



Updates to Part 90 Subpart Y – Regulations Governing Licensing and Use of Frequencies in the 4940-4990 MHz Band

TCB Workshop
April 26th, 2023



Amendment of Part 90Y of the Commission's Rules

- Recent Report and Order, FCC 23-3, adopted by the Commission on January 18th, 2023 and published in the Federal Register on February 28th, 2023, made modifications to Part 90Y of the FCC rules.
- This R&O is the most recent (7th) in an evolving effort to establish a comprehensive and coordinated approach to managing the 4.9 GHz (4940-4990 MHz) band while retaining its locally-controlled, public safety nature.
- It adopts new rules that implement a nationwide approach to centralizing management of the 4.9 GHz band through coordination with a single nationwide Band Manager
 - This approach is intended to retain existing status as a locally-controlled public safety band, but with more rationalized and coordinated public safety operations on a national level.
- In addition to Public Safety use, non-Public Safety use will also be permitted on a secondary basis via a priority and preemption strategy coordinated by the Band Manager.



Changes to Part 90Y Certification Requirements

- The R&O discusses eleven major topics in Section III, but this presentation is specific to the technical issues presented in Clause J (paragraphs 61-69) as they relate to certification requirements per §90.203.
- The relevant technical changes affecting certification under Part 90Y rules are:
 - Modification of §90.1213(b) to allow aggregation of channels listed in §90.1213(a) in any manner up to 50 MHz for wider bandwidth operation with stipulation that applicants should request no more bandwidth than necessary for a particular use.
 - Changes to §90.1215(f) to:
 - permit transmitter power of permanent fixed point-to-point and point-to-multipoint stations up to 55 dBW (85 dBm) EIRP with no antenna gain requirements.
 - Introduce a power reduction requirement for path lengths shorter than 17 kilometers to be derived from the equation:
 - New EIRP limit = $55 \text{ dBW} - 40 \cdot \log(17/B) \text{ dBW}$, where B = the actual path length in kilometers.



Associated Updates to KDB Publication 971168 D02

- Changes to §90.1213(b) necessitated an update to KDB publication 971168 D02, Clause V. to remove Question and Answer #2 regarding bandwidth limitations that have now been superseded.
- Note that the emissions masks applicable to Part 90Y operation (i.e., §90.210(l) Emission Mask L for transmitter power ≤ 20 dBm, or §90.210(m) Emission Mask M for transmitter power > 20 dBm) have not been modified.
- We are aware of some difficulties that have arisen with complying to the emission mask requirements while employing the wider bandwidths permitted by the new Part 90Y rules.
 - Currently working to develop relevant guidance.