TELEFONOS DE MEXICO S A B DE C V Form 6-K April 28, 2010

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16 of

the Securities Exchange Act of 1934

For the month of April 2010

Commission File Number: 333-13580

TELÉFONOS DE MÉXICO, S.A.B. DE C.V.

(Exact Name of the Registrant as Specified in the Charter)

Telephones of Mexico

(Translation of Registrant's Name into English)

Parque Vía 190

Colonia Cuauhtémoc

México City 06599, México, D.F.

(Address of principal executive offices)

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No...√ ..

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-

Highlights First Quarter 2010

• During the first quarter of 2010, revenues totaled 28.6 billion pesos, a decrease of 4.8% compared with the same period of the previous year. EBITDA (1) totaled 12.1 billion pesos, 14.2% lower than in 2009 and net income totaled 4.7 billion pesos, 2.1% lower than the first quarter of 2009.

• At the end of March, we had 15.811 million lines, more than one-third are low-income lines, a decrease of 1.7 million lines compared with March 2009, (including lines that were at least 2 months behind on payments). TELMEX has 79.5% of fixed lines in Mexico, below the average of 85.3% for 35 countries worldwide included in the 2009 Bank of America/ Merrill Lynch Global Wireline Matrix.

• Based on the February 2010 report from Teligen, the OECD's price consultant, TELMEX's prices are ranked 4th, 4th and 10th in residential low, medium and high consumption, respectively, among countries with the lowest prices. This is the result of TELMEX's commercial policy of reducing prices for close to 20 years in real terms, which in turn has provided our customers with economic benefits derived from the operating and technical improvements that have been implemented.

• The October 3, 2006, "Acuerdo de Convergencia," (more than 3 years and 6 months ago) which was issued by the Federal Government through the Secretaría de Comunicaciones y Transportes, established the basis for the full convergence of telecommunications networks with the participation of all operators. Unfortunately, the lack of technological convergence prevents delivering to customers the benefits of developing the information society with its better prices, more packaged services and increase in investments for the country in order to reach all Mexicans. It is important to highlight that technological convergence has been implemented in nearly all countries worldwide.

• During the first quarter, broadband Infinitum (ADSL) had a gain of 247 thousand services, bringing the total to 6.8 million customers, making Mexico one of the countries with the highest growth rates in the world with an annual average rate of more than 70% in the last four years, considerably higher than the average of less than 20% for the member countries of the OECD.

• Additionally, the main limitation for higher broadband growth in the country is the lack of computers in homes, since 3 out of 4 homes do not have a computer. TELMEX, in spite of the lack of convergence and computer penetration in the Mexican market, continues to aggressively drive education and digital culture in Mexico, not only to contribute so the country does not fall behind in the era of knowledge, but also to incorporate state-of-the-art information technologies in our own operations.

• Therefore, TELMEX proposed to make 2010 the year of "Driving Technological Innovation" and a program was implemented with the following actions:

- Increase connectivity in the country. TELMEX will increase Infinitum's access speed while maintaining the quality, continuity and speed consistency that characterize this service and double the number of sites with WiFi Móvil Infinitum to reach 3,000 nationwide this year including airports, restaurants, hospitals, public parks, educational centers and shopping malls, among others.

- Enhance information technologies. Inttelmex IT, the specialized Information Technologies Institute, has begun operations. For 2010 it has the objective of training more than 1,000 professionals in IT applications to innovate and produce solutions that help competitiveness for companies and domestic institutions.

- Support Education and Digital Culture through the operation of 3,300 Bibliotecas Digitales TELMEX (TELMEX Digital Libraries) and 1,000 Aulas Digitales TELMEX (TELMEX Digital Classrooms) at year-end 2010.

• Revenues in the first quarter totaled 28.6 billion pesos, a decrease of 4.8% compared with the same period of the previous year. Revenues related to data services increased 12.8%. Local, long distance and interconnection revenues decreased 9.4%, 20.6% and 9.9%, respectively.

• In the quarter, EBITDA (1) totaled 12.1 billion pesos, producing a margin of 42.3%. Operating income totaled 7.7 billion pesos, with a margin of 27.0%.

• Net income in the quarter totaled 4.7 billion pesos, down 2.1% from the first quarter of 2009. For the quarter, earnings per share were 26 Mexican cents, at the same level of the year-earlier period, and earnings per ADR (2) were 40 US cents, an increase of 11.1% compared with the first three months of 2009.

• At March 31, 2010, total debt was the equivalent of 6.731 billion dollars. During the first three months of the year, TELMEX amortized debt equal to approximately 1.266 billion dollars, which included a 950 million dollar bond and a 250 million dollar syndicated loan. Total net debt (3) was equivalent to 6.212 billion dollars, 536 million dollars less than March 31, 2009.

• Capital expenditures (Capex) were the equivalent of 159 million dollars in the first quarter. Of this investment, 65.3% was used for growth and infrastructure projects in the data business.

(1) EBITDA: defined as operating income plus depreciation and amortization. Go to www.telmex.com in the Investor Relations section where you will find the reconciliation of EBITDA to operating income.

(2) One ADR represents 20 shares.

(3) Net debt is defined as total debt less cash and cash equivalents.

Relevant Event

TELMEX Annual Shareholders' Meeting Resolutions

On March 24, 2010, TELMEX announced that the Board of Directors, at its meeting on that day, resolved to call for series "L" Special and Annual Shareholders' Meetings, to be held on April 29, 2010, in order to discuss, among other matters, the following proposals: to appoint the members of the Board of Directors pertaining to Series "L" shares; approval, as the case may be, of the Chief Executive Officer and Board of Director's reports and the financial statements for fiscal year 2009, and declaration of a cash dividend of P.0.50 Mexican pesos per outstanding share in four equal payments of P.0.1250 Mexican pesos per outstanding share, resulting from the net tax profit account. Dividend payments are proposed to be made in México on or after June 17, 2010, September 23, 2010, December 16, 2010, and March 24, 2011, respectively.

Operating Results

Lines and local traffic

At the end of March, we had 15.811 million lines, more than one-third are low-income lines, a decrease of 1.7 million lines compared with March 2009, (including lines that were at least 2 months behind on payments). TELMEX has 79.5% of fixed lines in Mexico, below the average of 85.3% for 35 countries worldwide included in the 2009 Bank of America/ Merrill Lynch Global Wireline Matrix.

During the quarter, local calls decreased 8.1% compared with the same period of 2009, totaling 4.821 billion local calls. Local traffic volume continues to be affected mainly by the increase in cellular telephony services, by the reduction in the number of lines and by competition from other operators and cable TV operators.

Long distance

In the first quarter, domestic long distance (DLD) traffic decreased 9.3% compared with the first quarter of 2009, totaling 4.482 billion minutes, due to the decrease in termination traffic with cellular telephony operators and long distance operators.

In the quarter, outgoing international long distance (ILD) traffic decreased 14.5% compared with the first quarter of 2009, totaling 321 million minutes. The decline reflected a decrease in traffic from mobile operators and the reduction in traffic of our customers. Incoming international long distance traffic increased 28.6% compared with the first quarter of 2009, totaling 1.885 billion minutes. The incoming-outgoing ratio was 5.9 times.

Interconnection

In the first quarter, interconnection traffic totaled 10.596 billion minutes, 0.7% lower than the same quarter of 2009, mainly due to the decrease of 3.6% in calling party pays traffic. Interconnection traffic with local, long distance and cellular telephony operators was flat compared with 2009's first quarter.

Internet access

During the first quarter, broadband Infinitum (ADSL) had a gain of 247 thousand services, bringing the total to 6.8 million customers, making Mexico one of the countries with the highest growth rates in the world with an annual average rate of more than 70% in the last four years, considerably higher than the average of less than 20% for the member countries of the OECD.

For our residential and commercial customers, TELMEX has designed multi-service packages which include access to broadband Infinitum services and different voice services that adjust to our customers' interests and needs so they obtain the best conditions and prices of our services.

Financial Results

The following financial information for 2010 and 2009 is presented in nominal pesos, according to Mexican Financial Reporting Standards.

Revenues: In the first quarter, revenues totaled 28.6 billion pesos, a decrease of 4.8% compared with the same period of the previous year. Revenues related to data services increased 12.8%, and local, long distance and interconnection revenues decreased 9.4%, 20.6% and 9.9%, respectively.

- Local: Local service revenues totaled 10.462 billion pesos in the quarter, a decrease of 9.4% compared with the first quarter of 2009, due to decreases of 8.7% in revenue per local billed call and 8.1% in local traffic volume.
- DLD: DLD revenues totaled 3.104 billion pesos, 16.5% lower than in January to March of 2009, due to the 9.3% decrease in traffic and the 7.9% decline in average revenue per minute, which in part was due to higher penetration of multi-service packages that include domestic long distance service.
- ILD: ILD revenues totaled 1.439 billion pesos in the quarter, a decrease of 28.4% compared with the same quarter of the previous year. Contributing factors included the 14.5% decrease in outgoing traffic and the 14.0% decrease in average revenue per minute. Incoming international long distance traffic revenues totaled 608 million pesos, a decrease of 30.8% compared with the first quarter of the previous year, due to the decline of 46.2% in average revenue per minute resulting from the revaluation of the Mexican peso and the increase of 28.6% in incoming traffic.
- Interconnection: In the quarter, interconnection revenues decreased 9.9% to 3.754 billion pesos compared with the first quarter of 2009, due to the 3.6% decline in calling party pays services and the decrease of 6.7% in average revenue of these services.
- Data: Data revenues are comprised mainly of Internet access services and services related to corporate customers' Virtual Private Networks. Revenues from data services in the quarter were 8.019 billion pesos, 12.8% higher compared with the first quarter of 2009 due to the increase of 20.8% in Internet access services and the integration of value-added services to our portfolio of products and services for the corporate market.

Costs and expenses: In the first quarter of 2010, total costs and expenses were 20.860 billion pesos, 2.3% higher than the same period of the previous year, mainly due to higher costs of equipment and services for customer sales and the increase in the reserve for uncollectables, partially offset by lower interconnection costs resulting from the decrease of 8.3% in the amount paid to cellular telephony operators for calling party pays services and by initiatives to optimize resource use.

- Cost of sales and services: In the quarter, cost of sales and services increased 7.9% compared with the same period of 2009, totaling 8.621 billion pesos, due to higher costs related to products and services for corporate customers and computer sales at Tiendas TELMEX (TELMEX Stores).
- Commercial, administrative and general: In the period from January to March 2010, commercial, administrative and general expenses totaled 5.251 billion pesos, 6.1% higher than the same period a year ago, mainly due to an increase in the reserve for uncollectables primarily from bad accounts from some telecommunications operators.
- Interconnection: Interconnection costs were 2.609 billion pesos, a decrease of 12.6% compared with the first quarter of 2009 due to the 8.3% decrease in the amount paid to cellular telephony operators for calling party pays services and the decrease in calling party pays traffic.
- Depreciation and amortization: In the quarter, depreciation and amortization decreased 2.2% compared with the same period of 2009, to 4.379 billion pesos, as a result of lower amounts of investments in recent years.

EBITDA (1) and operating income: EBITDA (1) totaled 12.086 billion pesos in the first quarter of 2010, a decrease of 14.2% compared with the same period of the prior year. The EBITDA margin was 42.3%. Operating income totaled 7.707 billion pesos in the first quarter and the operating margin was 27.0%.

Financing cost: In the first quarter of the year, financing cost produced a charge of 1.158 billion pesos. This was a result of: i) a net interest charge of 1.454 billion pesos, which includes debt reduction and the recognition of the market value of interest rate swaps and ii) a net exchange gain of 296 million pesos from the first-quarter exchange rate appreciation of 0.5947 pesos per dollar, offset by 3.987 billion dollars in dollar-peso hedges at the end of March 2010.

Net income attributable to controlling interest: In the first quarter, net income attributable to controlling interest was 4.661 billion pesos, 2.1% lower than the same period of the previous year. Earnings per share were 26 Mexican cents, at the same level of the first quarter of 2009, and earnings per ADR (2) were 40 US cents, an increase of 11.1% compared with the same period of the previous year.

Investments and other uses of cash: In the first quarter, capital expenditures (Capex) were the equivalent of 159 million dollars, of which 65.3% was used for growth and infrastructure projects in the data business.

Debt: Total debt at March 31, 2010, was the equivalent of 6.731 billion dollars, of which 95.5% is long-term, 45.0% has fixed rates considering interest rate swaps, and 60.8% is in foreign currency, equivalent to 4.091 billion dollars. To minimize risks from variations in the exchange rate, at March 31, 2010, we had dollar-peso hedges for 3.987 billion dollars.

In the first three months of the year, TELMEX realized debt payments for approximately 1.266 billion dollars, which included amortizations of 950 million dollars from a bond and 250 million dollars from a syndicated loan.

Total net debt (3) decreased during the last 12 months the equivalent of 536 million dollars, bringing the total to 6.212 billion dollars.

In millions of Mexican pesos, unless otherwise indica	ated)				
				%	
	1Q2010		1Q2009	Inc.	
Revenues P.	28,567	Ρ.	30,017	(4.8)	
EBITDA (1)	12,086		14,093	(14.2)	
EBITDA margin (%)	42.3		47.0	(4.7)	
Operating income	7,707		9,617	(19.9)	
Operating margin (%)	27.0		32.0	(5.0)	
Net income attributable to controlling interest	4,661		4,759	(2.1)	
Earnings per share (pesos)	0.26		0.26	0.0	
Earnings per ADR (dollars) (2)	0.40		0.36	11.1	
Weighted average of outstanding shares (millions)	18,191		18,519	(1.8)	
Equivalent ADRs (millions) (2)	910		926	(1.8)	

Relations section where you will f	Relations section where you will find the reconciliation of EBITDA to operating income.							
(2) One ADR represents 20 shares.								
(3) Net debt is defined as total de	bt less cash and ca	ash equivalents.						

Income Statements				
[In millions of Mexican pesos]				
				%
	1Q2010		1Q2009	Inc.
Revenues				
Local P.	10,462	Ρ.	11,546	(9.4)
Domestic long distance	3,104		3,716	(16.5)
International long distance	1,439		2,009	(28.4)
Interconnection	3,754		4,165	(9.9)
Data	8,019		7,106	12.8
Other	1,789		1,475	21.3
Total	28,567		30,017	(4.8)
Costs and Expenses				
Cost of sales and services	8,621		7,992	7.9
Commercial, administrative and general	5,251		4,947	6.1
Interconnection	2,609		2,985	(12.6)
Depreciation and amortization	4,379		4,476	(2.2)
Total	20,860		20,400	2.3
Operating income	7,707		9,617	(19.9)
	(152)		250	NA

Other (revenues) expenses, net					
Financing cost					
Interest, net		1,454		1,825	(20.3)
Exchange (gain) loss, net		(296)		568	NA
Total		1,158		2,393	(51.6)
Equity interest in net income affiliates	e (loss) of	20		(1)	NA
Income before income tax		6,721		6,973	(3.6)
Income tax		2,060		2,213	(6.9)
Net income		4,661		4,760	(2.1)
Noncontrolling interest		0		(1)	NA
Net income attributable to controlling interest	P.	4,661	Ρ.	4,759	(2.1)
EBITDA (1)	P.	12,086	Ρ.	14,093	(14.2)
EBITDA margin (%)		42.3		47.0	(4.7)
Operating margin (%)		27.0		32.0	(5.0)
Exchange rate at March 31,	2010: 12.4640) pesos per do	llar.		
NA not applicable.					

Balance Sheets				
[In millions of Mexican pesos]				
		March 31,		March 31
		2010		2009
Assets				
Cash and cash equivalents	Ρ.	6,468	Ρ.	11,98
Other current assets		35,512		45,50
Plant, property and equipment, net		102,096		111,688
Other assets		5,783		6,51
Net projected asset		15,084		14,21
Total assets	Ρ.	164,943	Ρ.	189,91
Liabilities and stockholders' equity				
Current portion of long-term debt	Ρ.	3,738	Ρ.	37,98
Other current liabilities		21,943		21,81
Long-term debt		80,155		70,71
Labor obligations		3,751		4,42
Deferred taxes		14,443		15,46
Deferred credits		537		39
Total liabilities		124,567		150,79
Stockholders' equity		40,376		39,11
Total liabilities and stockholders' equity	Ρ.	164,943	Ρ.	189,91
Exchange rate at March 31, 2010: 12.4640 peso	s per dollar.			
			\vdash	

Operating Results			

							% Inc. vs.
		1Q 2010	4Q 2009	3Q 2009	2Q 2009	1Q 2009	1Q 2009
Internet (tho	ousands)	6,883	6,651	6,446	6,059	5,699	20.8
	Prodigy (Dial-up)	112	127	143	159	177	(36.7
	Infinitum (ADSL)	6,771	6,524	6,303	5,900	5,522	22.0
				(= c / c +			
Billed lines ((thousand units)	15,811	15,882	17,346 *	17,415 *	17,514 *	(9.7
Local traffic	(million units)						
	Local calls	4,821	5,000	5,333	5,257	5,245	(8.1
	Interconnection minutes (A) (B)	10,596	10,678	11,137	10,882	10,670	(0.7
Long distan	ce traffic (million minutes)						
	Domestic long distance (A)	4,482	4,810	5,033	5,055	4,939	(9.3
	International long distance						
	(incoming and outgoing) (B)	2,206	2,067	1,891	1,726	1,841	19.
(A) Includes	domestic long distance calling	oarty pays tr	affic.				
(B) Includes	international long distance calli	ng party pay	s traffic.				
(*) Includes	lines with at least 2 months beh	ind on bill pa	yments whic	ch at the first	Quarter		
2009 totaled	d 1.2 million lines .						

Mexico Local and Long Dist	Mexico Local and Long Distance Accounting Separation						
Based on Condition 7-5 of the Amendments of the Concession Title of Teléfonos					de México	, the	

below for the first quarter of	2010 and 2009.					
Mexico Local Service Business						
Income Statements						
[In millions of Mexican pesos]						
					%	
		1Q2010		1Q2009	Inc.	
Revenues						
Access, rent and measured service	Ρ.	10,369	P.	11,440	(9.4)	
LADA interconnection		1,164		1,351	(13.8)	
Interconnection with operators		391		440	(11.1)	
Interconnection with cellular o	perators	2,461		2,775	(11.3)	
Other		4,028		3,689	9.2	
Total		18,413		19,695	(6.5)	
Costs and expenses						
Cost of sales and services		6,042		5,832	3.6	
Commercial, administrative ar	nd general	4,529		4,540	(0.2)	
Interconnection		1,602		1,812	(11.6)	
Depreciation and amortization		2,359		2,671	(11.7)	
Total		14,532		14,855	(2.2)	
Operating income	Р.	3,881	P.	4,840	(19.8)	
EBITDA (1)	Ρ.	6,240	P.	7,511	(16.9)	
EBITDA margin (%)		33.9		38.1	(4.2)	
Operating margin (%)		21.1		24.6	(3.5)	

Mexico Long Distance Serv	ice Business					
Income Statements						
[In millions of Mexican pesos]						
					%	
		1Q2010		1Q2009	Inc.	
Revenues						
Domestic long distance	Ρ.	3,647	P.	4,244	(14.1)	
International long distance		1,443		1,961	(26.4)	
Total		5,090		6,205	(18.0)	
Costs and expenses						
Cost of sales and services		1,185		1,451	(18.3)	
Commercial, administrative a	nd general	1,264		1,347	(6.2)	
Interconnection to the local ne	etwork	1,790		1,993	(10.2)	
Depreciation and amortization		430		521	(17.5)	
Total		4,669		5,312	(12.1)	
Operating income	Р.	421	Ρ.	893	(52.9)	
	· · ·	121			(32.3)	
EBITDA (1)	Р.	851	P.	1,414	(39.8)	
EBITDA margin (%)		16.7		22.8	(6.1)	
Operating margin (%)		8.3		14.4	(6.1)	

Statement of cash flows		
[In millions of Mexican pesos)		
		Three months
		ended
		March 31, 2010
Operating activities		
Income before income tax:	P.	6,72
Depreciation and amortization		4,37
Accrued interest expense		1,56
Other items not requiring the use of cash		1,18
Total		13,84
Cash flows used in operating activities		(734
Net cash flows provided by operating activities		13,11
Investing activities		(0.700
Acquisition of plant, property and equipment		(2,728
Other investments		(44
Net cash flows used in investing activities		(2,772
Cash surplus to be applied to financing activities		10,34
Financing activities		
New loans		1,50
Repayment of loans		(17,747
Acquisition of own shares		(11
Dividends paid		(2,047
Interest paid		(1,195

Derivative financial instruments		1,247
Net cash flows used in financing activities		(18,253)
Net decrease in cash and cash equivalents		(7,912)
Cash and cash equivalents at begining of period		14,380
Cash and cash equivalents at end of period	P.	6,468

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 27, 2010.

TELÉFONOS DE MÉXICO, S.A.B. DE C.V.

By: /s/_____

Name: Adolfo Cerezo Pérez Title: Chief Financial Officer

Ref: TELÉFONOS DE MÉXICO, S.A.B. DE C.V. - FIRST QUARTER 2010 – HIGHLIGHTS