PROTOCOL CONCERNING THE ALLOCATION AND USE OF THE BANDS 901-902 MHZ, 930-931 MHZ, AND 940-941 MHZ BANDS FOR PERSONAL COMMUNICATIONS SERVICES ALONG THE COMMON BORDER

(Narrowband)

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 equitable use of the 901-902 MHz, 930-931 MHz, and 940-941 MHz frequency bands for personal communications services (PCS) within a distance of 120 km on each side of the common border (Sharing Zone);

2. To establish technical criteria to regulate the use of the channels; and,

3. To establish conditions of use so that each Administration may make use of the channels allotted to the other country, provided this causes no interference.

ARTICLE II. Definitions

1. 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

2 For the purpose of this Protocol, Personal Communications Services (PCS) are defined as radio communications that encompass mobile and ancillary fixed communications that provide services to individuals and businesses and can be integrated with a variety of competing networks.

ARTICLE III. Conditions of Use

1. Considering that the Administrations have similar requirements for narrowband PCS and advanced paging operations, and that the bands 901-902 MHz, 930-931 MHz, and 940-941 MHz have been mutually designated for such use, the following conditions shall apply to the use of these frequencies

(a) The frequency bands will be channelized as shown in Appendix A to provide for fourteen channels with 50 kHz bandwidth paired with fourteen channels with 50 kHz bandwidth, sixteen channels with 50 kHz bandwidth paired with sixteen channels with 12.5 kHz bandwidth; ten unpaired channels with 50 kHz bandwidth, and 8 unpaired channels with 12.5 kHz bandwidth for a total of 48 channels.

(b) Each Administration shall have primary use of 24 channels, as specified in Appendix A.

(c) Each Administration shall have full use of all channels beyond 120 km of the common border.

2. Coordination of and between PCS Operations

(a) Frequencies allotted for the primary use of one Administration in Appendix A may be assigned by the other Administration within the sharing zone in accordance with the following conditions:

(i) The maximum power flux density at any location at or beyond the common border shall not exceed -99 dBW/m^2;

(ii) The Administrations shall take proper measures to eliminate any harmful interference caused by their licensees;

(iii) Each Administration shall grant protection to stations that have primary use of a given frequency;

(iv) 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 as specified in Appendix A.

(b) Both Administrations agree that the coordination of appropriate system parameters (both operating and technical) by the operators of the PCS systems represents the best way to ensure compatible and independent operation of PCS services. The operators of PCS systems shall carry out such coordination, and will notify the two Administrations of any agreed arrangements, and of those arrangements on which they were not able to agree. In any case, the agreed arrangements by the operators will be subject to the review or approval, as appropriate, of the Administrations, within 60 days of having been notified.

(c) With respect to the provisions in paragraphs (a) and (b) above permitting limited assignment of one Administration's primary channels by the other Administration, each Administration shall make its

best efforts to permit greater use of all channels by both countries.

ARTICLE IV. Technical Parameters

1. All stations transmitting in the 901-902 MHz band and all mobile stations in the 930-931 MHz and 940-941 MHz bands are limited to a maximum of 7 watts e.r.p.

2. A base station operating in the 930-931 MHz and 940-941 MHz bands is limited to a maximum of 3500 watts effective radiated power (e.r.p.), subject to the e.r.p. and antenna height above average terrain (HAAT) limits in the table in Appendix B.

ARTICLE V. Cross Border Roaming Service

Cross border roaming service is permitted only as long as the service providers in each country have agreed. This 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, this sixteenth day of May, 1995, in duplicate, in the English and Spanish languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE UNITED MEXICAN STATES:

APPENDIX A

NARROWBAND PCS BANDPLAN

United States	Mexico
7 - 50/50 kHz	7 - 50/50 kHz
940.00-940.05 / 901.00-901.05 MHz 940.05-940.10 / 901.05-901.10 MHz 940.10-940.15 / 901.10-901.15 MHz 940.15-940.20 / 901.15-901.20 MHz 940.20-940.25 / 901.20-901.25 MHz 940.25-940.30 / 901.25-901.30 MHz 940.30-940.35 / 901.30-901.35 MHz	940.35-940.40 / 901.35-901.40 MHz 940.40-940.45 / 901.40-901.45 MHz 940.45-940.50 / 901.45-901.50 MHz 940.50-940.55 / 901.50-901.55 MHz 940.55-940.60 / 901.55-901.60 MHz 940.60-940.65 / 901.60-901.65 MHz 940.65-940.70 / 901.65-901.70 MHz
8 - 50/12.5 kHz	8 - 50/12.5 kHz
930.40-930.45 / 901.7500-901.7625 MHz 930.45-930.50 / 901.7625-901.7750 MHz 930.50-930.55 / 901.7750-901.7875 MHz 930.55-930.60 / 901.7875-901.8000 MHz 930.60-930.65 / 901.8000-901.8125 MHz 930.65-930.70 / 901.8125-901.8250 MHz 930.70-930.75 / 901.8250-901.8375 MHz 930.75-930.80 / 901.8375-901.8500 MHz	930.20-930.25 / 901.7000-901.7125 MHz 930.25-930.30 / 901.7125-901.7250 MHz 930.30-930.35 / 901.7250-901.7375 MHz 930.35-930.40 / 901.7375-901.7500 MHz 930.80-930.85 / 901.8500-901.8625 MHz 930.85-930.90 / 901.8625-901.8750 MHz 930.90-930.95 / 901.8750-901.8875 MHz 930.95-931.00 / 901.8875-901.9000 MHz

United States	Mexico
5 - 50 kHz 940.75-940.80 MHz 940.80-940.85 MHz 940.85-940.90 MHz 940.90-940.95 MHz 940.95-941.00 MHz	5 - 50 kHz 930.00-930.05 MHz 930.05-930.10 MHz 930.10-930.15 MHz 930.15-930.20 MHz 940.70-940.75 MHz
4 - 12.5 kHz 901.9000-901.9125 MHz 901.9125-901.9250 MHz 901.9250-901.9375 MHz 901.9375-901.9500 MHz	4 - 12.5 kHz 901.9500-901.9625 MHz 901.9625-901.9750 MHz 901.9750-901.9875 MHz 901.9875-902.0000 MHz
24 channels	24 channels

APPENDIX B

Table of Limitations of
Antenna Height vs. Effective Radiated Power

Antenna Height Above Average Terrain (HAAT) in Meters (feet)	Corresponding Effective Radiated Power (E.R.P) in Watts
182 (600) and below	3500
183 (600) to 208 (682).....	3500 to 2584
208 (682) to 236 (775)	2584 to 1883
236 (775) to 268 (880)	1883 to 1372
268 (880) to 305 (1000)	1372 to 1000
305 (1000) to 346 (1137).....	1000 to 729
346 (1137) to 394 (1292)	729 to 531
394 (1292) to 447 (1468)	531 to 387
447 (1468) to 508 (1668).....	387 to 282
508 (1668) to 578 (1895)	282 to 206
578 (1895) to 656 (2154)	206 to 150
656 (2154) to 746 (2447)	150 to 109
746 (2447) to 848 (2781)	109 to 80
848 (2781) to 963 (3160)	80 to 58
963 (3160) to 1094 (3590)	58 to 42
1094 (3590) to 1244 (4080)	42 to 31
1244 (4080) to 1413 (4636)	31 to 22
Above 1413 (4636)	16