

700 / 800 MHz Service Rule Update

Office of Engineering and Technology
Laboratory Division



700 MHz PS NB (1)

- 700 MHz Public Safety Narrowband (PS NB)
 - 769-775 MHz / 799-805 MHz; BW < 25 kHz
 - For 700 MHz PS NB devices, §§ 2.911(c) and 2.1033(c) minimum rules include:
 - §§ 90.203(m), 90.531(b), 90.531(d)(1), 90.535, 90.539(a)-(c) [90.539(d)-(e) “wideband” obsolete], 90.541, 90.543 first ¶, 90.543(a)-(d), 90.543(f)
- Per 81 FR 66830-66833, rule updates from FCC-16-111 became effective Sep. 29, 2016
 - EXCEPT §§ 2.1033(c)(20) and 90.548(c) changes that do not become effective until OMB information collection approval (e.g., 3-6 months)—further details on next page
 - Other changes include:
 - Errata corrections in §§ 90.209(b) and 90.210(h)
 - 6.25 kHz spectrum efficiency requirement of former paragraphs (1)-(3) omitted from § 90.535(d)

NOTE—Recall also that 758-769 MHz / 788-789 MHz is PS Broadband (e.g., LTE band 14), with FirstNet being the nationwide exclusive licensee (<http://www.firstnet.gov/>)



700 MHz PS NB (2)

- FCC-16-111 Order on Reconsideration allows P-25 CAP compliance or the equivalent to be demonstrated after equipment certification but prior to the marketing or sale
- Revised § 2.1033(c)(20) (81 FR 66832; pending OMB approval):
 - ~~Applications for certification of~~ Before equipment operating under part 90 of this chapter and capable of operating on the 700 MHz interoperability channels (See § 90.531(b)(1) of this chapter) may be marketed or sold, the manufacturer thereof shall include have a Compliance Assessment Program Supplier's Declaration of Conformity and Summary Test Report
 - or, alternatively, ~~shall include~~ *[the manufacturer shall have]* a document detailing how the ~~applicant~~ manufacturer determined that its equipment complies with § 90.548 of this chapter and that the equipment is interoperable across vendors.
 - Submission of a 700 MHz narrowband radio for certification will constitute a representation by the manufacturer that the radio will be shown, by testing, to be interoperable across vendors before it is marketed or sold.

DHS Science and Technology Directorate Project 25 Compliance Assessment Program,
(<https://www.dhs.gov/science-and-technology/p25-cap>),
(https://www.dhs.gov/sites/default/files/publications/P25CAP_Updated-One-Pager_20160624-508_0.pdf).

NOTE—*On this slide, new rule text is shown as underlined.*



700 MHz PS NB (3)

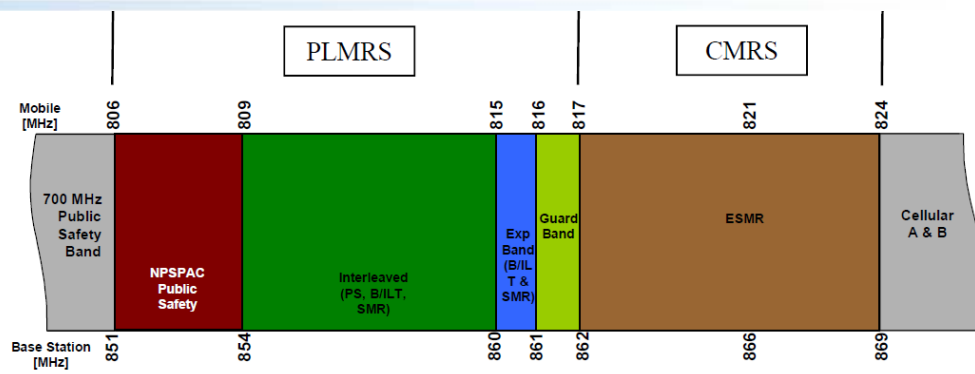
- Revised § 90.548(c) (81 FR 66833; pending OMB approval):
 - ~~Equipment certified by the P25 Compliance Assessment Program is presumed to comply with this section. (79 FR 71326)~~
 - Transceivers capable of operating on the interoperability channels listed in §90.531(b)(1) shall not be marketed or sold unless the transceiver has previously been certified for interoperability by the Compliance Assessment Program (CAP) administered by the U.S. Department of Homeland Security;
 - provided, however, that this requirement is suspended if the CAP is discontinued.
 - Submission of a 700 MHz narrowband radio for certification will constitute a representation by the manufacturer that the radio will be shown, by testing, to be interoperable across vendors before it is marketed or sold. [NOTE § 2.1033(c)(20) has same text.]
 - In the alternative, manufacturers may employ their own protocol for verifying compliance with Project 25 standards and determining that their product is interoperable among vendors.
 - In the event that field experience reveals that a transceiver is not interoperable, the Commission may require the manufacturer thereof to provide evidence of compliance with this section.

NOTE—*On this slide, new rule text is shown as plain font.*



800 MHz Public Safety

- Per 81 FR 30198-30202, rule updates from FCC-16-48 became effective June 15, 2016
- Applications must demonstrate that equipment:
 - [§ 90.203(i)] Is capable of operating with analog FM modulation on the NPSPAC mutual aid channels
 - § 90.20 channels 1, 39, 77, 115, 153:
806.0125 / 851.0125, 806.5125 / 851.5125, 807.0125 / 852.0125, 807.5125 / 852.5125, 808.0125 / 853.0125
 - [§ 90.210(h)] Conforms to Emission Mask H when operating on NPSPAC public safety (PS) channels (i.e., per § 90.617(a)(1), channels 1-230 of § 90.613)
 - NPSPAC PS channels: 806-809 MHz / 851-854 MHz (center frequencies: 806.0125-808.9875 MHz / 851.0125-853.9875 MHz)



NPSPAC = National Public Safety Planning Advisory Committee

Bandplan chart is from KDB Pub. 634817 D02 v01r01.