

September 20, 2018

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

Re: Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion; WT Docket No. 17-79, WC Docket No. 17-84, GN Docket No. 17-199

Dear Ms. Dortch:

On Tuesday, September 18, 2018, Craig Wigginton, Dan Littmann, Brett Haan and Brett Olson of Deloitte Consulting LLP, and undersigned counsel conducted separate meetings with Chairman Ajit Pai and his Wireless Legal Advisor Rachael Bender, Commissioner Michael O’Rielly and his Wireless Legal Advisor Erin McGrath, Commissioner Brendan Carr and his Wireless Legal Advisor Will Adams, and Commissioner Jessica Rosenworcel and her Wireless Legal Advisor Umair Javed.

During the meeting, Deloitte noted that developments in 5G are fast advancing, and that it is critical to remain a first-mover to reap the greatest benefits. First-mover advantages in 5G will be enhanced by the value of network effects, which will be distinguished by an unlimited number of devices (and more types of devices) connecting to the Internet than ever before. To achieve global leadership in establishing 5G standards and obtaining the economic rewards that accompany that leadership, significant investment is needed to build necessary infrastructure, especially regarding small cell deployments.

Deloitte noted that, as with many technology standard evolutions, the value of being a first-mover in 5G will be significant. Being first to LTE afforded the United States macroeconomic benefits, as it became a test bed for innovative mobile, social, and streaming applications. Being first to 5G can have even greater and more sustained benefits to our national economy given the network effects associated with adding billions of devices to the 5G network, enabling machine-to-machine interactions that generates data for further utilization by vertical industries.

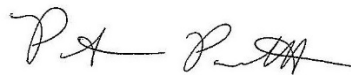
Deloitte predicted that 5G will expand the network effect dramatically by extending the reach of the Internet to almost any kind of connection, by almost any kind of device, and anywhere

a wireless signal can reach. Markets that attract the most users first will also influence further innovation as 5G networks mature and become ubiquitous. As different kinds of devices connect, new use cases will emerge for collections of devices previously considered unrelated, attracting even more investment and economic benefit.

Significant investment in new network infrastructure is needed to deploy 5G networks at-scale in the United States. 5G's speed and coverage capabilities rely on network densification, which requires the addition of towers and small cells to the network. Improved speed and capacity stem from the ability to utilize large blocks of contiguous spectrum and higher frequencies. This requires carriers to add 3 to 10 times the number of existing sites to their networks. Most of this additional infrastructure will likely be built with small cells that use lampposts, utility poles, or other structures of similar size able to host smaller, less obtrusive radios required to build a densified network.

Deloitte further remarked that in the "Race to 5G" other governments may propose government intervention, possibly in the form of subsidies or nationalized infrastructure, in an effort to improve the 5G business case for mobile operators and speed its deployment. However, Deloitte suggested the Commission instead focus on regulation that harnesses market competition and supports technology innovation, as well as measures that incent local governments to compete to adopt transparent siting practices that attract wireless broadband investment. First, the U.S. should consider establishing a light-touch policy framework to address 5G's inherent externalities that limit the value created by infrastructure investment from accruing to the carriers. Second, private sector leadership (such as negotiating attributable profits across carriers, Internet content/application providers) is preferable to government intervention in the marketplace. Third, Deloitte recommended that in addition to a light-touch framework, policymakers should actively target improvements to reduce the friction associated with deploying next generations of communication infrastructure at the state, local, and federal levels. This includes accelerated permitting processing and inventory of public sector small cell assets (lampposts, power, etc.).

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'P. Paoletta', with a stylized flourish at the end.

Patricia Paoletta
Counsel to Deloitte Consulting LLP

Cc: Rachael Bender
Erin McGrath
Will Adams
Umair Javed