REMARKS OF FCC CHAIRMAN AJIT PAI
AT THE INTERNATIONAL INSTITUTE OF COMMUNICATIONS
TELECOMMUNICATIONS AND MEDIA FORUM

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Thank you to the International Institute of Communications (IIC) for the opportunity to be here today for the last Telecommunications and Media Forum of the year. And I would like to thank my fellow regulators, Commissioner Euler from ANATEL Brazil and Councillor Mokhele from ICASA South Africa, for joining us in Washington, DC.

Since becoming Chairman, I've appreciated meeting and exchanging ideas with so many regulators and policymakers from around the world. It's meetings like this that allow us to learn from one another and to see how we can work together to tackle the challenges in promoting the benefits of the technological revolution for our citizens. Both Brazil and South Africa are leaders in their regions—and globally—in the digital economy. The FCC values our relationships with you and looks forward to continuing to work with you in the months and years to come.

This is a particularly opportune time for me to provide an update from the United States, because I'm approaching a milestone—the completion of my first full year as Chairman next month. Unfortunately, there isn't much to report from the FCC!

I'm joking, of course. For the past year, we have been very active as we modernize our rules and remove burdensome regulations that deter innovation and investment. Our goal is simple: to extend what I call "digital opportunity" to every American. In my view, every American who wants high-speed Internet access should be able to get it.

I firmly believe that the FCC's most powerful tool for expanding digital opportunity is setting rules that maximize private investment in broadband networks. That's why I want the United States to be the best place in the world to invest in such networks. The more difficult government makes the business case for deployment, the less likely it is that broadband providers, big and small, will invest the billions of dollars needed to connect consumers. And too often, unnecessary rules make it more expensive to construct these networks than it needs to be.

The issue of so-called "net neutrality," which we are addressing in our *Restoring Internet Freedom* proceeding, is but one of the many areas in which we're taking action toward this goal. At its core, this proceeding is really about repealing rules that depress investment and innovation. What will our plan do? When you cut through the legal terms and technical jargon, it's very simple. The plan will bring back the same policy framework in the United States that governed the Internet for most of its existence—from 1996 until 2015. Let me repeat this point: the plan will bring back the same framework in the United States that governed the Internet for most of its existence.

If you're wondering how what I just said relates to what you've been hearing about our plan, you're in good company. There's a huge gulf between the rhetoric on this issue and the reality. So let me provide some important context and walk through the reality of what the plan will do.

Until 2015, the FCC treated high-speed Internet access as a lightly-regulated service, an "information service" under the part of the U.S. Communications Act known as Title I. But a few years ago, the FCC changed course and classified Internet access as a heavily-regulated "telecommunications service" under Title II of the Communications Act. If the *Restoring Internet Freedom* plan is adopted on

December 14, we'll simply reverse the FCC's 2015 decision and go back to the pre-2015 regulatory framework under Title I.

Why is it so critical to return to the pre-2015 regulatory framework? The most important reason is that it was an overwhelming success.

Encouraged by light-touch regulation, America's private sector invested over $1.5 trillion to build out wired and wireless networks throughout the United States under the pre-2015 regulatory framework. 28.8k modems eventually gave way to gigabit fiber connections. U.S. innovators and entrepreneurs used this open platform to start companies that have become global giants. America's Internet economy became the envy of the world. (Indeed, the five biggest companies in America today by market capitalization are Internet companies.)

But then, in early 2015, the FCC chose a decidedly different course for the Internet. The FCC scrapped the tried-and-true, light touch regulation of the Internet and replaced it with heavy-handed micromanagement. It did this despite the fact that the Internet wasn't broken in 2015. There was no market failure that justified this dramatic new regulatory approach.

The results have been bad for consumers. One negative consumer impact has been less infrastructure investment. The top complaint consumers have about the Internet is not and has never been that their ISP is doing things like blocking content; it's that they don't have enough access and competition. Ironically, the Title II approach has made that concern even worse by reducing investment in building and maintaining high-speed networks. In the two years of the Title II era, broadband network investment declined by $3.6 billion—or more than 5%. Notably, this is the first time that such investment has declined outside of a recession in the Internet era. The impact has been particularly serious for smaller Internet service providers. They don't have the time, money, or lawyers to navigate a thicket of complex rules.

The FCC's heavy-handed regulations have also lead to less innovation for consumers. We shifted from a wildly successful framework of permission-less innovation to a mother-may-I approach that has had a chilling effect. One major company, for instance, reported that it put on hold a project to build out its out-of-home Wi-Fi network due to uncertainty about the FCC's regulatory stance. A coalition of 19 municipal Internet service providers—that is, city-owned nonprofits—have told the FCC that they "often delay or hold off from rolling out a new feature or service because [they] cannot afford to deal with a potential complaint and enforcement action." This is not good for online consumers.

Once the plan to restore Internet freedom is adopted on December 14, we will move from heavy-handed regulation to light-touch regulation, not a completely hands-off approach. We won't be giving anybody a free pass. We will simply shift from one-size-fits-all pre-emptive regulation to targeted enforcement based on actual market failure or anticompetitive conduct. The Federal Trade Commission will consistently protect competition and consumers across the Internet economy—ISPs and edge providers alike. We had a free and open Internet for two decades before 2015 with the FTC on the beat, and we *will* have a free and open Internet going forward.

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Tempting though it is to spend all my time this morning on the *Restoring Internet Freedom* proceeding, I want to go back to where this conversation started: encouraging investment and innovation in all kinds of technologies.

This effort includes several initiatives to reduce barriers to infrastructure deployment.

For instance, just last month, we acted to remove excessive regulation that has been slowing the transition from legacy copper networks to new IP-based networks. By definition, every dollar that is invested in the fading networks of yesterday can't be invested in the stronger networks of tomorrow. We

recognize that reality and are making it easier for companies to upgrade to more robust, resilient, consumer-friendly fiber.

As the world goes mobile, we're also aiming to promote more wireless infrastructure. The networks of the future will rely less on large cell towers and more on hundreds of thousands of small cells. But current rules aren't tailored to support this new kind of deployment. That's why we're aiming to update our rules to reflect the realities of next-generation networks. This will reduce unnecessary regulatory costs and make it easier to realize the potential of 5G.

Earlier this year, we initiated a comprehensive review of our wireless infrastructure rules—things like expediting review by local governments, reducing the cost of access to rights of way, and revising existing pole attachment rules.

That review has already yielded results. Last month, we formally concluded that replacement utility poles that have no potential effect on historic properties don't need to go through historic preservation review. This eliminates an unnecessary and time-consuming process to approve each and every pole replacement. And later this month, we'll vote on a proposal to exempt certain towers that were constructed long ago from similar reviews. This could open up thousands of existing towers for the deployment of new wireless equipment.

But our efforts to clear regulatory hurdles aren't just limited to what's on land. For instance, we recently approved several applications from satellite companies that want to launch low- and near-Earth orbit constellations to provide high-speed Internet access to hard-to-serve areas, like rural and Tribal areas. And we're currently processing applications from other satellite companies that want to do the same.

Finally, we recognize that not all wisdom resides in our agency. That's why we've established a Broadband Deployment Advisory Committee (BDAC). The BDAC includes representatives from all key stakeholder groups, public and private. We've asked them to recommend solutions to some of the challenges I've discussed. The members of the BDAC and its working groups are working hard to find deployment-friendly reforms that can deliver better, faster, and cheaper networks to the American people.

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Important though infrastructure is, you can't talk about unlocking the possibilities of next generation wireless networks without talking about spectrum.

One of the game-changers for 5G is that new technologies have made it possible to use millimeter-wave bands for broadband. But we know that opening up spectrum for 5G isn't just about millimeter-wave. We also need to introduce more low- and mid-band spectrum into the marketplace. We need to include a mix of licensed and unlicensed, and terrestrial and satellite spectrum. And we need to encourage flexible use as we enter the 5G future.

Here's a sketch of where we are.

On low-band spectrum, we've completed the first-ever incentive auction. And we're well into granting wireless licenses in the 600 MHz band. In fact, approximately 88% of licenses have already been granted. One major operator has already started deploying service in this band, with a path to 5G. For its part, the Commission is committed to continuing to work with industry—both broadcasters and the forward auction winners—to ensure a smooth post-auction transition.

Now, to mid-band spectrum. In the "middle bands," it has become clear over the past few years that the 3.5 GHz band will be a core component of 5G network deployments, with several countries moving forward with policies that will make this band available for such services. In the United States, we have made 150 MHz of spectrum in that band available using new sharing tools and have undertaken a review of our rules governing the band to ensure that they are designed to maximize investment. In October of this year, we proposed changes to the licensing and technical rules in the band that could help

increase incentives for investment, encourage more efficient spectrum use, and promote robust network deployments in both urban and rural communities.

But the "middle bands" aren't just limited to 3.5 GHz. This summer, we began to evaluate spectrum bands between 3.7 and 24 GHz, with a focus on new licensed access to the C band and new unlicensed access in the upper 6 GHz band. We are seeking input on how existing rules can be modified to promote additional access to these and other "middle" bands.

We've been busy moving on high-band spectrum, too. The FCC's *Spectrum Frontiers Order* in July 2016 opened up nearly 11 GHz of spectrum in the bands above 24 GHz for wireless use. But it also left many questions unanswered. So last month, we followed up with another order involving high bands so that operators have a clear path to launching 5G and other innovative millimeter-wave services in the United States. In fact, just last week, Verizon announced it will start offering commercial wireless broadband services early next year using the 28 GHz band that we opened up last year.

In last month's *Spectrum Frontiers* order, we also encouraged satellite entrepreneurship by preserving a four-gigahertz band for satellite services and providing some additional opportunities for siting earth stations. We also maintained the full 64-71 GHz band as a massive testbed for unlicensed innovation, and made much more millimeter wave spectrum available for terrestrial wireless use. Specifically, we added 1,700 MHz of new spectrum in the 24 and 47 GHz bands, on top of the spectrum we freed up last year.

Our focus on next-generation services isn't limited to broadband, but also extends to broadcasting. At last month's Commission meeting, the FCC allowed broadcasters the opportunity to use a new technical standard known as ATSC 3.0, or Next Generation TV. Broadcasters can choose to send 3.0 signals on a voluntary, market-driven basis. Our broadcasters are excited about this standard. So are we: this new standard marries the power of IP with the value of broadcasting, which could deliver great value for consumers. Among other things, this could allow state-of-the-art emergency alert features that could help save lives in cases of natural disasters.

Speaking of natural disasters, Hurricanes Harvey, Irma, and Maria, caused significant damage to the communications infrastructure in parts of the United States. I personally traveled to Texas, Florida, and Puerto Rico to see what had happened and what we could do to help. We've coordinated closely with the Federal Emergency Management Authority, state and local officials, and the private sector from the beginning. Now, we've shifted from response to recovery mode. We're working with many organizations and individuals to determine how best to re-build the infrastructure and restore service in Puerto Rico and the U.S. Virgin Islands. To this end, I've created a Hurricane Recovery Task Force, which includes leading experts from all of the FCC Bureaus and Offices that have been helping with the ongoing recovery effort. I'm grateful for their dedication and hard work.

Now, I realize that I've been going on for a while about the FCC's work over the past year. But I am acutely aware that we do not operate in a vacuum. As I mentioned when I began my remarks, I've been fortunate throughout this year to engage with my counterparts around the world. I enjoy listening to and learning from them. No one of us has all the answers, but we all face similar challenges. That's why it is so important to maintain a dialogue.

And for some issues like spectrum, we simply cannot go it alone. We all must work together to identify spectrum policies and rules that will enable innovation and investment in new wireless technologies and services. This will aid mobile consumers everywhere and help us close the digital divide.

In this regard, I'm pleased to note that the Americas region has been steadily advancing regional proposals for the WRC-19. The region held its most recent WRC-19 preparatory meeting just last week, and has already finalized five proposals and made significant progress on nine additional proposals. And following on the recent successes at the ITU World Telecom Development Conference, we are now fully

focused on the important ITU Plenipotentiary Conference. At that conference, we'll need to work together to set the course for the future work of the ITU, as we seek to ensure that the ITU can continue to meet the demands of the dynamic 21st century telecommunications environment.

I'd also be remiss to not make a pitch for the U.S. candidate for Director of the ITU's Development Sector, Doreen Bogdan. She is an extraordinary candidate. Those of you who know her understand that no one has worked harder to bring the benefits of communications technologies to all corners of the globe. With 20 years of experience at the ITU, 14 of those focused on the ITU's development work, Doreen has a strong track record in mobilizing support for bridging the digital divide.

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Shifting back from the ITU to the IIC, it's been great to have the opportunity to participate once again in your events. We at the FCC applaud the work you do in bringing together regulators, policymakers, industry, and other stakeholders here and around the world. And I look forward to continuing to collaborate with you in the months and years to come.