



JUL 18 2011

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554
USA

Dear Dr. Genachowski:

Thank you for your letter of July 13, 2011, and the attached draft Arrangement O, regarding the coordination of fixed and mobile (excluding aeronautical mobile) services operating in the bands 698-758 MHz and 776-788 MHz along our common border. In response, I can confirm that Industry Canada concurs with the proposals set forth in your letter, and agree that the content of those proposals is effective on the date of this letter.

Yours sincerely,

Helen McDonald
Senior Assistant Deputy Minister
Spectrum, Information Technologies
and Telecommunications



FEDERAL COMMUNICATIONS COMMISSION

JULIUS GENACHOWSKI
CHAIRMAN

July 13, 2011

Ms. Helen McDonald
Assistant Deputy Minister
Spectrum, Information Technologies and Telecommunications
Industry Canada
Jean Edmonds Tower North
300 Slater Street
Ottawa, ON K1A 0C8 Canada

Dear Ms. McDonald:

As you know, during the past several meetings of the U.S.-Canada Radio Technical Liaison Committee (RTLCL), the Federal Communications Commission (FCC) and Industry Canada (IC) have discussed and exchanged information regarding the coordination of fixed and mobile (except aeronautical mobile) services operating in the 698-758 MHz and 776-788 MHz bands along the common border.

During the most recent meeting, the FCC and IC finalized a draft text for a new arrangement in these bands, entitled Arrangement O. This draft Arrangement O, which is attached to this letter, is in the process of being reviewed by our respective governments with a view to taking the steps necessary to making it a legally binding Arrangement O under the *Agreement between the United States of America and Canada on the Coordination and Use of Radio Frequencies Above 30 Megacycles per Second, effected by exchange of notes at Ottawa on October 24, 1962.*

It is our understanding that IC shares the FCC's view that the draft Arrangement O reflects a mutually beneficial arrangement that would benefit fixed and mobile (except aeronautical mobile) services in both countries if implemented by IC and the FCC at the earliest possible date.

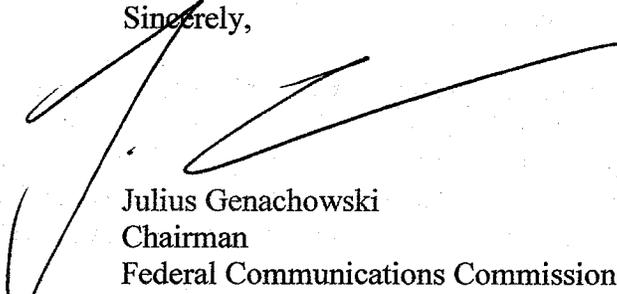
Therefore, the FCC proposes that both the FCC and the IC should apply the coordination terms set forth in the draft Arrangement O, as modified below, even to the extent of any inconsistency between the provisions of draft Arrangement O and the *Agreement concerning the allotment and assignment of television broadcasting channels in areas adjacent to the border of the United States and Canada, with working Arrangement, effected by exchange of notes at Washington, November 3, 1993 and January 5, 1994,* until the Government of the United States and the Government of Canada bring into force a new, legally binding Arrangement O governing these portions of the frequency spectrum for use by the fixed and mobile (except aeronautical mobile) services.

The draft Arrangement O focuses on coordination of fixed and mobile (except aeronautical mobile) service operations in the border area. To cover any relationship with television broadcasting operations (analog or digital), provisions are included in the draft arrangement that otherwise complement other current bilateral provisions.¹

The FCC proposes that the stations located in areas described in Attachment B be brought into operation in accordance with the provisions of the draft Arrangement except that the pfd value in Section 3.3 (-106 dBW/m²) is replaced by -96 dBW/m². The FCC also proposes that the stations in these locations comply with all other provisions of the draft Arrangement, including Sections 3.3.1, 3.3.2 and 3.3.3.

If IC concurs with the above, I further propose that the content of the above proposals become effective on the date of your affirmative letter in reply.

Sincerely,



Julius Genachowski
Chairman
Federal Communications Commission

Attachments

Arrangement O: Sharing Arrangement Between the Department of Industry of Canada and the Federal Communications Commission of the United States of America Concerning Use of the Frequency Bands 698-758 MHz and 776-788 MHz for the Fixed and Land Mobile Services Along the Canada-United States Border

Attachment B: U.S. Counties where Stations Are Permitted to Operate with a Higher PFD at the Border

¹ The other relevant documents are: (a) the Letter of Understanding between the Federal Communications Commission of the United States of America and Industry Canada related to use of the 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-806 MHz bands for the Digital Television Broadcasting Service along the Common Border, dated September 12 and 22, 2000, as amended on September 28 and October 7, 2004; and (b) the exchange of letters between the Federal Communications Commission and Industry Canada, dated August 5, 2008 and December 15, 2008, concerning assignments and allotments for use of the television broadcasting spectrum within 360 km of the common border.

Attachment B

**U.S. COUNTIES WHERE STATIONS ARE PERMITTED TO OPERATE WITH
A HIGHER PFD AT THE BORDER**

Michigan counties: Macomb, Monroe, St. Clair and Wayne for stations within 10 km of the border.

New York counties: Erie, Niagara for stations within 20 km of the border.

ARRANGEMENT O

SHARING ARRANGEMENT BETWEEN THE DEPARTMENT OF INDUSTRY OF CANADA AND THE FEDERAL COMMUNICATIONS COMMISSION OF THE UNITED STATES OF AMERICA CONCERNING THE USE OF THE FREQUENCY BANDS 698-758 MHZ AND 776-788 MHZ FOR THE FIXED AND MOBILE (EXCEPT AERONAUTICAL MOBILE) SERVICES ALONG THE CANADA-UNITED STATES BORDER

1. Scope

1. This Arrangement between the Department of Industry of Canada (Industry Canada), and the Federal Communications Commission of the United States of America (FCC), hereinafter referred to as the “Agencies”, is done pursuant to the Agreement concerning the coordination and use of radio frequencies above thirty megacycles per second, with annex, done at Ottawa October 24, 1962, as amended, and governs the sharing and coordination of frequency spectrum for the establishment and operation of fixed and mobile (except aeronautical mobile) radio services operating in the bands 698-758 MHz and 776-788 MHz along the United States-Canada border.
 - 1.1. In their assignments to the fixed and mobile (except aeronautical mobile) services in the bands 698-758 MHz and 776-788 MHz along the United States-Canada Border, the Agencies shall not claim protection from existing analog or digital television (TV) stations that were established in accordance with the conditions stated in the Agreement Concerning the Allotment and Assignment of Television Broadcasting Channels in Areas Adjacent to the Border of the United States and Canada, with working arrangement, dated November 3, 1993 and January 5, 1994 (“the 1993-1994 TV Agreement”), the Letter of Understanding Between the Federal Communications Commission of the United States of America and Industry Canada Related to the Use of the 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-806 MHz Bands for Digital Television Broadcasting Service along the Common Border, dated September 12 and 22, 2000, as amended, on September 28 and October 7, 2004 (“the 2000 FCC-IC Letter of Understanding”), and the exchange of letters between the Federal Communications Commission and Industry Canada, dated August 5, 2008 and December 15, 2008, concerning assignments and allotments for use of the television broadcasting spectrum within 360 km of the common border (“the 2008 FCC-IC Letter Exchange”), Further, in assigning use of any frequency in the bands 698-758 MHz and 776-788 MHz by the fixed and mobile (except aeronautical mobile) services along the United States - Canada Border, the Agencies shall meet the requirements listed in Section 4 of this Arrangement.
 - 1.2. With the exception of the protection afforded existing analog or digital television (TV) stations under section 1.1 above, the provisions of this Arrangement shall prevail over the provisions of the 1993-1994 TV Agreement, to the extent of any inconsistency between this Arrangement and the 1993-1994 TV Agreement.

- 1.3. This Arrangement is subject to review at any time at the request of either Agency, the U.S. Department of State or the Department of Foreign Affairs and International Trade of Canada.

2. General Principles

- 2.1 Both Agencies shall share the 698-758 MHz and 776-788 MHz bands on an equal basis along the border and, to the extent possible, both Agencies shall have full use of those frequencies or frequency sub-bands within their respective countries for the provision of fixed and mobile services.
- 2.2 Both Agencies shall require that their respective licensees carry out coordination within the 698-758 MHz and 776-788 MHz bands with all transmitting stations in their respective service areas on both sides of the border in accordance with Section 3 of this Arrangement.
- 2.3 Both Agencies shall encourage their respective licensees to enter into agreements with licensees on the other side of the border (Agreements) that: (1) facilitate coordination and allow for the reasonable and timely development of the respective systems of the licensees and (2) allow for the provision of services by each licensee within its licensed service area to the maximum extent possible.
- 2.4 Both Agencies shall encourage licensees that enter into Agreements referred to under paragraph 2.3 above to take full advantage of interference mitigation techniques such as antenna directivity, polarization, frequency offset, shielding, site selection and/or power control to facilitate the coordination of licensees' systems.
- 2.5 Each Agency shall require that its licensees provide all data and calculations for determining compliance with this Arrangement and/or licensee Agreements referred to under Section 2.3 above to that Agency, upon request.
- 2.6 If a license for operation in the 698-758 MHz and 776-788 MHz bands is transferred, assigned or reissued, the Agencies shall require any existing Agreement that formed the basis of coordination in the border area to continue to apply with respect to the new licensee unless a new Agreement is reached.
- 2.7 In certain exceptional circumstances, the Agencies may agree to special coordination procedures allowing variation(s) in the technical conditions for sharing and coordination of the frequency spectrum covered by this Arrangement through an exchange of correspondence.
- 2.8 The power flux density (pfd) produced by the stations located within one country's territory shall not exceed -96 dBW/m² in any 1 MHz bandwidth in the other country's territory unless both licensees in adjacent areas and the Agencies agree to a higher value.

3. Cross-Border Coordination

- 3.1 Coordination of a new or modified station shall be required if: (a) it is located at a distance less than 120 km (75 miles) from the United States-Canada border; and (b) the power flux density

(pfd) produced by the station at ground level anywhere in the other country's territory exceeds -116 dBW/m^2 in any 1 MHz bandwidth.

- 3.2 The Agencies shall ensure that coordination shall be conducted between the licensees as follows:
- 3.2.1 The licensee seeking coordination shall determine the maximum pfd value at and beyond the border that could be produced by any single transmitting station of the system. In making this determination (calculation), the licensee shall use good engineering practice and generally accepted terrain-sensitive propagation models. All data and calculations used in determining compliance with this Arrangement shall be made available to the licensing Agency, upon request;
 - 3.2.2 It shall be the responsibility of the licensee seeking coordination to communicate with licensees on the other side of the border, by registered mail (or other mutually acceptable method), providing a clear indication of when coordination was initiated;
 - 3.2.3 A recipient of a coordination request shall respond by registered mail¹ (or mutually acceptable method) within 30 days of receipt to state any objection to the deployment of the proposed system. If no objection is raised within that time frame, then the licensee initiating the coordination request may proceed with deployment of the proposed system;
 - 3.2.4 If a recipient of a coordination request raises an objection within 30 days of receipt of that request, the licensees shall collaborate to develop a mutually acceptable solution to the potential interference problem;
 - 3.2.5 In the event that licensees cannot reach a mutually acceptable solution within 30 days of a receipt of an objection, either licensee may request its licensing Agency to facilitate a resolution of the case with the other Agency;
 - 3.2.6 A station that requires coordination shall not be placed in operation until an Agreement has been reached between the relevant licensees or until both the Agencies have agreed to the sharing terms; and
 - 3.2.7 The coordinated stations are subject to the provisions in Section 2.8.
- 3.3 If there is no licensee within 120 km (75 miles) on the other side of the border, the pfd produced by the stations located within one country's territory shall not exceed -106 dBW/m^2 in any 1 MHz bandwidth in the other country's territory, unless agreed by both Agencies.
- 3.3.1 When a licensee within 120 km (75 miles) of the border operating in accordance with Section 3.3 above (operational licensee) is notified by a new licensee on the other side

¹ The date of postmark shall be taken as the date of response.

of the border of the issuance of the new license, the relevant Agency shall ensure that the operational licensee shall seek coordination with the new licensee within 30 days for all stations in operation using the process described in Section 3.2.

- 3.3.2 The Agencies shall ensure that the new licensee shall seek coordination, if required, pursuant to Section 3.1.
- 3.3.3 In the event that licensees cannot reach a mutually acceptable solution within 90 days of receipt of a notification from a new licensee as outlined in Section 3.3.1, the Agencies shall ensure that both licensees reduce the transmit power of their respective operations and make any other required changes so that the pfd level at and beyond the border does not exceed -116 dBW/m^2 in any 1 MHz bandwidth. Subsequent to reducing the power to meet the required pfd level, either licensee may request its licensing Agency to facilitate a resolution of the case with the other Agency, as described in Section 3.2.5.

4. Cross-Border Coordination with Television Systems

- 4.1 In making assignments for use of any frequency in the bands 698-758 MHz and 776-788 MHz by the fixed and land mobile services, each Agency shall protect the service of the other Agency's TV stations – within the other Agency's territory – according to the following Desired to Undesired (D/U) signal ratios:
 - (a) The minimum D/U ratio is 40 dB for co-channel analog TV stations and 0 dB for adjacent channel analog TV stations. The minimum D/U ratio shall be satisfied within the analog TV stations' $64 \text{ dB}\mu\text{V/m}$ contour and shall be based on interference at 50% of locations no more than 10% of the time; and
 - (b) The minimum D/U ratio is 17 dB for co-channel DTV stations and -23 dB for adjacent channel DTV stations. The minimum D/U ratio shall be satisfied within the DTV stations' $41 \text{ dB}\mu\text{V/m}$ contour and shall be based on interference at 50% of locations no more than 10% of the time.

5. Information Exchange

- 5.1 To facilitate the coordination requirements of this Arrangement, the Agencies shall either exchange information including, but not limited to (1) licensee name(s); (2) licensed service areas; and (3) licensee point(s) of contact; or provide other means to obtain the above information.
- 5.2 Where necessary, the Agencies shall provide information to their respective licensees to facilitate the coordination requirements of this Arrangement.

5.3 To facilitate cross-border coordination between licensees, the Agencies shall encourage licensees to exchange the data listed in Annex A to this Arrangement.

Annex A

PARAMETERS FOR COORDINATION

Licensee information (Corporate name/Mailing address/Phone/Fax/Email address)

Location of transmitter (Community/State/Province)

Geographical coordinates of transmitting antenna

Equivalent Isotropic Radiated Power (EIRP) (dBW)

Ground elevation and antenna height above ground (m)

Center frequency (MHz)

Polarization

Antenna pattern/tabulation of the pattern

Azimuth of the maximum antenna gain

Bandwidth and emission designation