



September 8, 2010

**VIA ELECTRONIC DELIVERY**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, SW  
Room TWA325  
Washington, DC 20554

**Re: Written *Ex Parte* Presentation  
ET Docket Nos. 04-186, 02-380**

Dear Ms. Dortch:

FiberTower Corporation (“FiberTower”), Sprint Nextel Corporation (“Sprint Nextel”), the Rural Telecommunications Group, Inc. (“RTG”), and the Wireless Communications Association International (“WCAI”) (collectively, the “Coalition”) strongly encourage the Commission to take immediate action to authorize limited fixed licensed use of a limited portion of the vacant TV Bands White Spaces (“White Spaces”) channels in rural and tribal areas. Specifically, the Commission should allow limited licensing for fixed use on UHF TV Channels 21-35 and 39-51, as well as UHF TV Channels 14-20, for up to six vacant TV White Spaces channels second or greater adjacent to a TV broadcast station in rural counties. The Coalition has confirmed the availability of off-the-shelf, cost-effective equipment for all UHF TV Channels, including Channels 14-20 (470-512 MHz), and remains flexible regarding limiting fixed use to a limited percentage of any vacant available channels in rural areas.

The Coalition’s very narrow proposal, utilizing off-the-shelf equipment for the Broadcast Auxiliary Service (“BAS”), is the only practical, cost-effective long-distance wireless backhaul solution that has been identified for rural and tribal areas. Adopting the Coalition’s proposal will help address the “notable lack of competition for special access in rural areas” recognized by the U.S. Government Accountability Office in a July 2010 Report to Congress,<sup>1</sup> and the “prohibitively

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<sup>1</sup> *Enhanced Data Collection Could Help FCC Better Monitor Competition in the Wireless Industry*, Government Accountability Office Report to Congressional Requesters, 32 (July 2010).

expensive” backhaul transport costs highlighted by the Commission in the 2009 Rural Broadband Report.<sup>2</sup>

Moreover, the Commission recognized in the National Broadband Plan (“Plan”) that wireless backhaul is “critical to the deployment of wireless broadband and other wireless services.”<sup>3</sup> Backhaul infrastructure must be built before consumers can benefit from innovative new unlicensed and licensed broadband networks and devices that may be offered in the TV White Spaces. In addition, the White Spaces channels are widely available in rural and tribal areas, with approximately 15-to-45 or more vacant White Spaces channels – up to 270 MHz – laying fallow in a given rural area. Consistent with the recommendations in the Plan, therefore, the Commission should “enhance the flexibility and speed with which companies can obtain access to spectrum for use as wireless backhaul” and make the White Spaces spectrum available for wireless backhaul “where it otherwise may go unused.”<sup>4</sup>

*UHF TV Channels 14-20 would be viable for limited fixed licensed use in rural areas.* The Coalition’s proposal provides significant flexibility regarding the fixed licensed use of particular TV White Spaces channels, especially on vacant UHF TV Channels 14-20 (470-512 MHz) in rural and tribal areas. The Coalition has confirmed that limited use of these vacant channels will enable the utilization of off-the-shelf equipment that is available from multiple vendors. For example, Kathrein, Inc. offers a PR-TV series high-gain, low-weight paraflector antenna designed for use in the 470-862 MHz range, encompassing UHF TV Channels 14-20. Axcera also offers a low-power QAM transmitter for the 470-860 MHz range. Both products can accommodate 6 MHz channel bandwidths. As the Coalition has stated many times, because off-the-shelf equipment is already in use for hundreds of existing BAS fixed point-to-point links, dramatically lower cost backhaul solutions can be deployed immediately in rural and tribal areas, subject to site availability, local zoning and other typical developmental concerns. Indeed, a 75-mile or longer wireless backhaul link could be constructed at a cost of \$100,000-200,000 using two small lightweight antennas that operate on vacant UHF TV Channels 14-20, whereas covering the same distance using 3.65 GHz, 6 GHz, or higher-frequency spectrum would require up to four relay towers and a total of ten six-foot diameter dish antennas, costing \$3 million or more. In addition, the proposed limited new fixed licensed operations would protect public safety and land mobile incumbents in TV UHF Channels 14-20 against harmful interference by not operating in the presence of those incumbents.

*The Coalition’s proposal is consistent with any future TV Bands repacking effort.* Another key benefit of the Coalition’s narrow proposal is that it is largely “repacking-proof” and consistent with any TV Bands channel modification or repacking efforts because it can accommodate essentially any subsequent repacking of the broadcast TV spectrum. Although the TV Bands are congested in most urban and suburban markets (especially compared to the relatively clear bands that the Commission auctions for exclusive use), they are far less utilized in rural areas. As mentioned above, dozens of vacant channels currently exist in rural and tribal areas. For example, the rural Midas, Nevada area has approximately 47 vacant White Spaces channels, far more than

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<sup>2</sup> *Bringing Broadband to Rural America: Report on a Rural Broadband Strategy*, Federal Communications Commission, at ¶ 114 (May 22, 2009).

<sup>3</sup> See “Connecting America: The National Broadband Plan,” Federal Communications Commission, 93 (March 2010) (“Plan”).

<sup>4</sup> *Id.*

necessary to address concerns over a future repacking in that area even with limited fixed licensed use of a small portion of the vacant channels.<sup>5</sup> Likewise, there are far fewer broadcast stations, low power TV stations, and TV translators that will need to be “repacked” in rural areas. Therefore, authorizing limited new fixed licensed use of a portion of these vacant channels – no matter how they are organized – would not preclude or require waiting for any broadcast repacking or channel modification proposals. Moreover, providing for limited fixed licensed point-to-point use greatly improves spectrum efficiency by increasing the chance that there will be some utilization of the White Spaces in rural and tribal areas, especially given that off-the-shelf equipment is already available today and the need for cost-effective backhaul is particularly urgent to provide broadband service to these areas.

By adopting the Coalition’s proposal, the Commission has a unique and practical opportunity to advance its broadband and competition policy goals and encourage the deployment of wireless broadband services in “prime” spectrum, especially in rural and tribal areas.

Pursuant to Section 1.1206 of the Commission’s rules, this letter is being filed via ECFS with the Commission’s Secretary.

Sincerely,

*/s/ Joseph M. Sandri, Jr.*

Joseph M. Sandri, Jr.  
Senior Vice President,  
Government & Regulatory Affairs  
FiberTower Corporation  
1667 K Street, NW Suite 250  
Washington, D.C. 20036  
(202) 223-1028

*/s/ Trey Hanbury*

Trey Hanbury  
Director, Legal and Government Affairs  
Sprint Nextel Corporation  
2001 Edmund Halley Drive  
Reston, VA 20191  
(703) 433-8525

*/s/ Caressa D. Bennet*

Caressa D. Bennet  
General Counsel  
Rural Telecommunications Group, Inc.  
10 G Street, NE  
Suite 710  
Washington, D.C. 20002  
(202) 551-0010

*/s/ Fred B. Campbell, Jr.*

Fred B. Campbell, Jr.  
President & CEO  
Wireless Communications Association International  
1333 H Street, NW  
Suite 700 West  
Washington, D.C. 20005  
(202) 452-7823

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<sup>5</sup> See, e.g., <http://spectrumbridge.com/products-services/tv-whitespaces/single-location-search.aspx#Search>.