- 5. That it undertakes some technological and industrial research and development on telecommunications technology to foster the company's competitiveness and to increase the technological capacity of the country in the area of telecommunications.
- 6. That it be owned by majority Mexican citizens. Foreign investment in TELMEX will not be permitted to exceed 49% and no foreign partner will be permitted to hold more than 10% of the capital (foreign investment now represents approximately 25% and is held in the form of non-voting ADR's sold in the U.S. market). In addition to capital, new investors will be expected to provide access to state-of-the-art technology to contribute to TELMEX's expansion program in terms of service quality and efficiency. National private investors will be the majority owners. The analyses of the proposals by investors will take into account their contribution to the company's development, expansion and service quality and its workers security.

TELMEX needs an estimated 9.8 billion dollars within the next six years to revamp its infrastructure, expand and improve service as outlined above. Telephone service in Mexico is characterized by numerous inefficiencies. The new measures are aimed at removing them through new investments. The following are some of the most salient inefficiencies:

- 20% of the population has no access to telephones;

 the demand backlog for phone service is estimated to be 1.5 million requests;

- 45,000 phones are out of order every day;

- service quality is below international standards;

- international long distance calls are significantly more expensive than in other countries;

- data banks and other data transmission services are not vet available to the general public.

The modernization program for TELMEX calls for a 12% annual growth rate between 1989 and 1994. This means installing 800,000 new lines and 3.3 million apparatus per year, in order to reach the goal of 25 million installed telephones by 1994, as compared to 8.5 million in 1988. In 1989 alone, 913,000 apparatus were installed and 493,000 lines. With telephone service now available to approximately one in every 11 inhabitants, this growth rate will result in service availability for three in every ten by the end of the century. A 100% increase in rural service is expected and over 80,000 urban phone booths will be installed. Long distance infrastructure will increase 60% by installing 8,500 kms. of digital lines and 3,000 kms of fiber optics, at the same time modernizing the service.

Fiber optic technology will be used extensively in the future, due to its advantages over other types of transmission systems, in particular for the new overlay network and ISDN.

The new phone lines being installed are predominantly digital, so that by the year 2000 approximately 70% of the system will be digital. These lines will increase both system capacity and transmission speed, and will allow for better and newer services. The new digital switching system manufactured by Indetel/Alcatel and Ericsson is expected to increase long distance capacity by 10% a year, raising the system's capacity from 700 million calls in 1986 to 2.8 billion calls by the year 2000. At present, 13% of the total network and 40% of the international long distance network are digital. By 1990, 50% of the long distance and 20% of the local network will be digital. By 1994, 50% will be digitalized across the board. With 80% of the network digitalized by the end of the century, access to high capacity voice, data and image networks will be nearly universal.