

PROTOCOL CONCERNING USE OF THE
929-930 MHZ AND 931-932 MHZ BANDS FOR PAGING SERVICES
ALONG THE COMMON BORDER

This Protocol is being concluded pursuant to the Agreement Between the Government of the United States of America and the Government of the United Mexican States Concerning the Allocation and Use of Frequency Bands by Terrestrial Non-Broadcasting Radiocommunication Services Along the Common Border signed June 16, 1994, herein referred to as the Agreement.

ARTICLE I. Purposes

The purposes of this Protocol are:

1. To establish and adopt a common plan for the use of the 929-930 MHz and 931-932 MHz frequency bands for one way paging within 120 km of each side of the common border (Sharing Zone).
2. To identify channels for shared use on both sides of the common border.
3. To establish technical criteria that will permit each Administration to regulate the use of its channels.

ARTICLE II. Definition

For the purpose of this Protocol and as provided for in Article IV of the Agreement, the term Administration(s) shall refer to the Federal Communications Commission (FCC) of the United States of America and the Secretaria de Comunicaciones y Transportes (SCT) of the United Mexican States.

ARTICLE III. Conditions of Use

1. In the Sharing Zone, the frequencies in the bands 929-930 MHz and 931-932 MHz shall be allotted for each Administration's primary use in accordance with the tables in Appendices I and II, which are an integral part of this Protocol.
2. In the Sharing Zone, existing assignments, listed in Appendices III and IV, will be protected based on a minimum separation distance of 120 km.
3. Frequencies allotted for the primary use of one Administration may be assigned by the other Administration within the Sharing Zone in accordance with the following conditions:
 - a. The maximum power flux density (pfd) at any point at or beyond the border shall not exceed -86 dBW/m^2 .
 - b. Both Administrations shall take proper measures to eliminate any harmful interference caused by their licensees.
 - c. Each Administration shall ensure protection to stations of the other Administration that has primary use of the frequency.

d. Stations operating under this provision shall be considered as secondary and shall not be granted protection against harmful interference from stations whose Administration has primary use of the frequency.

4. Both Administrations will promote the identification of frequencies which can be utilized by licensees with common partners/operators in the other country for establishing operational agreements in the border area. When two licensees become partners or develop operational agreements to use the same frequencies, each will provide this information to its Administration. When an Administration notifies the other of its operator's intention to use a frequency in common, the notified Administration shall determine the acceptability of the agreement and respond within a period of 60 days from the receipt of the notification.

5. The following channels are available to both Administrations on a shared basis, as indicated in Appendices I and II. In the event an Administration grants use of any of these channels in the Sharing Zone and that channel has already been assigned by the other Administration, coordination of all transmitter installations shall be required to eliminate any harmful interference that might otherwise exist and to ensure continuance of equal access to the channel by both countries, including the use of time-sharing or other techniques:

929.1375 MHz	931.4375 MHz
929.2125 MHz	931.6875 MHz
929.5375 MHz	931.7375 MHz
929.5625 MHz	931.8875 MHz
929.7375 MHz	931.9125 MHz
929.7625 MHz	931.9375 MHz

6. Assignments made by an Administration within the Sharing Zone shall be authorized subject to the Effective Radiated Power (ERP) and Antenna Height limits specified in the following table:

Antenna Height Above Average Terrain (Meters)	Maximum ERP (Watts)
0 to 304	1000
Above 304 to 457	600
Above 457 to 609	350
Above 609 to 762	200
Above 762 to 904	140
Above 904 to 1056	100
Above 1056 to 1205	75
Above 1205 to 1357	70
Above 1357	65

ARTICLE IV. Exchange of Data

In May of each year, the Federal Communications Commission of the United States of America and the Secretaria de Comunicaciones y Transportes of the United Mexican States shall exchange recapitulative lists of all of their country's assignments in the bands 929-930 MHz and 931-932 MHz within the Sharing Zone.

ARTICLE V. Cross Border Roaming

Cross border service is permitted only as roaming service and this service is permitted only as long as the service providers in each country have agreed. The roaming service is provided in accordance with the laws, regulations, standards and authorizations of the country in which the mobile is operating. The service providers shall avoid discriminatory treatment in the provision of the service.

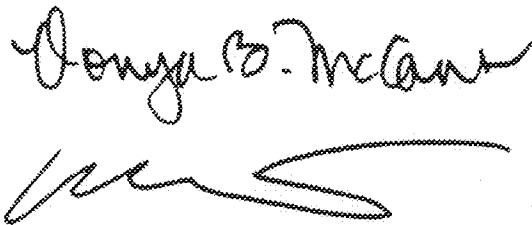
ARTICLE VI. Entry Into Force and Termination

This Protocol shall enter into force on the date of signing. It shall remain in force until it is replaced by a new Protocol, or until it is terminated in accordance with Article VII of the Agreement.

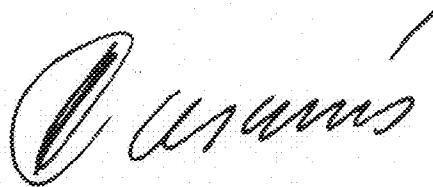
IN WITNESS WHEREOF, the respective representatives have signed the present Protocol.

Done at Washington, D.C., this twenty seventh day of February, 1997, in duplicate, in the English and Spanish languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

Handwritten signature of Donya B. McLean, representing the United States of America.

FOR THE GOVERNMENT OF THE
UNITED MEXICAN STATES:

Handwritten signature, representing the United Mexican States.

APPENDIX I

929-930 MHz Paging Channels¹

<u>United States</u>	<u>Mexico</u>
	.0125
	.0375
	.0625
	.0875
	.1125*
.1375 (S)	.1375 (S)
	.1625
.1875	
.2125 (S)	.2125 (S)
	.2375*
	.2625*
.2875	
	.3125
	.3375
.3625	
	.3875*
.4125	
	.4375
.4625	
	.4875
.5125	
.5375 (S)	.5375 (S)
.5625 (S)	.5625 (S)
.5875	
.6125	
	.6375*
.6625	
	.6875*
.7125	
.7375 (S)	.7375 (S)
.7625 (S)	.7625 (S)
	.7875*
	.8125*
.8375	
.8625	
.8875	
.9125	
.9375	
.9625	
.9875	

(S) - usable and shared by both countries

* Subject to the protection of stations licensed in the United States as listed in Appendix III.

¹ All frequencies are in MHz, relative to 929 MHz

Appendix II

931 - 932 MHz

	Frequency ¹	West ² of 115	115-118	118-120	120-125	125-130	130-135	135-140	140-145	145-150	150-155	155-160	160-165	165-170	170-175	175-180	180-185	185-190	190-195	195-200	
1	931.0125	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
2	931.0375	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
3	931.0625	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
4	931.0875	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
5	931.1125	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
6	931.1375	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
7	931.1625	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
8	931.1875	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
9	931.2125	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
10	931.2375	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
11	931.2625	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
12	931.2875	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
13	931.3125	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
14	931.3375	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
15	931.3625	++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
16	931.3875	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
17	931.4125	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
18	931.4375	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
19	931.4625	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
20	931.4875	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

¹ All Frequencies are in MHz

² West Longitudes are in degrees

Appendix II

931 - 932 MHz

	Frequency	West of 115	115-113	113-110	110-108	108-105	105-101	101-97	Frequency
21	931.5125	+++	++	++	++	+	+	+	931.5125
22	931.5375	+	++	+++	++	++	++	++	931.5375
23	931.5625	+	++	+++	++	+	++	++	931.5625
24	931.5875	+	++	++	++	++	++	++	931.5875
25	931.6125	+	++	+	+	+	++	++	931.6125
26	931.6375	+	++	++	++	++	++	++	931.6375
27	931.6625	+++	++	++	++	++	++	++	931.6625
28	931.6875	S	S	S	S	S	S	S	931.6875
29	931.7125	+	++	++	++	++	++	++	931.7125
30	931.7375	S	S	S	S	S	S	S	931.7375
31	931.7625	+	+	++	++	+	++	++	931.7625
32	931.7875	+	++	++	++	+	++	++	931.7875
33	931.8125	+	++	+	++	+	++	+	931.8125
34	931.8375	+++	++	++	++	++	++	++	931.8375
35	931.8625	+	+	+	++	+	++	+	931.8625
36	931.8875	S	S	S	S	S	S	S	931.8875
37	931.9125	S	S	S	S	S	S	S	931.9125
38	931.9375	S	S	S	S	S	S	S	931.9375
39	931.9625	+	+	+	++	+	++	++	931.9625
40	931.9875	+	+	+	++	+	++	++	931.9875

Notation Key: + For primary use of the United States ++ For primary use of Mexico S Shared by both countries (See Article III, paragraph 5.) * Refer to Appendix IV for stations that require protection

APPENDIX III

The following locations for US stations are referenced to Appendix I and shall be protected in accordance with the terms of Article III, Paragraph 2.

<u>Frequency (MHz)</u>	<u>Geographic Coordinates</u> <u>(degrees/minutes/seconds)</u>	
	<u>Latitude</u>	<u>Longitude</u>
929.1125	32/13/20	110/58/14
	32/50/53	117/16/25
	32/45/55	117/09/39
	32/41/47	116/56/06
	32/42/55	117/09/24
	32/50/24	117/14/52
	33/00/30	115/31/28
	33/00/54	116/58/11
	33/12/54	117/11/15
	33/19/06	116/53/04
929.2375	33/25/53	117/35/47
929.2625	33/18/30	116/50/20
929.3875	32/41/47	116/56/06
	33/00/34	116/58/11
929.6375	25/57/49	097/31/11
	27/30/23	099/30/30
929.6875	32/40/25	114/20/13
	32/42/10	114/36/38
	32/48/15	115/30/12
	27/30/23	099/30/30
	25/57/49	097/31/11
929.7875	31/28/50	109/57/30
	31/23/14	110/58/20
	32/41/47	116/56/09
	32/42/59	117/09/34
	33/00/32	116/58/13
	33/13/15	117/11/00
929.8125	33/00/34	116/58/11

APPENDIX IV

The following locations for US stations are referenced to Appendix II and shall be protected in accordance with the terms of Article III, Paragraph 2.

<u>Frequency (MHz)</u>	<u>Zone</u>	<u>Geographic Coordinates</u> <u>(degrees/minutes/seconds)</u>	
		<u>Latitude</u>	<u>Longitude</u>
931.2125	West of 115	33/00/34	116/58/11
931.2375	101-97	26/07/08	097/50/00
931.2375	West of 115	33/36/22	117/48/40
931.2625	101-97	26/15/23	098/13/49
931.3125	113-110	32/13/16	110/58/13
931.3375	West of 115	33/12/53	117/11/15
931.3375	West of 115	33/36/22	117/48/40
931.3625	West of 115	33/00/34	116/58/11
931.3625	113-110	32/13/16	110/58/13
931.3875	113-110	32/13/20	110/58/14
931.4875	113-110	32/10/51	110/55/03
931.4875	113-110	32/13/20	110/58/14
931.5125	West of 115	33/00/34	116/58/11
931.5125	West of 115	32/43/05	117/09/32
931.5125	West of 115	33/12/53	117/11/15
931.5125	West of 115	32/43/00	117/09/48
931.5125	West of 115	32/46/49	117/08/07
931.5125	West of 115	33/37/34	117/55/45
931.5125	West of 115	32/41/47	116/56/06
931.5125	West of 115	33/06/55	117/09/01
931.5375	113-110	32/13/21	110/58/15
931.5625	113-110	32/13/21	110/58/15
931.5625	113-110	32/13/20	110/58/14
931.6625	West of 115	33/36/22	117/48/40
931.8375	West of 115	33/00/34	116/58/11

LETTER OF UNDERSTANDING

The Secretaria de Comunicaciones y Transportes, hereinafter "SCT", and the Federal Communications Commission, hereinafter the "FCC", in order to seek and implement arrangements under which more efficient use can be made of the frequency bands set forth in the "Protocol Concerning the Use of the 929-930 MHz and 931-932 MHz Bands for Paging Services Along the Common Border," hereinafter "the Protocol", *DECLARE* the following:

- (1) The SCT and the FCC have carried out negotiations and signed the Protocol.
- (2) The distribution of the channels and the associated operating procedures contained in the Protocol may be improved to the benefit of all licensees as experience is gained from the implementation of the Protocol.
- (3) In keeping with the process of economic integration between the United States and Mexico, it is desirable that better use be made of the radio spectrum, especially that occurring in the sharing zone on both sides of the border.

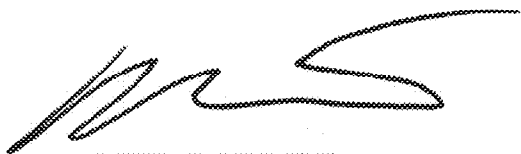
Based on the above declarations, the Parties hereby *AGREE* on the following:

- (a) Both parties will utilize their best efforts to identify frequencies permitting shared operation and will intensify their activities to encourage business arrangements between operators in each country.
- (b) Both parties will immediately begin to search for options that will allow shared operation of the frequency 929.4125 MHz.
- (c) Both parties will promote and make every effort to ensure the continuity of the arrangements or contracts, current or future, between operators on each side of the border.

Both parties agree to subsequently exchange formal letters confirming the terms of this Letter of Understanding.

FOR THE FEDERAL COMMUNICATIONS
COMMISSION

FOR THE SECRETARIA DE
COMUNICACIONES Y TRANSPORTES



REED E. HUNDT



JAVIER LOZANO CARLOS CASASUS

WASHINGTON, DC

FEBRUARY 27, 1997