



September 15, 2010

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: TV White Spaces  
ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

My company, Intelliwave LLC, provides fixed wireless broadband service in Appalachian Ohio. We rely primarily on unlicensed spectrum to deliver broadband services to consumers that have no other broadband choices. We built our network from scratch using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz and 5 GHz spectrum for unlicensed broadband devices. Thanks to the Commission's initiatives, consumers in the Appalachian Ohio area can now get broadband service. These services are critical to our communities as many residents may live up to 2 hours from the nearest metro area. Wireless broadband offers these rural residents access to education, healthcare, banking, entertainment and a host of other services readily available to their urban neighbors. Many of these communities suffer from severe unemployment. Broadband is the community lifeline for economic development.

Intelliwave is very interested in utilizing television white spaces so that we can both expand and improve service. Appalachian Ohio is marked by low population densities, mountainous terrain and heavy tree cover. These factors combine to make wireline investments unfeasible. Wireless services can meet part of these challenges. We are limited by the availability, propagation and penetration capabilities offered by current unlicensed spectrum. This new spectrum would allow us to reach deeper into Appalachian Ohio and offer increased bandwidth for an ever growing demand. We are committed to deploying as soon as equipment for point-to-multipoint service is commercially available.

I am pleased that the FCC will be acting on TV white space petitions for reconsideration in the near future. There are several proposals that would help us to deploy service:

First, the FCC should allow WISPs to operate using base station antennas mounted higher than 30 meters, and we should be allowed to install customer antennas (CPE) at heights below 10 meters. If we could increase our base station antenna height to 100 meters, we could cover three times more area with a base station and reduce our equipment, tower acquisition and tower lease fees by a large amount – an amount that could be the difference between deploying and not deploying in an area. We support the WISPA and Motorola proposals to increase base station

height. By removing any minimum CPE height restrictions, we would not have to put tall masts on residences and we would be able to provide service at a lower cost.

Second, we believe we should be allowed to operate with power in excess of 4 Watts EIRP in rural areas. As is the case with tower height, operating with higher power will give us a greater coverage area and we will not need to spend as much money on infrastructure.

Third, we are very concerned about a proposal made by FiberTower and others to license white space spectrum for point-to-point wireless backhaul. Not only would adopting this proposal take six channels (36 MHz) and perhaps more channels away from us, but WISPs also would have to protect these licensed links. Moreover, channels and areas far beyond the links would be blocked because the signals from the licensed links would overshoot the path and the endpoints. This is due to the low-cost, low-gain antennas FiberTower wants to use. We also would not deploy if a licensed point-to-point user could come along later and put us out of business with a licensed link. We support the views expressed by WISPA in their September 8 letter and ask the FCC to reject the FiberTower proposal.

Intelliwave, along with several other regional Ohio WISPs, was awarded stimulus funding to help construct wireless broadband networks in Appalachian Ohio. I believe that this reflects the administration's strong desire to push broadband deeper into the unserved regions of our nation. Giving WISPs the ability to harness this new spectrum will only serve to bring our nation closer to this goal.

Sincerely,

Chris Cooper  
President  
Intelliwave LLC