

ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

COMMUNICATIONS OUTLOOK 2001

Country: Mexico

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TELECOMMUNICATIONS

Market Structure and Regulatory Status (Questions 1 -10)

1. Please provide details of the regulation of communication infrastructure, including the public switched telecommunication network (PSTN), provision in your country.

Infrastructure provision for following service	Regulatory Status (e.g. monopoly, duopoly, certain number, fully open to any applicant)	Number of licensed operators (2000)
Fixed PSTN (Local, National and International)	Fully open	34
Network infrastructure capacity (Includes only companies not licensed to provide voice services)	Fully open	71
Analogue Cellular Mobile (e.g. NMT etc.)	Duopoly, the country is divided in 9 regions. Two operators per region (A&B bands in 800MHz band)	Total : 7 A band: 1 operator (4 regions) 5 operators (1 region each) B band: 1 operator (9 regions)
Digital Cellular Mobile (e.g. GSM, PCS etc.)	Duopoly, in 800 MHz band. PCS, 1850-1990Mhz. band, fully open (subject to spectrum availability)	Total 7: Same as analog due to the digitalization of their networks. 2
Wireless local loop (fixed wireless)	Fully open (subject to spectrum availability)	3 (including PCS)
IMT-2000 Operators (i.e. UMTS and 3 rd Generation)	Fully open (subject to spectrum availability)	Not licensed yet

2. Please provide details for the major public telecommunication operator (PTO) of public switched telecommunication services in your country. (PTOs are state and privately owned entities providing public switched telecommunication services over their own infrastructure)

Name of PTO	PTO Ownership Status (2000) (e.g. state owned/privately owned) If a balance of ownership exists please indicate the share (%) held by the government
Teléfonos de México, S.A. de C.V. (Telmex)	100% privately owned

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3. Please provide details of market share for the largest PTO in the following categories.

	The largest PTO's share	
	End 1998	End 1999
Local Access: % of access lines	100%	99.6%
Local Access: % of local calls	100%	n.a.
National Long Distance (% of total minutes) ¹	n.a.	n.a.
International (% of total outgoing MiTT)	76%	69%
Internet Subscribers ²	n.a.	n.a.

1. If % of minutes is not available, please indicate the % of revenue

2. If share of subscribers is not available, please indicate number of Internet subscribers for the PTO.

4. Please provide details of the number of subscribers by cellular and PCN mobile communication operators.

Name of Operator	Number of Subscribers (End 1999)
1. Telcel	5,271,957 (source: Telmex)
2. Iusacell	1,322,798 (source: Iusacell)
3. Cellular (Total)	7,621,575
4. Cellular + PCS	7,730,362
5.	

5. Please provide a description of the most significant recent policy changes affecting the provision of telecommunications services, as well as any draft laws, or regulatory proposals to be implemented in 2000 to 2001.

Telephone services

- Interconnection rate between long distance and local operators (Resolution, Apr 96, tariff structure review every 2 years) (Resolution Nov 98, new tariff for 1999-2000. Next review July 2000, for the period of 2001-2002)
- Signaling and Numbering Plans, Jul, 1996
- Domestic long distance service rules, Jul, 1996
- International long distance service rules, Dec, 1996
- Regulation for Public Telephony services, Dec 1996
- Local service rules, Oct, 1997
- Technical Specifications and conditions to access 800 numbers from a public phone (Resolution, Aug, 1998)
- Establishment of a "Users in arrears" database for long distance services payments (Resolution, Aug 1998)
- Growth of the Digits of the National Numbering Plan according to the Fundamental Technical Numbering Plan of 1996, Resolution Oct 1998)
- Interconnection rate between fixed and mobile and calling party pays for cellular telephony (Resolution, Nov 98, tariff structure review every 6 months)
- Integration of local service areas, Resolution Nov, 98). A four year process to reduce from 1464 local service areas to 406, -in process- ends in Jul 2002.
- Interconnection rate between fixed to fixed local operators (2 resolutions, Nov, 98) 1st. Resolution, similar coverage the "bill & keep" mechanism applies. 2nd. Resolution commercial coverage only, an asymmetric rate applies. (Next review, Jul 2000)
- Accounting Separation System (Resolution, Dec, 1998) (General rules for new entrants, specific rules for the incumbent)
- Review of the price cap system of Telmex for the period of 1999-2002 (Study and Results, Feb 99 Three international experts intervened -- Booz Allen & Hamilton, McKinsey & Co. and NERA)
- Process to impose additional obligations to Telmex on tariffs, quality of service and information (draft resolution, started March 2000 -in process-)

Pay TV and audio

- Conversion to a public telecommunications networks (Agreement, Jan 96)
- DTH protocol with the US, Nov 1996
- Restricted Audio and TV services rules, Feb 2000
- Agreement to allow ISP's to provide access to Internet services through Pay TV concessionaires' cable infrastructure.

Radiocommunications

- More than 30 agreements and protocols signed with the US to coordinate wireless services in the border zone for different radiocommunication services, and to allow greater competition in this zone (2000 kms).

Satellite

- Satellite Transmission Signals Treaty (US-Apr 96, Argentina-Oct 97, Canada-Apr99)
- FSS protocol with the US, Oct 97
- MSS protocol with the US, Dec 98
- MSS and FSS protocols with Canada -in process-
- FSS protocol with Argentina -in process-
- DARS agreement with the US -concluded- (estimated signature date: Jul 2000)

Value Added Services

- Registration process, 97
- Simplified registration process for ISP's, 2000 -in process-

Auctions

- Ongoing process to increase competition in fixed and mobile local access, Restricted Audio and TV services, trunking, one way and two way paging and Internet services, and long distance point to point and point to multipoint microwave links. LMDS -in process-

Other provisions -in process-

- Formal consultation process
- Universal Service Funding Mechanism
- International Long Distance Rules: Proportional Return System and Uniform Settlement Rate Systems under review
- Review of the structure of the regulatory authority
- Review of the Federal Telecommunications Law

6. Please provide a brief description of the responsibilities of the national regulatory authorities for public telecommunication services. Please highlight any changes over the last 12 months.

The national regulatory authority for the public telecommunications services, the Federal Telecommunications Commission was created by Presidential Decree and its main responsibilities are:

- To regulate the telecommunications sector
- To manage the fundamental technical plans (numbering, signaling, etc.)
- To coordinate activities with the private sector and the academia addressing human resources capacity building on telecommunications and technology development
- To manage the radio-spectrum and coordinate the bidding processes to license the frequency bands for public telecommunications services
- The homologation and certification of telecommunications equipment
- To register tariffs of telecommunications services and establish specific obligations related to quality of service, tariffs and information to those concessionaires with substantial power in the relevant market in accordance with the Federal Competition Law
- To participate in international affairs related to telecommunications regulation
- To oversee the compliance of regulation and the provision of services by concessionaires and permissionaires in accordance with the legal framework and to propose sanctions for non-compliance to the Ministry of Communications and Transport

No changes over the last 12 months, however Mexico is currently reviewing Cofetel's functions and responsibilities.

7. Are there any foreign ownership, size of shareholding or other ownership restrictions on individuals and corporations investing in the incumbent PTO(s) in your country? Yes/ No

Yes.

Article 12. Federal Telecommunications Law. Concessions referred to by this Law, shall only be granted to individuals or corporations of Mexican nationality. Foreign investment, in no case can be greater than 49% except for the cellular telephone service. In such a case, the concessionaire will be requested to obtain a favourable resolution from the National Commission of Foreign Investments.

It is important to note that the Mexican Foreign Investment Law includes the concept of “Neutral Investment”, which is defined by law as an investment in a Mexican corporation represented by a special class of shares which have a limited vote and therefore are not considered as foreign investment.

- 8. Are there any communication infrastructures or services (e.g. mobile, cable television, terrestrial broadcasting, satellite broadcasting) that PTOs in your country are not permitted to provide directly? In addition, please specify any restrictions on PTOs investing in companies that provide such infrastructure or services. Please include information on requirements by the incumbent PTO to divest cable networks.**

Please provide details:

All services and infrastructures are provided directly by PTO's in Mexico in a fully competitive market. The Federal Telecommunications Law (FTL) grants concessions for those corporations or individuals that build their own infrastructure or use the radio spectrum. According to Article 16 of the FTL, a favourable opinion from the Federal Competition Commission must be granted to those corporations or individuals that participate in a bidding process to obtain a concession to use radio spectrum to provide telecommunications services. Another modality, is the “comercializadoras” commonly referred to as resellers in other countries and defined by the FTL in Article 52 as “comercializadora” of telecommunications services any person that, without owning or possessing transmission means, provides telecommunications services to third parties by using capacity of the infrastructure of a concessionaire of a public telecommunications network. Article 53 of the same law establishes that: unless there is written approval from the Ministry of Communications and Transport, concessionaires of public telecommunications networks cannot participate, directly or indirectly, in the capital of a “comercializadora” of telecommunications services.

- 9. What selection procedures are used to grant licences for new Wireless Local Loop (WLL) and IMT-2000 services? (e.g. spectrum auctions, calls for tenders, government appointments, licence on request)?**

Please provide details:

Article 14 of the FTL establishes that concessions for frequency bands of the spectrum classified as "specific use" (“uso determinado” in Spanish language) as stated in Article 13 of the same law, will be granted through public bidding without exception. The most common bidding process that the regulatory authority has used is known as Simultaneous Multiple Round Ascending Auction. In 1998 in the WLL in 3.4-3.6GHz band this type of auction was used. It will be highly probable that the IMT-2000 services will follow the same process.

- 10. Under the communication regulation existing in your country how would national and international voice telephony services provided over the Internet, by entities other than a PTO, be defined and treated? Please mention any restrictions or obligations that may apply.**

Please provide details:

Mexico is currently studying the evolution of basic or regulated services over the Internet and PSTN networks.

However, in the current Mexican telecommunications regulation, the legal framework is technology neutral, it regulates services. If voice telephony over the Internet is a telephone service that uses the Internet as a protocol to originate or terminate voice traffic in any Mexican public telecommunications network, it should comply with the current Mexican regulation for local, domestic and international long distance services. Bypass of the international settlement rate or the interconnection rate between local and long distance is prohibited.

To provide domestic and international voice telephone services in Mexico you need a concession. The international long distance rules establish that long distance concessionaires must comply with the proportional return system and uniform settlement rate system.

Pricing (Questions 11 -12)

11. What, if any, conditions are applied to the tariffs set by PTOs? (Please include any price control information such as price caps or approvals and specify for which services they apply).

Please provide details:

In accordance with the Federal Telecommunications Law:

Article 60: Concessionaires and permissionaires shall freely determine the tariffs of telecommunications services in such terms that these tariffs will allow the provision the services under satisfactory conditions of quality, competitiveness, security and permanence.

Article 61: Tariffs should be registered before the authority previous to their entry into force. Operators cannot incur in discriminatory practices on the application of authorized tariffs.

Article 62: Concessionaires cannot grant cross-subsidies to themselves or through their subsidiaries or affiliated companies for those services they provide in competition.

Article 63: The authority has the faculty to establish specific obligations related with tariffs, quality of service and information to any concessionaire of a public telecommunications network with substantial power in the relevant market, according to the Economic Competition Federal Law.

With regard to the incumbent PTO's tariffs, in its Title of Concession of 1990, when the public PTO was privatized, specific obligations on tariffs were included as obligations that are still in force (Chapter 6 of Telmex Title of Concession).

The incumbent PTO Title of Concession has several pro-competitive measures that seek to provide an efficient expansion of the public telephone network while providing the basis for health competition in the provision of services. Among those measures related to tariffs we find that:

- The rates which apply to each service must allow for the recovery of at least the “long- term incremental cost,” in such a manner as to eliminate “cross subsidies” between services; its purpose is to ensure that the necessary incentive exists to expand each service and establish the right basis for fair competition. (Condition 6.2)
- It defines a “Maximum Price System” or a system of rate regulation that consist of the application of a maximum ceiling to the average weighted rate for the “basic regulated service package”. The package includes the following basic services structured into four types of services: local residential service, local commercial service, national long-distance service, and international long-distance service. (Condition 6.3)
- It states that the incumbent PTO may not allow rates for local residential services to be higher than necessary to recover incremental costs for local residential service. (Condition 6.5)

12. If communication discount schemes are available in your country please provide information on one or more popular schemes applicable to low users and dial-up Internet access users from the incumbent PTO. In the space below please indicate the main features:

Low User scheme:

Internet Access Discount Scheme:

(Additional pamphlets from the PTO in English or French, or with the main points translated into one of these languages, would be most appreciated. Please provide data in local currency).

Note: Low user schemes is a term sometimes applied by PTOs to schemes designed for segments of the community that are financially disadvantaged. A dial-up Internet user refers to a consumer accessing the Internet via a PC with a modem over the local public switched telecommunication network.

Numbering/Domain Names (Questions 13 - 14)

13. Please describe the numbering policy in your country. Please mention the responsible authority and whether portability (including geographic portability) has been introduced and for which services (e.g. 800 numbers, cellular numbers, local PSTN numbers).

Please provide details:

The numbering policy in Mexico is managed by the Federal Telecommunications Commission and it is regulated fundamentally through the Technical Numbering and Signaling Plans as well as the rules for local, domestic and international long distance services. These two plans were issued by Cofotel in consultation with the industry in 1996 to allow the introduction of competition of telephone services and to expand the numbering plan to allow flexibility in the introduction of new applications for the operators and the consumers.

Portability has been discussed broadly between the government and the industry. Operators believe their networks are prepared to introduce portability but they wish to know who is going to pay for it. The current behaviour of the Mexican consumers on telecommunications services, the ongoing process of the reduction of the local service areas as well as the poor purchasing power of most of the residential users have lead the operators to believe that this is not an appropriate time to introduce such a sophisticated feature in the Mexican market.

14. Which organisation is responsible for the administration of your Internet country code top level domain names. (An example of a country code top level domain name is .be for Belgium). Please provide any details of any recent policy initiatives relating to country code domains.

Please provide details:

The Mexican universities agreed to create the NIC (network information center) for Mexico. This NIC controls the .mx domain, today under operation of the ITESM (Instituto Tecnológico de Estudios Superiores de Monterrey)

Interconnection (Questions 15)

15. Interconnection between fixed networks.

	Yes /No	Details
Are PSTN interconnect or access charges a matter for commercial agreement between operators? And if so, is there provision for arbitration and by whom?	Yes	Federal Telecommunications Law (FTL), Article 42 establishes that concessionaires of public telecommunications networks should interconnect their networks, and therefore should sign an agreement in no more than 60 natural days, starting once any of the parties formally requests interconnection to the other party. If the operators involved don't reach an agreement in this period of time, or even before the period of time is over if both parties request it, the authority (Cofetel) in the following 60 natural days should resolve those conditions that were not agreed.
Is there a requirement on the incumbent to publish the rate for PSTN interconnect or access charges?		FTL, Article 61 establishes that tariffs should be registered with the authority previous to the effective date of application. Operators cannot incur in discriminatory practices on the application of authorized tariffs.
For the purpose of establishing interconnect or access charges is accounting separation used?	Yes	FTL, Article 44 paragraph IV. Establishes that concessionaires of public telecommunication networks should observe accounting separation for each service they provide and must charge themselves and its subsidiaries and affiliates, desaggregated and non discriminatory tariffs for each interconnection service
Once the interconnection or access charge of the incumbent has been established, is it available as a standard rate for other service providers (including other PTOs and resellers)?	Yes	FTL, Article 43 paragraph IV. On the interconnection agreements referred to in Article 42, the parties should: IV Act on reciprocity basis for the interconnection of similar services, capacity or functions in tariffs and conditions. According to FTL, Article 54, resellers will not start operating until corresponding regulatory provisions are in place.
Does regulation specify that competitive service providers can collocate facilities on the same site as incumbent PTOs? (Please indicate whether resellers and Internet Service Providers can collocate equipment under the same terms and conditions as PTOs without being designated as a PTO?)	Yes	FTL, Article 43 paragraph VI On the interconnection agreements referred to in Article 42, the parties should: VI. Anticipate that the necessary equipment for interconnection be provided by any of the concessionaires and its location be established in any of the parties' premises. Corresponding regulatory provisions for resellers has not been issued yet.
What kind of interconnection accounting methodology (e.g. LRIC, FDC, etc.) is used for calculating the incumbent's interconnection charges?		Telmex title of concession establishes LRIC, the regulatory authority uses a Forward Looking Model to calculate the incumbent's LRIC. Additionally, the regulatory authority uses Telmex account separation information to calculate the Fully Distributed Costs. FDC is one of many elements (other can be international benchmarks) to take into account in order to calculate interconnection evolution.

<p>Is carrier pre-selection implemented? If so, please describe the coverage of carrier pre-selection (e.g. local, long-distance and international).</p>	<p>Yes</p>	<p>The SCT (Ministry of Communications and Transport) resolution on interconnection of 1994 mandates pre-selection for domestic and international long distance services. The pre-selection process started with the opening of competition in 1997. As of May 1999, 87% of the total number of lines installed have selected their preferred carrier for domestic and international long distance services.</p>
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16. Fixed to Mobile Network Interconnection

	Details
Are termination rates to mobile networks published?	Yes. CFT resolution on interconnection rates for fixed to mobile networks, November 1998.
How are the termination rates for fixed-to-mobile calls determined in your country (e.g. commercial negotiated between operators, determined by mobile operator or other)?	Commercially negotiated. If parties don't reach an agreement the regulatory authority resolves in a fixed period of time.
Are these rates subject to any regulation (e.g. must they be cost orientated if operators have significant market power)?	<p>In November 1998, the regulatory authority issued a Resolution imposing calling party pays in cellular mobile services. The same resolution establishes that the termination rate should be reviewed every six months considering the following:</p> <ul style="list-style-type: none"> - the evolution of the cellular and fixed markets on traffic volumes and number of users - the results from the procedures applied to evaluate termination costs in cellular networks - international benchmarks <p>The next revision will take place in November 2000.</p>

Unbundling (Questions 17 -18)

17. Please describe initiatives for local loop unbundling and indicate when unbundling policies were put in place or the expected date of implementation.

Please provide details:

Local competition has started recently and unbundling initiatives have not been considered by the regulatory authority at this stage of development of the telecommunications sector in Mexico. As stated in the objectives and goals when issuing the FTL to allow competition in the Mexican telecommunications market, the main priority was to invest in the development of infrastructure, thus attempting to issue unbundling initiatives when that goal has not been accomplished yet would be premature.

18. Please provide the prices for access to unbundled local loops and specify the service on offer (e.g. raw copper, DSL subscriber line).

Please provide details:

Consumer Issues (Questions 19 -20)

	Details
In the context of universal service policies, which elements of telecommunication service are considered as part of universal service in your country?	FTL, Articles 50 and 51 establish general policies to provide social coverage of public networks. One way to tackle this objective was the provision of service to rural areas. There are two programs, one controlled by the Ministry of Communications and Transport (SCT) to communicate rural communities between 100 and 500 inhabitants. The second was established as a specific obligation on the Title of Concession of Telmex, (Condition 3.4) By December 31, 1994, to provide all urban population centers with more than 500 inhabitants, as determined by the 1990 General Census of Population and Housing, with access to telephone services, at least by means of a public phone booth or long-distance service office. Other social coverage obligations applied. More recently, once the rebalancing process was accomplished by the end of 1998, the regulatory authority started working together with the industry on a non discriminatory, transparent and competitively neutral funding mechanism, to support universal service policies. The results of the study are expected for the end of 2000.
Please provide details of any explicit funding mechanism for addressing universal service and its coverage (this can include initiatives related to infrastructure in respect to addressing digital divide issues).	The SCT Rural Telephone Program. From the census of 1990 it was determined that there were 32 230 towns with between 100 and 499 inhabitants. By April 1999, 21,000 communities were already connected. By the end of the year 2000 around 34,000 towns (including new towns) will have access to the telephone network using cellular, microwave and/or satellite technologies. Additionally, the regulatory authority is working on the definition of the funding mechanism.
Is the cost of providing universal service calculated? If so please provide the latest annual costing.	The regulatory authority is developing the cost methodology, no cost has been defined yet.
What percentage of telephone subscribers do not have access to an Internet service provider's point of presence with a local call?	n.a.
What is the average monthly online time for a subscriber to the largest PTO's Internet access service (e.g. number of hours).	n.a.
What is the average household consumption expenditure of telecommunication services in your country? Please provide the data in local currency and specify the year of the survey. Please indicate which of the following telecommunications services are included or excluded -- fixed PSTN services, cellular mobile services and Internet access – or provide a definition of the indicator used in	n.a.

your country.	
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19.

	2000	2001	2002	2003
Please report any estimates of the potential coverage of access lines with DSL by the end of the following years (as a % of total subscriber lines) by the incumbent(s):	n.a.	n.a.	n.a.	n.a.