Before the
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
DEPARTMENT OF COMMERCE
Washington, D.C. 20230

In the Matter of	)	
INPUT ON PROPOSALS AND POSITIONS FOR THE 2020 WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY	)	Docket No. 200504–0126

COMMENTS OF SPACE EXPLORATION TECHNOLOGIES CORP.

Space Exploration Technologies Corp. (, "SpaceX"), submits these comments in response to the Department of Commerce National Telecommunications and Information Administration's ("NTIA") request for comments to inform the development of NTIA's proposals and positions for World Telecommunication Standardization Assembly ("WTSA")–2020. SpaceX supports NTIA's efforts to ensure the ITU–Telecommunication Standardization Sector's ("ITU-T") emphasis remains on technical and standardization matters consistent with its mandate and expertise. SpaceX also urges NTIA to recognize the value next-generation satellite broadband systems can bring for consumers by ensuring their interests are protected at the ITU-T. SpaceX looks forward to working with NTIA as it takes a more active role in developing ITU-T Recommendations.

SpaceX is leveraging its experience in building launch vehicles and spacecraft to create, deploy, and operate the Starlink network: an innovative, cost-effective, and spectrum-efficient non-geostationary orbit ("NGSO") satellite system capable of delivering high-quality broadband

service—at competitive speeds and latencies—anywhere on the planet. Because the network will operate at lower orbits, far closer to Earth than traditional satellite systems operating at geostationary orbit ("GSO") altitudes, Starlink will deliver low-latency broadband service—below many terrestrial services and well below the Federal Communications Commission's 100-millisecond threshold for low-latency services. With performance on par with terrestrial service offered in urban areas, Starlink is uniquely positioned to deliver high-quality broadband service to the hardest-to-reach rural Americans, for whom access has for too long been unreliable, prohibitively expensive, or completely unavailable. SpaceX will begin to offer its Starlink broadband service for consumers by the end of 2020.

I. ITU-T PROCESSES AND PROCEDURES SHOULD FOCUS ON STANDARDS ISSUES, NOT POLICY

SpaceX supports NTIA's efforts to limit expansion of ITU-T processes and procedures beyond technical issues. Technical standards are a critical component to the development and deployment of new technologies that can better connect and serve consumers around the globe. These standards ensure that new innovations are cost effective and accessible to all. The ITU-T is an important element in accomplishing this important goal.

But while the ITU-T is well suited to developing and supporting technical standards, its processes are not designed to achieve the same consensus-driven results required for policy and regulatory issues. As NTIA notes, the ITU–T study groups adopt recommendations in their entirety, without extensive debate or peer review. This approach may be optimal for technical issues that must work together to be effective, but the best policy results are attained through extensive, collaborative, and transparent processes that reach consensus through compromise. The take-it-or-leave-it approach in the ITU-T study groups can lead to ill-considered results

poorly tailored for multi-faceted and complex policy issues. Instead, policy and regulatory issues should be addressed through the more transparent ITU-Radiocommunications Sector ("ITU-R").

But beyond just incongruity of the process, consideration of similar issues in multiple ITU sectors can lead to conflicting and confusing policies. Moreover, parallel processes in multiple ITU sectors encourages harmful gamesmanship and forum shopping. Parties with unpopular positions that are unable to gain support through the ITU-R process may seek to use the various ITU-T focus groups to short-circuit the well-established process that make the ITU-R successful.

SpaceX supports NTIA's efforts to seek to improve ITU-T's procedures and limit duplication of issues better resolved through the ITU-R. NTIA should consider proposing processes through which ITU-R and ITU-T can clearly communicate the issues each sector is addressing to eliminate costly and confusing overlap. As part of this process, all policy and regulatory issues must remain exclusively within the purview of the ITU-R.

II. RESILIENT, SECURE, AND DIVERSE SUPPLY CHAINS ARE VITAL FOR 5G—AS WELL AS OTHER TECHNOLOGIES LIKE NEXT-GENERATION SATELLITE SYSTEMS

Next-generation broadband networks will bring high-throughput, low-latency services to consumers around the globe. SpaceX encourages NTIA to take every step necessary to ensure these networks and their supply chains are secure. But these efforts cannot be limited to 5G networks. In fact, because next-generation satellite systems operate globally, ensuring worldwide security standards is essential.

The development of technical security standards should be led by private industry. Telecommunications technology—especially innovations driving next-generation satellite

systems—is developing at a breathtaking pace. The launch services industry has undergone a revolution over the past decade, enabling the development and deployment of innovative communications networks in space. Satellite constellations already in orbit today were unimaginable just a few years ago. By its nature, this rapid development in the private sector can far outstrip the ability of international bodies that meet in four year cycles to keep pace.

Nonetheless, SpaceX agrees that the ITU-T should have an important, if limited, role in developing recommendations that can support telecommunications security. The ITU-T can develop recommendations that help ensure that supply chains remain secure, even when they have global reach. For example, ITU-T can develop recommendations to globally harmonize standards being developed in regional standards development organizations. While the ITU-T should allow the private sector drive standards setting, it can still play an important support role in supply chain and cybersecurity.

III. CONCLUSION

The Administrations is correct to consider whether it should take a more active role in the ITU-T. Each ITU sector has an important role and can help drive the development of improved service for people around the world. But these sectors can only work if they have a defined mission, avoid duplication, and remain transparent and inclusive. The ITU-T in particular is most effective when it remains focused on making recommendations about technical standards and refrains from working on policy and regulatory matters that are better handled in the ITU-R.

While issues related to the development of 5G, such as cybersecurity and supply chain security, are important, the US should also make sure it considers the effects on other technologies, such as next-generation satellite systems. These new systems have the potential to

bring true high-throughput, low-latency broadband to unserved people across America and around the world.

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