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September 4, 2018

Federal Communications Commission

445 12th Street SW

Washington, DC 20554

RE: Comments on Wireless Transition to 5g (Docket # WT 17-79 and 17-84)

The American Council of the Blind (ACB) writes with regards to the current proceedings pertaining to the expansion to 5G mobile broadband telecommunications. ACB is a leading national consumer organization comprise of 70 state and special-interest affiliates dedicated to expanding independence and securing equal opportunity for Americans who are blind and visually impaired.

In recent years, there has been much excitement over emerging technologies capable of providing greater access through innovative means for individuals who are blind and visually impaired.  Since the passage of the 21st Century Communications and Video Accessibility Act (CVAA), the mobile telecommunications industry has been completely transformed, shifting from a primarily voice-data driven industry in the early years of the smart phone revolution, to a complex global network of data driven devices-working independent of human contact. This Smart Internet of Things has not simply transformed the way we communicate but revolutionized the way we live and move through society. Public utilities, transportation networks, home appliances, and automobiles have all grown within the space allotted for mobile broadband telecommunications. And in this smart space, there has grown a greater need for increased mobile bandwidth and decreased latency between Cloud-based networks.

These advanced capabilities have allowed for creative solutions to everyday tasks for millions of Americans with disabilities. In the case of blindness and vision impairment, the ability for smart devices to augment sensory perception has created life-changing applications and devices that have made significant impact in the lives of individuals often shut out from full and equal inclusion in society. Ride share services have transformed the way people without access to traditional transit move and development in autonomous vehicles provides a promise of complete freedom of mobility for future generations. Smart wearables like Aira and OrCam, along with free mobile apps like Seeing AI and Be My Eyes provide real-time sensory augmentation, leveraging AI and human-assisted support. And the smart speaker revolution (Amazon’s Alexa, Apple’s Siri, and Google’s Home products) have revolutionized the way we communicate, access information, and control everyday activities. All of this technology would not be possible if not for the ability to push data to and from cloud-based smart devices.

ACB believes we are just at the beginning of this social transformation. However, in order to continue the progress currently underway, there is a need for increased bandwidth and decreased latency. Such improvements in the wireless telecommunications space will allow for improved reliability for current technologies and open the door for more innovative solutions that expand equal access and opportunity for people with disabilities. For instance, deployment of smaller 5G cells throughout urban environments will significantly boost the way-finding space for individuals who are blind, who rely on real-time navigation and geolocation accuracy to pinpoint location and direction when seconds and meters can make a difference. In such a space, access to cloud-based AI can provide instantaneous description of a person’s surroundings as he or she works to move freely through the space without the reliance of human aids and supports. This technology is already achievable, and with increased speed and almost zero latency, today’s tech is just the tip of the iceberg toward how such technology could be expanded.

Such a technical revolution for people who are blind places us at an exciting horizon for future growth in smart assistive technology. To this end, ACB urges the Commission to continue its commitment to the rapid expansion of high bandwidth wireless networks like 5G that will deploy such transformative technologies. ACB stands willing to work with government and industry in order to assure that our movement forward provides maximum opportunity for people with disabilities, particularly those who are blind and visually impaired who can significantly benefit from such aforementioned technologies. We look forward to any forthcoming rulings on these subsequent proceedings. Should any questions arise pertaining to these comments, please feel free to contact Anthony Stephens, ACB Director of Advocacy & Governmental Affairs, at [astephens@acb.org](mailto:astephens@acb.org) or (202) 467-5081.

Sincerely,

Anthony Stephens

Director of Advocacy & Governmental Affairs