

Written Testimony of

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Subcommittee on Communications and Technology**

“Liftoff: Unleashing Innovation in Satellite Communications Technology”

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Good morning Chairman Latta, Chairwoman Rodgers, Ranking Member Matsui, Ranking Member Pallone, and members of the Subcommittee. On behalf of Assistant Secretary Alan Davidson, thank you for the opportunity to testify about the National Telecommunications and Information Administration’s (NTIA) work on satellite issues. My name is Charles Glass. I serve as the Chief of the International Spectrum Policy Division in NTIA’s Office of Spectrum Management (OSM) and have been in that role for the past eight years. After briefly highlighting NTIA and Department of Commerce space interests, I am going to provide some background on NTIA’s spectrum management role and then discuss some specifics of how we do our job.

NTIA has several roles with respect to how our nation utilizes spectrum resources, including those used by space-based systems such as satellites. First, NTIA is the principal advisor to the President on telecommunications and information policies. Second, we directly manage the use of spectrum by federal agencies. In addition, NTIA maintains a research and testing lab, the Institute for Telecommunication Sciences, in Boulder, Colorado, which provides critical theoretical and real-world knowledge on spectrum engineering.

NTIA is, of course, part of the Department of Commerce, so we strive to ensure that spectrum resources are maximized for the growth and vitality of our nation’s economy. One of the Department’s key strategic goals is to advance U.S. leadership in the global commercial space industry. Several other parts of the Commerce Department also are actively engaged in this effort.

The space economy is a strong growth sector of the U.S. economy. The Administration views space as a source of American innovation, opportunity, leadership, and strength and has made it a priority to foster a policy and regulatory environment that enables a competitive and burgeoning U.S. commercial space sector. NTIA is committed to supporting this growth through improving our own federal processes and, in coordination with the Federal Communications Commission (FCC), to support space commerce.

NTIA works to ensure that sufficient spectrum is accessible for U.S. companies to pioneer and lead in their global space-based industries. As NTIA is well aware, space is an area where there is a strong mutually beneficial relationship between the federal government and American industry.

NTIA works with federal agencies to support their growing spectrum access requirements for their vital national security, weather forecasting, space exploration, radio astronomy, and other missions, while balancing the need for increased spectrum access for commercial activities. For satellite systems this is accomplished through domestic efforts in concert with the FCC in their rulemaking and licensing efforts which are coordinated with NTIA under our Memorandum of Understanding. Internationally, NTIA leads, files, and coordinates federal satellite authorizations and registrations while working with the FCC to ensure maximum access to spectrum for commercial activities.

NTIA is also committed to protecting critical infrastructure, including satellites, from malignant actors that pose a threat to our security. NTIA supports the Department in its role of enhancing cybersecurity awareness and protections, maintaining public safety, and supporting economic and national security.

Now for an overview of our spectrum management operations.

For federal systems, OSM has a process for reviewing and certifying the spectrum supportability for a proposed system. This certification process typically has a number of stages, from conceptual through operational, as these systems take years to design and build and the relevant parameters may change over time. We also have a separate but related process for assigning specific frequencies to each federal system. All of this is spelled out in the Manual of Regulations and Procedures for Federal Radio Frequency Management (NTIA Manual), usually referred to as the “Redbook” within the spectrum management community. As a result of these efforts, we process roughly two hundred certifications for federal agencies every year and make nearly one hundred thousand frequency assignments to the agencies.

NTIA also is responsible for coordinating federal satellite filings internationally and with foreign administrations to ensure protection of our existing satellite systems. The international filing process is conducted in coordination with the FCC which transmits all satellite filings to the International Telecommunication Union (ITU). NTIA also leads U.S. engagement in bilateral discussions with foreign administrations for coordination of our federal satellite systems with new foreign satellite systems. The ITU publishes a quarterly report of satellite systems being registered, and NTIA works with the federal agencies to identify any foreign systems with which coordination will be required.

We have an equally important role in connection with the coordination of non-federal systems that either share spectrum with federal systems or operate using nearby frequencies that may receive interference from what’s called “out-of-band” emissions. Our goal in these cases is to balance protecting critical federal operations, promoting spectrum efficiency, and supporting commercial development. OSM coordinates either directly with the FCC or, at times, with the system proponents themselves. We also work closely with the FCC through our longstanding

interagency processes. Notably, NTIA and the FCC recently agreed to an updated Memorandum of Understanding that is enhancing our coordination in a number of important ways.

NTIA has an important role in preparing for each World Radiocommunication Conference (WRC) which takes place typically every four years. The WRC is an international forum for world agreement on the use of the radio-frequency spectrum and the geostationary-satellite and non-geostationary-satellite orbits. The next WRC is scheduled for later this year in Dubai. NTIA has an Interdepartmental Radio Advisory Committee (IRAC) subcommittee dedicated to development of federal views and proposals for each WRC agenda item. Each of these agenda items is tied to specific studies for introduction of new technologies or review of current regulations to improve them. NTIA strives to ensure that there is a balance between protection of existing operations and introduction of new technologies that will further spur economic growth and support federal missions. NTIA coordinates and reconciles federal views and proposals with the FCC and the U.S. Department of State to ultimately develop U.S. views and proposals that account for all U.S. spectrum stakeholders.

Thank you for the opportunity to testify today. I look forward to answering any questions you may have regarding NTIA's work on satellite issues.