

NOTE: Subject to final minor editorial review

PROTOCOL
BETWEEN THE DEPARTMENT OF STATE
OF THE UNITED STATES OF AMERICA
AND THE SECRETARIAT OF COMMUNICATIONS AND
TRANSPORTATION
OF THE UNITED MEXICAN STATES
CONCERNING THE ALLOTMENT AND USE OF THE 698-806 MHz BAND
FOR TERRESTRIAL NON-BROADCASTING RADIOCOMMUNICATION
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 at Williamsburg, Virginia, June 16, 1994 (herein referred to as the “Agreement”).

ARTICLE I. Purposes

The purposes of this Protocol are:

1. To establish and adopt a plan for the equitable allotment and use of frequency sub-bands in the 698-806 MHz band within the Sharing Zone defined in this Protocol;

2. To establish technical criteria that will permit each Administration to regulate the use of the frequency sub-bands referred to in paragraph 1 of this Article;

3. To establish conditions of use so that each Administration may use the frequency sub-bands allotted to the other country, provided this causes no harmful interference to stations operating within the other country; and

4. To continue interference protection for broadcasting services in both countries in a manner consistent with the terms set forth in the “Agreement Relating to Assignments and Usage of Television Broadcasting Channels in the Frequency Range 470-806 MHz (Channels 14-69) along the United States-Mexico border,” signed by the United States and Mexico at Mexico City June 18, 1982, as amended (hereinafter the “1982 Agreement”), and the “Memorandum of Understanding between the Federal Communications Commission of the United States of America and the Secretaria de Comunicaciones y Transportes of the United Mexican States related to the use of the 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-806 MHz bands for digital television broadcasting service along the common border,” signed at Mexico City July 22, 1998 (hereinafter the “1998 Memorandum”) until these instruments are replaced by new instruments, or are modified or terminated.

ARTICLE II. Definitions

1. For the purpose of this Protocol and as provided for in Article IV of the Agreement, the term "Administration" or "Administrations" shall refer with equal effect to the Federal Communications Commission of the United States of America (hereinafter "FCC") and the Secretaría de Comunicaciones y Transportes of the United Mexican States (hereinafter "SCT").

2. For the purpose of this Protocol, the term "Sharing Zone" is defined to include the border areas within the United States and Mexico and their respective territorial waters as set forth in Appendix I.

3. For the purpose of this Protocol, the term "television station" is defined to include an assignment or allotment in the television broadcasting service, analog or digital.

4. For the purpose of this Protocol, the term "counterpart operators" is defined to include operators of communications networks operating in certain frequency sub-bands in the 698-806 MHz band with geographic coverage areas situated contiguous to each other and authorized by the Administrations to use the same sub-bands or portions of the same sub-bands.

ARTICLE III. Conditions of Use for Radiocommunication Services

1. For the frequency sub-bands 764-776 MHz and 794-806 MHz (TV Channels 63-64 and 68-69):

a. In the Sharing Zone, the frequencies in these sub-bands shall be allotted for the primary use of each Administration in accordance with Appendix II. Each Administration shall ensure that stations in its national territory are assigned and operated in such a way that the transmission bandwidth on radio

channels shall not exceed the primary frequency allotments for that country in Appendix II.

b. Each Administration shall ensure that radiocommunication stations in these sub-bands that are assigned to primary frequency allotments within the Sharing Zone shall be operated in accordance with the effective radiated power (ERP) and antenna height limitations specified in the following table (Table I):

Table I

Average of the Antenna Height Above Average Terrain on Standard Radials in the Direction of the Common Border ¹	Maximum ERP in Any Direction Toward the Common Border
Meters	Watts (Maximum)
Up to 503	500
Above 503 to 609	350
Above 609 to 762	200
Above 762 to 914	140
Above 914 to 1066	100
Above 1066 to 1219	75
Above 1219 to 1371	70
Above 1371 to 1523	65
Above 1523	5

¹ Standard radials are 000°, 045°, 090°, 135°, 180°, 225°, 270° and 315°, relative to True North.

c. Frequencies in these sub-bands that are allotted for the primary use of one Administration may be assigned by the other Administration to stations located within the latter Administration's territorial segment of the Sharing Zone under the following conditions:

(i) The maximum power flux density (PFD) at any point at or beyond the common border shall not exceed -120 dBW/m^2 per 1 kHz;

(ii) Counterpart operators of communications networks in these frequency sub-bands (764-776 MHz and 794-806 MHz) may exceed the maximum PFD in subparagraph 1.c.i above if all potentially affected counterpart operators in the other country agree to a different PFD and approval is obtained from the appropriate Administration;

(iii) Each Administration shall take appropriate measures to eliminate any harmful interference caused by stations operating within its own territory to stations operating on frequency sub-bands allotted on a primary basis to the other country pursuant to this Protocol; and

(iv) Stations operating under this provision (subparagraph 1.c of Article III) shall be considered as secondary and shall not be granted protection against harmful interference from stations whose Administration has primary use of the frequency allotment as long as the stations on the primary frequency allotment operate in accordance with the technical limitations in subparagraphs 1.a and 1.b of this Article.

d. Beyond the Sharing Zone, the Administrations' use of the 764-776 MHz and 794-806 MHz frequency sub-bands shall in no way be restricted under this Protocol.

2. For the frequency sub-bands 698-764 MHz and 776-794 MHz (TV Channels 52-62 and 65-67):

a. All frequencies in these sub-bands are available to both Administrations on an equal basis for the provision of radiocommunication services within their respective national territories within the Sharing Zone in accordance with the following conditions:

(i) The maximum power flux density (PFD) at any point at or beyond the common border of all emissions shall not exceed -106 dBW/m^2 within the authorized bandwidth;

(ii) Both Administrations shall take appropriate measures to eliminate harmful interference to stations operating in the frequency sub-bands allotted under this paragraph (Article III, paragraph 2);

(iii) Measurements of transmitter power output shall be made in accordance with Appendix III;

(iv) The Administrations shall authorize counterpart operators in these frequency sub-bands (698-764 MHz and 776-794 MHz) to take the following actions:

1. Coordinate appropriate technical and operational network parameters when necessary to provide for cross-border roaming or other collaborative operations;

2. Exceed the PFD provided in subparagraph 2.a.i of this Article based upon a mutual understanding among the counterpart operators and based upon prior notification of the terms of the mutual understanding to the two Administrations;

3. Continue operations with a PFD greater than -106 dBW/m^2 within the authorized bandwidth either until the operator notifies its counterpart operator(s) that the mutual understanding referred to in the prior subparagraph (subparagraph 2.a.iv.2 of this Article) is cancelled or until the operator is notified by the appropriate Administration to return to the PFD required in subparagraph 2.a.i; and

(v) The maximum out-of-band emission in the sub-bands 764-776 MHz and 794-806 MHz shall not exceed -120 dBW/m^2 per 1 kHz at any point at or beyond the common border.

b. Beyond the Sharing Zone, the Administrations' use of the 698-764 MHz and 776-794 MHz frequency sub-bands shall in no way be restricted under this Protocol.

ARTICLE IV. Transition and Protection of the Television Broadcasting Service

1. The protection to which this Article refers is intended to be provided consistent with the terms set forth in the 1982 Agreement, as amended, as well as the 1998 Memorandum until these instruments are replaced by new instruments, or are modified or terminated.

2. Assignments in the radiocommunication services in the band 698-806 MHz shall protect analog and digital television stations in accordance with the following desired-to-undesired (D/U) signal ratios:

a. For analog television stations. The minimum D/U ratio is 40 decibels (dB) for the co-channel case and 0 dB for the adjacent channel case. The minimum D/U ratio must be satisfied within the 64 dB μ V/m coverage contour of the analog television station; if this contour extends beyond the common border, the minimum D/U ratio will be calculated at the common border. The interference criteria to be used for this provision (subparagraph 2.a of Article IV), is based on 50% of all locations no more than 10% of the time; and

b. For digital television stations. The minimum D/U ratio is 17 dB for the co-channel case and -23 dB for the adjacent channel case. The minimum D/U ratio must be satisfied within the 41 dB μ V/m contour of the digital television station; if this contour extends beyond the common border, the minimum D/U ratio will be calculated at the common border. The interference criteria to be used for this provision (subparagraph 2.b of Article IV), is based on 50% of all locations no more than 10% of the time.

3. In order to promote spectrum efficiency under the terms of this Protocol, both Administrations will make their best efforts to support transitioning digital television stations to the 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-698 MHz bands (TV Channels 2-51).

ARTICLE V. Appendices

Appendices I, II, and III are integral parts of this Protocol.

ARTICLE VI. Entry into Force and Termination

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

IN WITNESS WHEREOF, the respective representatives sign the present Protocol.

Signed at Mexico City on this first day of November, 2006, and at Antalya, Turkey, on this eighth day of November, 2006, in duplicate in the English and Spanish languages, both texts being equally authentic.

FOR THE DEPARTMENT OF
STATE OF THE UNITED STATES
OF AMERICA

FOR THE SECRETARIAT OF
COMMUNICATIONS AND
TRANSPORTATION OF THE
UNITED MEXICAN STATES

/s/ David A Gross

/s/ Jorge Alvarez Hoth

Ambassador David A. Gross
U.S. Coordinator for International
Communications and Information Policy

Mr. Jorge Alvarez Hoth
Under Secretary of Communications

/s/ Hector G. Osuna Jaime

Mr. Hector G. Osuna Jaime
Chairman, Federal Telecommunications
Commission

APPENDIX I

Areas Within Which the Frequencies Are to Be Protected

U.S.-MEXICO SHARING ZONE

The Sharing Zone is defined as the areas covered by a distance of 110 kilometers (68.35 Miles) from the U.S.-Mexico common border into the national territory of each country and includes areas of the Pacific Ocean and the Gulf of Mexico.

These areas are enclosed by the boundaries shown on the map below and are further defined in Table II.



Table II

The following geographic coordinates (corresponding to NAD83) define the U.S.-Mexico Sharing Zone in the national territory of each country. Point 1 is located in the Pacific Ocean due west from the U.S.-Mexico common border and defines the starting point of the Sharing Zone. The boundary of the Sharing Zone is then defined by plotting each geographic point in advancing numerical order in a clockwise direction.

ID	longitude decimal degrees	latitude decimal degrees	longitude deg/min/sec	latitude deg/min/sec
1	-122.1324	31.5235	122/07/56 W	31/31/24 N
2	-119.2616	32.0537	119/15/41 W	32/03/13 N
3	-118.5985	33.3415	118/35/54 W	33/20/29 N
4	-118.1657	33.5837	118/09/56 W	33/35/01 N
5	-117.7038	33.6483	117/42/13 W	33/38/53 N
6	-117.0916	33.5693	117/05/29 W	33/34/09 N
7	-114.4342	33.7229	114/26/03 W	33/43/22 N
8	-113.5516	33.1732	113/33/05 W	33/10/23 N
9	-110.9020	32.3491	110/54/07 W	32/20/56 N
10	-109.0659	32.3519	109/03/57 W	32/21/06 N
11	-108.6352	32.7974	108/38/06 W	32/47/50 N
12	-106.1107	32.8123	106/06/38 W	32/48/44 N
13	-103.8529	31.0554	103/51/10 W	31/03/19 N
14	-103.5560	30.2756	103/33/21 W	30/16/32 N
15	-103.1130	30.7142	103/06/46 W	30/42/51 N
16	-102.1958	30.9402	102/11/45 W	30/56/24 N
17	-100.4516	30.6660	100/27/05 W	30/39/57 N
18	-97.9163	27.0978	97/54/58 W	27/05/52 N
19	-97.1379	26.9756	97/08/16 W	26/58/32 N
20	-96.5071	27.0384	96/30/25 W	27/02/18 N
21	-93.4156	27.0181	93/24/56 W	27/01/05 N
22	-91.0891	26.7119	91/05/20 W	26/42/42 N
23	-90.5847	26.7851	90/35/04 W	26/47/06 N
24	-88.1724	26.6918	88/10/20 W	26/41/30 N
25	-88.2459	24.6980	88/14/45 W	24/41/52 N
26	-90.4566	24.7738	90/27/23 W	24/46/25 N
27	-90.9949	24.6998	90/59/41 W	24/41/59 N
28	-93.4595	24.9541	93/27/34 W	24/57/14 N
29	-96.6737	24.9901	96/40/25 W	24/59/24 N
30	-97.3714	24.7983	97/22/17 W	24/47/53 N
31	-98.0746	24.9511	98/04/28 W	24/57/03 N
32	-99.7404	25.5613	99/44/25 W	25/33/40 N
33	-101.9323	28.7236	101/55/56 W	28/43/24 N
34	-102.6689	28.0418	102/40/08 W	28/02/30 N
35	-103.3540	27.8941	103/21/14 W	27/53/38 N
36	-105.1973	28.7692	105/11/50 W	28/46/09 N
37	-105.8133	29.9143	105/48/47 W	29/54/51 N
38	-106.9438	30.7571	106/56/37 W	30/45/25 N
39	-107.3627	30.7571	107/21/45 W	30/45/25 N
40	-107.7697	30.3269	107/46/11 W	30/19/36 N
41	-111.2398	30.3160	111/14/23 W	30/18/57 N
42	-115.4915	31.6420	115/29/29 W	31/38/31 N
43	-117.2764	31.4945	117/16/34 W	31/29/40 N
44	-117.8588	30.4207	117/51/31 W	30/25/14 N
45	-118.2297	30.1897	118/13/47 W	30/11/22 N
46	-121.8613	29.5104	121/51/40 W	29/30/37 N

APPENDIX II

Allotment of Frequency Sub-bands in the 764-776 MHz and 794-806 MHz bands (TV Channels 63-64 and 68-69)

<u>U.S. Primary</u>	<u>Mexico Primary</u>
764.0 – 765.5 MHz	765.5 – 768.5 MHz
768.5 – 771.5 MHz	771.5 – 774.5 MHz
774.5 – 776.0 MHz	
794.0 – 795.5 MHz	795.5 – 798.5 MHz
798.5 – 801.5 MHz	801.5 – 804.5 MHz
804.5 – 806.0 MHz	

APPENDIX III

Measurement of Transmitter Power Output

Maximum (peak) composite transmitter power output shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of root mean square (RMS) equivalent voltage. The measurement results shall be adjusted appropriately for any instrument limitations such as variations in detector times, limited resolution bandwidth capability when compared to the emission bandwidth, or other related characteristics, in order to obtain a true maximum composite measurement for the emission in question over the full bandwidth of the channel.