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re: NPRM 13-49 7/8/2014

Dear Sirs:

As a Rural area WISP owner, I thank you for providing more spectrum on the 5 ghz Part 15 band to be used to help me provide Broadband service to rural America.

After looking over some of the comments, I feel that I must comment on them and provide a voice of what is actually happening "out in the field".

1. It will be a huge benefit to WISP's like me to get the 5150-5250 Mhz band for Point to Point use. This will allow us to bring more bandwidth into the rural areas that we provide service in. I am AGAINST allowing the use of any outdoor Point to Multi-Point devices on this band, especially the Waiver requests by the Cable Industry to allow them to use their Wireless routers on this band, and to increase their power output. This could possibly cause interference to the Satellite service which is sharing this band, which a Point to Point service would not do.

2. It is time for the FCC to bring the 5 ghz band into the 21st Century, and set a date for the complete removal of all old Analog units from this band. These were originally setup to carry T1 audio circuits to remote sites, and they have now outlived their usefulness. They are now preventing use of additional spectrum on these frequencies. These old devices use the UNII-3 band (5725-5850 Mhz) with 20, 40, and 80 mhz wide bandwidth to process a single T1 (1.54 mhz), 2T1, or 4T1 circuits. There is now newer digital equipment available that will do the same thing on much smaller 5, 10, and 20 Mhz bandwidth channels. Much of this older equipment was originally used by the cellular industry as "temporary" microwave links. Many of these Analog units have become "permanent" site fixtures, and are still using "Part 15 un-licensed" frequencies to provide "primary" E911 service to some cell sites. Replacing these units with newer digital devices would allow the re-use of many of these frequencies, on this much needed, higher power, 5 ghz band.

3. As a WISP operator, we are starting to see the proliferation of 5 GHz "Dual Band" router units. Being touted as the biggest bandwidth, and highest speed router, they are starting to cause major interference on the 5 ghz band, including across the TDWR band and DFS required channels. One of the problems with these devices is the programming installed by the manufacturer. As most WiFi connected devices still only use the 2 ghz band, the "Dual band" router will transmit a signal on 5 ghz, by "Default", with nothing connected to it. What makes things even worse, under the "Default" programming, the 5 ghz. channel selection is set to an "Auto" setting. This makes the router start transmitting beacon signals, randomly across the ENTIRE 5 ghz band, looking for devices with which to connect too, and none being there. Many of these units are sold as high power, and can have up to 27 Dbm transmit power. The units do not seem to hear other "fixed" wireless that is working in the area, and do not seem to comply with DFS requirements.

The FCC can fix this problem by:

1. Requiring that these "Dual band" routers do not have the 5 ghz transmitter turned ON by "default".

2. That "ALL" Part 15 devices, do not have an "AUTO" or "Every channel" selection available for their selected transmit frequency. These devices should physically have to have the transmitting channel selected.

3. Require more testing and certification on the devices for DFS requirements, and listening before transmitting!

Thank you,

Wayne Markis
Az Airnet