



# NPSTC

*National Public Safety Telecommunications Council*

## Regulatory Update

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### FCC Seeks Comment on NPSTC TV Band Proposals

#### FCC Seeks Comment on NPSTC's Proposed New Technical Standards for Land Mobile/DTV Operation in the 470-512 MHz Band

The FCC is seeking comment on NPSTC's Petition for Rulemaking proposing new technical standards for land mobile/DTV operation in the 470-512 MHz band filed in February.

For the past 35 years, land mobile sharing of 470-512 MHz spectrum has been allowed within a 50-mile radius of eleven metro areas on one to three TV channels (6 to 18 MHz) based upon conservative protection of analog television. The transition to digital television provides an opportunity to update the land mobile to television protection requirements and, correspondingly, expand the radius around metro centers where land mobile users can locate licensed operations.

The original TV sharing rules were deliberately set at conservative levels to minimize impact to over-the-air analog TV reception. In areas of extreme spectrum congestion, public safety has successfully obtained waivers to operate outside the 50-mile radius and/or short-space based upon a TV station's actual ERP/HAAT.

In its Petition, NPSTC is proposing several changes to Part 90 Subpart L (TV Band) TV co- and adjacent channel protection rules that reflect the technical advances made to TV receivers since the 1980s making them less susceptible to interference. Consistent with this lower protection, new TV to LMR protection rules adopted for broadcasters in Part 73 reduced co-channel separation from 212 miles for TV to 155 miles for DTV.

Among the modifications to Subpart L being proposed by NPSTC are:

- 1) Eliminate 50 dB D/U TV/DTV protection tables and replace with 40 dB D/U tables or allow engineering analysis using equivalent DTV/LMR protection ratios for all TV sharing cities = 17 dB D/U co-channel and -23 dB D/U adjacent channel.
- 2) Allow short-spacing using terrain-based engineering analysis and actual station parameters.
- 3) Allow written concurrence between LMR and DTV stations based upon tolerable interference levels.
- 4) Allow LMR base station to be located outside 50 mile radius of metro center, without waivers, as long as edge of mobile service area does not exceed the 80-mile radius of metro center AND co-/adjacent-channel DTV stations are protected.
- 5) Allow Public Safety and Enterprise licensees to share the same channel as long as co-channel interference contour does not overlap service area contour. Minimum co-channel re-use distances would remain the same.

6) Expand Washington, D.C., to include the area within 80 km of Baltimore, thus expanding the Baltimore/Washington urbanized area to the north and east.

These recommendations will provide greater flexibility for both public safety and enterprise licensees and applicants in markets where the 470-512 MHz band can be shared without any negative impact on future television viewing.

Readers are encouraged to file comments with the FCC supporting NPSTC's proposals. Comments are due May 7. If enough supporting comments are received, the FCC's next step would be to release a Notice of Proposed Rulemaking to solicit additional comments.

The full text of NPSTC's proposal is available on [NPSTC's FCC Filings and Positions page](#).

NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

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