

Comments on FCC Proceeding RM-11715

These Comments are filed against the Petition filed by Mimosas Networks, Inc. (Mimosas) urging the Commission to initiate a rulemaking proceeding to make spectrum in the 10.0-10.5 GHz band available for wireless broadband services.

Contrary to Mimosas beliefs, attenuation due to rain-fading effects is a serious problem in the 10-13 GHz band. I have personally witnessed an analog television STL operating in those frequency ranges that was engineered with 40 dB of fade margin totally fail when a monsoon storm passed within the 14 miles between the path of the antennas. I also witness countless times when DSS dishes lose signal completely when there are storm clouds overhead even when it isn't raining.

Consumers (especially those in rural areas) and wireless Internet service providers (WISPs) already have an ample supply of off the shelf equipment and frequencies to choose from in the 0.9, 2.4, 3.4, 5.2 and 5.8 GHz bands as well as the 3G and 4G LTE bands that multiple cellular companies are marketing. There are also a number of licensed bands and equipment available for point to point digital links.

One of the main uses of the 10.0-10.5 GHz spectrum is X-band motion detection sensors that are used at just about every grocery and department store in America. These sensors are built around a device known as a Gunnplexer, which have very little to no filtration of an incoming signal.

Imagine some poor bystander walking face first in to a glass door because it failed to open due to interference emitted from the device in their hand they are browsing the Internet on instead of watching where they are going.

This could also create an interference problem for Police radar guns, resulting in erroneous if any readings. Burglar alarms that use this type of sensor may provide false positives as well, resulting in an increased workload for law enforcement agencies.

Also Amateur Television is a key use of the 10.0-10.5 GHz spectrum. To date there is no known way to keep the digital noise generated by similar WiFi type devices out of an analog television (NTSC) signal which is still commonly used by amateurs.

It is quite evident in the 0.9, 2.4, 3.4 and 5.8 GHz amateur bands that are presently shared with data services that any co-channel or adjacent digital emissions, spread spectrum or otherwise will seriously degrade the pictures received.

Thank you for your time and I strongly urge denial of the Mimosas application.

--Matt Krick