

The Honorable Earl L. "Buddy" Carter

- 1. In your opinion, what is and isn't working for other countries with respect to licensing? How have other countries adapted their regulatory processes based on recent advancements in the satellite industry?
- 2. How should potential incentives be aligned to balance speed and innovation with the need to provide certainty and protection to satellite systems?



Response to 02.02.23 C&T Subcommittee Hearing

Margo R. Deckard Co-Founder and Chief Operating Officer Lynk Global, Inc.

1. In your opinion, what is and isn't working for other countries with respect to licensing? How have other countries adapted their regulatory processes based on recent advancements in the satellite industry?

The United States is a world leader in setting the standard for responsible licensing. The licensing process once matched the makeup of space industry. Old Space companies would take years to build and deploy a few expensive satellites. However, New Space companies –like Lynk Global—have forever changed the cadence at which satellites are designed, built, and launched.

Countries that want to maintain their leadership in space must meet this new paradigm with affordable, responsible, and fast licensing processes. Licensing fees, bonds, and time to process licenses may create barriers for small innovative companies. Transparent licensing processes benefit both Old Space and New Space companies.

Policy makers around the world have committed to connecting their disconnected populations and building resilient infrastructure. Digital poverty is growing and affordable connectivity that supports the device a person has or can afford is key to closing the gap. Island nations and vulnerable geographies look to satellite technology to solve resiliency challenges and disaster preparedness.

Regulators around the world are meeting satellite direct-to-phone where it is and allowing mobile operators with terrestrial spectrum to partner with satellite providers to fill in their coverage gaps, extend their coverage, and provide their network resiliency with no additional or special licensing requirements.

With the rise of large constellations, other countries are taking serious consideration of space safety and sustainability in ways they haven't before. This includes minimizing debris creation, post-mission on-orbit lifetime reductions, and refusal to license systems that do not meet basic standards.

These basic standards include closing the forum shopping loophole for companies who look to register in countries who do not protect against the risk of orbital debris and a potential "Kessler Effect". The foundation of international space law is called the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other



Celestial Bodies" and the follow-on "Convention on Registration of Objects Launched into Outer Space" & "Convention on International Liability for Damage Caused by Space Objects". These form the foundation for commerce in space and require that every commercial satellite company be registered by a country that has signed both the Registration & Liability conventions. If one company's satellites damage other satellites in orbit, or cause damage here on Earth, the country that registered those satellites is liable.

Since space is a "commons" creating economic incentives is fundamental to free-market approaches to appropriately using the commons. These laws, which were created with American leadership, create an economic incentive for countries to manage orbital debris risks.

However, this economic system does not work if a company forum shops and registers with a country which has not signed the Registration & Liability conventions. A country not bound by treaty to pay for damages caused by that satellite has no incentive to build any rigor into their regulatory and licensing processes. Forum shopping is happening today. The Federal Communications Commission should play an important role in shutting down forum shopping by preventing market access in the United States to bad actor satellite firms, and by encouraging the regulators of America's allies and the ITU to do the same.

Lastly, China is pressing forward to launch objects solely to ensure Chinese access to Low Earth Orbits. By filling these orbital slots, U.S. access is limited. It is vital the United States government support American innovation by ensuring an affordable, timely, and transparent regulatory process.



2. How should potential incentives be aligned to balance speed and innovation with the need to provide certainty and protection to satellite systems?

United States (US) policymakers should adopt a regulatory approach that matches American ingenuity. The Small Sat process, for example, was designed to cut the red tape of the traditional Part 25 to increase the speed for licensing for satellite systems that pose a lower risk so that early-stage innovative companies don't die in a regulatory Valley of Death.

The Small Sat process is innovation in regulation that acknowledges that some satellite proposals are risker than others. It was designed to rapidly achieve commercial service for U.S. Space companies that pose limited risk. The authorization is limited in number—just 10 satellites, is limited in lifetime—just 6 years, and is limited in size—each satellite has to be below 180 kgs.

Lynk is very encouraged by the FCC's focus on the satellite-direct-to-phone category and the imperative to maintain U.S. leadership in space across a breadth of technologies. The U.S. must set the norms for space, and commercial activities are key to accomplishing that.

By operating from the perspective that real world data can inform a larger deployment and integration of groundbreaking technologies, the FCC can responsibly license new technologies and pass the risk onto companies. By allowing companies to take on calculated and smaller risks, the FCC can condition a license so that a company's operations can be paused at any point should something unexpected happen. Investors want speed to market and will take that risk to get to revenue faster.