# NEW ENGLAND REGION 19 ALLOCATION OF "GENERAL USE" SPECTRUM

Region 19 uses the following pre-planning methods to avoid problems with adjacent Region coordination.

- 1. Region 19 will use the NPSTC-CAPRAD pre-designated initial allotments.
- 2. Applications within the Region will be handled on a first-come, first-served basis.
- 3. Region 19 will attempt to satisfy applicants with the 821 MHz pool. If 821 MHz spectrum is not available, 700 MHz spectrum will be allocated.

When allocating 700 MHz channels near the Region borders, multiples of 6.25 KHz units will be used to distribute spectrum. The use of 6.25 kHz units will allow for 12.5 and 25 KHz based technology and will allow for technology-neutral pre-planning.

If, after five years, the county or city/town has not built out a system at 700 MHz, its allotted frequencies will be placed back into the Region's 'general use' pool and be available to any applicant on a first-come, first-served basis.

Procedures for use near the Canadian border follow 47 CFR, Part 9, Subpart R - Regulations Governing the Licensing and Use of Frequencies in the 769-775 & 799-805 MHz Bands as excerpted below.

## § 90.533 Transmitting sites near the U.S./Canada or U.S./Mexico border.

Since the release of the 700MHz, Second Notice of Proposed Rule Making, Canada announced that, as of August 31, 2011, it will have completed its DTV transition, including on channels 64 and 69. <sup>1</sup> Thus, while Canada has now established a firm DTV transition date, it will continue to trail the U.S. DTV transition by two and a half years.

#### § 90.533 Transmitting sites near the U.S./Canada or U.S./Mexico border.

This section applies to each license to operate one or more public safety transmitters in the 763-775 MHz and 793-805 MHz bands, at a location or locations North of Line A (see § 90.7) or within 120 kilometers (75 miles) of the U.S.-Mexico border, until such time as agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, become effective governing border area non-broadcast use of these bands. Public safety licenses are granted subject to the following conditions:

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<sup>&</sup>lt;sup>1</sup> Section 90.535 is amended by revising the introductory paragraph and paragraph (a) to read as follows:

- (a) Public safety transmitters operating in the 763-775 MHz and 793-805 MHz bands must conform to the limitations on interference to Canadian television stations contained in agreement(s) between the United States and Canada for use of television channels in the border area.
- (b) Public safety facilities must accept any interference that may be caused by operations of UHF television broadcast transmitters in Canada and Mexico.
- (c) Conditions may be added during the term of the license, if required by the terms of international agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, regarding non-broadcast use of the 763-775 MHz and 793-805 MHz bands.

This section applies to each license to operate one or more public safety transmitters in the 769–775 MHz and 799–805 MHz bands, at a location or locations North of Line A (see § 90.7) or within 120 kilometers (75 miles) of the U.S.-Mexico border, until such time as agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, become effective governing border area non-broadcast use of these bands. Public safety licenses are granted subject to the following conditions:

- (a) Operation of public safety transmitters must not cause harmful interference to the reception of television broadcasts transmitted by UHF TV broadcast stations located in Canada or Mexico. In addition, public safety base, control, and mobile transmitters must comply with the interference protection criteria in § 90.545 for TV/DTV stations in Canada and Mexico.
- (b) Public safety facilities must accept any interference that may be caused by operations of UHF television broadcast transmitters in Canada and Mexico.
- (c) Conditions may be added during the term of the license, if required by the terms of international agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, regarding non-broadcast use of the 769–775 MHz and 799–805 MHz bands.

## **Low Power Secondary Operations**

To facilitate portable operation by any licensee, and to provide channels for such operation without impacting the use of primary channels, certain low power secondary use will be permitted. Any public safety entity otherwise licensed to use one or more channels may receive authorization to license an additional channel for secondary use, subject to the following criteria:

- All operation of units on such authorized channels will be considered secondary to other licensees on both co-channel and adjacent channels.
- No channels on, or adjacent to, those designated in the Plan for wide area operation and/or mutual aid use will be authorized.

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- Channels will be authorized for use in specific areas only; such areas to be within the licensees authorized operational area.
- Maximum power will be limited to 6 watts ERP.
- Use aboard aircraft is prohibited.
- Applications for channels may be submitted to the RPC for consideration at any time and
  must be accompanied by a showing of need. The RPC may select and authorize licensing of
  these secondary use channels after consideration of potential interference to co-channel and
  adjacent channel allotments, allocations and licensees. Authorization may be granted for use
  of any suitable channel, without prior allotment or allocation to the requesting agency.
- In the event the channels authorized for low power secondary operation are needed by others during any window opening for reassignment, no protection will be afforded to the licensed secondary user, and they may be required to change frequencies or surrender licenses to prevent interference to primary use channels.

#### **Low Power Channels**

The FCC in the 700 MHz band plan set aside channels 1 - 8 paired with 961 - 968 and 949 - 958 paired with 1909 - 1918 for low power use for on-scene incident response purposes using mobiles and portables subject to Commission-approved regional planning committee regional plans. Transmitter power must not exceed 2 watts (ERP).

Channels 9 - 12 paired with 969 - 972 and 959 - 960 paired with 1919 - 1920 are licensed nationwide for itinerant operation. Transmitter power must not exceed 2 watts (ERP).

These channels may operate using analog operation. To facilitate analog modulation, this plan will allow aggregation of two channels for 12.5 kHz bandwidth. On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) with an antenna height limit of 6.1-meter (20 feet) above the ground. However, users are encouraged to operate in simplex mode whenever possible. This plan does not limit use to only analog operations; these channels are intended for use in a wide variety of applications that may require digital modulation types.

In its dialog leading up to CFR 90.531 allocating the twenty-four low power 6.25 kHz frequency pairs (of which eighteen fall under RPC jurisdiction), the FCC suggested that there is a potential for multiple low power applications, and absent a compelling showing, a sharing approach be employed rather than making exclusive assignments for each specific application because low power operations can co-exist [in relatively close proximity] on the same frequencies with minimal potential for interference due to the 2 watt power restrictions.

The following assignments associated with the eighteen narrowband channels are to be used:

- Channel numbers 1 4 and 949 952 are set aside as *generic base* channels for use by public safety agencies operating within Region 19, and the complementary channel #'s 961 964 and 1909 1912 are set aside as *generic mobile* channels also for use by public safety agencies likewise operating within Region 19.
- Channel numbers 5 8 are designated as *Fire Protection base* channels for licensing and exclusive use by the Fire Protection discipline, and the complementary channel #'s 965 968 are set aside as *Fire Protection mobile* channels also for licensing and exclusive use by the Fire Protection discipline.

- Channel numbers 953 956 are set aside as *Law Enforcement base* channels for licensing and exclusive use by the Law Enforcement discipline, and the complementary channel #'s 1913 1916 are set aside as *Law Enforcement mobile* channels also for licensing and exclusive use by the Law Enforcement discipline.
- Channel numbers 957 958 are set aside as *Fire Protection/Law Enforcement base* channels for licensing and use by the Fire Protection <u>and</u> Law Enforcement disciplines, and the complementary channel #'s 1917 1918 are set aside as *Fire Protection/Law Enforcement*.

Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on scene use among all agencies involved. Users should license multiple channels and be prepared to operate on alternate channels at any given operational area.

### **System Implementation**

Most areas in New England will be precluded from immediately implementing systems due to protection requirements of existing television stations. These stations may not move until year 2006, or after, depending on the 85% market penetration of digital TV implementation.

Therefore this plan will not require agencies to implement systems using the 700 MHz spectrum allocated to them until TV station(s) requiring protection relocate to another TV channel. After that date, agencies must release a System RFP within one year and sign a contract with a vendor within one year of releasing the System RFP. For the New England States, implementation of general use channels shall be governed by FCC rule 90.529 (b) and (c). (Refer to Appendix L.)

If an agency does not implement in the time frames specified, that agency's allotment may be removed from the allotment list. An Agency may file a request with the Region Chair for an extension of time to implement. The request should include all details describing why the agency has not implemented and a new implementation schedule. The Committee Chair will advertise this request and set a date for the full committee to vote on the request.