

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

WIRELESS TELECOMMUNICATIONS BUREAU, PUBLIC SAFETY AND HOMELAND SECURITY
BUREAU AND OFFICE OF ENGINEERING AND TECHNOLOGY SEEK COMMENT ON PETITION
TO DELAY INDEFINITELY IMPLEMENTATION OF SECTION 90.203(J)(5) OF THE
COMMISSION'S RULES

WT Docket No. 99-87

Comments of David T Witkowski

In regards to WT Docket No. 99-87, "PETITION TO DELAY INDEFINITELY IMPLEMENTATION OF SECTION 90.203(J)(5) OF THE COMMISSION'S RULES" I offer the following comment.

The history of (and need for) narrowbanding traces back to the early 1990's, before the cellular/mobile telephone became affordable and widely adopted as it is today. Back in the "old days" Part 90 spectrum was scarce in dense metropolitan areas, and the need to provide additional spectrum was clear. Today, many people who would have been Part 90 licensees have switched over to cellular/mobile telephones, and the increasingly pervasive coverage from 3G/4G mobile broadband even allows "smartphone" users (iOS or Android-based devices) to install apps which mimic and even extend the behavior of Part 90 push-to-talk radios. So while the mandate to narrowband started about 20 years ago, the technology has evolved over the past 10 years to the point where Part 90 spectrum is no longer critically impacted. In dense urban areas, it's very likely that migration to 12.5 kHz channels will free up enough spectrum to make migration to 6.25 kHz channels unnecessary.

The effect of narrowbanding on radio system performance cannot and should not be overlooked. For example, recently in the Reno/Sparks NV area an analog radio system was coverage tested in first 25 kHz, then 12.5 kHz. Aside from the bandwidth/deviation, nothing else was changed; antennas, ERP, etc were left equivalent. The effect was dramatic; the 12.5 kHz system is clearly shown to have inferior coverage relative to the 25 kHz system. It's therefore reasonable to presume that a 6.25 kHz signal would result in even more degraded coverage. (Granted, we can recover some of the lost coverage by switching from analog to digital modulation.)

The question of whether or not the public good is served by requiring a migration path to 6.25 kHz channels should really be made based on the question of need. Presumably the FCC has the record-keeping and application data to show whether Part 90 license applications have increased or decreased over the past decade, and to show whether or not the number of Part 90 license applicants has increased or decreased during that same period. If the trend is towards decreased applications and decreased denials for lack of channels, then the public good is likely not served by mandating 6.25 kHz capability.

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