



National Regional Planning Council

Best Practice - Use of 800 MHz Interoperability Frequencies

This document has been created to help members comply with the rules of the Federal Communications Commission (“FCC”) as relates to 800 MHz nationwide interoperability frequencies.

FCC definition of Interoperability

An essential communication link within public safety and public service wireless communications systems which permits units from two or more different entities (emphasis added) to interact with one another and to exchange information according to a prescribed method in order to achieve predictable results.¹

Characteristics of permitted interoperable communications

1. Appropriate interoperability communications “are not intended for routine, administrative, intra-agency (emphasis added) communications, but are to be reserved for coordination of multiple public safety entities.”²
2. Communications that are not “day to day” intra-agency uses; “any internal day-to-day communications on the 800 MHz mutual aid channels would be a violation of FCC rules.”³
3. Mobile and portable radios operating on the mutual aid channels shall employ an analog FM emission.⁴
4. Encryption may not be used on any of the interoperability or mutual aid calling channels.⁵
5. 8CALL90, 806.0125/851.0125 MHz, is used only for hailing; CTCSS 156.7 Hz.

FCC requirement for licensing of 800 MHz interoperability stations

Base stations and control stations must be licensed individually if they operate on the interoperability or mutual aid channels, but that any public safety eligible entity holding a Part 90 license may operate mobile and portable units on the interoperability and mutual aid channels without needing a separate authorization.⁶

Operations on interoperability channels

The appropriate use of an 800 MHz nationwide interoperability frequency is for “incident based” interagency communications. Interoperability repeaters should be active only during the pendency of an incident. Repeater operations should be disabled (“knocked down”) when not supporting an incident. 8TAC frequencies are:

806.5125/851.5125 MHz is 8TAC91	CTCSS 156.7 Hz
807.0125/852.0125 MHz is 8TAC92	CTCSS 156.7 Hz
807.5125/852.5125 MHz is 8TAC93	CTCSS 156.7 Hz
808.0125/853.0125 MHz is 8TAC94	CTCSS 156.7 Hz

¹ See 47 CFR §90.7

² See Development and Implementation of a Public Safety National Plan and Amendment of Part 90 to Establish Service Rules and Technical Standards for Use of the 821–824/866–869 MHz Bands by the Public Safety Services, Report and order, 3 FCC Rcd 905, para. 30 (1987).

³ See FCC Public Notice DA 18-168 issued February 21, 2018

⁴ See 47 CFR 90.617(a)(1)

⁵ See 47 CFR § 90.20(i)

⁶ *Id.*