

Questions for the Record Responses

From: Peter Davidson, Vice President of Global Government Affairs & Policy, Intelsat before the United States House of Representatives Energy and Commerce Committee Subcommittee on Communications and Technology

Re: Legislative Hearing: "Liftoff: Unleashing Innovation in Satellite Communications

Technologies."

March 14th, 2023

Chair Cathy McMorris Rodgers

What role does U.S. spectrum policy and satellite licensing play in maintaining U.S. leadership at the international level in the space economy?

Spectrum is the foundation of the space economy. Access to adequate spectrum for satellite enables critical services for U.S. national security and commerce. It also is imperative for innovative—both on-orbit and for satellite applications such as geospatial analytics for agriculture and climate, integrated 5G communications networks, and remote healthcare and educational opportunities. Thousands of new satellites will be launched in the next few years, most of which will provide a wide array of services to customers; but continued growth in the space sector is reliant on adequate spectrum availability for operations. It is the role of the U.S. government to explore new opportunities to deploy spectrum for commercial uses and to ensure equitable access to spectrum for the space commerce sector.

There is *absolutely* a space race going on between China and the United States and its democratic allies. For the United States to continue leading in the arena of space commerce, Congress must make sure that the satellite industry has access to enough spectrum to support current and future commercial services. It is imperative for the United States to lead the way in ensuring adequate access to spectrum for satellites. It is critical that U.S. policy makers and the private sector work together to craft spectrum policy that maximizes U.S. competitive advantage internationally.

Additionally, we applaud the Committee's attention to satellite licensing's role in promoting innovation. As the demand satellite services continue grow, so does the imperative for cooperative engagement between industry and government to find the right balance between accelerating the Federal Communications Commission (FCC) license approval processes and preventing harmful interference. The SAT Act provides an opportunity for the United States to refresh the application process by eliminating processing inefficiencies and eliminating the processing round system for non-geostationary orbit satellites. We at Intelsat believe that the SAT Act recognizes both the needs of incumbent operators and new entrants, and we look forward to working with Congress as this legislation moves forward. We also believe that the United States can provide a model for the rest of the world in terms of balancing the interests of licensing speed with interference protection.

In conclusion, equitable access to spectrum and streamlining the FCC application process together with promoting U.S. leadership in international policy making bodies are critical in advancing the benefits of space commerce to Americans and people around the world.

The Honorable Rick Allen

We've learned there's a lot of satellites up there, and we know that technology is changing and updating by the hour. Do some of those satellites need to come down, and we need to put new ones up there? What is the program in place for recycling everything up there [in space]?

There are currently roughly about 32,750 objects—a combination of active spacecrafts, decommissioned spacecrafts, and organic and inorganic debris—currently tracked and catalogued by the Department of Defense's Combined Force Space Component Command (CSpOC). Given the increased interest in space, this number will increase as the industry continues expands. While estimates vary, it is likely that tens of thousands of satellites will be launched into space in the next decade, with the vast majority of those going into Low Earth Orbit (LEO).

This increased interest in and use of space, particularly LEO, has not gone unnoticed. Last fall, the Federal Communications Commission (FCC) adopted new rules requiring certain lower-LEO missions to complete disposal as soon as practicable following end of mission, but no later five year post mission. But this rule only applies to FCC-authorized satellites and systems—not NTIA authorized missions or foreign-licensed satellites/systems without market access. More needs to be done to minimize congestion and its corresponding interference, especially in LEO.

Additionally, it is imperative that current regulations and rules keep pace with innovation in the sector. This means ensuring rules are flexible enough to permit new developments of on-orbit services and promoting satellite disposal processes that are economically sustainable. This should also include promoting mission extension and rendezvous operations in order to sustain the satellites that are already in orbit as well. Intelsat has more than 50 years of experience safely deploying, operating, and retiring communications satellites in geostationary orbit (GEO), as part of its mission to connect people, businesses and communities around the world. We were able to demonstrate that in 2020 when Intelsat took part in an historic first when Intelsat 901 docked with Northrup Grumman's first Mission Extension Vehicle (MEV-1). This in-space maneuver was the first time that mission extension services were offered to a satellite in the GEO orbit. As a result, we were able to extend the life of Intelsat 901 for another five years. As demonstrated through our mission, there are many players that can contribute to the space situational awareness effort. Life extension vehicles are just one example of how we can work together to ensure there is equitable access to space. This is why legislation such as the SAT Act encourages new entrants to put space sustainability front of mind by codifying requirements for orbital debris removal.

Intelsat continues to collaborate with partners across industry and government to ensure that safe and equitable access to space. We support a stable and modern regulatory and policy backdrop supporting space sustainability as it is essential to enable expansion and innovation in the space commerce area. We appreciate the interest of Congress in space sustainability and look forward to the future collaboration on this very important topic.