

FCC Rules Require Express Consent for ERRCS

FCC rules require that only the Frequency License Holder has the authority to permit rebroadcast of licensed public safety frequencies in use by Emergency Responder Radio Communication Systems (ERRCS, or sometimes referred to as ERCES).

DISCUSSION:

FCC rules in **47 CFR § 90.219 - Use of Signal Boosters** - are clear that only the FCC License Holder has the authority to permit rebroadcast of licensed public safety frequencies. Anyone who does not obtain express consent from the License Holder before activating or operating a public safety booster system is in violation of federal FCC rules.

WHY THIS MATTERS:

- **Improper design and operation of ERRCS systems can interfere with the proper operation and performance of public safety radio networks, placing the public and first responders at risk.**
- **Where are the systems installed?** It is critical that the location and immediate contact information for all installed ERRCS systems be available to the frequency license holder to quickly locate sources of interference and insure correct continued operation.
- **Fire Code authorizes Code Officials to require public safety radio signals be present within a building, but FCC rules govern who can authorize turning on and operating such a system.** This is the Frequency License Holder, and not the AHJ (unless the AHJ is both).

BEST PRACTICES:

1. The AHJ should identify the FCC License Holder (frequently the jurisdiction's radio operations department) and provide their contact information to Building Owners and their Contractors to ensure compliance to FCC rules.
2. Permission to operate any ERRCS system should be provided in writing and should have an expiration date that coincides with annual re-inspection requirements.
3. The FCC License Holder should develop the Technical Criteria for system design, including at a minimum the list of frequencies, location and ERP of radio sites used as system source, maximum propagation delay, and other criteria specified in code and particular to their jurisdiction.
4. RF system trained and qualified representatives of the FCC License Holder should be active participants in review of system designs and inspections.
5. Records for every system should be maintained to facilitate interference investigation and to notify owners about system changes like new / changed frequencies, tower relocations, technical criteria updates, and other important communications.

RULE and CODE EXCERPTS

FCC Part 90.219

(b) Authority to operate. PLMRS licensees for stations operating on assigned channels higher than 150 MHz may operate signal boosters, limited to the service band for which they are authorized, as needed anywhere within the PLMRS stations' service contour, but may not extend the stations' service contour.

(1) PLMRS licensees may also consent to operation of signal boosters by non-licensees (such as a building owner or a signal booster installation contractor) within their service contour and across their applicable frequencies, but must maintain a reasonable level of control over these operations in order to resolve interference problems.

(i) Non-licensees seeking to operate signal boosters must obtain the express consent of the licensee(s) of the frequencies for which the device or system is intended to amplify. The consent must be maintained in a recordable format that can be presented to an FCC representative or other relevant licensee investigating interference.

FIRE CODE

IFC 2018: 510.5.4 FCC compliance. The emergency responder radio coverage system installation and components shall comply with all applicable federal regulations including, but not limited to, FCC 47 CFR Part 90.219.

NFPA 1221-19: Chapter 2 Referenced Publications

2.3.2 FCC Publications. FCC 13-21, Use and Design of Signal Boosters Report and Order, 2013

FCC Docket 13-21: III.B.5. Industrial Signal Boosters require an FCC license or express licensee consent to operate, and must be appropriately labeled.

NFPA 1221-19: A.9.6.11.1 [Annex]...the FCC published Use and Design of Signal Boosters Report and Order 13-21, which took effect in March 2014, and established requirements for consumer-grade and industrial-grade signal boosters.

SBC Interpretation

It is SBC's opinion that it was not the intention of the drafters of fire code that AHJ's, contractors or building owners violate federal rules or law in enforcing fire code pertaining to ERRCS Systems.