REMARKS OF
COMMISSIONER GEOFFREY STARKS
BEFORE ERICSSON'S
BROADBAND FOR ALL ONLINE CONFERENCE
JUNE 21, 2021

Good morning—and good evening to those of you joining from the other side of the world. It's a pleasure to gather with you around such an important theme, Broadband for All. Here in the United States, as in many of your countries, public health leaders spent much of the last 18 months encouraging Americans to stay home as much as possible. For many of us, that meant taking our daily activities—work, school, medical care, and connecting with loved ones—online.

It also meant confronting the cruel reality of the digital divide. Even before the pandemic, and the economic pain it caused across our country, tens of millions of Americans did not have broadband at home. They could not access, could not afford—or both—the home broadband connections they needed to telework, access medical information, and help young people learn when school is closed. Our pandemic response made clear that the digital divide isn't just unfair and cruel—it's a threat to our safety and economic security. And like so many aspects of the pandemic, the lack of broadband access replicated and reinforced existing systems of inequality in our society. Today, Black Americans and other people of color are still, by a wide margin, significantly less likely to have a home broadband connection than their counterparts.

In my role as a Commissioner on the Federal Communications Commission, I have spent much of the last year-and-a-half focused on emergency measures to address internet inequality during the pandemic. We are by no means out of the woods yet, even in countries where COVID-19 vaccinations are becoming widespread. But as we continue to work to bring the pandemic to a close, I am already thinking about the lessons we have learned that should influence how we work toward the goal of broadband for all. Those lessons are what I want to talk with you about today.

First, we need a long-term commitment to infrastructure. Though the digital divide has been with us as long as the Internet has, the pandemic certainly imbued that problem with more weight for many people. But getting the needed fiber, cable, towers, spectrum, and equipment into the field is often a multi-year process. As proud as I am of the commitment to affordability the United States has demonstrated in recent months—something I'll talk more about in just a moment—I recognize that those programs are little help to families who live in places where

broadband simply isn't available. As a native son of the state of Kansas, I understand how deeply frustrated Americans are when they live in areas where there is simply no broadband to buy.

Last year, the FCC announced that about 18 million Americans cannot buy broadband with speeds of 25 Mbps for downloads and 3 Mbps for uploads at any price. Those households are mostly, but not exclusively, in rural areas where the cost to deploy infrastructure is much higher than in urban areas. And we know that number overstates broadband access for two reasons. First, it's based on flawed methodology. In the past, the FCC has treated households as covered if even a single household in the census block had access to broadband service. That's a problem. There are millions of Americans frustrated by broadband service that works for the neighbors but hasn't quite reached their homes. This data undercounts them.

It also relies on an increasingly outdated definition of "broadband." Many of the latest applications—especially those that rely on simultaneous two-way communications—need more than 25/3. Households clearly need more download speed, and critically, uploads have become more and more important. That became especially clear for the many of us working at home with children simultaneously taking classes online. And we know higher bandwidth applications like AR and VR are coming. For many of today's needs and the needs we anticipate in the near future, 25/3 just won't cut it.

I'm glad that President Biden—along with many leaders in Congress—is proposing an investment commensurate with the size of the infrastructure challenges we face. I'm hopeful that this year Congress will authorize billions of dollars to fund broadband buildout. The key to making that investment last is building with our future needs in mind, even as we focus on reaching Americans where they are today.

While we're discussing long-term strategy, we shouldn't forget the importance of international standards and spectrum planning. Through organizations like the International Telecommunications Union and 3GPP, governments, academia and the private sector collaborate to establish the technical framework for entire world. These international bodies have helped fuel the current growth of the information and communications technology sector and have laid the groundwork for success in the 21st century. Most importantly, we must ensure that these bodies continue to adhere to their highest goal: that final

decisions on spectrum and technology reflect the best engineering judgment and support the best technical outcomes.

Second, all the advanced infrastructure in the world won't help if ordinary people cannot afford to buy the broadband service it supports. Tens of millions of Americans who have access to broadband do not subscribe. The central reason: affordability. No family should have to decide between keeping the lights on or getting the household connected, but we know that they do.

Earlier this Spring, a story in the New York Times highlighted the challenges facing Jordyn Coleman, a fifth-grade student in Clarksdale, Mississippi. Jordyn, who transferred schools during the pandemic, described his struggles with online school. Jordyn's family does not have internet access at home, and he can only participate in virtual classes by using his mother's cellphone. But his mother works night shifts as a security guard at a casino and, like most of us, takes her phone with her. Ms. Coleman has difficulty making it home in time for Jordyn's first morning classes due to her 40-mile commute on public transportation. Consistently connecting to online lessons would no doubt be easier with a home Wi-Fi connection. But for a family that has faced stiff economic headwinds during the pandemic, other basic needs have to come first. Ms. Coleman usually makes dinner on a hot plate or in an electric pot, because she does not have a refrigerator or stove in her apartment. She told the Times: "My priorities are a stove, a fridge, a car. . . . Then maybe we can talk about internet." Millions of households are in the same spot.

In the United States, we have responded to the affordability challenge by making broadband subsidies for Americans' needs a central part of COVID-19 relief and recovery legislation. The FCC is in the process of distributing the $3.2 billion Emergency Broadband Benefit, which provides low-income families with a substantial monthly discount on broadband services and a device. We have also established a system to spend $7.17 billion on off-campus connectivity and devices for students, library patrons, and staff.

Diligent administration of these programs will significantly impact families across the country, but I am mindful that these are—as of now—emergency benefits set only for the duration of the pandemic. It is clear to me that we will need permanent solutions to ensure that all Americans can afford connectivity.

Third, failing to close the digital divide threatens basic trust in government. In more ordinary times, reliable and easy access to government services online can make all our lives easier; during the pandemic, social distancing and building closures made online service delivery essential.

In recent testimony before a committee of the U.S. House of Representatives, Max Stier, the President and CEO of the Partnership for Public Service outlined a number of benefits from effective online delivery of government service: reduced costs, enhanced security (by, for example, making it easier for individuals to report a lost or stolen passport), improved accuracy of government data collections, increased customer satisfaction, and expanded access to benefits. These are all good reasons to invest in bringing government services online.

But for the 77 million Americans without an adequate broadband connection at home, online government services can be a source of frustration and exclusion. Here's a safety-critical example: when communities in the United States began rolling out COVID-19 vaccines, supplies were extremely limited, and most vaccine locations required priority groups to make an appointment in advance to avoid dangerous physical crowding. To distribute those appointments, many states and other vaccine authorities created online booking systems. Having a computer or other device, a broadband connection, and the digital know-how to navigate were all critical factors in securing an appointment, and much has been written about those unable to register online who spent precious time trying to reach a phone operator as slots were vanishing by the second.

The fact of the matter is that Seniors—statistically, the Americans most at risk of a catastrophic outcome from COVID-19 and among the highest priority for vaccination— remain among the most disconnected in the United States, and millions were impacted by being on the wrong side of the digital divide.

Many of the millions of Americans who needed unemployment assistance during the pandemic faced similar challenges. Early in the pandemic, the United States experienced an unprecedented spike—roughly 3000 percent—in jobless claims. The procedures for claiming unemployment benefits vary by state, but often rely on outdated technology not built to withstand a crush of simultaneous users, and typically expect that most people will apply online despite the fundamentals of the digital divide. For example, in April 2020, CNN reported that hundreds of people had gathered, in person, at South Florida unemployment offices to collect paper applications for benefits. From a public health perspective and an equity perspective, we have got to do better.

These examples illustrate how internet inequality can make other unfairness in our societies worse. It's well documented that the digital divide impacts older people, poorer people, and people of color disproportionately. The pandemic has shown us that, in today's world, that can amount to a real denial of access to fundamental public services. That is unacceptable.

And while I support creating backup systems of phone and in-person outreach that meet people where we are today, we won't have equal access if older people, poorer people, and people of color have to work so much harder to get basic benefits. When it comes to expanding broadband access and affordability, we can't take our foot of the gas even as our COVID-19 situation improves.

Fourth, Telehealth services have matured into an important part of our healthcare system, and we risk further inequity if not everyone can access them. We have ample evidence that telehealth made an enormous difference in our nation's pandemic response. Researchers at the Urban Institute found that during the first six months of the pandemic, one-third of Americans had a telehealth visit to discuss their own healthcare. There have been particularly striking increases in telehealth use by low-income Americans. Between March and June 2020, the Centers for Medicare and Medicaid Services found that telehealth visits for Medicaid and Children's Health Insurance Program beneficiaries increased by more than 2600 percent compared to the same period in 2019. Those beneficiaries received more than 34 million telehealth services in just four months. Those strong adoption rates are truly remarkable.

Through tens of millions of virtual visits, patients and healthcare providers have reduced in-person contacts and maintained social distancing—important measures to prevent spread of the coronavirus.

But patients clearly saw other benefits that had piqued interest in telehealth even before the pandemic—increasing access to specialists, mitigating challenges like travel and health conditions that keep people from seeing doctors, and reducing costs. Those benefits are likely to make expanded access to telehealth a lasting legacy; three-quarters of people who used telehealth during the pandemic say they are very or somewhat likely to continue doing so.

Broadband can bring back the house call in a new way and expand the reach of doctors, mental health professionals, and other providers. That's a game changer—but not for the many communities that remain on the wrong side of the digital divide. Low-income people, people of color, and people in rural areas either

can't get online or are making great sacrifices in order to get connected. While anchor institutions, hotspot lending programs, and many other community efforts do their best to fill the gap, fully realizing healthcare requires the certainty and privacy of a high-quality broadband connection at home.

Finally, all those essential services are only as reliable as they are secure. The bigger our reliance on technology, the more we have to lose from security threats. Over the past decade, our networks have faced a rising tide of activity by adversary states and others intent on compromising Americans' privacy and security.

That reality came home for millions of Americans this spring when a ransomware attack on Colonial Pipeline, which controls nearly half the gasoline, jet fuel, and diesel on the East Coast of the United States, caused fuel shortages across the southeastern part of the country. Last year, in the midst of enormous strains on our healthcare system, one of our largest hospital systems was forced to return to pen-and-paper charting when a cyberattack took down its network.

With those threats in mind, and recognizing that these are whole-of-government issues, much of my time at the Federal Communications Commission has been spent working to secure U.S. networks against potential bad actors. As we seek to enhance our networks to support innovative technologies, policymakers, industry and consumers must ensure that those networks are sufficiently fortified to preserve the critical economic, privacy, and security interests at stake. The FCC has a vital role to play. Congress explicitly created our agency "for the purpose of the national defense" and "for promoting safety of life and property through the use of wire and radio communications." The complexity of protecting the American public and the fundamental inter-connectedness of security issues, along with long-term economic and international trends, including the disappearance of the American telecom hardware sector and the growing role of Chinese vendors, have compelled the FCC to embrace its role. Network security is national security.

Thus, in 2019 we prohibited the use of Universal Service Funding—the money the U.S. spends each year at the federal level to make sure communications networks reach every part of country—to purchase or support equipment or services posing a national security threat. That year, I challenged the Commission to begin the process of finding the untrustworthy equipment already in our networks, setting out a plan to fix it, and funding the replacement process. A year later, we determined that certain Chinese firms produced equipment that posed

significant risks to national security, collected data on their presence in U.S. networks, and strategized a reimbursement plan to cover the cost of replacing the equipment, which could be close to $2 billion.

Although the Commission's efforts to promote supply chain security have focused on network infrastructure, our networks also include billions of end user devices. As the Internet of Things flourishes and connects a variety of devices to our networks, we must ensure that those devices and the Americans who use them are protected from cyber-threats. According to one study, we will have more than 25 billion connected devices worldwide by 2025. Networks of IoT devices will help our environment by reducing carbon emissions and waste, increase productivity, protect public safety, and generally enhance our way of life.

But many of these devices or their components come with exploitable security vulnerabilities. This same inexpensive equipment is most likely to be used by small businesses and consumers. One 2017 study reported that nearly half of all companies that use IoT devices have lost revenue due to a security breach, at a cost of more than 13 percent of revenue for companies with annual revenues under $5 million.

News reports have highlighted security issues regarding devices like web cameras, wireless routers, and WiFi extenders. Each device could be a potential entry point for a hostile actor to attack connecting networks, including those belonging to critical infrastructure industries, governments, and health care facilities. Late last year, for example, a technology news site found suspicious backdoors in affordable Chinese-made internet routers and Wi-Fi extenders sold at several major retailers that would allow an attacker to remotely control not only the devices, but also any devices connected to the same network. Further testing showed that these backdoors were not only potential threats, but that third parties were actively attempting to exploit them.

And while industry, Congress, and other federal agencies are highlighting the importance of securing these devices, none of these actions address the devices manufactured overseas that are likely to ignore any voluntary protections.

The Commission should work with other policymakers and retailers to ensure that all devices imported into the United States and connected to our networks meet NIST cybersecurity standards. We also must develop proactive safeguards to educate users and prevent future intrusions on our IoT networks.

Indeed, as I record these remarks, the Commission is considering a draft order that proposes to use our equipment authorization rules to bar devices from entities deemed to present a national security risk. The same draft also seeks comment on how the Commission could encourage manufacturers and other parties to improve the cybersecurity of equipment sold in the United States, particularly with respect to the IoT devices I mentioned earlier. Assuming the Commission adopts this item, I look forward to hearing from industry and the public about increasing the FCC's role in protecting our networks from insecure equipment.

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The late Congressman John Lewis made the urgency of this work clear when he said: "Access to the internet ... is the civil rights issue of the 21st century." Before the pandemic, I visited Montgomery and Selma, Alabama. These are sacred American places, where landmark events in our civil rights movement unfolded. And they continue to inspire.

On that trip, I met with members of the Selma Public Housing Authority, who have a special project to get people living in low-income housing free broadband and a tablet. I'll never forget when I met with a single mother of three children who lived in the George Washington Carver homes and benefitted from the program. She told me with great pride how at-home broadband access enabled her to complete assignments for her online degree program while her children finished their homework—all without requiring her to make trips to the local library or restaurants to find an adequate connection. She was a living example of the power of broadband to transform lives.

We need to bring that transformative experience to millions more households, in the United States and around the world. I thank you for your time today, and I look forward to working with you toward achieving that goal.