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110

Telecommunications

Restructuring Work and Employment Relations Worldwide

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Chapter 9

Mexico

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Labor relations in the company that has traditionally had a monopoly in the provision of telephone services in Mexico, Teléfonos de México (Telmex), have followed a path that differs from the typical Mexican pattern. Both before and after its 1990 privatization, Telmex has viewed the labor union that represents its employees, Sindicato de Telefonistas de la República Mexicana (STRM), as its partner in determining important aspects of technological change, labor relations, and the organization of work. This chapter explains the factors that helped create the uncommon "bilateral" relationship between Telmex and STRM. This partner relationship contrasts sharply with the more typical authoritarianism found in Mexico's system of industrial relations and the breakdown of collective labor contracts that has occurred in many Mexican firms since the early 1980s.

Our explanation of the Telmex-STRM partnership emphasizes the following factors: (1) the changes that occurred in government regulation of telecommunications including the privatization of Telmex and the opening up of telephone services to competition; (2) Telmex's modernization policies involving the introduction of new technologies, new forms of work organization, internal labor flexibility, and the establishment of incentives for productivity and quality; (3) the shift in the STRM's strategy toward modernization and productivity; and (4) the Mexican national government's new corporatist policy promoting the opening of markets, globalization, and labor-management partnerships of the Telmex-STRM style.

The Deregulation of Telephone Services in Mexico

Until 1988, the provision of telecommunications services in Mexico was monopolized by Telmex and the Dirección General de Telecomunicaciones (DGT), the General Office of Telecommunications. The DGT was under the jurisdiction of the Secretaria de Comunicaciones y Transporte (SCT), the Department of Communications and Transportation.

The DGT was in charge of the transmission of television, data, and telegraphic signals as well as international telegraph service, telex, videotel, voice, teleinformatics, facsimile, telephotography, radio maritime services, and telereservations. This office also managed the federal microwave network, the national land station network, the telegraphic network, telex services, mobile services, satellite transmissions, and rural telephone networks.

Also under the SCT's jurisdiction was the General Office of Concessions and Licenses for Telecommunications that regulated telecommunications-related concessions, licenses, authorizations, and standards. The SCT provided regulation but did not direct investment or other managerial decisions. Telmex generated more than 95 percent of all its sales income in the telecommunications sector (Sánchez 1993).

The national government owned 60 percent of the shares of Telmex, with the other 40 percent owned either by telecommunications suppliers or individuals who bought shares of the company on the stock exchange. Telmex's top executive was appointed by the government, but the company had a lot of autonomy in its managerial decisions and operated much like a private company.

SCT's policy until the beginning of the 1980s was to maintain Telmex's monopoly. However, the appearance of new technologies in the 1980s provided the opportunity for redefining basic telecommunication concepts and restructuring this sector. In 1990, the SCT issued new regulations for telecommunications after having created Telecom, which is responsible for managing telecommunications services, the networks previously under the DGT's jurisdiction, and the satellite network and land stations.

In the new regulatory structure the SCT has the authority to grant all concessions (operating rights) in telecommunications; the national government retains a monopoly over the system of satellites and land stations; the prices for telecommunications services must be approved by the SCT; and long distance services will not be opened up to competition until 1996 (*Official Journal of the Federation*, 29 October 1990).[1]

After these regulations were issued, the Telmex concession was adjusted. Among the most important points of this adjustment are the commitments it acquires: the expansion of services at an annual rate of 12 percent during the period from 1990 to 1994, the establishment of telecommunications in all towns with a population of more than 500 inhabitants, the installation of public telephones to achieve a rate of two for every thousand inhabitants by 1994, a reduction in the waiting time for new services, and an increase in the quality of services to reach the level of international standards (*Official Journal of the Federation*, 10 December 1990).

In exchange for these commitments, the SCT established in the concession that Telmex may request authorization to provide the services of mobile radiotelephone, value-added services, and distribution of television signals; to manufacture telecommunication, computer, and electronic equipment through its subsidiaries (in addition to basic services); and to sell all types of terminal equipment.

A set of basic telecommunications service prices were established that are indexed to increases in the national consumer price index. However, as of 1997, telecommunications service prices must decrease to take account of an automatic productivity adjustment factor. This price structure was modified in 1989 and prices have since been increasing in an effort to eliminate subsidies across telecommunications services. In summary, the new regulations limit the national government's direct participation in the telecommunications sector but maintain governmental control through limits on new concessions and through price controls. Although an oligopolistic structure has been maintained in most parts of the telecommunications services sector, in some cases, such as cellular telephone services, competition has intensified greatly in recent years.[2]

Four companies were issued concessions for cellular telephone services. Table 9.1 shows the rapid growth that has been occurring in this segment and how competition has developed. In some regions of Mexico

1. A new telecommunications law adopted in June 1995 provides that the national government can grant concessions involving telecommunications communications by satellite and public networks, but foreign investments in these new concessions cannot exceed 49% of the capital of each enterprise, except concessions involving cellular telephone services.

2. Information on the extent of competition in services such as mobile radio services, specialized radiocommunication, cable television (which has 114 concessions with 90 companies), and value-added services, is more limited.

TABLE 9.1. Cellular telephone service in Mexico

Year	Total subscribers
1989	1,150
1990	65,800
1991	175,350
1991	175,350
1992	278,646
1993[a]	300,000
1995[b]	745,000

[a]up to the month of August.
[b]*Iusacell: Cellular*, May 1992, page 17.
Carlos Salinas de Gortari, 1992, *Fourth Presidential Report*, Mexico City.
Department of Communications and Transportation, 1992, *Report Document*, Mexico City.

a battle has developed between Telcel (Dipsa-Telmex), which acquired 207,462 users by 1994, and Iusacell leading to economic losses for both companies as a result of subscription campaigns (Vérut 1993).

Privatization

On 17 September 1989, President Salinas de Gortari announced that Telmex would be disincorporated from the national government. He claimed that the government did not have enough financial resources for necessary expansion and modernization of the company during the period 1989 to 1994 (equivalent to ten billion U.S. dollars).

The president announced a resolution that included six conditions for privatizing Telmex: (1) That the national government's ultimate control over telecommunications in Mexico be guaranteed. The government's role will be to regulate and supervise the sector, thus guaranteeing the diversification and efficiency of services as well as Telmex's financial balance. (2) That public telephone services be radically improved, with objectives established for repairs and for the installation of telephone booths and long distance telephone services. (3) That the rights of workers be guaranteed, in accordance with collective labor contracts and that the workers participate in the new ownership structure of Telmex. (4) That telephone services be expanded with the objectives of annual growth of 12 percent; the installation of four million lines in the 1990–1994 period; an increase in telephone density from five to ten lines per hundred inhabitants; and an investment of 25 billion pesos (equivalent at the time to ten billion U.S. dollars) of which 70 percent would be financed with domestic economic resources. (5) That scientific and technological research be continued in telecommunications services. (6) That

Telmex remain under Mexican control by maintaining a majority of shares in the hands of Mexicans. Foreign investment may not exceed 49 percent of the capital, and individually, no foreign shareholder can own more than 10 percent of the shares. The profitability of Telmex would depend on the company's productivity (Solis 1992). After a long process, Telmex was sold to a conglomerate headed by the Carso Group. The Carso Group owns 5.2 percent of Telmex's shares. Other owners of large blocs of Telmex's shares and partners with the Carso Group (and the respective fraction of Telmex stock that they own) are France Cable and Radio (5%), a subsidiary of France Telecom, Southwestern Bell (5%), a U.S. regional Bell operating telephone company, and other Mexican associates to the Carso Group (5.2%).

The Carso Group is able to exercise control of Telmex because the current shareholder structure includes three types of shares. Type A (19.6%) shares have free subscription (any individual can own the shares) and the share owners have voting rights in corporate decisions. Type AA (20.4%) shares were sold to the Carso Group and its partners and have voting rights. Type L (60%) shares with free subscription do not have voting rights. This share distribution gave the Carso Group and its partners 51 percent of the shares with voting rights. In addition, 4.4 percent of the shares (type A shares with voting rights) were sold to the STRM, but since Mexican law stipulates that one must have at least 10 percent of the shares in order to have the right to be represented on the firm's board of directors, the union was denied participation on Telmex's governing board.

According to information provided by the new management, there is a "natural" division in the firm's internal organization: the Carso Group specializes in legal, social, and real estate matters; Southwestern Bell is in charge of commercial matters, mobile telephone service, and the publication of directories; and France Cable & Radio concentrates on the modernization of the network and the satellite system.

Effectively then, since 1990 Telmex has been a private company controlled by Mexican capital (the Carso Group). Telmex has twenty subsidiaries that function generally as subcontractor (supplier) companies to Telmex and other telephone companies. As of March 1994, Telmex employed a total of 62,828 workers. Of these, 45,901 were members of the STRM which also represented 8,376 workers in six of Telmex's subsidiaries. In addition, another 5,829 workers in Telmex's other subsidiaries were members of the Confederación de Trabajadores de México (Confederation of Mexican Workers, or CTM). Telmex also contracts with some of its subcontractors to fill temporary jobs. The number of workers used in these temporary jobs fluctuates, but union sources estimate the number to be around 10,000. There is one STRM-Telmex collective contract covering unionized Telmex employees throughout Mexico.

Telmex still has a monopoly in the provision of basic telephone services including both local and long distance services. Since its privatization, Telmex has been trying to maintain a high growth rate and a high degree of modernization in order to achieve international competitiveness, especially in long distance services, which will be opened to competitors in 1996.

In recent years, the number of telephones, telephone lines, and long distance calls handled by Telmex has increased considerably. However, the personnel employed by Telmex has remained stable primarily due to the high rate of growth in labor productivity at Telmex (shown in Table 9.2). The growth in labor productivity occurring at Telmex in recent years has been a consequence of a high level of investment (number of lines), growth in the national economy (increases in the number of long distance calls), technological changes, and constant employment.

In the last four years Telmex's income and profits increased by 82.5 percent and 81.7 percent respectively. Profits have been enhanced by increases in the prices for telephone service. Meanwhile, Telmex's income has shifted from being based on long distance services (as it was in the 1980s) to local services (as shown in Table 9.3). Income from local services include installations, measured services, and basic rental charges. Income generated by long distance calls declined as a share of total income in the 1990s due to a sharp rise in local call income caused by the introduction of measured service.

New services, which are included in the "other" category in Table 9.3, are still very limited despite the fact that, according to some internal projections, they were expected to reach a level of more than 15 percent by this time period. However, the change in revenue sources is very clear—an increase in local and national service provision.

Table 9.4 shows that wages and related personnel costs have been a

TABLE 9.2. Productivity at Telmex

Year	Worker/1000 lines	Long distance calls/worker
1990	9.6	23.5
1991	8.5	27.1
1992	7.5	33.0
1993	6.6	36.7

Source: Figures were calculated from data from a Telmex work report.

TABLE 9.3. Telmex: Composition of income (%)

Year	National long distance	International	Local	Other
1987	29.6	54.0	14.7	1.8
1988	29.9	47.4	21.0	1.7
1989	33.5	42.9	20.9	2.7
1990	36.8	28.9	32.3	2.0
1991	38.0	23.8	36.0	2.2
1992	36.5	22.0	39.8	1.7
1993	33.7	19.7	42.8	3.8

Source: Figures calculated from Telmex, *Annual Report* (from several years).

TABLE 9.4. Wage costs as percentage of Telmex's total expenditures

	1990	1991	1992	1993
Wages and related personnel costs/total expenditures	37.8	36.9	39.8	39.3

Source: Figures were calculated from Telmex, *Annual Report* (from several years).

stable share of Telmex's total expenditures during the 1990s. This stability occurred even in the face of the changes made to pay procedures, which are discussed in a later section of this chapter.

Modernization at Telmex

From 1979 on Telmex has been engaged in a technological modernization drive. The factors leading to Telmex's decision to modernize were the following: (1) It was structurally impossible to respond rapidly to the increasing demand for telephone services which was caused in large part by population growth. This was reflected in the fact that as of 1979, 1.5 million applications for telephone services were not being met. (2) Productivity was stagnant at the company. The equipment in use had reached its maximum level of productivity by 1976 with yearly growth rates of 12 to 14 percent. The annual rate of productivity growth decreased after that period. From 1982 to 1986, productivity grew at annual growth rates between 5 percent and 6 percenr. (3) There were technical problems caused by the electromechanical (analog) switchboard equipment. There were increasingly frequent equipment failures as a result of progressive wear and tear and difficulties in finding spare parts. (4) Within a context of obsolete equipment, there was an excessive dependence on workers for maintaining equipment and providing services. This gave the workers a very advantageous position in relarion to the company, providing them with a high degree of control over the work process and bargaining leverage. (5) The STRM was using workers' bargaining leverage to obtain more extensive control over the work process. (6) The San Juan and Victoria stations were destroyed in Mexico City's 1985 earthquakes. (7) The tendencies toward globalization and the opening of markets were bringing greater competition for Telmex (Lara 1992).

Face with this situation, the company developed three strategic plans for modernization. The first was the Programa Inmediato de Mejoramiento del Servicio (Immediate Program for Service Improvement or PIMES), created for the purpose of increasing the quality of service. Specific improvements were to include increasing the number of lines per hundred inhabitants (density), new management plans, reforms in the management of subsidiaries, and innovative financing policies. The second plan involved a change in labor relations and labor "culture." It was clear that improvements were needed in services and responsiveness to customers. A transformation in human resource management and labor relations was necessary. The company's public image was also to be improved. The plan for modernization and diversification dealt with quality improvement, diversification, and provision of new services, the introduction and development of new technologies, and the international development of the company (Solis 1992).

Telmex signed contracts for supplying digital stations with the Indetel and Teleindustria Ericsson companies to purchase their S-12 and AXE systems. It is important to note that these companies committed themselves to producing much of this equipment in Mexico (Sánchez 1993).

Majot technological changes then appeared at Telmex in switching, involving the rapid transition toward electronic stations and the digital system; and in transmission, the use of satellites, optic fiber, and cellular telephones (see Table 9.5).

According to Telmex plans, by the year 2000 there will be 30 million telephones, 80 percent digitalization of local facilities, 100 percent digitalization of long distance facilities, 15 million lines and 75,000 workers—which will imply an increase in productivity of almost 100 percent in comparison with 1985, in terms of telephones and lines per worker (Telmex 1994).

Technological changes produced the following capabilities at Telmex as of 1993:

Lines in service: 7,620,880
Digitalization of telephone facilities: 65 percent
Telmex cellular telephones (Telcel): 195,409 users

TABLE 9.5. Characteristics of Telmex exchanges (1992)

	Local exchanges		Tandem exchanges		Toll exchanges	
	Number	% of capacity	Number	% of capacity	Number	% of capacity
Electromechanical switches	19	0.8%	—	—	—	—
Crossbar switches	766	41.0%	2	4%	71	17%
Semielectronic switches	24	1.0%	—	—	4	7%
Digital switches	1,611	57.2%	69	96%	81	76%
	2,420	100%	71	100%	156	100%

Source: Telmex, Internal Report, 1992.

Optic fiber: 8701 kilometers
Operator-assisted traffic: 100 percent digitalized
No more electromechanical stations (1994)
Submarine Cahle, Columbus II, made of optic fiber, used to connect America with Europe
New services were opened: 800 (free call) service; telephone card charge; virtual private networks; universal numbers; personal numbers.

Telmex's modernization plan for 1994 includes:

Investment: US$ 2 billion, 300 million pesos
Stations: 1,520,000 new lines
Optic fiber: 9,600 kilometers (new)

Another element of Telmex's modernization has been management reorganization including the creation of two corporate directorates. The first includes four sections: finance and administration; corporate development; human resources and labor relations; and another directorate in charge of the operation of telecommunications services. The latter includes: long distance, telephone development (including developing new services and ptoviding them to large users), and local services (divided into three regional subdirectorates: Northern, Metropolitan, and Southern).

Changes in Labor Relations at Telmex and Labor Union Strategy

Labor unions in Mexico typically have sought to protect jobs, wages, benefits, and working conditions, and to negotiate with the national government over economic and social policies that affect labor. In exchange, the national government received political support from the labor unions.

During the last ten years, the Mexican economy has been opened to the international market and the national government reduced its intervention in the economy and limited public spending to only the poorest sectors in the economy. In this new context, the possibilities for labor unions to influence economic and social policy through interactions with the national government were reduced. This weakened the corporatist pact that had previously prevailed between labor unions and the state. Under these conditions the restructuring of large companies stimulated a process that greatly affected labor relations and the contents of collective contracts. Over the last ten years there has been a strong movement toward labor deregulation and a substantial decrease in the negotiating power of most Mexican labor unions (De la Garza 1993).

The Telmex case, however, contrasts sharply with the pattern of labor deregulation and union weakness that typified most sectors of the Mexican economy in recent years. In Telmex, a bilateral agreement was initiated between management and labor. Unlike most other Mexican labor unions, the STRM has played a major role in shaping events at Telmex and in the process has created a novel labor-management partnership. The three basic changes that occurred in labor relations at Telmex are: a transformation in the collective labor contract, productivity agreements, and joint commissions involving company and union representatives. A central theme in these processes was a shift in the union's focus to issues related to productivity and service quality (Vasquez 1988).

Several factors influenced the strategy of the STRM with regard to Telmex's modernization. First, although the labor union at Telmex is corporatist, it has always maintained high levels of internal democracy, even to the extent that it has some very influential leftist opposition factions (Torres 1990). A second factor was the pressure exerted by high-level technicians working at the central Telmex stations. These technicians were (and continue to be) politically involved and well educated. Third, a group of outside advisors (high-level specialists) hired on a permanent basis by the executive committee of the STRM have been key players in the development of the union leadership's proposals. And finally, the leadership of the STRM, during the era of labor union decline (the mid-1980s), analyzed international experiences and recognized the need to change strategies in the face of new economic, political, and productive conditions (De la Garza 1990).

The STRM's initiatives at Telmex included the following. In 1986, the labor union won Clause 193 of the collective labor contract and proposed a "quality model" to the company. The principles of the quality model (agreed to by the company) were: (1) The company recognized the labor union's right to participate in the modernization projects, digitalization, and the implementation of new services. (2) The labor union also obtained the right to be informed about modernization projects. (3) A joint commission on new technology was formed which, among other attributes, would have access to information concerning company projects and their impact on training, work conditions, and labor relations. (4) A joint modernization commission was created, which would be in charge of defining the technical and operational implications of the modernization projects and would analyze their implications for labor. (5) The company agreed to develop jointly with the union a broad-based training program. (6) It was decided that a joint commission would analyze the impacts of modernization on job safety and health conditions. (7) It was also decided that there would be no reduction of personnel due to the company's modernization (Xelhuantzi 1989).

One of the first effects of contract clause 193 came through the creation of the Inmediate Program for Service Improvement (PIMES) in 1987. This was a plan negotiated with the labor union to improve services. It represented the formal beginning of the labor union's co-responsibility in achieving quality. In that same year, within the framework of Telmex's Eighth Meeting for Corporative Planning, the strategic planning directors' plans for "structural change" were discussed with the union. It became clear at this point in time that Telmex's plans for expansion, diversification of its services, and modernization would require significant changes in labor relations. While the negotiation of contract clause 193 and the union's involvement in the development of the quality model signaled a new turn in labor-management relations, in 1989 the spirit of bilateralism deteriorated due to macroeconomic pressures. In many industrial sectors in Mexico in 1989 national governmental labor policies led to changes in collective contracts which reduced labor union involvement in technological and organizational matters. Following this trend toward increased unilateral managerial control of labor relations, the collective labor contract at Telmex was modified in the following manner in 1989: (1) Labor union intervention in the introduction of new technology was eliminated from clause 193, and the company effectively dissolved the joint commission on new technologies. All that remained from this initiative was the company's commitment to inform the labor union whenever training for workers became necessary. (2) Internal worker mobility, prohibited under the previous contract, and broad job descriptions were established. (3) The only joint commission continuing to operate was the one concerned with personnel training. (4) The fifty-seven existing departmental agreements (which regulated in detail the work of each of the company's departments) were eliminated and replaced with simplified and broader job descriptions (De la Garza 1989).

The key factors that led management to push for a more flexible labor contract in 1989 were the national government's decision to privatize Telmex and pressure exerted by the company's future owners to modify the labor contract even before the sale. This sort of pre-privatization labor contract modification had occurred in airline companies and in the iron and steel industry.

When Telmex was privatized, the STRM won clause 195 in the 1990 labor contract. That clause reshaped the quality model agreed upon in 1988 and partially restored the bilateralism the union had lost in 1989. However, bilateralism was not immediately returned to its former level as the only major bilateral initiative involved the creation of a joint national commission for quality and productivity.

The national government then again changed its industrial relations policy. The government proposed that instead of having weak unions, a new type of labor union would be created—one that would make proposals concerning productivity and quality and be involved in the creation of a new more positive labor culture. The national government at this point recommended that industry throughout Mexico follow the approach being proposed by the STRM—an approach that was different from the old corporatism favored by the CTM. The national government exerted substantial influence over Telmex management who fully identified with the government's neoliberal economic policies. The principal shareholders of Telmex are the type of business people created through neoliberal policies—those who have acquired important companies that were previously government-owned. With the national government's encouragement, the STRM has since been able to benefit from three agreements that focused on productivity and quality improvements at Telmex (Ortiz 1993).

The most important of these agreements is the "Agreement on quality, productivity, and training for the integral modernization of Teléfonos de México" signed in November 1990. With the signing of this agreement, a new horizon was opened up in labor relations. That agreement established the following: the right of workers to participate in making proposals concerning the company's modernization and workers' right to be rewarded for any additional work effort; the commitment that both the company and labor union will jointly design a program to increase productivity and quality; joint determination of administrative and operational modernization processes; the promotion of a new labor culture based on negotiation and mutual benefit; and approval of the quality model. In addition, it called for the establishment of training programs with the purpose of encouraging creative capacities; the encouragement of teamwork and efforts to improve work conditions; the creation of a joint commission in charge of defining productivity criteria and measures; and the commitment of the company to train management in total quality.

Although it defined some essential elements for the creation of a bilateral modernization project, this agreement primarily focused on establishing only basic guidelines. In March 1992, with the signing of the "General Permanent Program of Incentives for Productivity," more detailed modernization plans were specified. The March 1992 agreement was the first concrete product of the Joint Commission for Productivity which had the task of defining productivity criteria and measures. The 1992 Permanent General Program established: that the company will determine the maximum annual amounts to be paid out in productivity enhancing incentives (in 1993 the amount was 324.65 million new pesos); the areas in Telmex where incentives would be implemented (commercial, external plant, commutator, and traffic); and physical productivity objectives for each area. For example, in the external plant area, the objective is line repairs to be achieved per day. In the traffic area, the objective is that operators answer calls in less than ten seconds. In the commercial area, the objective is to prepare internal duty orders without error. In the switching area, the objective concerns damage control and repairs. In addition, the Permanent General Program included two types of pay incentives (monthly and yearly); and stated that 50 percent of the monthly pay incentives will be paid when 90 percent of the objectives are achieved and the total amount will be paid when 100 percent of the objectives are accomplished; that the annual pay incentive will be paid if all the objectives in the labor area are met; that 85 percent of the total incentives are to be paid monthly while 15 percent will be paid on an annual basis. The pay incentives are to be calculated on the basis of performance in each work area, and joint work unit (analysis) groups will be established with the participation of unionized supervisors and chiefs in order to carry out follow-up monitoring and adjustment of the incentive system. The functions of the analysis groups are to design plans and methods to improve productivity, and to conduct evaluations and make proposals regarding productivity improvement methods. Unionized workers and managers participate in these groups.

The other important aspect of the new bilateral labor relations at Telmex is the many new joint commissions (formal entities that design programs in different areas). Some of these have existed a long time, others were restructured after being eliminated in the 1990 contract revision, and still others have been created as a result of the new productivity-related negotiations. There are six commissions.

The Joint Commission for Productivity and Quality has existed since 1987 and has been the forum for the discussions that led to the Telmex quality model. The 1990 contract modifications interrupted the operation of this joint commission for over a year, but since 1992 the commission has recovered the important responsibility for designing training courses that promote the quality model. This commission also is in charge of negotiations surrounding productivity-related agreements, in particular, this commission establishes productivity objectives and the indicators used to measure productivity.

The Joint Commission on Modernization is now the most important commission (although its functions overlap with those of other commissions). It supervises the negotiations that deal with quality and productivity incentives. This commission includes the qualification and new technology program; the labor conditions program; the culture and relief program; the specialties qualification program; and the permanent program for improving services.

The Joint Commission on New Technology was created in 1987. This commission lost its importance with the 1990 contract modifications. At present its functions have been reduced to receiving information whenever new training is required due to the introduction of new technology. The Training Commission was created in 1986. This commission designs training courses. The Health and Safety Commission was created in 1987. Finally, there is a Commission of Medical Studies.

The breadth of the productivity agreements affecting telephone services and the progress made in implementing those agreements propelled Telmex into the status of the most highly-developed case of bilaterally negotiated work restructuring in Mexico. Telmex is frequently cited in governmental and internal union discussions as a model productivity improvement process.

Impact on Internal Labor Markets and Human Resources

The restructuring of Telmex has not involved employment reductions. On the contrary, employment has remained stable since 1988 (see Tables

9.6 and 9.7). Factors that have contributed to this stability are: the company's growth; the labor union's offer of flexibility and quality in exchange for pay incentives and the company's efforts to avoid cutbacks in personnel; and management's acceptance of the labor union as its legitimate counterpart in confronting productivity problems. Six main human resource adjustments have occurred at Telmex since the late 1980s. There are no firings but rather personnel are frequently relocated or reassigned. Job positions and categories have been consolidated. Despite the Telmex modernization, gender segmentation by job type is still substantial. There is greater flexibility in the contract that deals with either external or internal personnel adjustments. Wages increasingly depend on individual and departmental performance. Job qualifications have been steadily raised.

Employment

Although total employment at Telmex has been stable in recent years, there have been many relocations and early retirements. Many of the relocations have involved employees in the general services department, operators, installers, and PBX and telephone equipment maintenance

TABLE 9.6. Telephone services and employees at Telmex, 1976–1993

Year	Telephone apparatus in service (thousands)	Telephone lines (thousands	International distance conference (thousands)	National long distance conference (thousands)	Employees
1976	3,309	1,850.6	23.3	197.3	22,078
1977	3,712	2,077.1	24.3	220.0	23,403
1978	4,140	2,307.1	29.6	268.5	24,870
1979	4,543	2,498.8	38.1	222.1	26,006
1980	5,013	2,720.5	47.3	402.4	27,568
1981	5,533	2,969.8	56.7	461.2	29,566
1982	5,975	3,163.1	55.4	510.3	31,385
1983	6,378	3,318.0	52.0	520.5	32,509
1984	6,796	3,458.0	55.6	563.8	34,663
1985	7,325	3,705.0	60.8	608.4	37,487
1986	7,735	3,927.0	69.6	665.2	40,662
1987	8,176	4,092.8	78.9	724.7	44,700
1988	8,653	4,381.4	103.6	768.6	49,995
1989	9,558	4,847.2	141.5	860.6	49,203
1990	10,323	5,355.0	169.0	951.0	49,912
1991	11,072	6,025.0	210.0	1,068.0	49,488
1992	11,126	6,875.0	248.0	1,204.0	49,893
1993		7,621.0	387.5	1,403.0	48,771

Source: Telmex, *Annual Report* (several years).

TABLE 9.7. Types of employees at Telmex (without subsidiaries), 1985–1994

Year	Total	Unionized	Chiefs and supervisors	Operators
1985	37487	32452	5035	11509
1986	40662	35045	5617	12444
1987	44700	38036	6614	12699
1988	49995	42663	7332	13421
1989	49203	41621	7682	NA
1990	49912	42100	7812	NA
1991	49488	NA	NA	NA
1992	48937	41722	7215	NA
1993	NA	NA	NA	NA
1994*	NA	45901	NA	10584

Sources:
a) Telmex, Report to Shareholders' Assembly (various years).
b) Telmex, Census, October 1992.
c) Solís (1992).
d) Telmex, Wage Scale, 1994.
*March

staff. For example, when ongoing relocations are completed, 50 percent of the operators will have been relocated. Meanwhile, employment growth has been occurring in exrernal plant, commercial, customer services, exchange, and long distance.

Consolidation of Jobs and Job Categories

Prior to recent restructuring, complex regulations at Telmex specified jobs and job categories. These regulations emerged as a consequence of a long series of confrontations and negotiations from 1976 to 1989. The regulations were contained in fifty-seven departmental agreements, which in practice functioned as collective subcontracts. These contracts specified 585 labor categories. Wirh the 1989 producrivity agreements, these agreements and the associated regulations disappeared and a smaller number of job specializations (24) and job profiles (125) were defined.

Segmentation by Gender

Although women represent 42.4 percent of the workforce at Telmex, there is sharp gender-based job segmentation.[3] As can be seen in Table 9.8, thirteen job specialties (or departments) are staffed only by men, and three job specialties (or departments) are filled only by women. These two groups of specialties include the vast majority of Telmex personnel.

3. The average age of the wage earners is 34 years.

TABLE 9.8. Workers by specialty or department at Telmex, 1994

Specialty	Number of employees	Gender
Central maintenance	3,023	mixed
Long distance maintenance	1,076	male
Energy	321	male
Projects engineering	375	male
Lines central	129	male
Long distance building	210	male
Long distance lines maintenance	539	male
Storage	821	male
Marketing	3,888	mixed
Administration	3,942	mixed
Repair of equipment	842	male
Technicians	259	mixed
Day care center	154	female
Specialties of the Secretary General	11	mixed
Finances	334	mixed
Drivers	155	male
Automotive	138	male
Files	9	mixed
Exterior plant	13,493	male
Supervision and construction, ext. plant	200	male
Networks and construction	505	male
International traffic	2,153	female
National traffic	8,431	female
Total	41,192	

Source: Wage scale for 1994 and conversations with Telmex workers.

As reported in Table 9.9, 18,804 workers are concentrated in the specialties in the first group (only men) and 10,738 workers are in the second group (only women). Only the remaining 28.3 percent of the unionized personnel (11,650 workers) are distributed in categories which include both men and women.

Recruitment norms at Telmex

Telmex and the STRM have established three documents that provide rules governing entry into and movements within Telmex's internal labor

TABLE 9.9. Segmentation by gender at Telmex, 1994

Number of categories	Workers
Only women: 3	10,738
Only men: 13	18,840
Mixed: 6	11,650

Source: Telmex, Internal Report, 1994.

market. These documents include: (1) the Contrato Colectivo de Trabajo or CCT (collective labor contract); (2) the Reglamento Intero de Trabajo or RIT (internal labor regulations), and (3) the Perfiles de Puesto or PP (job profiles) for each department.

Chapter 11 of the collective labor contract (CCT) stipulates that individuals hired into Telmex must already be members of the STRM, have the necessary abilities for the job, and be tested by examination. Clause 15 of the CCT requires the company to inform the union and workers of any vacancies—permanent or temporary—so that the union can propose candidates to occupy those positions. This clause also describes how to fill a new position or vacancies created by promotion, resignation, dismissal, death, or retirement.

The internal labor regulations (in chapter 1 of the CCT) also establish the requiremenrs that applicants must satisfy in order to join the company. The requirements mentioned in the collective labor contract are in addition to those included in the job profiles. The departmental agreements had served as "small" collective labor contracts in each department. The April 1989 negotiation carried out between rhe company and union replaced the departmental agreements with "job profiles." The job profiles established more specific job requirements and promoted what at the time was referred to as an expansion of "labor flexibility" at Telmex. The net effect of the introduction of job profiles was consolidation of job and wage categories.

Chapter 2 of the CCT allows for admission examinations for joining (or rejoining) the company. It also specifies the knowledge required for workers in each of the following departments: national and international traffic, commercial offices, claims and repairs, long distance lines, networks, and mechanical workshop. Article 3 of the CCT allows the company to require a medical examination of job applicants.

The new job profiles perform the following functions. They provide the 125 categories for the 24 job specialties; they outline in detail the principal functions and activities expected of personnel; they establish the conditions under which work must be carried out; and they describe the training and other procedures that enable promotion to a higher category. A common characteristic in these job profiles is mention of the importance of labor flexibility.

The regulations described above are much broader than previous Telmex policies in that they regulate assignments, promotion, and retirement, and it is noteworthy that they do so in a bilateral manner.

Pay Procedures

The three components of pay at Telmex are wages, extra wages, and productivity incentives. The first two of these components and the respective labor contract clause defining each are described in Tables 9.10 and 9.11.

The productivity incentives mentioned in earlier sections of this chapter provide extra compensation that averages between 30 percent and 43 percent of workers' base salary whenever the productivity goals in each labor area are achieved. Telephone workers' wages are generally much higher than the minimum wage in Mexico (equal to about U.S. $100 per month), especially if rhe productivity incentives are included. Examples of Telmex worker base wages are listed in Table 9.12.

Despite rhe novel system and size of wage incentives now used at Telmex, national government economic policies led to significant declines in real earnings in recent years as reported in Table 9.13. However, these declines were less severe than the declines experienced by most workers in other sectors in Mexico.[4] In part, the declines in real earnings at Telmex result from the fact that the productivity incentives merely replace what was previously paid as overtime payments.

Training

Since the early 1990s, both management and the union at Telmex have recognized the increasing importance of training and the advantages of joint regulation of training. As of 1993, Telmex workers on average were receiving eleven days of training per year. Telmex's training effort thus

TABLE 9.10. Direct wages at Telmex

Wages	Concept	Form of calculation
Clause 103	Based on daily wages	The weekly wage is calculated on the basis of the seven days of the week
Clause 104	Aid for paying housing rent	Telmex provides $5,926.39 per year[a]
Clause 105	Aid for transportation expenditures	Telmex provides $1,769.03 per year[a]
Clause 108	Overtime	The daily wage is multiplied by six work-days, and the result is divided among the number of hours corresponding to the daytime, mixed, and nighttime shifts. The quotient is divided by two, thus providing a type of overtime payment.

[a]New pesos for all unionized workers. Each new peso equals one U.S. dollar.
Note: The base salary depends exclusively on each worker's job category.

4. Note, the minimum wage in Mexico fell by 22.3% in real terms between 1990 and 1993 due to high inflation.

TABLE 9.11. Extra wages at Telmex

Extra wages	Concept	Extra payment
Clause 113	For driving a car, truck or motorcycle on the job (except those employed as drivers)	$2,307.14 per year for driving a car, truck or motorcycle. $387.96 for driving a bicycle
	Incentives for not having an accident	Funded from a company-wide fund of $50 million per year (except for those employed as drivers)
	For those who are not payers but handle money for payments	$1,000 per year
	When traffic personnel handle matters of the Commercial Department	They receive an extra amount in relation to the number of local telephone lines
	For using English	15% of the daily wage
Clause 114	For commissions	For wage earners who also receive commissions, the total gained during the last three months will be averaged, to obtain the daily wage
Clause 15	To operators making long distance calls	15% of the daily wage
Clause 16	For porters and watchmen	20% over the base wage for performing cleaning work

Note: Each new peso equals one U.S. dollar.

TABLE 9.12. Base wages at Telmex for various worker categories

Category	Monthly wage (in U.S. dollars)
Highest level technicians (maintenance stations)	800
Engineer assistant (engineering and design)	857
Foreman assistant (long distance construction)	800
Warehouse commissioned (warehouses)	600
Commercial assistant	700
Operator	620
Average base salary for unionized workers	670

Note: These figures do not include extra wages or incentives. These figures were those before the devaluation of the peso in November 1994.

TABLE 9.13. Index of the average real wages of Telmex workers

Year	1990	1991	1992	1993
Index	100	85	90.9	92.1

Source: Our own calculations based on Telmex reports.

was higher than the training that was occurring at Southwestern Bell (Telmex's U.S. partner) which provided ten days of training per year, or France Télécom which offered only six days of training per year. Intelmex was created through joint discussions at Telmex to oversee training. It provides workers with seventy-nine programs on new technology including the impacts of digitalization on operators and optic fiber networks and the impacts of digital technology on communication and transmission-related work. Telmex's training programs include jointly run courses aimed at sensitizing workers regarding improved quality and productivity, teamwork, customer needs, and the new labor culture.

Conclusions

Mexico's monopolistic telephone service company was privatized in 1990, and in 1996, the long distance services will be opened to competition. The expanding cellular telephone system has always been open to competition in Mexico. This opening of the market has exerted pressure on Telmex to accelerate its modernization, to create new services, and to improve its quality and productivity.

Significant technological changes driven by efforts to improve and expand communications services were implemented in Mexico during the last decade. By 1993, 65 percent of telephone facilities were digitalized, there was rapid development of an optic fiber system, and the use of telecommunications satellites was expanding markedly.

While these transformations were taking place, labor relations were being substantially modified in three ways. First, labor flexibility was increased through the consolidation of jobs and the increased functions assigned to each job category. Furthermore, the new emphasis on quality and internal mobility led to heightened labor flexibility. Second, the union at Telmex gained an increased role through the negotiation of productivity agreements which establish that the union can participate in measuring productivity, diagnosing the factors that hinder productivity, designing training programs, and improving work conditions. A new type of labor relations has thus been born, characterized by flexibility and, at the same time, bilateral negotiation between management and the union.

The union's involvement in the development of the plans guiding Telmex's modernization prevented that modernization from causing the dismissal of workers. Instead, there has been an ambitious plan to retrain and relocate workers.

Third, wage payments have been made less rigid and are now generally semi-flexible. There are incentives for achieving productivity and quality goals that provide significant extra compensation. This has permitted the real wages of telephone workers to diminish less than wages in other sectors of the Mexican economy.

The fact that Telmex has become a model for bilateral labor relations, which is unlike the path followed by the country's other companies, cannot be explained simply by structural factors, given that other companies in similar conditions have opted for different strategies. Without a doubt the regulatory changes affecting Telmex provided the context for and a spur to changes in labor relations. Mexico's telecommunications services sector is now more open, although it is not entirely deregulated, and pressure for further opening in the market for telecommunications services could challenge Telmex. Faced by these pressures, including the need to offer new services, Telmex proposed over ten years ago to make changes first in technology, then in organization, and finally in labor relations.

In the mid-1980s, when technological modernization had already begun at Telmex, the labor union and its strong position were viewed in business policies as an obstacle to be overcome in order to increase productivity. In the end it was a switch in labor union strategy that convinced Telmex management to begin a process of bilateral negotiation, a policy extended by the new owners of Telmex in 1990. The bilateralism adopted at Telmex contrasts sharply with the deregulation-authoritarian path followed by the majority of Mexico's businesses. The switch in union strategy that drove the process was itself precipitated by the union leadership's recognition of the economic pressures confronting Telmex, by the presence of an intellectualized opposition within the union, by the advice provided by a group of high-level specialists in the union, and by the fact that the union was relatively democratic. The fact that Telmex was not in the midst of a financial crisis, but rather was earning positive profits although it faced economic challenges, also helped the union push for bilateralism.

But the path to bilateralism was not an easy one. A year before the privatization of Telmex, the power and position of the union was severely

weakened. Nevertheless, once the company was privatized, the labor union leadership's push for bilateralism helped convince the president of Mexico of the need to transform the state's traditional corporatist model of labor relations. As bilateralism developed at Telmex, the STRM and Telmex workers gained influence over employment conditions, in particular, through the negotiation of successive productivity agreements.

The STRM was thus converted into the leader of a new trend in Mexican labor unionism which contrasted with the corporatism of the CTM. A new federation, Federación de Sindicatos de Empresas de Bienes y Servicios or FESEBES (Labor Union Federation in Businesses Providing Goods and Services) has been formed and has inspired the leadership of the teachers' union, the public service workers' union, and the bank workers' union to favor bilateralism instead of corporatism.

Industrial relations in Mexico are, however, permanently contaminated by electoral politics and in 1993 the race for the country's presidency began, once again making the CTM the privileged counterpart from the government's point of view (the CTM has 5,000,000 members as opposed to FESEBES' 120,000 members). That same year the negotiations surrounding the North American Free Trade Agreement concluded and at the last minute, the Mexican president promised to index wages with productivity. The CTM, and not the telephone workers' union was asked to represent labors' interest in the negotiation of the specific index.

Mexico now finds itself once again submerged in a deep economic crisis. The national government's economic adjustment program has emphasized the need to balance the trade account and proposals for a new labor unionism have been abandoned. At the same time, pressure for a broader opening of the Mexican telecommunications services sector from the United States and other sources is building. The future for bilateral labor relations at Telmex is unclear. Nevertheless, the fate of this pioneering experiment in Mexican labor relations is worthy of future study.