

# CONFIRMATION OF ACCEPTANCE

The attached document is the interim sharing arrangement between the Federal Communications Commission, the National Telecommunications and Information Administration (NTIA) and the Department of Industry (Industry Canada) concerning use of the 220 to 222 MHz frequency band. The Federal Communications Commission, NTIA and Industry Canada intend to implement the attached arrangement, to the extent permissible under their respective domestic laws, pending the amendment of the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second, with Annex*, as amended,<sup>1</sup> to incorporate the arrangement's terms.

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Donald Abelson  
Chief, International Bureau  
Federal Communications  
Commission

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William T. Hatch  
Acting Associate Administrator  
Spectrum Management  
National Telecommunications  
and Information Administration

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Michael Binder  
Assistant Deputy Minister  
Spectrum, Information  
Technologies &  
Telecommunications  
Industry Canada

Date: 08 Dec 99

Date: 12/13/99

Date: 21/12/99

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<sup>1</sup> Exchange of Notes at Ottawa, Canada, October 24, 1962. Entered into force October 24, 1962. See USA: *Treaties and Other International Acts Series* (TIAS) 5205; CAN: *Canada Treaty Series* (CTS) 1962 No. 15. *Agreement revision Technical Annex to the Agreement of October 24, 1962* (TIAS 5205/CTS 1962 No. 15) Effected by Exchange of Notes at Ottawa, Canada, June 16 and 24, 1965. Entered into force June 24, 1965. USA:TIAS 5833/CAN: CTS 1962 No. 15, as amended June 24, 1965.

**Interim Sharing Arrangement between  
the Canadian Department of Industry, the  
National Telecommunications and Information Administration,  
and the Federal Communications Commission  
Concerning the Use of the Band 220 to 222 MHz  
Along the United States-Canada Border**

1. Scope

1.1 This interim arrangement (Arrangement) between the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA) of the United States of America (United States), on the one hand, and the Canadian Department of Industry (Industry Canada), on the other hand, herein referred to as the Agencies, covers the coordination and use of the frequency band 220 to 222 MHz in the vicinity of the United States-Canada border.

The coordinating agency for the United States is the FCC while the coordinating agency for Canada is Industry Canada.

1.2 This Arrangement is subject to review at any time at the request of either Administration.

1.3 Within 120 km of the United States-Canada border the frequencies shall be used as specified in Sections 2, 3 and 4.

1.4 Notwithstanding any other provision of this Arrangement, beyond 120 km from the United States-Canada border each country shall have full use of the 220-222 MHz band.

2. General Sharing Arrangements

2.1 Except as indicated below in Section 3, the frequency band covered by this Arrangement is to be shared along the border as indicated in Annex A, Table 1.

2.2 In addition to the channeling allotments set forth in Annex A, both Administrations agree that, to the extent possible, the following channels will be available for implementation of the following services:

- |     |   |                                     |
|-----|---|-------------------------------------|
| (a) | Intelligent Transportation Systems/<br>Intelligent Vehicle Highway System | Channels 111, 113, 115, 117 and 119 |
| (b) | Public Safety and Mutual Aid  | Channels 161 to 170 and 181 to 185  |

### 2.3 Power and Antenna Height Limits

The Agencies may use their allotted portions of spectrum subject to the Effective Radiated Power (ERP) and Height Above Average Terrain (HAAT) limits indicated in Annex B.

### 2.4 Two-Frequency Channeling Arrangements

The Agencies will use the spectrum on the basis of a two-frequency band-channeling plan. For land mobile operations, the base station transmitters will normally operate in the 220-221 MHz band and the mobile station transmitters will normally operate in the 221-222 MHz band. A mobile station may also transmit on any frequency assigned to its associated base station, provided that power limits for such transmissions are maintained in accordance with Annex B.

### 2.5 Distribution/Allotment of Frequencies

In the areas not encompassed by the Sectors described in Section 3, the United States will have unrestricted geographic use of the channels: 21 to 24, 27 to 55, 86 to 120, 146 to 154, 157 to 160, 171 to 174, and 186 to 189; Canada will have unrestricted geographic use of the channels: 1 to 20, 25, 26, 56 to 85, 121 to 145, 155, 156, 175 to 180, and 190 to 195; and the channels 161 to 170, 181 to 185, and 196 to 200 will be available for use by either Administration. Furthermore, channels 111, 113, 115, 117 and 119 will be available for Canada if used for Intelligent Transportation Systems/Intelligent Vehicle Highway Systems (ITS/IVHS). See Annex A, Table 1.

## 3. Special Sharing Arrangements

3.1 In recognition of particular demographic circumstances, the allotment of channels between Canada and the United States in the two sectors is as follows:

(a) Sector 1

Sector 1 is defined as the area within 120 km of the border bounded on the west by 85 degrees West longitude and on the east in Canada by 81 degrees West longitude and in the United States by 80 degrees 30 minutes West longitude.

In this sector, the United States will have unrestricted geographic use of the channels: 1 to 120, 141 to 160, 171 to 178, and 186 to 192; Canada will have unrestricted geographic use of the channels: 121 to 140, 179, 180, and 193 to 195; and the channels 161 to 170, 181 to 185, and 196 to 200 will be available for use by either Administration. Furthermore, channels 111, 113, 115, 117 and 119 will be available for Canada if used for ITS/IVHS. See Annex A, Table 2.

(b) Sector 2

Sector 2 is defined as the area within 120 km of the border bounded on the west in Canada by 81 degrees West longitude and in the United States by 80 degrees 30 minutes West longitude and on the east by 71 degrees West longitude.

In this sector, the United States will have unrestricted geographic use of the channels: 21 to 23, 28 to 30, 51 to 53, 88 to 120, 148 to 153, 158 to 160, 171, 172, and 186 to 188; Canada will have unrestricted geographic use of the channels: 1 to 20, 24 to 27, 31 to 50, 54 to 87, 121 to 147, 154 to 157, 173 to 180, and 189 to 195; and the channels 161 to 170, 181 to 185, and 196 to 200 will be available for use by either Administration. Furthermore, channels 111, 113, 115, 117 and 119 will be available for Canada if used for ITS/IVHS. See Annex A, Table 3.

- 3.2 The following are low power channels and shall be available for each Administration's use on an unprotected basis. Operation on the lower frequencies of these channels is limited to a maximum ERP of 2 watts and a maximum antenna height of 6.1 meters above average terrain.

<b>Channel Pairs</b>		
<b>Channel</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>
196	220.9775	221.9775
197	220.9825	221.9825
198	220.9875	221.9875
199	220.9925	221.9925
200	220.9975	221.9975

4. Use of Frequencies Allotted to One Administration by the Other Administration

Frequencies primarily allotted for unrestricted use by one Administration may be assigned by the other Administration within 120 km of the border in its country under the following conditions:

- (a) The maximum power flux density (pfd) at any point at or beyond the border shall not exceed  $-108 \text{ dBW/m}^2$ ;
- (b) Stations operating under this provision shall be considered as secondary and shall neither be granted protection against harmful interference from stations that have primary use of their authorized frequency, nor shall they cause harmful interference to stations having primary use of their authorized frequency, regardless of whether they meet the pfd value specified in 4(a) above;
- (c) The documentation issued by each Agency authorizing such stations to use these frequencies will include a clause stating that such authorization is subject to the following conditions:

- (1) in the event that the actual signals at or beyond the border are found to exceed the value specified in 4(a) above, the signal level should be reduced accordingly;
- (2) in the event that the actual signals are found to cause harmful interference to stations that have primary use of their authorized frequency, regardless of signal strength, the licensee shall take immediate action to eliminate such interference. The Agency granting the authorization for secondary use is responsible for ensuring that remedial action is taken, up to and including revocation of the authorization.

**ANNEX A****TABLE 1****GENERAL TABLE OF ALLOTMENTS  
220 - 222 MHz Band**

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
1	220.0025	221.0025	Canada
2	.0075	.0075	"
3	.0125	.0125	"
4	.0175	.0175	"
5	.0225	.0225	"
6	.0275	.0275	"
7	.0325	.0325	"
8	.0375	.0375	"
9	.0425	.0425	"
10	.0475	.0475	"
11	.0525	.0525	"
12	.0575	.0575	"
13	.0625	.0625	"
14	.0675	.0675	"
15	.0725	.0725	"
16	.0775	.0775	"
17	.0825	.0825	"
18	.0875	.0875	"
19	.0925	.0925	"
20	.0975	.0975	"
21	220.1025	221.1025	United States
22	.1075	.1075	"
23	.1125	.1125	"
24	.1175	.1175	"
25	.1225	.1225	Canada
26	.1275	.1275	"
27	.1325	.1325	United States
28	.1375	.1375	"
29	.1425	.1425	"
30	.1475	.1475	"
31	.1525	.1525	"
32	.1575	.1575	"
33	.1625	.1625	"
34	.1675	.1675	"
35	.1725	.1725	"
36	.1775	.1775	"
37	.1825	.1825	"
38	.1875	.1875	"
39	.1925	.1925	"
40	.1975	.1975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
41	220.2025	221.2025	United States
42	.2075	.2075	"
43	.2125	.2125	"
44	.2175	.2175	"
45	.2225	.2225	"
46	.2275	.2275	"
47	.2325	.2325	"
48	.2375	.2375	"
49	.2425	.2425	"
50	.2475	.2475	"
51	.2525	.2525	"
52	.2575	.2575	"
53	.2625	.2625	"
54	.2675	.2675	"
55	.2725	.2725	"
56	.2775	.2775	Canada
57	.2825	.2825	"
58	.2875	.2875	"
59	.2925	.2925	"
60	.2975	.2975	"
61	220.3025	221.3025	"
62	.3075	.3075	"
63	.3125	.3125	"
64	.3175	.3175	"
65	.3225	.3225	"
66	.3275	.3275	"
67	.3325	.3325	"
68	.3375	.3375	"
69	.3425	.3425	"
70	.3475	.3475	"
71	.3525	.3525	"
72	.3575	.3575	"
73	.3625	.3625	"
74	.3675	.3675	"
75	.3725	.3725	"
76	.3775	.3775	"
77	.3825	.3825	"
78	.3875	.3875	"
79	.3925	.3925	"
80	.3975	.3975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
81	220.4025	221.4025	"
82	.4075	.4075	"
83	.4125	.4125	"
84	.4175	.4175	"
85	.4225	.4225	"
86	.4275	.4275	United States
87	.4325	.4325	"
88	.4375	.4375	"
89	.4425	.4425	"
90	.4475	.4475	"
91	.4525	.4525	"
92	.4575	.4575	"
93	.4625	.4625	"
94	.4675	.4675	"
95	.4725	.4725	"
96	.4775	.4775	"
97	.4825	.4825	"
98	.4875	.4875	"
99	.4925	.4925	"
100	.4975	.4975	"
101	220.5025	221.5025	"
102	.5075	.5075	"
103	.5125	.5125	"
104	.5175	.5175	"
105	.5225	.5225	"
106	.5275	.5275	"
107	.5325	.5325	"
108	.5375	.5375	"
109	.5425	.5425	"
110	.5475	.5475	"
111	.5525	.5525	" *
112	.5575	.5575	"
113	.5625	.5625	" *
114	.5675	.5675	"
115	.5725	.5725	" *
116	.5775	.5775	"
117	.5825	.5825	" *
118	.5875	.5875	"
119	.5925	.5925	" *
120	.5975	.5975	"

\* Available to Canada for ITS/IVHS operations on a shared basis

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
121	220.6025	221.6025	Canada
122	.6075	.6075	"
123	.6125	.6125	"
124	.6175	.6175	"
125	.6225	.6225	"
126	.6275	.6275	"
127	.6325	.6325	"
128	.6375	.6375	"
129	.6425	.6425	"
130	.6475	.6475	"
131	.6525	.6525	"
132	.6575	.6575	"
133	.6625	.6625	"
134	.6675	.6675	"
135	.6725	.6725	"
136	.6775	.6775	Canada
137	.6825	.6825	"
138	.6875	.6875	"
139	.6925	.6925	"
140	.6975	.6975	"
141	220.7025	221.7025	"
142	.7075	.7075	"
143	.7125	.7125	"
144	.7175	.7175	"
145	.7225	.7225	"
146	.7275	.7275	United States
147	.7325	.7325	"
148	.7375	.7375	"
149	.7425	.7425	"
150	.7475	.7475	"
151	.7525	.7525	"
152	.7575	.7575	"
153	.7625	.7625	"
154	.7675	.7675	"
155	.7725	.7725	Canada
156	.7775	.7775	"
157	.7825	.7825	United States
158	.7875	.7875	"
159	.7925	.7925	"
160	.7975	.7975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
161	220.8025	221.8025	Shared**
162	.8075	.8075	"
163	.8125	.8125	"
164	.8175	.8175	"
165	.8225	.8225	"
166	.8275	.8275	"
167	.8325	.8325	"
168	.8375	.8375	"
169	.8425	.8425	"
170	.8475	.8475	"
171	.8525	.8525	United States
172	.8575	.8575	"
173	.8625	.8625	"
174	.8675	.8675	"
175	.8725	.8725	Canada
176	.8775	.8775	"
177	.8825	.8825	"
178	.8875	.8875	"
179	.8925	.8925	"
180	.8975	.8975	"
181	220.9025	221.9025	Shared**
182	.9075	.9075	"
183	.9125	.9125	"
184	.9175	.9175	"
185	.9225	.9225	"
186	.9275	.9275	United States
187	.9325	.9325	"
188	.9375	.9375	"
189	.9425	.9425	"
190	.9475	.9475	Canada
191	.9525	.9525	"
192	.9575	.9575	"
193	.9625	.9625	"
194	.9675	.9675	"
195	.9725	.9725	"
196	.9775	.9775	Shared***
197	.9825	.9825	"
198	.9875	.9875	"
199	.9925	.9925	"
200	.9975	.9975	"

\*\* Available for public safety and mutual aid operations

\*\*\* Low power operations

**ANNEX A**  
**TABLE 2**

TABLE OF ALLOTMENTS FOR USE IN SECTOR 1  
AS DEFINED IN SECTION 3.1(a)  
220 - 222 MHz Band

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
1	220.0025	221.0025	United States
2	.0075	.0075	"
3	.0125	.0125	"
4	.0175	.0175	"
5	.0225	.0225	"
6	.0275	.0275	"
7	.0325	.0325	"
8	.0375	.0375	"
9	.0425	.0425	"
10	.0475	.0475	"
11	.0525	.0525	"
12	.0575	.0575	"
13	.0625	.0625	"
14	.0675	.0675	"
15	.0725	.0725	"
16	.0775	.0775	"
17	.0825	.0825	"
18	.0875	.0875	"
19	.0925	.0925	"
20	.0975	.0975	"
21	220.1025	221.1025	"
22	.1075	.1075	"
23	.1125	.1125	"
24	.1175	.1175	"
25	.1225	.1225	"
26	.1275	.1275	"
27	.1325	.1325	"
28	.1375	.1375	"
29	.1425	.1425	"
30	.1475	.1475	"
31	.1525	.1525	"
32	.1575	.1575	"
33	.1625	.1625	"
34	.1675	.1675	"
35	.1725	.1725	"
36	.1775	.1775	"
37	.1825	.1825	"
38	.1875	.1875	"
39	.1925	.1925	"
40	.1975	.1975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
41	220.2025	221.2025	United States
42	.2075	.2075	"
43	.2125	.2125	"
44	.2175	.2175	"
45	.2225	.2225	"
46	.2275	.2275	"
47	.2325	.2325	"
48	.2375	.2375	"
49	.2425	.2425	"
50	.2475	.2475	"
51	.2525	.2525	"
52	.2575	.2575	"
53	.2625	.2625	"
54	.2675	.2675	"
55	.2725	.2725	"
56	.2775	.2775	"
57	.2825	.2825	"
58	.2875	.2875	"
59	.2925	.2925	"
60	.2975	.2975	"
61	220.3025	221.3025	"
62	.3075	.3075	"
63	.3125	.3125	"
64	.3175	.3175	"
65	.3225	.3225	"
66	.3275	.3275	"
67	.3325	.3325	"
68	.3375	.3375	"
69	.3425	.3425	"
70	.3475	.3475	"
71	.3525	.3525	"
72	.3575	.3575	"
73	.3625	.3625	"
74	.3675	.3675	"
75	.3725	.3725	"
76	.3775	.3775	"
77	.3825	.3825	"
78	.3875	.3875	"
79	.3925	.3925	"
80	.3975	.3975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
81	220.4025	221.4025	United States
82	.4075	.4075	"
83	.4125	.4125	"
84	.4175	.4175	"
85	.4225	.4225	"
86	.4275	.4275	"
87	.4325	.4325	"
88	.4375	.4375	"
89	.4425	.4425	"
90	.4475	.4475	"
91	.4525	.4525	"
92	.4575	.4575	"
93	.4625	.4625	"
94	.4675	.4675	"
95	.4725	.4725	"
96	.4775	.4775	"
97	.4825	.4825	"
98	.4875	.4875	"
99	.4925	.4925	"
100	.4975	.4975	"
101	220.5025	221.5025	"
102	.5075	.5075	"
103	.5125	.5125	"
104	.5175	.5175	"
105	.5225	.5225	"
106	.5275	.5275	"
107	.5325	.5325	"
108	.5375	.5375	"
109	.5425	.5425	"
110	.5475	.5475	"
111	.5525	.5525	" *
112	.5575	.5575	"
113	.5625	.5625	" *
114	.5675	.5675	"
115	.5725	.5725	" *
116	.5775	.5775	"
117	.5825	.5825	" *
118	.5875	.5875	"
119	.5925	.5925	" *
120	.5975	.5975	"

\* Available to Canada for ITS/IVHS operations on a shared basis

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
121	220.6025	221.6025	Canada
122	.6075	.6075	"
123	.6125	.6125	"
124	.6175	.6175	"
125	.6225	.6225	"
126	.6275	.6275	"
127	.6325	.6325	"
128	.6375	.6375	"
129	.6425	.6425	"
130	.6475	.6475	"
131	.6525	.6525	"
132	.6575	.6575	"
133	.6625	.6625	"
134	.6675	.6675	"
135	.6725	.6725	"
136	.6775	.6775	"
137	.6825	.6825	"
138	.6875	.6875	"
139	.6925	.6925	"
140	.6975	.6975	"
141	220.7025	221.7025	United States
142	.7075	.7075	"
143	.7125	.7125	"
144	.7175	.7175	"
145	.7225	.7225	"
146	.7275	.7275	"
147	.7325	.7325	"
148	.7375	.7375	"
149	.7425	.7425	"
150	.7475	.7475	"
151	.7525	.7525	"
152	.7575	.7575	"
153	.7625	.7625	"
154	.7675	.7675	"
155	.7725	.7725	"
156	.7775	.7775	"
157	.7825	.7825	"
158	.7875	.7875	"
159	.7925	.7925	"
160	.7975	.7975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
161	220.8025	221.8025	Shared**
162	.8075	.8075	"
163	.8125	.8125	"
164	.8175	.8175	"
165	.8225	.8225	"
166	.8275	.8275	"
167	.8325	.8325	"
168	.8375	.8375	"
169	.8425	.8425	"
170	.8475	.8475	"
171	.8525	.8525	United States
172	.8575	.8575	"
173	.8625	.8625	"
174	.8675	.8675	"
175	.8725	.8725	"
176	.8775	.8775	"
177	.8825	.8825	"
178	.8875	.8875	"
179	.8925	.8925	Canada
180	.8975	.8975	"
181	220.9025	221.9025	Shared**
182	.9075	.9075	"
183	.9125	.9125	"
184	.9175	.9175	"
185	.9225	.9225	"
186	.9275	.9275	United States
187	.9325	.9325	"
188	.9375	.9375	"
189	.9425	.9425	"
190	.9475	.9475	"
191	.9525	.9525	"
192	.9575	.9575	"
193	.9625	.9625	Canada
194	.9675	.9675	"
195	.9725	.9725	"
196	.9775	.9775	Shared***
197	.9825	.9825	"
198	.9875	.9875	"
199	.9925	.9925	"
200	.9975	.9975	"

\*\* Available for public safety and mutual aid operations

\*\*\* Low power operations

**ANNEX A**  
**TABLE 3**

**TABLE OF ALLOTMENTS FOR USE IN SECTOR 2**  
**AS DEFINED IN SECTION 3.1(b)**  
**220 - 222 MHz Band**

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
1	220.0025	221.0025	Canada
2	.0075	.0075	"
3	.0125	.0125	"
4	.0175	.0175	"
5	.0225	.0225	"
6	.0275	.0275	"
7	.0325	.0325	"
8	.0375	.0375	"
9	.0425	.0425	"
10	.0475	.0475	"
11	.0525	.0525	"
12	.0575	.0575	"
13	.0625	.0625	"
14	.0675	.0675	"
15	.0725	.0725	"
16	.0775	.0775	"
17	.0825	.0825	"
18	.0875	.0875	"
19	.0925	.0925	"
20	.0975	.0975	"
21	220.1025	221.1025	United States
22	.1075	.1075	"
23	.1125	.1125	"
24	.1175	.1175	Canada
25	.1225	.1225	"
26	.1275	.1275	"
27	.1325	.1325	"
28	.1375	.1375	United States
29	.1425	.1425	"
30	.1475	.1475	"
31	.1525	.1525	Canada
32	.1575	.1575	"
33	.1625	.1625	"
34	.1675	.1675	"
35	.1725	.1725	"
36	.1775	.1775	"
37	.1825	.1825	"
38	.1875	.1875	"
39	.1925	.1925	"
40	.1975	.1975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
41	220.2025	221.2025	Canada
42	.2075	.2075	"
43	.2125	.2125	"
44	.2175	.2175	"
45	.2225	.2225	"
46	.2275	.2275	"
47	.2325	.2325	"
48	.2375	.2375	"
49	.2425	.2425	"
50	.2475	.2475	"
51	.2525	.2525	United States
52	.2575	.2575	"
53	.2625	.2625	"
54	.2675	.2675	Canada
55	.2725	.2725	"
56	.2775	.2775	"
57	.2825	.2825	"
58	.2875	.2875	"
59	.2925	.2925	"
60	.2975	.2975	"
61	220.3025	221.3025	"
62	.3075	.3075	"
63	.3125	.3125	"
64	.3175	.3175	"
65	.3225	.3225	"
66	.3275	.3275	"
67	.3325	.3325	"
68	.3375	.3375	"
69	.3425	.3425	"
70	.3475	.3475	"
71	.3525	.3525	"
72	.3575	.3575	"
73	.3625	.3625	"
74	.3675	.3675	"
75	.3725	.3725	"
76	.3775	.3775	"
77	.3825	.3825	"
78	.3875	.3875	"
79	.3925	.3925	"
80	.3975	.3975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
81	220.4025	221.4025	Canada
82	.4075	.4075	"
83	.4125	.4125	"
84	.4175	.4175	"
85	.4225	.4225	"
86	.4275	.4275	"
87	.4325	.4325	"
88	.4375	.4375	United States
89	.4425	.4425	"
90	.4475	.4475	"
91	.4525	.4525	"
92	.4575	.4575	"
93	.4625	.4625	"
94	.4675	.4675	"
95	.4725	.4725	"
96	.4775	.4775	"
97	.4825	.4825	"
98	.4875	.4875	"
99	.4925	.4925	"
100	.4975	.4975	"
101	220.5025	221.5025	"
102	.5075	.5075	"
103	.5125	.5125	"
104	.5175	.5175	"
105	.5225	.5225	"
106	.5275	.5275	"
107	.5325	.5325	"
108	.5375	.5375	"
109	.5425	.5425	"
110	.5475	.5475	"
111	.5525	.5525	" *
112	.5575	.5575	"
113	.5625	.5625	" *
114	.5675	.5675	"
115	.5725	.5725	" *
116	.5775	.5775	"
117	.5825	.5825	" *
118	.5875	.5875	"
119	.5925	.5925	" *
120	.5975	.5975	"

\* Available to Canada for ITS/IVHS operations on a shared basis

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
121	220.6025	221.6025	Canada
122	.6075	.6075	"
123	.6125	.6125	"
124	.6175	.6175	"
125	.6225	.6225	"
126	.6275	.6275	"
127	.6325	.6325	"
128	.6375	.6375	"
129	.6425	.6425	"
130	.6475	.6475	"
131	.6525	.6525	"
132	.6575	.6575	"
133	.6625	.6625	"
134	.6675	.6675	"
135	.6725	.6725	"
136	.6775	.6775	"
137	.6825	.6825	"
138	.6875	.6875	"
139	.6925	.6925	"
140	.6975	.6975	"
141	220.7025	221.7025	"
142	.7075	.7075	"
143	.7125	.7125	"
144	.7175	.7175	"
145	.7225	.7225	"
146	.7275	.7275	"
147	.7325	.7325	"
148	.7375	.7375	United States
149	.7425	.7425	"
150	.7475	.7475	"
151	.7525	.7525	"
152	.7575	.7575	"
153	.7625	.7625	"
154	.7675	.7675	Canada
155	.7725	.7725	"
156	.7775	.7775	"
157	.7825	.7825	"
158	.7875	.7875	United States
159	.7925	.7925	"
160	.7975	.7975	"

<b>Channel Pair</b>	<b>Lower Frequency (MHz)</b>	<b>Upper Frequency (MHz)</b>	<b>Country</b>
161	220.8025	221.8025	Shared**
162	.8075	.8075	"
163	.8125	.8125	"
164	.8175	.8175	"
165	.8225	.8225	"
166	.8275	.8275	"
167	.8325	.8325	"
168	.8375	.8375	"
169	.8425	.8425	"
170	.8475	.8475	"
171	.8525	.8525	United States
172	.8575	.8575	"
173	.8625	.8625	Canada
174	.8675	.8675	"
175	.8725	.8725	"
176	.8775	.8775	"
177	.8825	.8825	"
178	.8875	.8875	"
179	.8925	.8925	"
180	.8975	.8975	"
181	220.9025	221.9025	Shared**
182	.9075	.9075	"
183	.9125	.9125	"
184	.9175	.9175	"
185	.9225	.9225	"
186	.9275	.9275	United States
187	.9325	.9325	"
188	.9375	.9375	"
189	.9425	.9425	Canada
190	.9475	.9475	"
191	.9525	.9525	"
192	.9575	.9575	"
193	.9625	.9625	"
194	.9675	.9675	"
195	.9725	.9725	"
196	.9775	.9775	Shared***
197	.9825	.9825	"
198	.9875	.9875	"
199	.9925	.9925	"
200	.9975	.9975	"

\*\* Available for public safety and mutual aid operations

\*\*\* Low power operations

## ANNEX B

When an Administration assigns its own primary use frequencies within 120 km of the United States-Canada border, such use shall be authorized subject to the effective radiated power (ERP) and antenna height limits specified below:

1. In the 220-221 MHz band, the maximum ERP, except as noted below, shall be determined by the following table:

TABLE 1

<b>Antenna Height Above Average Terrain (Meters)</b>	<b>ERP (Watts)</b>
Up to 150	500
Above 150 to 225	250
Above 225 to 300	125
Above 300 to 450	60
Above 450 to 600	30
Above 600 to 750	20
Above 750 to 900	15
Above 900 to 1,050	10
Above 1,050	5

(a) Low power channels:

Stations transmitting on the lower frequencies of channels 196 through 200 are limited to a maximum ERP of 2 watts and a maximum antenna height of 6.1 meters above average terrain.

(b) Station location limitations:

The maximum ERP for stations located 6 kilometers or less from the border transmitting on the lower frequencies of channels 161 through 195 must be in accordance with Table 2<sup>1</sup>, unless otherwise provided for by special agreement. This table does not apply to the low power channels (196 – 200).

(c) Canadian Radio amateur use:

In Canada, for radio amateur use, channels may be aggregated. The maximum ERP allowable per 5 kHz, in any one 5 kHz, shall be the applicable maximum ERP depending on Antenna Height Above Average Terrain described in Table 1 of Annex B.

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<sup>1</sup>The maximum ERP for these stations can not be greater than the maximum ERP determined by their antenna height above average terrain.

TABLE 2

<b>Distance from border (km)</b>	<b>ERP (watts)</b>
Less than 0.3	Operations not permitted
0.3 - 0.5	5
0.5 - 0.6	10
0.6 - 0.8	20
0.8 - 2.0	25
2.0 - 4.0	50
4.0 - 5.0	100
5.0 - 6.0	200
beyond 6.0	500

2. In the 221-222 MHz band, the maximum effective radiated power allowable for mobile units shall be 50 watts. Portable units are considered mobile units. Fixed stations transmitting in this band are permitted up to 50 watts ERP using an antenna with a maximum height of 7 meters above average terrain. Transmissions from antennas that are higher than 7 meters above average terrain will be permitted if the effective radiated power is reduced below 50 watts ERP by  $20 \log_{10}(h/7)$  dB. In Canada, for radio amateur use, the maximum ERP allowable shall be 50 watts per 5 kHz in any one 5 kHz, e.g. over a 20 kHz bandwidth, up to 200 W ERP would be allowed as long as the spectral power flux density does not exceed 50 W per 5 kHz in any 5 kHz. Such transmissions from antennas that are higher than 7 meters above average terrain will be permitted if the effective radiated power is reduced below 50 watts per 5 kHz by  $20 \log_{10}(h/7)$  dB. (Note: h is the height of the antenna above average terrain, in meters.)