



Statement of

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Good morning, Chair McMorris Rodgers, Ranking Member Pallone, Chairman Latta, Ranking Member Matsui and members of the House Communications and Technology Subcommittee.

Thank you for the opportunity to join this conversation.

Introduction

My name is Margo Deckard, and I am a Co-founder and Chief Operating Officer of Lynk Global, a New Space company on a mission to connect everyone everywhere in the world – because nobody should die because they have a mobile phone that is not connected.

I am a systems engineer and retired first responder and have spent the past three decades working in the humanitarian, space, and defense sectors. I am going to share with you Lynk's story because not only are we at the forefront of creating the technology that powers satellite direct to phone service, but because Lynk's experience highlights the New Space revolution and the important role the U.S. government can play to support this kind of innovation for the benefit of American consumers, American competitiveness, and our national security.

The Lynk Origin Story

Lynk was formally created in 2017. Our business was born from work I did during the 2014 Ebola Pandemic Crisis Response in Liberia and Sierra Leone. I was tasked to evaluate the use of BGAN satellite terminals that were deployed to forward field hospitals in response to the pandemic. While analyzing BGAN usage data, I noticed that, even though the terminals had video capabilities and other advanced features, most of these terminals were only used for texting.

Think about the life saving information that can be conveyed in a text—infection rates, fatalities, supply requests. Think about the time saved if a team can simply grab their mobile phones and their “go” bags and respond to the crisis. It was very clear to me that if we could solve the terminal problem that we would revolutionize emergency and disaster response. The terminal has to be the one already in everyone’s pocket—the one they can afford. Lynk has connected everything from \$5 feature phones to the top-of-the-line smart phones.

With this insight, my fellow co-founders and I decided to focus on developing a communications system that would allow the existing phone in your pocket to work anywhere in the world. This technology is a game changer for emergency and disaster response. It is key to building resilient communities and it can start with texting. To solve this problem, we designed what we call “cell towers in space” to connect with the device already in your pocket.

Building Lynk

Like many New Space companies, Lynk is fundamentally different than Old Space companies. We are leaner and more agile. In fact, our first payload went from a drawing on a napkin to flying in space in 6 months. Today, we can assemble a satellite in about 2 weeks, and build and launch a new generation of satellite every 6-9 months. Our mission— to connect everyone, everywhere, no matter what — is built into our corporate DNA. Lynk is championing what we call Everyone Everywhere Emergency (EEE) service and planning with U.S. federal agencies and international non-governmental organizations on how to connect and help people everywhere.



Today, Lynk is the only patented, proven, and commercially licensed satellite-direct-to-standard-phone system in the world. As of January 3rd, we have 3 commercial cell towers in space including the world's first 5G enabled payload. Lynk has signed 26 commercial contracts to date, valued at over \$2.5 billion, to provide coverage in 41 countries. We plan to begin international commercial service in April. Our initial service will be text messaging, but as we build out our constellation, we will support broadband services everywhere directly to standard phones. In the near future, everything you can do on your phone from a ground-based cell tower will be enabled from a space-based cell tower.

We are an American company. We are proud that the fundamental technology for connecting satellites directly to standard, unmodified mobile phones was invented and patented here in America--right down the road in Falls Church, Virginia. Lynk has now proven the technology in the lab, in the field, and to and from space. As we work to integrate our system with our Mobile Network Operator (MNO) partners, our satellites are connecting thousands of standard phones every day in 18 countries on all 7 continents. In December, we connected the first standard mobile phone in Antarctica.

We are also proud that in September 2022, Lynk received the world's first, and only, commercial license for satellite-direct-to-standard-phone service. Because we wanted to ensure we met a rigorous standard of review, we did it through an American regulatory agency, the Federal Communications Commission (FCC).

How Lynk Works: A Non-Technical Overview

Lynk works by partnering with MNOs interested in providing the most ubiquitous and resilient coverage to their customers. Simply put, the MNOs provide radio spectrum and customers—and we bring space-based infrastructure to fill in any coverage gaps, extend coverage, and provide instant backup coverage in the case of an outage due to natural or other disasters. We do this by placing the terrestrial base station software used on every cell tower onto our small



satellites in Low Earth Orbit and solving for doppler shift, because the cell tower is moving quickly relative to the phone, and solving for extended range time delay, because the cell tower is 500 km from you instead of 35 km—this is our patented secret sauce. Your phone actually thinks that our satellite-cell-towers are on the ground about ten kilometers away because of our solution. When a customer is outside of terrestrial coverage, they seamlessly roam onto our network without any changes to their phone. No changes to the phone’s hardware or software.

American MNOs have built out their networks to cover vast portions of the United States. Yet, even the most robust mobile networks cannot cover every square inch of our country. It is an economics problem — it is simply not affordable to extend coverage everywhere with ground-based cell towers. There are many remote parts of the United States that do not have adequate coverage, including massive wilderness areas. Globally, billions of people live and work in rural and remote communities that are disconnected.

Solving digital poverty for the United States and the world will take space and the emerging revolution in satellite technology.

The Promise of Direct to Standard Phone Service

With satellite-direct-to-standard phone technology, the era of the disconnected is coming to an end. New Space satellite technology has now solved what was previously considered an intractable economic problem. Our technology allows the Lynk network to provide mobile coverage in remote and rural areas at 4 orders of magnitude lower operating costs than the ground network.

In addition to reaching the unconnected, our technology serves the public interest in other critical ways. Most notably, our cell towers in space are impervious to fires, floods, hurricanes, tsunamis, earthquakes, volcanos, and other disasters that impact networks on earth. Lynk’s service acts as an automatic instantaneous backup to the ground network. Deploying temporary cell towers on wheels in response to a disaster will be a thing of the past.

Billions of people around the world do not have access to affordable broadband, and more than one billion people do not have access to any affordable connectivity. The digital divide is growing in the 21st century. People without connectivity cannot participate in our global society and economy. Using New Space technology, America will help pull people out of poverty. Our service is designed to reach everywhere on the surface of the Earth. It will be backwards compatible with every mobile phone or cellular device made. Of course, some nations will not allow our service — or any connectivity that they themselves cannot completely control. In those situations, politics, not technology or economics, will keep people disconnected.

American Innovators Need Support from U.S. Regulators and Legislators

We are an American company— we invented and built this breakthrough technology here in the United States.

Although we have a solid business path and proven technology, American companies like Lynk need a responsive and timely regulatory process to succeed and to help maintain American leadership in space and communications technology. Many countries in the world have adopted a strategy of copying and stealing American technology — we see it happen again and again.

Satellite direct to the handset is now a category, with significant national security benefits. The United States must own the satellite-direct-to-phone category.

Supporting the New Space companies, protecting their intellectual property and speed to market is critical for American leadership because foreign governments will not slow down their companies.

We can end digital poverty on a global scale with this technology. Just as the printing press brought knowledge to the masses, connectivity empowers the individual. Affordable universal

connectivity provides quality of life, education, time-saving productivity enhancements, access to the global economy, and resiliency.

EEE service will save lives everywhere it can be implemented. The self-organization that occurs in the immediate aftermath of a disaster is critical to saving lives. Your own actions are critical to saving your own life. Every day I think about the Gerrish Chung family that perished in the Sierra National Forest. Jonathan and Ellen along with their baby girl and dog succumbed to heat exhaustion with texts for help queued up in their phones. Communications is the most critical part in the chain of survival. The American public enjoys one of the best emergency response systems in the world—they count on it. The technology to cost effectively extend that coverage to everywhere exists now. Everyone everywhere coverage from space is now inevitable.

While Lynk invented the key technology, and is years ahead, there are many competitors jumping into the game. The only question now is who provides this service to the world. Will it be American companies leading the way, or will it be somebody else?

Thank you—I look forward to the dialog.