

Wireless Update 2010: June 12 DTV Transition Anniversary Is 700 MHz Deadline

“There will be two classes of wireless system operators going forward.”

January 30, 2010, by PSW Staff

The FCC finally dropped the other proverbial shoe during the 2010 Winter NAMM show when it issued an Order and Further Notice of Proposed Rulemaking prohibiting sales of wireless microphone and monitoring systems that operate in the 700 MHz frequency band, and kicking existing ones out by June 12 of this year.

This final step in the DTV transition clears the way for the 4G consumer and emergency wireless services that roll out this year.



Verizon, which paid \$9.3 billion for their share, tested Boston and Seattle last year, with plans to roll out service in 24 to 30 cities later this year and full national service in 2011. Qualcomm's Media Flo service has been interfering on channel 55 for more than a year.

The FCC's consumer outreach plan includes a website listing all affected wireless systems (www.fcc.gov/cgb/wirelessmicrophones) and whether they can be re-tuned for legal operation.

A quick inspection of the site's equipment list shows that, except for Lectrosonics, most wireless 700 MHz equipment cannot be re-tuned and will soon be worthless. Its only value will be when used to take advantage of a trade-in or rebate, which some manufacturers have reinstated following this latest FCC announcement.

Reading through the 103-page Report and Order, which takes some time, it's clear that the FCC doesn't attach the same urgency to the operation of wireless systems that we do in live sound.

The FCC also has restricted power levels of unlicensed (Part 15) wireless mics to 50 milliwatts (mW), unless they're licensed under Part 74, in which case they're willing to make exceptions on a case by case basis.

Furthermore, unlicensed operation, which is the bulk of us in live sound, must accept interference from other licensed and unlicensed devices. These and other warnings will be required to be displayed prominently on packaging and websites selling wireless systems.

Licensed operation under Part 74 is restricted to broadcast and movies. The FCC is trying to figure out whether to broaden licensing under Part 74 to include theaters, performing arts centers, sports arenas and churches, and perhaps to also cover trade shows, cultural events, and governmental or educational institutions.

There will be two classes of wireless system operators going forward. Part 74 licensed users will have their geo-location information entered into a data base, so that unlicensed TV Band Devices (TVBDs) can try to figure out if they're about to interfere with them, and thereby know when to shut themselves off.

Unlicensed users under Part 15 must accept interference from others (what we currently do every time we operate a wireless system).

However, in this new world of TVBDs, their operation is liable to occur in the very buildings where people are likely to walk in with portable TVBDs. Since the geo-location database and licensed use go hand-in-hand, expansion of Part 74 is in our best interest.

Those who must replace wireless equipment in the next few months must consider systems that operate in the several 6 MHz TV channels on either side of channel 37 (608-614 MHz), which are safe-havens from TVBDs, making Shure's UHF-R wireless mic system in its J5 band and new PSM900 wireless monitoring system in its K1 band good choices for the future.

Frequencies below TV channel 21 are off limits to mobile TVBDs, except in the 13 largest cities where they're used for mobile radio services, which makes Audio-Technica's new I band (TV 16-20) another good selection.

Eight VHF frequencies from 169-171 MHz (just below TV channel 7) can be licensed for churches, schools, hospitals and businesses under Part 90, up to 50 mW.



While VHF wireless fell out of favor long ago, it might be one of the best options going forward.

Wireless system users are frogs in the proverbial pot of warm water.

Ribbit.

The FCC's 30-day comment period ends on Valentine's Day. It is vitally important that you:

1. Visit the FCC's "Electronic Comment Filing System" home page at www.fcc.gov/cgb/ecfs
2. Click on the "Submit a Filing" link under the "ECFS Main Links" section
3. Fill out the form (Proceeding Number is 10-24) entering all the required (*) fields

My comments to the FCC are as follows:

"Dear Sir or Madam,

With regard to 10-24, I'm concerned as a professional user of wireless microphones. I own a dozen systems and often rent others for use in live concert sound.

I'm writing to encourage the FCC's expansion of licensing under Part 74 to include theaters, performing arts centers, sports facilities, churches,

educational and government institutions, which all benefit enormously from reliable wireless microphones used for public assembly.

Unlicensed use under Part 15 - cohabiting spectrum with unlicensed consumer services (TVBDs) - would be catastrophic to many live events that regularly take place.

I urge you to expand the categories of licensed use under Part 74.

Thank you,
Mark Frink."

Please use your particular circumstances to discuss this situation in YOUR comments to the FCC before Valentine's Day.

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