



December, 14 2010

Via ECFS

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

Re: *Written Ex Parte Presentation*
ET Docket Nos. 09-191 and WC Docket No. 07-52

Dear Ms. Dortch:

Our company, Tye River Farms, Inc. dba Stewart Computer Services, provides Fixed Wireless broadband service in rural central Virginia. We are excited about the prospects of fairly new radio technology approved by FCC such as MIMO and GPS synchronization. These innovations approved by FCC are making an impact on more bandwidth and reliable services. I would like to first thank you and all at the FCC for such continued progress to help us meet the growing broadband demand. Most rural WISPs, us included, rely primarily on unlicensed spectrum to deliver broadband services to consumers that have no other broadband choices but satellite and cell phone cards. Neither of these two technologies as of today meet the requirements of most homes and businesses at a fixed location. We replace these types of broadband services every single day with our superior, fixed based wireless systems. We have worked tirelessly building our network from scratch using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz, 3.65 GHz and 5 GHz spectrum for unlicensed or light licensed broadband devices. Thanks to the Commission's initiatives; consumers, businesses, and government services in the four counties of our current served territory in Virginia can now get broadband services.

As we continue to grow to serve more rural counties, we need your help to continue the same policies which have allowed the thousands of WISPs like ours to grow and survive. These policies and decisions need to help us in our most critical need, to make broadband affordable for all businesses and homes in our area. Middle mile costs, along with equipment costs, and associated labor costs, all combine to make this goal allusive, especially during the current recession. Any additional burden to our operations, and those of all America's WISPs, will directly affect further gains in providing cost effective and efficient broadband services to more people. The landscape of the Internet is exponentially changing in the coming year or two. The current move of the motion picture industry and television industry to provide content through Internet content giants such as Google and Sony has made it imperative that there be no change additional policies to add additional constraints to WISPs deployments. The current stress on costs for backhaul, and on our network resources, is going to become even more stressed with the new demands which are showing up in home Internet appliances such as IPTVs, Wii, XBOX and various IP telephony equipment coming to market at this time. We are NOW helping customers program the new IPTVs and IP appliances, something new to our support services. The bandwidth requirements are growing daily now, not monthly or yearly. Last Christmas, we had

a bump in required home services as new products hit the market Christmas morning. We had to reprogram home routers to allow more devices. This year we are expecting a rather large hill, not a bump, in broadband demand increase... and next year a mountain.

We need help to reduce costs, provide for more and cheaper wireless bandwidth, and a great need for fair priced fiber backhaul. One area the FCC can help with is in 3.65Ghz deployment. MCI, now Verizon, owned a lot of earth stations which have to give permission to any company who wants to use this frequency within 175 kilometers. They are not motivated to do so, for competitors such as rural WISPs. The WISP industry struggles to get such permission, even when an earth station is well over a hundred kilometers away, in a valley, and behind mountain ranges. I know of WISPs who have worked for nearly two years to get such permission from Verizon. Our 5.8Mhz in our rural counties is drying up for Point-to-Point usage, especially as power companies are gearing up to use this frequency for home and station monitoring. One local electric cooperative is building a 160' tower to use for just this purpose and has asked us not to use 5.8Mhz if we use their tower. The 3.65Ghz frequency was set aside for just this reason for rural WISPs, to give us a way to provide a cost effective and very efficient way to accomplish wireless backhaul. This would allow us to expand into areas no national or regional company has an interest. I have a need for many point-to-point 3.65Ghz to reach remote areas throughout the eastern Blueridge Mountains. This is an example of where the FCC can help in rural broadband provisioning, assisting the 3.65Ghz approval process where obvious conflict of interest exists which a provider such as Verizon.

I have personally been negotiating for more fiber backhaul from several sources. It has amazed me how this part of the industry has such freedom to price for profit with what seems no regulation, while we wireless providers, on the front lines of provisioning, have to sacrifice any reasonable profit and constantly worry about what new regulations will greatly effect our industry. I have negotiated for four weeks recently with two fiber providers. They have dropped from the first offer of \$180 per Mbps to \$93 per Mbps per month, while one county I served currently will be offering \$15 per Mbps. All on the same fiber lines! These prices are for Verizon and NTelos fiber trunks, who of course, are competitors to us WISP through their mobile broadband products. But we differ, we WISPs spend the money and energy with devotion to our local neighbors and communities to deliver wireless service to the homes and businesses. We do this in a way national and regional companies will not, and cannot. We wire into the structures from outside wireless radios. This is one of the main reason why WISPs of America are far better in servicing rural America. Another reason is the historical support for our industry by FCC. We need more fair play and pricing for connecting our rural wireless networks to fiber backhauls.

Stewart Computer Services is concerned that certain Network Neutrality rules, if adopted, would severely and adversely affect our ability to continue to provide our customers with affordable Fixed Wireless broadband services at a time when our demands and costs are being increased. It is our understanding that although mobile broadband will have a special set of rules, Fixed Wireless broadband will be lumped in with traditional wired services and be subject to a stricter set of rules. We feel that the Network Neutrality rules imposed on Fixed Wireless broadband should be no more rigid than the rules that will apply to mobile wireless broadband providers. The physics of wireless technology and delivery necessitate a relaxed set of rules for all wireless technologies. The simple fact that the material and labor costs to install rural homes and businesses via radios and wired entries to dwellings, necessitates a different approach to assure our joint goals of broadband deployment.

Many of the proposed rules will destroy our industry, our business and our customers?

Internet experience. We believe wireless networks, either Fixed or mobile, will be unable to operate effectively if the definition of what constitutes “reasonable” network management practices does not account for the unique obstacles faced by small businesses with congested networks, bandwidth constraints, tower and middle-mile access limitations and a lack of investment capital. **For many households in rural America, this will mean the loss of broadband services entirely at a time when the country is seeking to accomplish ubiquitous coverage.**

We need to face the reality that content delivery and demand is outpacing the technology and spectrum available to meet consumer demands, especially for Fixed Wireless networks that have limited spectrum, capacity and throughput. Many regions of our country do not have the wireline broadband infrastructure available to meet this demand. The past has proven that often times it is economically unfeasible to build new wireline infrastructure in rural areas; thus Fixed Wireless broadband is often the only economical delivery mechanism to deliver quality broadband services to those households that have been overlooked or bypassed by traditional wireline Internet providers.

It should not be taken lightly that the FCC was charged by the ARRA to write a National Broadband Plan so that all Americans could receive affordable broadband service. If the proposed rules are approved, this one action alone would cripple this goal. Why would the FCC protect one method of wireless broadband delivery and not apply the same good fortune to a similar technology that is in place and actively servicing many people and businesses today? As Fixed Wireless technology improves, and more spectrum is opened to the Fixed Wireless industry, then a more relaxed set of Network Neutrality rules may be revisited in the future, but **now is not the proper time.**

In nearly every industry in the world, flow is managed, whether it is sewer systems, hydraulic fluid, natural gas, air traffic, the highway system, or countless other systems. Flow management is essential for orderly delivery of a medium in a safe and effective process. Data is no different than anything mentioned above. Without proper management, systems will fail and the data highways will be disrupted, leaving millions of businesses and residents without service.

Companies that are building and maintaining the data highways should be able to control and manage the traffic coming in and out of their network as they see fit, in order to effectively deliver the high levels of sustained traffic that are starting to clog the Internet.

The majority of Fixed Wireless networks have been completely funded with private funds and organic growth. As Internet traffic grows exponentially, Fixed Wireless broadband providers are seeing not only their middle mile transport costs increasing but last mile transport costs increasing exponentially as well. Given the state of our current economy, we do not feel that we can pass these increased costs on to our customers. This is not a time to increase regulation in order to satisfy the consumer thirst for more content delivered to their doorstep for the same cost that they are currently paying.. The economics just do not justify it.

Our company supports the positions taken by WISPA, the Wireless Internet Service Providers Association in their Ex Parte presentation filed on December 10, 2010.

Sincerely,

Clay Stewart
CEO, Stewart Computer Services

