

**Before the  
National Telecommunications and Information Administration  
United States Department of Commerce  
Washington, DC 20230**

*In the Matter of*

**REQUEST FOR COMMENTS ON CONNECTING  
THE UNCONNECTED WORLDWIDE IN LIGHT OF  
THE ITU'S WTDC-21**

Docket No. 210503-0097  
RIN 0660-XC050

To: Office of International Affairs (OIA),  
National Telecommunications and Information Administration  
U.S. Department of Commerce

**COMMENTS OF SPACE EXPLORATION HOLDINGS, LLC**

Space Exploration Holdings, LLC (“SpaceX”) hereby submits the following comments in response to the National Telecommunications and Information Administration’s (“NTIA”) Notice and Request for Public Comment (“Notice”) seeking input on “activities, priorities, and policies that advance telecommunications and information and communications technology (ICT) development worldwide,” including for NTIA’s preparations for the “International Telecommunication Union’s (ITU) World Telecommunication Development Conference (WTDC-21 or Conference).”<sup>1</sup>

SpaceX is committed to the task of connecting the unconnected. We therefore strongly support the U.S. objectives for the WTDC-21 conference and in the Development Sector of the

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<sup>1</sup> U.S. Dep’t of Commerce, National Telecommunications and Information Administration, Notice and Request for Public Comment, *Telecommunications/ICT Development Activities, Priorities and Policies to Connect the Unconnected Worldwide in Light of the 2021 International Telecommunication Union (ITU) World Telecommunication Development Conference (WTDC-21)*, Docket No. 210503-0097, RIN 0660-XC050, 86 Fed. Reg. 24,391, 24,391 (May 6, 2021) (“Notice”).

ITU (“ITU-D”) to “[i]mprove global ICT connectivity and affordability to reach everyone”; to “[r]educer the global digital divide and promote inclusion”; to “[d]emonstrate U.S. leadership in connecting the unconnected nationally, regionally, and globally”; and to “promote new business models and forms of partnership to connect the unconnected with affordable broadband services.”<sup>2</sup> Reaching the unconnected presents significant and well-documented challenges, particularly in rural and remote areas where geographical features or low population density increase the costs of providing reliable service. But we are taking unprecedented steps to overcome these challenges, both in the U.S. and around the planet. We submit these comments to request that NTIA champion positions before the ITU that support efforts by space-based communications innovators to expand broadband availability.

Starlink is a high-speed, low-latency satellite broadband network. It uses non-geostationary orbit (“NGSO”) satellites to provide service across a large geographic footprint—including many locations terrestrial providers view as too difficult and expensive to serve. SpaceX has launched over 1,700 satellites to date, is building and launching 120 more satellites every month, and already is providing broadband service to tens of thousands of customers in the U.S. and Canada, proving that NGSO systems like Starlink are an important means of addressing the most difficult portions of the digital divide.

SpaceX’s initial service started in North America, where it provides high-speed broadband to many rural and underserved communities, as well as consumers in urban areas. For example, SpaceX successfully worked with the Hoh Tribe, on the coast of Washington, to introduce Starlink access to their community, helping the Hoh access online education, telehealth, and other

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<sup>2</sup> *Id.* at 24,392.

important resources.<sup>3</sup> Furthermore, the Nooksack Tribe recently installed Starlink equipment to provide high-speed internet to the community, allowing tribe members to “connect to the internet at 190 Mbps.”<sup>4</sup>

Starlink’s development and success offer an important path forward toward successfully addressing digital divides and improving ICT connectivity for underserved or unconnected areas.<sup>5</sup> SpaceX is already expanding its operations beyond the United States and Canada to other countries and regions, including exploring, for example, India, Nigeria, and Chile. Innovative and flexible offerings like Starlink can reach communities without the cost and difficulty that limit the so-called “last mile” of connectivity efforts that many other providers face. Connecting those communities so that they can access global resources and use communications technologies to advance local needs, based on their unique understanding of community priorities, is one of the best ways to promote opportunity.

NTIA should champion forward-looking policies at the ITU that support the innovation needed to make real progress and overcome the obstacles that have stifled progress in the past. New NGSO deployments are developing rapidly, but their success depends upon the availability of spectrum and the approval of local regulatory authorities for local service offerings and the installation of ground-based facilities to receive and distribute connections. NTIA therefore should adopt the position that the 10.7-12.7 GHz, 14.0-14.5 GHz, 17.8-19.3 GHz, and 27.5-30.0 GHz frequency ranges for NGSO systems are important to further the ITU-D’s objective of bridging

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<sup>3</sup> See, e.g., Jon Brodtkin, *Remote tribe says SpaceX Starlink “catapulted” them into 21st century*, Ars Technica (Oct. 12, 2020, 1:05 PM), <https://arstechnica.com/information-technology/2020/10/remote-tribe-says-spacex-starlink-catapulted-them-into-21st-century/>.

<sup>4</sup> Jade, *Nooksack Partners with SpaceX’s Starlink Program for Broadband on Tribal Lands*, Nooksack Indian Tribe (Mar. 25, 2021), <https://nooksacktribe.org/it/2021/nooksack-partners-with-spacexs-starlink-program-for-broadband-on-tribal-lands/>.

<sup>5</sup> See Notice at 24,392.

the global digital divide. U.S. advocacy on the importance of reliable access to these bands, without the threat of harmful interference, will support SpaceX and other NGSO operators as we engage with decisionmakers in multilateral settings and with individual regulators on spectrum policy matters. Furthermore, we request that NTIA promote general recognition of the promise of next-generation satellite broadband networks to advancing the goals of WTDC-21 and specific recognition of the value of individual countries approving new NGSO service offerings and earth station deployment to allow their citizens to benefit from broadband service.

Starlink has demonstrated that innovation and investment in NGSO networks will bring high-speed broadband access to areas and communities in the United States and Canada where it has not previously been accessible or affordable. SpaceX is excited to continue that progress in countries around the world. We hope that NTIA will support these efforts, and thereby advance its ITU-D goals, at WTDC-21. We are ready and willing to discuss these topics further as NTIA prepares for WTDC-21.

Respectfully submitted,

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