

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 USE OF  
THE 1710-1755 MHz AND 2110- 2155 MHz BANDS 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 in Williamsburg, Virginia June 16, 1994, (hereinafter referred to as the "Agreement").

ARTICLE I. Purposes

The purposes of this Protocol are:

1. To establish and adopt a plan for the equitable use of frequencies in the 1710-1755 MHz and 2110-2155 MHz bands within the Sharing Zone defined in Article II of this Protocol and within a certain additional geographic zone referred to in Article IV of this Protocol;
2. To establish technical criteria to regulate the use of the frequency bands referred to in paragraph 1 of this Article;
3. To establish conditions of use so that each Administration may use the above-referenced bands, provided this causes no harmful interference to stations operating within the other country.

ARTICLE II. Designation of Administrations and Definitions

1. The Federal Communications Commission of the United States of America and the Secretariat of Communications and Transportation of the United Mexican States are hereby designated as the Administrations responsible for the implementation of this Protocol for the United States of America (hereinafter "United States") and the United Mexican States (hereinafter "Mexico"), respectively, as provided for in Article IV of the Agreement.
2. The Sharing Zone is defined to include the border area within the United States and Mexico and their respective territorial waters as set forth in Appendix I of this Protocol.

3. Advanced Wireless Services (AWS) are defined as fixed and mobile radio communications used for advanced wireless applications, such as voice, data and broadband services provided over high speed networks.

4. Counterpart Operators are defined as operators of communications networks in both countries operating in frequency sub-bands in the 1710-1755 MHz and 2110-2155 MHz bands with geographic coverage areas situated contiguous to each other across the common border and authorized by their respective Administrations to use the same sub-bands or portions of the same sub-bands in their respective national territories.

5. The "protected user" is defined as the operator of the United States federal fixed microwave and tactical radio relay stations on a primary basis near Yuma, Arizona, along the common border between Longitude 113 degrees, 04 minutes West, to Longitude 115 degrees, 10 minutes West.

#### ARTICLE III. Conditions of Use

1. All frequencies in the sub-bands of the 1710-1755 MHz and 2110-2155 MHz bands are available to both Administrations on an equal basis for the provision of radiocommunication services for AWS within their respective national territories within the Sharing Zone in accordance with the following conditions:

a. The maximum power flux-density (PFD) at any point at or beyond the common border of all emissions shall not exceed  $-106 \text{ dBW/m}^2$  in any 1 MHz bandwidth, except for stations in sub-paragraph 1.d;

b. The Administrations shall authorize counterpart operators in the 1710-1755 MHz and 2110-2155 MHz bands to coordinate appropriate technical and operational network parameters when necessary to provide for cross border roaming or other collaborative operations. Except for that portion of the common border from Longitude 113 degrees, 04 minutes West to Longitude 115 degrees, 10

minutes West, the counterpart operators may mutually agree to exceed the technical parameter provided in sub-paragraph 1.a of this Article, provided that the terms of the mutual agreement shall have been previously notified to the two Administrations. If an agreement is concluded between counterpart operators as provided in the prior sentence, the counterpart operators shall continue operations with the greater technical parameter (that is, a PFD greater than -106 dBW/m<sup>2</sup> in any 1 MHz bandwidth) until either: (i) an operator notifies its counterpart operator(s) that the mutual agreement is cancelled; or (ii) an operator is notified by the appropriate Administration to conform to the technical parameter provided in sub-paragraph 1.a (that is, a PFD not to exceed -106 dBW/m<sup>2</sup> in any 1 MHz bandwidth);

c. Both Administrations shall take appropriate measures to eliminate harmful interference to AWS stations operating in the 1710-1755 MHz and 2110-2155 MHz frequency bands.

d. The PFD level for stations of the protected user in the area near Yuma, Arizona, shall not exceed the levels set forth in Appendix II at any point at or beyond the common border for the respective geographic portions indicated.

2. Beyond the Sharing Zone, the Administrations' use of the 1710-1755 MHz and 2110-2155 MHz bands shall in no way be restricted under this Protocol except for the protection of existing services as set forth in Article IV of this Protocol.

#### ARTICLE IV. Protection of Existing Services

1. Except for the interference protection afforded to the protected user in the area near Yuma, Arizona, by the exception in Article III, sub-paragraph 1.b, the provision of any new AWS service shall be on the basis that harmful

interference is not caused to existing stations in the fixed point-to-point service in the 1710-1755 MHz band and in the 2110-2150 MHz sub-band that were authorized by the other Administration prior to the entry into force of this Protocol. Both Administrations shall exchange information on all existing assignments to stations in the fixed point-to-point service before March 19, 2009.

a. Both Administrations shall require coordination of all AWS systems located within 72 kilometers (45 miles) of the common border relative to any previously authorized stations in the fixed point-to-point service within 120 kilometers (75 miles) of the border. Such coordination shall be based on:

i. A technical analysis that harmful interference is not caused to existing stations in the fixed point-to-point service of the other Administration. The analysis shall be based on recognized industry procedures such as the TIA/EIA Telecommunications Systems Bulletin (TSB10-F), "Interference Criteria for Microwave Systems;" or

ii. Alternatively, a mutually acceptable agreement between the applicant/operator of the AWS facility and any affected fixed point-to-point service operators located within 120 kilometers (75 miles) of the common border.

b. In the event that the operators can not reach a mutually acceptable understanding within two (2) years, the dispute will be referred to both Administrations for resolution.

c. In the event that there is harmful interference from an AWS station within 72 kilometers (45 miles) of the common border to previously authorized stations in the fixed point-to-point service located beyond 120 kilometers (75 miles) from the border, the Administration responsible for granting the license to the station causing the interference shall take appropriate action to resolve the interference.

2. The provision of any new AWS service in the 2150-2155 MHz sub-band shall be on the basis that harmful interference is not caused to existing stations in that sub-band that were authorized by the other Administration prior to the entry into force of this Protocol. Both Administrations shall exchange information on existing assignments to stations in the 2150-2155 MHz sub-band before March 19, 2009.

a. Operators of new AWS stations shall enter into mutually acceptable agreements with any affected operators whose previously authorized stations are located within 120 kilometers (75 miles) of the common border in the national territory of the other country when the PFD level of the new AWS station exceeds  $-116 \text{ dBW/m}^2$  in any 1 MHz bandwidth at or beyond the common border.

b. In the event that the operators can not reach a mutually acceptable understanding within two (2) years, the dispute will be referred to both Administrations for resolution.

3. The provision of any new AWS service in the 1710-1755 MHz band shall also be on the basis that harmful interference is not caused to the stations of the protected user along that portion of the common border from Longitude 113 degrees, 04 minutes West to Longitude 115 degrees, 10 minutes West.

#### ARTICLE V. Relation to the Agreement

This Protocol forms an integral part of the Agreement and shall be referred to as Protocol 17, "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 Use of the 1710-1755 MHz and 2110-2155 MHz Bands for Terrestrial Non-Broadcasting Radiocommunication Services Along the Common Border," in Annex I of the Agreement.

ARTICLE VI. Appendices

Appendices I and II are integral parts of this Protocol.

ARTICLE VII. Entry into Force, Amendment and Termination

This Protocol shall enter into force on the nineteenth day of December, 2008. It shall remain in force until it is replaced by a new protocol, or until it is amended or terminated in accordance with Articles V and VII of the Agreement.

IN WITNESS WHEREOF, the respective representatives have signed the present Protocol at Washington and Mexico City on the sixteenth day of December, 2008, and on the nineteenth day of December, 2008, 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

  
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Ambassador David A. Gross  
United States Coordinator of  
International Communications and  
Information Policy

  
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Ms. Purificacion Carpinteyro Calderon  
Under Secretary of Communications

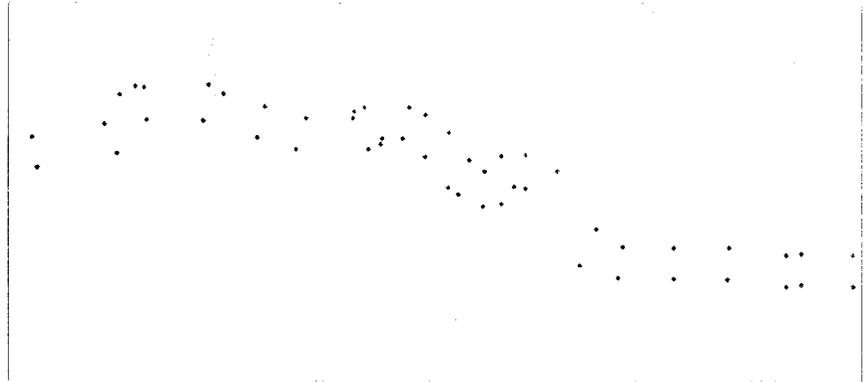
  
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Mr. Hector G. Osuna Jaime  
Chairman of the Federal  
Telecommunications Commission

**APPENDIX 1**

**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 72 kilometers (45 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 I.



**Table I**

The following geographic coordinates 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. Each distance path between consecutive points is traversed by great circle arc.

ID	Longitude Decimal Degrees	Latitude Decimal Degrees	Longitude Deg/Min/Sec W.	Latitude Deg/Min/Sec N.
1	-121.9925	31.1771	121° 59' 33"	31° 10' 37"
2	-119.0324	31.7134	119° 1' 57"	31° 42' 48"
3	-118.3993	32.9265	118° 23' 58"	32° 55' 35"
4	-117.7585	33.2710	117° 45' 31"	33° 16' 16"
5	-117.3970	33.2335	117° 23' 49"	33° 14' 1"
6	-114.7682	33.3643	114° 46' 6"	33° 21' 52"
7	-114.1184	32.9606	114° 7' 6"	32° 57' 38"
8	-112.4399	32.4418	112° 26' 24"	32° 26' 31"
9	-110.7435	31.9808	110° 44' 37"	31° 58' 51"
10	-108.8285	31.9797	108° 49' 43"	31° 58' 47"
11	-108.7350	32.2456	108° 44' 6"	32° 14' 44"
12	-108.3342	32.4187	108° 20' 3"	32° 25' 7"
13	-106.4857	32.4299	106° 29' 8"	32° 25' 48"
14	-105.8353	32.0908	105° 50' 7"	32° 5' 27"
15	-104.8780	31.3591	104° 52' 41"	31° 21' 33"
16	-104.0399	30.2159	104° 2' 24"	30° 12' 57"
17	-103.4042	29.7897	103° 24' 15"	29° 47' 23"
18	-102.7052	30.4116	102° 42' 19"	30° 24' 42"
19	-101.7335	30.4535	101° 44' 0"	30° 27' 13"
20	-100.4206	29.7774	100° 25' 14"	29° 46' 38"
21	-98.8158	27.4172	98° 48' 57"	27° 25' 2"
22	-97.7353	26.7045	97° 44' 7"	26° 42' 16"
23	-95.6538	26.6558	95° 39' 14"	26° 39' 21"
24	-93.4027	26.6429	93° 24' 10"	26° 38' 34"
25	-91.0921	26.3564	91° 5' 31"	26° 21' 23"
26	-90.4696	26.4281	90° 28' 10"	26° 25' 41"
27	-88.3425	26.3452	88° 20' 33"	26° 20' 43"
28	-88.3425	25.0529	88° 20' 33"	25° 3' 10"
29	-90.4653	25.1320	90° 27' 55"	25° 7' 55"
30	-91.0903	25.0561	91° 5' 25"	25° 3' 22"
31	-93.4869	25.3494	93° 29' 13"	25° 20' 58"
32	-95.6590	25.3608	95° 39' 32"	25° 21' 39"
33	-97.9545	25.3990	97° 57' 16"	25° 23' 56"
34	-99.5100	25.9115	99° 30' 36"	25° 54' 41"
35	-101.7413	29.0932	101° 44' 29"	29° 5' 35"
36	-102.1819	29.1484	102° 10' 55"	29° 8' 54"
37	-102.7208	28.4723	102° 43' 15"	28° 28' 20"
38	-103.4582	28.3548	103° 27' 29"	28° 21' 17"

39	-104.4775	28.8265	104° 28' 39"	28° 49' 35"
40	-104.4847	28.8306	104° 29' 5"	28° 49' 50"
41	-104.9096	29.1272	104° 54' 34"	29° 7' 38"
42	-105.8213	30.3622	105° 49' 17"	30° 21' 44"
43	-106.7670	31.1346	106° 46' 1"	31° 8' 5"
44	-107.5894	31.1337	107° 35' 22"	31° 8' 1"
45	-107.6622	30.8958	107° 39' 44"	30° 53' 45"
46	-108.1751	30.6878	108° 10' 30"	30° 41' 16"
47	-111.1589	30.6903	111° 9' 32"	30° 41' 25"
48	-112.7253	31.1746	112° 43' 31"	31° 10' 28"
49	-114.9506	31.8597	114° 57' 2"	31° 51' 35"
50	-117.2805	31.8813	117° 16' 50"	31° 52' 53"
51	-118.4896	30.4956	118° 29' 22"	30° 29' 44"
52	-121.7817	29.9000	121° 46' 54"	29° 54' 0"

**APPENDIX II**

**Limitations on Power Flux-Density (PFD) Levels  
for the Protected User in the Area near Yuma, Arizona  
for the Band 1710-1755 MHz**

Portion of the Common Border (West Longitude)	PFD Level Not To Be Exceeded in Any 1 MHz of Bandwidth (in dBW/m <sup>2</sup> )
114 degrees, 15 minutes to 114 degrees, 20 minutes	- 100
114 degrees, 20 minutes to 114 degrees, 43 minutes	- 90
114 degrees, 43 minutes to 114 degrees, 50 minutes	- 80
114 degrees, 50 minutes to 114 degrees, 56 minutes	- 90
114 degrees, 56 minutes to 115 degrees, 00 minutes	- 100

For all other portions of the common border, the PFD of the protected user shall not exceed -106 dBW/m<sup>2</sup>.