## COMMSCOPE°

June 25, 2020

## **VIA ELECTRONIC MAIL**

National Telecommunications and Information Administration U.S. Department of Commerce, ATTN: Secure 5G RFC 1401 Constitution Ave., NW, Room 4725 Washington, DC 20230 secure5G@NTIA.gov

Re: Request for Public Comment on The National Strategy to Secure 5G Implementation Plan, Docket No. 200521-0144

CommScope Holdings Company, Inc. ("CommScope") hereby submits these comments in response to the above-captioned Request.<sup>1</sup> CommScope appreciates the opportunity to provide comment and assist the Administration as it develops its Implementation Plan for its National Strategy to Secure 5G, as required by the Secure 5G and Beyond Act.<sup>2</sup>

As a leading U.S.-based telecommunications infrastructure provider for both wireless and wired broadband networks, CommScope has substantial expertise in network infrastructure and is uniquely positioned to support the transition to 5G in the United States. Our portfolio includes the critical building blocks our customers need to deploy and operationalize their end-to-end 5G networks—for each and every part of those networks (enabling both mobile and fixed wireless 5G services). CommScope provides access, edge, and certain core equipment for 5G networks—from equipping macro sites with super high-speed capability, to densifying the network with metro cells for urban capacity, to providing breakthrough enhanced in-building and in-home solutions utilizing licensed, unlicensed, and shared spectrum.

<sup>&</sup>lt;sup>1</sup> National Telecommunications and Information Administration, *The National Strategy to Secure 5G Implementation Plan*, Notice; Request for Public Comment, 85 Fed. Reg. 32,016 (May 28, 2020), https://www.federalregister.gov/documents/2020/05/28/2020-11398/the-national-strategy-to-secure-5g-implementation-plan ("Request").

<sup>&</sup>lt;sup>2</sup> Secure 5G and Beyond Act of 2020, Pub. L. No. 116–129, 134 Stat. 223 (2020).

The Request raises a number of important questions, including how the U.S. government can: (1) "best facilitate the domestic rollout of 5G technologies and the development of a robust domestic 5G commercial ecosystem (e.g., equipment manufacturers, chip manufacturers, software developers, cloud providers, system integrators, network providers),"and (2) "best promote 5G vendor diversity and foster market competition?"

Open radio access networks (or "Open RAN") for 5G networks will advance these and other important objectives in the Administration's strategic plan. Open RAN will play a significant role in accelerating the rollout of 5G infrastructure by enabling 5G equipment interoperability, which will help enhance the security of these networks, increase vendor diversity, and reduce dependence on Chinese suppliers. Historically, mobile networks have been deployed using compatible radio network equipment from a single vendor as a "closed" proprietary solution. This "closed" system has led to a lack of competition among vendors, which has hindered RAN innovation and the introduction of new services and creation of new business models. Open RAN, however, is a new model where cellular radio networks are comprised of hardware and software components from multiple vendors operating over network interfaces that are truly "open and interoperable." Open RAN has the potential to accelerate the availability of 5G throughout the U.S. across various deployment models and strategies. This includes expediting small cell deployments—both outdoors and indoors—and broadening the use cases they serve, as well as 5G deployment at the macro and metro layers. Open RAN can drive innovation by encouraging the growth of an expanded supply ecosystem. It also can reduce capital costs and avoid single vendor "lock-in" through open interfaces and commodity hardware platforms.

CommScope has been at the forefront of Open RAN efforts and is committed to advancing Open RAN in the marketplace to drive innovation and bring 5G benefits faster to end users for a variety of use cases. The fundamental underpinning of Open RAN is the standardization of radio interfaces in an open manner to ensure interoperability between component radio equipment manufactured by different vendors. The O-RAN Alliance, a consortium of mobile network operators and vendor companies, has been working to standardize these interfaces. CommScope has been a contributor to the O-RAN Alliance since it was founded in February 2019. For example, CommScope has contributed to a fronthaul specification which, among other things, enables fronthaul (i.e., connectivity between the radio unit and distributed unit) over IP/Ethernet and is critical for integrating small cells into enterprise networks. AT&T, Intel, and CommScope collaborated on a "virtual" demonstration of this fronthaul interface.<sup>3</sup> CommScope has integrated this innovative solution as well as other open interfaces and virtualized RAN functions in its ONECELL<sup>™</sup> small cell product in order to provide an innovative and open approach for operators to deploy 5G networks to enterprises and venues.<sup>4</sup> In addition, CommScope is a founding member of the Open RAN Policy Coalition, which promotes policies that will advance Open RAN solutions.

Although CommScope and other industry stakeholders are making significant strides towards Open RAN solutions for 5G and next-generation wireless networks, ongoing standardization and implementation research and development must still be done. Given the critical role Open RAN can play in achieving the Administration's 5G vision, the Implementation Plan should expressly support Open RAN solutions and incorporate other concrete steps to advance these initiatives, such as by allocating federal funds for Open RAN research and development and by encouraging federal agencies to foster the deployment of open and interoperable 5G networks in their various pilot programs and procurement guidelines.

CommScope welcomes additional opportunities to work collaboratively with the Administration on its 5G Strategy and Implementation Plan.

Sincerely,

/s/ Jason E. Friedrich

Jason E. Friedrich Vice President Government & Regulatory Affairs CommScope

<sup>&</sup>lt;sup>3</sup> See O-RAN Alliance, Virtual Exhibitions, <u>https://www.virtualexhibition.o-</u> <u>ran.org/classic/generation/2020/category/open-ran-demonstrations/sub/open-interface/11</u> (last visited June 25, 2020). A live demonstration was initially planned for this year's Mobile World Congress.

<sup>&</sup>lt;sup>4</sup> See Press Release, CommScope, CommScope Delivers Open Interfaces and Virtualization for Small Cells Maximizing the Benefits of 5G for Enterprises (Feb. 19, 2020), <u>https://www.commscope.com/press-</u> <u>releases/2020/commscope-delivers-open-interfaces-and-virtualization-for-small-cells-maximizing-the-</u> <u>benefits-of-5g-for-enterprises/</u>.