious government policy, producing a shift of economic activity out of agriculture and into manufacturing in the past 50 years. A sharp cut back in the economic role of the state is a difficult task that the country has been trying to implement in recent years.

Brazil has had multiple development goals during recent decades. As a result, the regulatory role of the state has been used to intervene directly in the market place in order to guide and implement its various social and economic policies.

During the so-called Brazilian miracle, in the beginning of the 1970's, the country favored the expansion of its industrial base through an increase in its international indebtedness.

Following the international financial monetary crisis of 1982, and given the high indebtedness of the economy, the federal government was forced to decrease the level of infrastructure investments.

A series of economic stabilization plans, beginning with the Cruzado Plan in 1986, attempted unsuccessfully to curb inflation, usually by imposing price controls. Despite such plans, inflation rocketed to as much as 2,490% in 1993, undermining the real value of public utility tariffs.

Consequently, between 1977 and 1990, the real value of monthly Telebrás’ subscription charges fell by 83%, pay-phone rates by 75%, domestic long-distance rates by 79%, and local call tariffs by 63%. During 1990-1994, when inflation ranged from 1,100% - 2,500% per year, monthly subscription charges fell 50% in real terms.

Partly offsetting this tremendous erosion of telecommunication tariffs, the federal government raised the domestic and international long distance telephone tariffs. As a result, Telebrás’ international tariff structure became less competitive, creating a space for the so-called “call back system” (international services offered by international carriers through special dialing numbers).

Insufficient revenues resulting from the low telecommunication tariff structure, along with the deteriorated capacity of the federal government to invest (due to rampant inflation) depressed the company's investments during this period. The lack of sufficient investments in the expansion and modernization of Telebrás’ basic infrastructure, coupled with high levels of traffic, has led to a deterioration in the quality of telephone service in recent years.


It was only with the implementation of the Real Plan in 1994 that inflation was brought down to manageable levels. Thus, until the implementation of the Real Plan, the average investment in Telebrás started to double, ranging from US$4.3 billion in 1994 to US$6.1 billion in 1996.

The stabilization of the economy has enabled the federal government to redefine some of its expansion targets for publicly-owned companies. In many cases, such companies had been adopting investment levels that did not meet their needs.

Forced to deal with low levels of internal savings, a rampant inflation and an increasing cost for new technologies, the federal government was forced to start a strategic move towards the modernization of the country’s economy.

Concomitantly, the revival of the old liberalism ideal, as described before, started to take shape in many of the Latin American economies. By then, some countries of the region had adopted a more liberalized economy with decreasing government intervention.

In order to participate actively in this changing world economy and to enjoy the benefits of globalization, the Brazilian federal government has implemented some structural changes, such as privatization and the modernization of basic infrastructure.

The current Brazilian Administration, through the Ministry of Communications, has developed the Paste - Recovery and Expansion Program for Telecommunications and Postal Systems. This program will, in accordance with these liberal economic concepts, allow Telebrás to be restructured, and according to the federal government's intention, later privatized.

The aim of the next section is to present the main objectives and guidelines of this extensive investment and development program called Paste.

2.1. The PASTE Program

The Paste program creates the basic guidelines for the institutional reorganization of the telecommunications sector in Brazil.
The idea behind this program is to establish goals and viable projects to expand the telecommunication sector in the country, envisioning a substantial increase in the supply of lines and services.

Aiming to transform the telecommunications sector, the federal government, through the Ministry of Communications, decided to promote an extensive investment program capable of stimulating national economic development and of meeting the overall demand for infrastructure and services in the coming years.

Total investments projected by government through Paste is US$75 billion for the 1995 - 2003 period. The private sector has been strongly encouraged to participate in this extensive investment program for the modernization and expansion of the telecommunications sector in Brazil.

"Information technology has become the fundamental tool for the development of economy and society itself. This means that our nation will have to overcome this existing gap in order to continue its development process. This does not just involve expanding the already existing services for the purpose of restoring justice and balance. It is a matter of investing heavily in communications to build a sound and strong infrastructure, essential to create the wealth needed for the country to invest in social areas."

Among some of the factors that have contributed to limit the modernization and expansion of the telecommunications infrastructure in Brazil over the last ten years, Paste has identified the following:

- Misalignment of tariffs caused by the extensive use of "cross-subsidies";
- Telecommunications services not affordable by most of the population;
- Insufficient investment in the expansion and modernization of the network;
- Lack of professionally skilled employees

In response to the urgent needs of this economic sector, the government clearly intends to implement a new set of regulations for the sector, using competitive criteria when granting of concessions and authorizations, and when promoting the reform of the Brazilian Telecommunication Code. Nevertheless, the changes proposed in Paste also include a final chance to increase the capacity and the density of telecommunications facilities in Brazil.

In view of this program, it is necessary to stimulate technological innovation, to enhance productivity and competitiveness, and to consolidate a modern telecommunications industry in Brazil.

In a simplified way, the Paste program clearly indicates the Brazilian government’s perception of the importance of the development of the telecommunications industry for the people and for the country’s economy at the turn of the century.

Developing countries like Brazil must increase investments in their telecommunications infrastructure. Must promote the development of an information society; and must stimulate their social, political and economic development.

The far reaching goals outlined by Paste will intensify the density of telephone services in Brazil by the simple fact that, within the time period specified, a large number of fixed and cellular lines will be installed.

The tables presented below illustrate the present situation and the proposed goals in the each of the above referenced fields.

**Paste’s Proposed Telecommunications Services Goals:**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Fixed Lines (millions)</td>
<td>14.3</td>
<td>16.5</td>
<td>18.9</td>
<td>21.7</td>
<td>24.7</td>
</tr>
<tr>
<td>Cellular Lines (millions)</td>
<td>1.9</td>
<td>4.8</td>
<td>6.8</td>
<td>8.2</td>
<td>9.6</td>
</tr>
<tr>
<td>Pay-Phones (millions)</td>
<td>0.40</td>
<td>0.46</td>
<td>0.54</td>
<td>0.66</td>
<td>0.80</td>
</tr>
<tr>
<td>Data Communication terminals (millions)</td>
<td>1.5</td>
<td>2.5</td>
<td>3.8</td>
<td>5.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Service</td>
<td>1995</td>
<td>1996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Lines (millions)</td>
<td>13.3</td>
<td>14.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellular Lines (millions)</td>
<td>1.5</td>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Paste's Installed Lines Per 100 Inhabitants Goals:**

<table>
<thead>
<tr>
<th>Service</th>
<th>1994</th>
<th>1997</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Lines</td>
<td>8.46</td>
<td>15.00</td>
<td>23.22</td>
</tr>
<tr>
<td>Cellular Lines</td>
<td>0.52</td>
<td>5.83</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Actually Installed Lines by Telebrás per 100 Inhabitants as of Dec.31, 1996:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Lines</td>
<td>8.41</td>
<td>9.22</td>
<td>10.18</td>
</tr>
<tr>
<td>Cellular Lines</td>
<td>0.50</td>
<td>1.06</td>
<td>1.96</td>
</tr>
</tbody>
</table>

**Paste's Investment Plan Proposal - (R$ billion):**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R$ billions</td>
<td>5.26</td>
<td>7.84</td>
<td>8.03</td>
<td>8.10</td>
<td>8.23</td>
<td>37.46</td>
</tr>
</tbody>
</table>

Investment by Telebrás as of Dec.31, 1996 - (R$ billion):

<table>
<thead>
<tr>
<th>Investment</th>
<th>1995</th>
<th>1996</th>
<th>1997 (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R$ billion</td>
<td>4.6</td>
<td>6.7</td>
<td>7.9</td>
</tr>
</tbody>
</table>

(= total authorized investment for 1997)

Considering the original targets in Paste, and analyzing the above tables, it is clear that the initial results deviated somewhat from the projections. Nevertheless, it is important to point out that Paste’s main idea, and the federal government’s commitment to the modernization and expansion of the Telebrás System, has never been discarded. A good example of that fact is the almost doubling of the company’s investments, since the launching of the program in 1995.

The achievement of the program’s targets, however, involve a wider spectrum of economic improvements. They depend on a political will and commitment to implement structural changes.

The advancements made during Fernando Henrique Cardoso’s administration include some important legislative changes that the government has been able to pass in Congress. To start, it is important to cite the August 1995 amendment to the national Constitution, that ended the telecommunications monopoly in Brazil.

Furthermore, the first implementing law (Minimum Law) regarding the privatization of broad band services for cellular telecommunications (B Band) passed the Congress in July, 1996. Finally, after 18 months of discussion, the General Telecommunications Law proposed by the government has been
under consideration in Congress since last December. It is likely to be enacted by July 1997.

Before discussing the contents and objectives of this Law, it is important to cite some traditional sources of financing that might be relevant to the Brazilian telecommunications sector under the new conditions suggested by the Paste. The following section will briefly discuss these.

2.1.1. FINANCING ALTERNATIVES FOR THE TELECOMMUNICATIONS SECTOR

Considering the government’s major objective of developing and modernizing the telecommunications sector in Brazil, the amount of funds that will be necessary to finance this process appears relatively large when compared to previously authorized investments.

The financing suggestions presented below are suitable for any kind of telecommunications company - private or public, and intend to enumerate briefly some of the ways normally used in the international finance market.

2.1.1.1. Debt Financing

a) Project Financing

This kind of financing has been extensively used by telecommunications companies recently. Such financing raises capital in the international market mostly through special government sponsored programs.

Project financing involves the creation of a separate stand-alone entity for a particular project. The future cash flow of the project will determine the capacity for debt repayment.

b) International Lease Financing

This is an important form of asset-based financing that involves the leasing of capital goods. In leasing equipment, the party that owns and leases it to another party receives the lease payment and the residual value, thereby covering the equipment’s acquisition cost plus profit. Leasing tends to be heavily tax-driven, in that the lessor is able to deduct lease payments as part of the cost of doing business.

c) Eurobonds

Eurobonds are usually listed on the London or Luxembourg stock exchange. This kind of financing includes raising long-term capital from international sources, denominated in the currency of the country in which the paper is being issued, according to the standard procedures of the bond market. Eurobonds are usually issued at a premium interest rate reflecting the borrower’s nature and/or the possibility of difficulties in collecting payments.

The capital raising opportunity represented by Eurobond issues complements, and can even exceed domestic borrowing potential. Government and corporate organizations usually are the issuers of Eurobonds. The telecommunication sector in Brazil has used this type of financing repeatedly in recent years, especially because they are able to provide a high volume of resources at low interest rates.

Bonds are issued in a variety of currencies at fixed or floating rates, usually accompanied by an interest rate or currency swaps. Maturities tend to be less than 10 years, averaging around 5 - 6 years.

2.1.1.2. Equity Linked Financing

a) Convertibles

Convertibles offer higher benefits than such traditional forms of capital as stocks and bonds. A convertible is part debt, part equity, or a true hybrid form of financing. For the issuers, they offer the possibility of selling shares at a premium; for the investor, they offer the combined advantages of the income and capital preservation advantages of bonds as well as the long-run growth potential of stocks.

2.1.1.3. Equity Financing

a) International Equity Securities

The extraordinary growth in demand for investment in foreign stocks has been a worldwide trend. The massive development of the telecommunications industry has provided even more stimulus to this international tendency.

There are several methods of achieving the international distribution of new issues of equity securities. Among those it is important to cite: international tranches, euro equity issues, global issues and the Japanese round tripping.

2.1.1.4. Other Sources of Financing

In the increasingly competitive atmosphere in Brazil, there are a range of other important sources for financing the telecommunications sector.

a) Export / Import Government Agencies

These Agencies provide a wide range of financing for companies willing to acquire specialized equipment that is unavailable in their internal markets. The interest rate provided by such agencies is usually low and the maturity tends to be substantially longer than the usual market terms.
This type of financing should not be considered the only source of financing that a company should rely on, but it can be of special interest when it is related to the development of a relevant project.

Some of the governments that provide this type of financing through their own agencies are the United States, Canada, France, Italy and Sweden.

b) International Financial Institutions

Some international financial institutions such as the World Bank and the Inter-American Development Bank (IDB), provide special lines of credit for development projects in many countries. Tailoring its assistance to the needs of different countries, the World Bank supports a broad range of activities, including investments in the development of infrastructure. Today, the Bank is one of the largest providers of aid to developing nations.

c) Strategic Partners

Strategic partners through joint ventures, direct equity investments, partnership agreements, and other arrangements could be turned into important procedures to help attract capital investments and technology.

The negotiation involved in tailoring a partnership must consider such important issues as valuation, the corporate experience, synergy, market entry, company cultures, exclusivity, operating role, and plans for dissolving the agreement and future alliances. In recent years, a considerable amount of investments in the telecommunications sector has been made by foreign partners.

The objective of the next section is to underline some of the major characteristics of the General Telecommunication Law, hoping that such analysis can clarify some assumptions about the future of the Brazilian telecommunications sector.

3. The General Telecommunications Law

The main principles guiding the elaboration of the Executive Branch’s proposal for reorganizing the telecommunications sector took into consideration such basic premises as the provision of good quality and universal services at reasonable costs and prices, and the sector’s ability to promote economic development to reduce regional disparities and to increase competition.

The primary objective of this Bill is to reinforce the federal government’s position as a regulator, rather than an entrepreneur, of the telecommunications sector. In order to accomplish this objective, the regulatory framework should seek to further competition in order to increase significantly the sector’s scope, diversity and penetration throughout the country.

Within the new regulatory framework proposed by the Executive Branch, through the Ministry of Communications, defined the Government’s new role in this sector.

The Government should establish and operate a new and independent regulatory body. For this purpose, the Bill suggests the creation of the Brazilian Telecommunication Agency that would propose and enforce the rules governing the telecommunications services concessions, the regulation of the market, and the use of the available services. The Agency would be responsible for punishing those companies that fail to comply with its rules.

This Agency is to be responsible for defining the basic specifications of all the services offered to the public. The scope of application of these services as well as the definition of the technology to be used are also under its jurisdiction.

The proposed regulatory body differs from most of the existing public bureaus because its charter grants it independence. Political influence should guide any of the agency’s decisions. Its independence must be sufficiently guaranteed to attract the attention of international investors to the privatization process that is being prepared in Brazil.

The law is innovative because it establishes two new legal regimes, a public and private regime. The public regime encompasses all telecommunications services whose existence, continuity, provision of services, and public accessibility the federal government considers to be in the public interest and, therefore, opts to stimulate and guarantee their coexistence with the private sector.

The spirit of the private regime is to promote the establishment of competition and consumer protection. The government’s intention with the definition of this regime is to guarantee the provision of a variety of options of services in order to increase its basic quality standards, as well as to promote the development of the sector’s technology and the growth of the country’s industry.

The provision of services under the private regime is to be given preference over the public one. The federal government’s intervention under this regime is to be restricted to its basic guidelines so that the private sector can operate with the least possible state intervention.

The main difference that separates these regimes is related to price criteria. The rating system for the private sector is not going to be regulated by the agency; the market will define each company’s price strategy. In the public regime, the agency would define the initial rating system during the negotiations of the concession contract, as well as the permitted adjustment levels to be applied over the first five years of the concession. After this period, the agency’s power over tariffs would tend to diminish substantially.

According to the agency’s scope, an intervention regarding the price criteria in the private regime is likely to occur only when the relative price structure threatens competition among the operating companies or when a major competitor displays a clear intention of economic abuse in setting new rates.

The Bill also innovates by creating a fee for the purpose of the establishment of new concessions, permissions or authorizations for new telecommunications services facilities. The funds gathered from this fee will be directed to a Telecommunications Controlling Fund (FISTEL) and used by the Brazilian Telecommunications Agency to finance its own current expenses.

Although the Bill defines most of the government’s new role in the sector, it is not clear in providing information on how the Telebrás System is going to be restructured. Nor does this Bill clarify the number and limit of companies that will be permitted to operate the future telecommunications sector.
Further, the Bill does not define the strategy that Telebrás’ operating companies are to develop for the future.

This law is going to enable the government’s Executive Branch to promote the restructuring and the denationalization of the companies that today compose the Telebrás System.

The restructuring process may include cession, fusion, incorporation and creation of other companies, including new subsidiaries as well as total or partial dissolution of the incorporation and the reduction of shareholder’s equity.

The denationalization process would not affect the operating companies’ present concessions, permissions or authorizations. This process would be undertaken into one of two basic procedures; first the selling of the company’s shares; second surrendering its right of preference as the major shareholder for subscribing new shares in a broader public offering.

Finally it is fair to assume that the basic aim of this proposed regulation is to guarantee the provision of continuous and universal telecommunications services at reasonable prices and tariffs for the Brazilian population. Further details on the implementation of this law are yet to be announced by the federal government.

4. Final Considerations

Telebrás has played a fundamental role directing the implementation of the federal government’s policies for the Brazilian telecommunications sector. The basic progress for restructuring this sector of the economy achieved its culmination with the creation of the Telebrás System in 1972. To realize this primary objective, Telebrás was given sufficient autonomy to build a comprehensive network that would integrate and stimulate the country’s economic development.

In recent years the technological and scientific advancements combined with the federal government’s increasing inability to finance the telecommunication system’s expansion, have imposed on Telebrás an even wider range of budget constraints that have thwarted many of the company’s development plans.

The results of public performance started to decrease and to provide inadequate outputs that were considered incompatible with the country’s increasing demand for basic services, such as telecommunications. Thus, as a direct result, the vision of the State as an entrepreneur started to deteriorate. Today, it is reasonable to say that the telecommunications sector has become Brazil’s bottleneck to further economic development.

Developed nations are rapidly increasing their investments in telecommunication infrastructure, envisioning the implementation of an information society that will soon be interconnecting the entire world at very low costs.

The availability of an adequate telecommunication infrastructure is a decisive factor for the effective insertion of Brazil into the new international market. The liberalization approach adopted by the Brazilian government has as a fundamental goal the introduction of competition into the sector and the provision of basic universal service for the population. In considering such strategies, the government has recognized the need to redefine the current size and structure of the Telebrás System. This approach has already promoted some relevant and unprecedented legal improvements in the sector, culminating with the proposed General Telecommunications Law in December 1996.

Although the actual privatization model for Telebrás is unknown, the main objective in pursuing reform and privatization is to maximize investment, to create as efficient and as modern a telecommunications infrastructure as possible, and to do it in the shortest space of time.

Within this scenario the challenge faced by Brazil in expanding and modernizing its national telecommunications network is enormous. Brazil cannot afford to ignore the worldwide telecommunications revolution. To participate actively in this process, it must find the necessary financial resources and the means of building an advanced telecommunication infrastructure.

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