



DATE: March 7, 2014

TO: Federal Communications Commission (FCC) Staff

FROM: Associate Partners

RE: Expression of Interest – Rural Broadband Trials – WC Docket No. 10-90

Background

Associate Partners, under our trade name ZCorum (www.ZCorum.com), has been a provider of managed services to rural Internet providers since the mid-1990s. During this time we have assisted hundreds of companies as they have brought advanced Internet services into their rural communities, including independent cable companies, telephone companies, municipalities, and wireless Internet service providers. The managed services we provide allow these companies to offer broadband service more economically so that they can more competitively serve their communities and expand into new areas.

Technology Used

TV White Space (TVWS) are vacant frequencies made available for unlicensed use at locations where spectrum is not being utilized by a licensed service such as for television broadcasting. The spectrum is located in the VHF (54-216 MHz) and UHF (470-698 MHz) bands. Use of TVWS for broadband wireless has significant advantages over other fixed wireless technologies. The primary advantage is its propagation properties and the impact this has on customer reach and the cost to provide the service.

The lower-frequency UHF signals are non-line-of-sight, so they can follow uneven ground and penetrate obstacles such as trees and buildings without the need for tall towers and repeaters. This significantly increases the number of subscribers that can be served, especially in rural areas where trees and terrain are often an issue. In addition to greater customer reach, there is less infrastructure needed. These factors allow for high-speed Internet service where it would have been impractical otherwise and at a lower price-point to the consumer. In addition, because of reduced infrastructure, there is less impact on the environment.

Our Project

We are currently evaluating wireless equipment that uses the TV White Space spectrum the FCC has made available. Our goal is to provide broadband service in four underserved areas surrounding one of our call centers. In addition, that deployment will provide a launching point for our company to bring that technology to other communities through rural operators that we work with. This includes incumbent providers who want to expand their service area into locations that are too costly for technologies like cable, DSL or Fiber, and where traditional wireless technology is not well suited, as well as new providers that want to launch broadband service. By using specialized wireless equipment and the TV White Space spectrum, we and other operators we work with will be able to reach subscribers in areas that until now have been economically unviable for other broadband technologies.

Initial Target Areas Deployment

Census Block Group 960300 (Gordon, GA and Ivey, GA)
Census Block Group 030301 (Gray, GA)
Census Block Group 950500 (Dublin, GA)
Census Block Group 950400 (Dublin, GA)
Census Block Group 950300 (Dublin, GA)

Funding Required

The funding we seek is for our own initial deployment in the above areas. One-time funding is expected to be sufficient. To cover these areas, the equipment plus tower and installation fees is expected to be approximately \$175,000.00, with the assumption that four access points will cover Gray and Gordon each and no more than five are needed to cover the Dublin area. This cost model is a rough estimation of gear, tower, install, and bandwidth costs to get the system up and running.

Project Timeline

We have completed initial propagation studies and are currently doing field testing of wireless equipment compatible with TV White Space spectrum. Because this is a wireless deployment with no physical infrastructure needed to reach last mile, we could begin offering residential and commercial broadband service a few months after funding is received.

Pricing and Speeds

Pricing is still being determined. Because of the comparatively low cost of this technology and the ability to serve many more customers with the same infrastructure, our target pricing will be competitive with wireline alternatives currently available in the identified areas and surrounding markets. Our expectation is to offer plans with download speeds of 6, 8, and 10 mbps.