

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of:

Comments on Petitions Regarding)	CC Docket No. 02-06
Off-Campus Use of Existing E-rate)	WC Docket No. 10-90
Supported Connectivity)	WC Docket No. 13-184

**REPLY COMMENTS OF THE
THE GIGABIT LIBRARIES NETWORK (GLN)**

December 5, 2016

The Gigabit Libraries Network (GLN) hereby files these reply comments in strong support of the petitions to use new longer range WiFi technology, known as TV WhiteSpace, to connect students at home directly to school wireline networks; students who otherwise lack meaningful access to necessary school resources to allow their full participation in the curriculum.

The internet has enabled anytime, anywhere learning. Clinging to a pre-internet concept of a “school” or a “library” only within the walls of the building is shortsighted and disablingly restrictive. The nation’s struggling educational institutions need every advantage the country can muster to remain competitive with the very highest global standard practices. Students living in un/underserved areas of the US, sit outside of schools and libraries after hours where they rely on signals from open facility WiFi routers that extend beyond the buildings to perform required educational tasks.

In essence, both petitions propose to make wireless capability provided by the schools accessible for in-home use to promote “educational purposes” and thus satisfying statutory language. As school property, these wireless units as well as the computers they enable, are physical extensions of the school facility in the same way a school bus, a library kiosk or a library book corner at city hall should be considered on-property. They are simply nodes on local, albeit wide area, intra-networks, and are not wireless services, much less one used by the general public.

Due to complications and fund limitations of categorical eligibility for E-rate support, we allow it may be impractical for the E-rate program to fund third party connectivity services to millions of unserved student homes, but if the technology used requires no such contracts or additional fees, as in this case, not only should the school or library’s pre-existing connectivity service be leveraged in every allowable way, but the network devices should also be deemed in-facility WiFi nodes. That’s in fact what they are.

Further, expanding the use of TV White Space (TVWS) is another national priority and is another reason for the granting the Microsoft petition. TVWS technology has been affirmed in two successive 5-0 FCC votes, under both the current and prior administrations, and has the

potential to become a new open national public asset. The process of bringing this technology to market has been a priority of the FCC for over ten years. Granting the Microsoft petition will provide new and overdue market reassurance and thus reaffirm the agency's commitment to this valuable public wireless capability outside of the E-rate community.

The Gigabit Libraries Network has been leading in the exploration of TVWS to enhance and expand access to library services. GLN is part of a consortium which has been awarded grant funds from the Institute of Museum and Library Services (IMLS) for: "Libraries Leading in Digital Inclusion and Disaster Response via TV WhiteSpace Wireless Connections". The opportunities to use free open spectrum in the TV bands to enhance delivery of essential public services and to increase community resilience to crises without having to pay fees to use frequencies originating as public airwaves cannot be overlooked or delayed.

The use case for allowing TVWS, as open shared public spectrum, to support education and other public services could not be more appropriate and will provide a clear market signal that the millions of dollars and years of research and development invested to bring this vision to reality will not have been wasted. Vast amounts of unused spectrum in the TV bands exist in the most underserved areas across the US and around the world and most certainly will grow into a major market for equipment where US companies now lead.

Even further, in April Chairman Wheeler explicitly committed the FCC's support of the goal of the Global Connect Initiative, led by a partnership of the World Bank and the US State Department to bring the next 1.5 billion unconnected people around the world online by 2020. Setting the example of a robust and effective US(A)F program combined with smart spectrum policy that fully supply communications infrastructure to schools and libraries, clinics and other anchor institutions offers the most efficient path for billions of new users around the world to become consumers and producers in the global digital conversation.

We commend the leadership shown by the petitioners in enabling development of world-class communications technology and especially in its use to advance learning in America. We urge the agency to act swiftly to grant these petitions.

Don Means, Director

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