

Bilateral Agreement Between Mexico and the USA for the Coordination of Earth Stations in the 6 GHz Band

On July 2, 1991 an agreement between the governments of Mexico and the USA was signed in Chestertown, Maryland. This agreement provides procedures for the bilateral coordination of certain Mexican and USA earth stations located near the common Mexican/USA border. Only earth stations that transmit in the 5925-6425 MHz band (commonly called the 6 GHz band) are subject to this bilateral agreement. This agreement calls for an exchange of earth station data every six (6) months and a response from the other party within six (6) months of the receipt of station data.

Under this agreement, the USA has provided information on a total of 467 US earth stations to Mexico prior to May 15, 1994. This information is summarized in Table 1. Until March 1, 1994, the USA had not receive a response from Mexico concerning these pending coordination requests. On March 1, 1994, Mexico responded with a listing of a total of 672 emissions from US earth stations which it states "Require Coordination".

Table 1: USA 6 GHz earth stations sent to Mexico for coordination

Date Sent To Mexico	No. & Type of stations	Comments
November 15, 1991	393 domestic	Ref. in Mexico's 3/1/94 list
November 15, 1991	20 international	Ref. in Mexico's 3/1/94 list
November 15, 1991	15 transborder	
May 15, 1992	19 domestic	
November 15, 1992	8 domestic	
May 15, 1993	12 domestic	Ref. in Mexico's 3/1/94 list
May 15, 1994 -- Held	78 domestic -- Held	Batch being held pending resolution of problems concerning this agreement.

Under this agreement, Mexico has provided information on a total of 78 Mexican earth stations to the USA prior to May 15, 1994. This information is summarized in Table 2. The USA agreed to coordination on 75 of these Mexican earth stations on November 15, 1992. At that time, the USA requested further information on the remaining five (5) earth stations. To date, Mexico has made no response to the USA concerning these five stations.

Table 2: Mexican 6 GHz earth stations sent to the USA for coordination

Date Sent To USA	No. of earth stations	Comments
May 15, 1992	78 earth stations	Coordination complete on 75 stations as of 11/15/92.



SECRETARÍA DE COMUNICACIONES
Y TRANSPORTES

COORDINACION DE RELACIONES
INTERNACIONALES

"MOVIMIENTO PARA EL PROGRESO"

Marzo, 1 de 1994

0259

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SR. WILLIAM H. JAHN

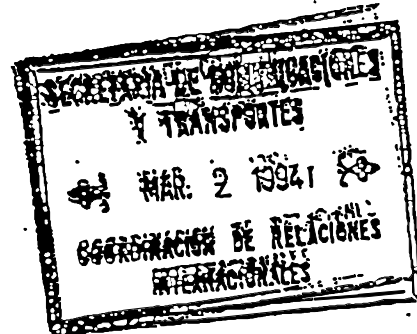
Director of Telecommunications Policy
for Mexico and Micronesia.

En relación al proceso de coordinación entre estaciones terrenas y sistemas relevadores radioeléctricos en la banda de 6 GHz, que operan a lo largo de la frontera común de México y Estados Unidos de América, anexa le envío información correspondiente a la respuesta del total de 672 estaciones terrenas de su Administración, sujetas al procedimiento de coordinación de conformidad con el Acuerdo suscrito en Chestertown en 1991.

Sin otro particular, reitero a usted las seguridades de mi atenta y distinguida consideración

ING. JOSE A. PADILLA LONGORIA.

Coordinador



c.c. Lic. Andrés Massieu Berlanga.- Subsecretario de
Comunicaciones y Desarrollo Tecnológico.

Lic. José Ma. Rivas Moncayo, Director General de Políticas y
Normas de Comunicaciones.

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RESPUESTA DE LA ADMINISTRACION DE MEXICO
A LA ADMINISTRACION DE LOS ESTADOS UNIDOS
DE AMERICA, EN BASE A LA SOLICITUD DE COOR-
DINACION DE ESTACIONES TERRENAS EN LA BAN-
DA DE 6 GHz

FECHA: ENERO / 94

NOMBRE DE LA ESTACION TERRENA/ ESTACION ESPA- CIAL ASOCIADA	DIAMETRO DE ANTENA	LONGITUD	LATITUD	ALTURA SOBRE EL NIVEL D' MAR	PIRE MAXIMO (dBw)	DENSIDAD DE PIRE (dBw/4KHz)	EMISION	ARCO ORBITAL	RESPUESTA	OBSERVA- CIONES
E860194 LOS ANGELES ALSAT	5.1 METROS	118W1641	34N0058	56.3 METROS	55.9	42.9	200KF3E	91.0 - 99.0W	RC	
E860194 LOS ANGELES ALSAT	5.1 METROS	118W1641	34N0058	56.3 METROS	51.9	42.9	50F9	91.0 - 99.0W	RC	*
KP24 LOS ANGELES ALSAT	4.5 METROS	118W1641	34N0058	56.4 METROS	58.5	41.5	200KF3E	90.0 - 135.0W	RC	*
KP24 LOS ANGELES ALSAT	4.5 METROS	118W1641	34N0058	56.4 METROS	45.3	36.5	30K0F1D	90.0 - 135.0W	RC	*
E4005 LOS ANGELES ALSAT	9.0 METROS	118W2147	34N0030	126.7 METROS	88.7	50.2	36000F9	70.0 - 145.0W	RC	*
E6568 REDLANDS ALSAT	13.0 METROS	117W1129	34N0026	495.3 METROS	61.6	61.6	F0	55.0 - 145.0W	RMI	SE REQUIERE LA EMISION
E6568 REDLANDS ALSAT	13.0 METROS	117W1129	34N0026	495.3 METROS	82.2	61.6	36000F9	55.0 - 145.0W	RC	*
E6568 REDLANDS ALSAT	13.0 METROS	117W1129	34N0026	495.3 METROS	85.2	61.2	72000F9Y	55.0 - 145.0W	RC	*
E880732 PICO RIVERA ALSAT	1.4 METROS	118W0621	33N5913	49.4 METROS	43.5	15.5	5000F9Y	91.0 - 101.0W	RC	*
E9206 CULVER CITY ALSAT	1.4 METROS	118W2319	33N5901	16.8 METROS	36.5	8.5	5000F9Y	91.0 - 101.0W	RC	*
E9206 CULVER CITY ALSAT	1.4 METROS	118W2319	33N5901	16.8 METROS	43.5	15.5	5000F9Y	91.0 - 101.0W	RC	*

RC = REQUIERE COORDINACION

RMI = REQUIERE MAYOR INFORMACION

* = RESPUESTA EN BASE AL PROCEDIMIENTO DE COORDINACION
PARA ESTACIONES TERRENAS EN LA BANDA DE 6 GHZ FIRMADO EN
CHESTERTOWN, MARYLAND EL 2 DE JULIO DE 1991

RESPUESTA DE LA ADMINISTRACION DE MEXICO
A LA ADMINISTRACION DE LOS ESTADOS UNIDOS
DE AMERICA, EN BASE A LA SOLICITUD DE COOR-
DINACION DE ESTACIONES TERRENAS EN LA BAN-
DA DE 6 GHz

FECHA: ENERO /94

NOMBRE DE LA ESTACION TERRENA/ ESTACION ESPA- CIAL ASOCIADA	DIAMETRO DE ANTENA	LONGITUD	LATITUD	ALTURA SOBRE EL NIVEL D' MAR	PIRE MAXIMO (dBw)	DENSIDAD DE PIRE (dBw/4KHz)	EMISION	ARCO ORBITAL	RESPUESTA	OBSERVA- CIONES
E8113 SAN DIEGO ALSAT	1.2 METROS	117W1154	32N5325	48.8 METROS	34.0	6.0	5000F9Y		NRC	
E8113 SAN DIEGO ALSAT	1.2 METROS	117W1154	32N5325	48.8 METROS	36.5	8.5	5000F9Y		RC	*
E8113 SAN DIEGO ALSAT	1.4 METROS	117W1154	32N5325	48.8 METROS	34.0	6.0	5000F9Y	91.0 - 101.0W	NRC	*
E8113 SAN DIEGO ALSAT	1.4 METROS	117W1154	32N5325	48.8 METROS	36.5	8.5	5000F9Y	91.0 - 101.0W	RC	*
E7464 LA JOLLA ALSAT	9.2 METROS	117W1418	32N5228	123.8 METROS	66.0	39.0	1764F9Y	67.0 - 143.0W	RC	*
E7464 LA JOLLA ALSAT	9.2 METROS	117W1418	32N5228	123.8 METROS	56.5	39.0	224F9Y	67.0 - 143.0W	RC	*
E880898 LA JOLLA ALSAT	1.4 METROS	117W1222	32N5227	115.8 METROS	36.5	8.5	4M92G1D	91.0 - 101.0W	RC	*
E860621 LA JOLLA ALSAT	1.4 METROS	117W1508	32N5207	39.6 METROS	36.5	8.5	5000F9Y	91.0 - 101.0W	RC	*
E860621 LA JOLLA ALSAT	1.4 METROS	117W1508	32N5207	39.6 METROS	43.5	15.5	5000F9Y	91.0 - 101.0W	RC	*
E871513 ALPINE ALSAT	1.4 METROS	116W4420	32N5002	620.3 METROS	43.5	15.5	5000F9Y	91.0 - 101.0W	RC	*

RC = REQUIERE COORDINACION

NRC = NO REQUIERE COORDINACION

* = RESPUESTA EN BASE AL PROCEDIMIENTO DE COORDINACION
PARA ESTACIONES TERRENAS EN LA BANDA DE 6 GHz FIRMADO EN
CHESTERTOWN, MARYLAND EL 2 DE JULIO DE 1991

AGREEMENT BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND
THE GOVERNMENT OF THE UNITED MEXICAN STATES
REGARDING AN EARTH STATION COORDINATION PROCEDURE

The Government of the United States of America and the Government of the United Mexican States, recognizing the sovereign right of both countries to manage their telecommunications, taking into account the provisions of Article 31 of the International Telecommunication Convention, done at Nairobi in 1982, and in accordance with the provisions of Article 7 of the Radio Regulations considered an annex to the above-mentioned Convention, sharing an interest in establishing an earth station coordination procedure along their common border area;

Have agreed as follows:

I. Purpose

The purpose of this Agreement is to establish a procedure for coordinating the operation of earth stations in the band 5925-6425 MHz (6 GHz), that are part of one or more fixed-satellite service networks, with terrestrial fixed-stations in the same frequency band.

II. Definitions

For purposes of this Agreement, the terms indicated below shall be defined as follows:

Administration: for the United States of America, the Federal Communications Commission; and for the United Mexican States, the Direccion General de Politicas y Normas de Comunicaciones of the Secretaria de Comunicaciones y Transportes.

Coordination Areas: properly limited zones, within which an earth station of one Party could cause harmful interference to terrestrial stations of the other Party.

Master List of Coordinated Mexico-U.S. 6 GHz Earth Stations (Master List): a list of all earth stations that have been satisfactorily coordinated pursuant to this Agreement.

III. Conditions of Use and Coordination Areas

1. Each Administration shall ensure that the earth stations that it licenses operating at 6 GHz within the respective coordination areas indicated in the Annex, which is an integral part of this Agreement, and meeting the specifications in paragraph III. 2, are satisfactorily coordinated with the terrestrial stations licensed by the other Administration.

2. The following earth stations shall require coordination:

- (a) Earth stations with transmitter power densities greater than -30.0 dB(W/Hz) into the antenna, which lie within line 1USA and the common border;
- (b) Earth stations with transmitter power densities equal to or less than -30.0 dB(W/Hz) into the antenna, which lie within line 2USA and the common border;
- (c) Earth stations with antennas smaller than or equal to 2.5 meters in diameter and transmitter power density equal to or less than -57 dB(W/Hz) into the antenna, which lie within line 3USA and the common border;

Earth stations with transmitter power densities greater than -40 dB(W/Hz) into the antenna, which are located to the south of line 4USA;

(e) Earth stations with transmitter power densities greater than -40 dB(W/Hz) into the antenna, which are located to the north of line 4MEX;

(f) Earth stations with antennas smaller than or equal to 2.5 meters in diameter and transmitter power densities equal to or less than -57 dB(W/Hz) into the antenna, which lie within line 3MEX and the common border;

(g) Earth stations with transmitter power densities equal to or less than -30.0 dB(W/Hz) into the antenna, which lie within line 2MEX and the common border; and

(h) Earth stations with transmitter power densities greater than -30.0 dB(W/Hz) into the antenna, which lie within line 1MEX and the common border.

3. Earth stations of a Party located outside the indicated coordination areas shall not require coordination between the Administrations, except in cases where terrestrial stations of the other Party experiences unacceptable interference.

IV. Coordination Procedure

1. No later than November 15, 1991, each Administration shall provide to the other a list of its satisfactorily coordinated earth stations operating as of that date. These two lists together will constitute the initial Master List.

2. Each Administration shall provide to the other in the second half of May and the second half of November a list of earth stations for which coordination is required, indicating the following information:

- (a) call-sign, other identifying number, and serial number;
- (b) location: city and state;
- (c) latitude and longitude;
- (d) altitude in meters above sea level;
- (e) antenna diameter in meters;
- (f) maximum antenna gain in dBi;
- (g) geostationary satellite orbital service arc over which the earth station is required to be coordinated (RR1107) to operate with domestic and international satellites;
- (h) satellite(s) with which the station can establish communication;
- (i) emission designator for each carrier;
- (j) total peak e.i.r.p. in dBW for each carrier;

- (k) maximum e.i.r.p. density in dBW/4 kHz for each carrier;
- l) assigned frequency range in MHz for each carrier,

3. The information referred to in the preceding paragraph shall be provided either for modified or new earth stations that may operate within the designated coordination areas.

4. Each Administration shall have a period of six months to review the semi-annual listings of the new or modified earth stations to determine the potential for unacceptable interference. In any case, it shall report in writing to the other Administration on the status of the requested coordination within the six month review period.

5. If the Administration that reviews the listing concludes that there is no problem of interference with regard to one or more particular earth stations, it shall so notify the other Administration. These earth stations shall be considered satisfactorily coordinated and consequently, each Administration shall record those earth stations in the Master List.

6. If the Administration that reviews the listing determines that an earth station of the other Party in the coordination area may cause interference that is unacceptable according to the studies undertaken pursuant to Appendix 28 of the Radio Regulations and pertinent Recommendations and Reports of the International Radio Consultative Committee of the International Telecommunication Union, it shall notify the

other Administration, and they shall undertake a more detailed coordination and make every effort to conclude it satisfactorily. When the Administrations have effected satisfactory coordination of the earth station, each Administration shall record the earth station in the Master List.

7. a. Eighteen months after the provision of the first list required in paragraph 1, and every eighteen months thereafter, each Administration shall compile a recapitulative list of all its earth stations previously satisfactorily coordinated, and shall provide this list to the other Administration no later than three months after the end of each eighteen month period.

b. Each Administration shall have ninety days after receipt of the list referred to in subparagraph (a) to verify it. If the Administrations agree upon the content of these lists, these lists shall be considered verified and together shall constitute the Master List.

V. Cooperation and Exchange of Information

1. The Administrations shall exchange information and cooperate in order to eliminate any harmful interference and to ensure, to the maximum extent possible, the growth of the respective terrestrial systems.

2. The Administrations shall inform separately the International Frequency Registration Board (IFRB) of the International Telecommunication Union of this Agreement and shall send it their verified recapitulated listings of the successfully coordinated earth stations.

VI. Amendment of the Agreement

This Agreement may be amended by agreement of the Parties. Amendments shall enter into force on the date on which both Parties have notified each other by exchange of diplomatic notes that they have concluded their respective constitutional procedures for entry into force.

VII. Entry into Force and Duration

This Agreement shall enter into force on the date on which both Parties have notified each other by exchange of diplomatic notes that they have completed their respective constitutional procedures for entry into force. It shall remain in force until it is replaced by a new agreement or until it is terminated by either Party in accordance with Article VIII of this Agreement.

VIII. Termination of the Agreement

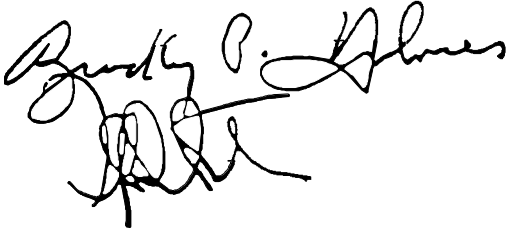
This Agreement may be terminated by mutual agreement of the Parties or by either Party by written notice to the other Party through diplomatic

channels. The termination will be effective one year after the date of receipt of the notice.

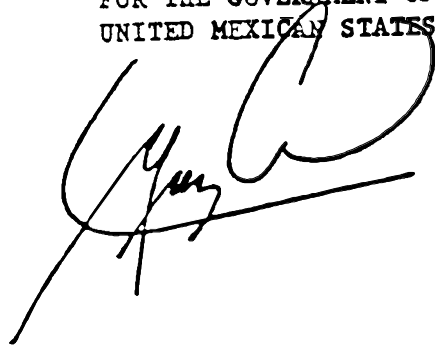
IN WITNESS WHEREOF, the respective Plenipotentiaries have signed this Agreement.

DONE, at Chestertown, Maryland in the United States of America, in duplicate, this second day of July, 1991, in the English and Spanish languages, each text being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

Handwritten signature of Bradley P. Holmes in cursive script.

FOR THE GOVERNMENT OF THE
UNITED MEXICAN STATES:

Handwritten signature for the United Mexican States in cursive script.

ANNEX

DEFINITION OF LINES FOR THE COORDINATION OF 6 GHz
EARTH STATIONS BETWEEN MEXICO AND THE USA

USA Line 1:

The states of California and Nevada south of 37 degrees North latitude, and the entire states of Arizona, New Mexico, Texas, and Louisiana.

USA Line 2:

Line 2 includes the southernmost part of the states of California, Arizona, New Mexico, Texas, Louisiana, and the Gulf of Mexico. Line 2 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
36 00 00 N	122 00 00 W	32 00 00 N	99 00 00 W
36 00 00 N	121 24 00 W	31 30 00 N	99 00 00 W
34 30 00 N	118 00 00 W	31 30 00 N	98 00 00 W
34 30 00 N	113 00 00 W	29 30 00 N	98 00 00 W
34 00 00 N	113 00 00 W	29 30 00 N	96 00 00 W
34 00 00 N	103 00 00 W	30 30 00 N	94 00 00 W
32 00 00 N	103 00 00 W	30 30 00 N	90 00 00 W

Line 2 is formed by connecting these points along lines of constant latitude, longitude, or by great circle arc.

USA Line 3:

Line 3 includes the very southernmost part of the states of California, Arizona, New Mexico, and Texas. Line 3 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
34 00 00 N	121 00 00 W	31 30 00 N	104 00 00 W
34 00 00 N	118 00 00 W	31 00 00 N	100 00 00 W
33 30 00 N	117 00 00 W	29 00 00 N	99 00 00 W
34 00 00 N	114 00 00 W	27 30 00 N	98 00 00 W
33 00 00 N	112 00 00 W	28 30 00 N	97 00 00 W
33 00 00 N	106 00 00 W	28 30 00 N	95 00 00 W

Line 3 is formed by connecting these points along lines of constant latitude, longitude, or by great circle arc.

USA Line 4:

Line 4 include portions of the states of Mississippi, Alabama, Georgia, and Florida. Line 4 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>
31 00 00 N	90 00 00 W
31 00 00 N	84 00 00 W
27 00 00 N	80 15 00 W

Line 4 is formed by connecting these points along lines of constant latitude or by great circle arc.

Mexico Line 1:

Line 1 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
26 30 00 N	115 00 00 W	26 15 00 N	105 00 00 W
26 30 00 N	112 48 00 W	25 00 00 N	102 00 00 W
26 30 00 N	111 30 00 W	19 00 00 N	97 00 00 W
28 00 00 N	110 42 00 W	19 00 00 N	95 00 00 W
28 00 00 N	107 00 00 W		

Line 1 is formed by connecting these points along lines of constant latitude or by great circle arc.

Mexico Line 2:

Line 2 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
27 00 00 N	117 00 00 W	26 00 00 N	102 00 00 W
27 00 00 N	114 00 00 W	22 30 00 N	98 20 00 W
29 00 00 N	112 00 00 W	20 00 00 N	97 00 00 W
29 00 00 N	107 00 00 W	20 00 00 N	95 00 00 W
27 00 00 N	105 00 00 W		

Line 2 is formed by connecting these points along lines of constant latitude or by great circle arc.

Mexico Line 3:

Line 3 is defined by the following set of points:

<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
31 20 00 N	119 00 00 W	27 30 00 N	104 00 00 W
31 20 00 N	116 24 00 W	28 00 00 N	102 00 00 W
31 20 00 N	114 48 00 W	24 40 00 N	100 00 00 W
30 10 00 N	111 00 00 W	24 40 00 N	97 36 00 W
30 10 00 N	107 00 00 W	24 40 00 N	95 00 00 W

Line 3 is formed by connecting these points along lines of constant latitude or by great circle arc.

Mexico Line 4:

The Yucatan peninsula north of 20 degrees North latitude.

