

**REMARKS OF FCC CHAIRMAN AJIT PAI
TO THE U.S.-INDIA BUSINESS COUNCIL WEBINAR ON
“CREATING ALIGNMENT IN THE 5G ECOSYSTEM”**

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As always, it's great to be with the USIBC. You were one of the first groups I spoke to as FCC Chairman back in early 2017. At that meeting, I said that the partnership between the United States and India will be the defining one of the 21st century. Over the past three-plus years, it's been gratifying to see the bonds between the U.S. and India grow stronger and stronger.

We saw the vitality of this special friendship on full display this past February. I was honored and humbled to be a part of the U.S. delegation visiting India. From my bilateral visits with my counterparts in the Indian government to the state banquet at Rashtrapati Bhavan and conversations with Prime Minister Modi, the energy and excitement was incredible. The trip left me with an even deeper appreciation of the common values our countries share and an even stronger determination to help bring the world's oldest and largest democracies even closer together.

The United States and India share not only a set of common values. We also share strategic interests. We are both deeply committed to harnessing the power of communications technology to promote mutual growth and prosperity for our people. And we both deeply value the importance of connecting all of our citizens. That means, in part, unlocking the power and potential of 5G technology.

I commend the USIBC for launching this Webinar series on 5G, and I appreciate the opportunity to be the first speaker of the first session.

I've been asked to begin with an update on the FCC's efforts to promote the development and deployment of 5G. This is something we've spent quite some time on, to say the least.

We call our strategy the 5G FAST plan, and it has three key components: freeing up spectrum, promoting wireless infrastructure, and modernizing regulations to encourage fiber deployment.

With respect to spectrum, the Commission has left no stone unturned in its quest to make a mix of low-, mid-, and high-band spectrum available for 5G services. Earlier this year, we concluded an auction of 3,400 megahertz of spectrum in the upper 37, 39 and 47 GHz bands, the most spectrum ever won in a single auction. In 2019, we auctioned 850 megahertz in the 28 GHz band, and 700 megahertz in the 24 GHz band. Combined, these three auctions made available almost five gigahertz of high-band spectrum for commercial use. To put that in perspective, that is more spectrum than was used for terrestrial mobile broadband by all wireless service providers in the United States combined before these auctions started.

Lately, our focus has been on mid-band spectrum, which is appealing for 5G because it combines good geographic coverage with good capacity. We've got a lot of efforts moving forward on this front—too many for me to cover—but the one I would highlight is our work on the so-called C-band. The C-band is a 500 megahertz swath of spectrum from 3.7 GHz to 4.2 GHz. It's mostly used by fixed-satellite companies to beam content to video and audio broadcasters, cable systems, and other content distributors.

Four months ago, the FCC voted to clear the lower 280 megahertz of the C-band and make this spectrum available for flexible use. To that end, we'll begin a public auction this coming December 8. All eligible space station operators currently using this spectrum have committed to an accelerated relocation to the upper 200 megahertz of this band—meaning that the lower 280 megahertz (and a 20-megahertz guard band) will become available for 5G two to four years earlier than otherwise would have been the case.

In addition to pushing more spectrum out in the marketplace, we continue to clear regulatory hurdles and promote infrastructure build-out. This has spurred record-breaking capital investments in infrastructure essential for 5G, including fiber-optic cables and small cells.

Now, when we say we want to accelerate the deployment of 5G, we're effectively saying that we want high-speed, high-throughput mobile connectivity to be available to everyone, everywhere. But 5G isn't the only technology with the power to create this world of ubiquitous wireless gigabit connectivity. While many new technologies are emerging, such as high-throughput GEO and LEO satellite systems as well as ATSC 3.0, our biggest initiative of late involved Wi-Fi—specifically, our decision to make available the 6 GHz band for unlicensed use.

Wi-Fi already carries more than half of the Internet's traffic. And offloading mobile data traffic to Wi-Fi was vital to keeping our cellular networks from being overwhelmed over the past few months. The exciting news is that Wi-Fi 6, the next generation of Wi-Fi, has already started rolling out. Wi-Fi 6 will be over two-and-a-half times faster than the current standard, and it will offer better performance for connected devices. But in order to fully take advantage of the benefits of Wi-Fi 6, we need to make more mid-band spectrum available for unlicensed use.

And that's exactly what the FCC did on April 23. The Commission unanimously approved my proposal to make the entire 6 GHz band available for unlicensed use. By doing this, we are creating a massive 1,200 megahertz testbed for innovators and innovation. This is a big deal. We've effectively increased the amount of mid-band spectrum available for Wi-Fi by almost a factor of five.

All 1,200 megahertz of this spectrum will be available for indoor-only low-power use without the added complexity of database coordination. We are also making the two largest sub-band segments, totaling 850 megahertz, available for use indoors and outdoors at a higher standard power. We'll use an automated frequency coordination system to prevent interference with incumbent services. Going big means allowing unprecedented 160- and 320-megahertz channels for Wi-Fi. This will dramatically ease spectrum capacity as a constraint on innovation and open the door to new high-bandwidth applications.

Ultimately, I expect that 6 GHz unlicensed devices will become a part of consumers' everyday lives. And I predict the rules we adopted in April will play a major role in the growth of the Internet of Things, connecting appliances, machines, meters, wearables, smart televisions, and other consumer electronics, as well as industrial sensors for manufacturing.

During my visit to India in February, I had a good discussion with Indian officials about our 6 GHz efforts, so I know that India is interested in exploring the possibilities of unlicensed use in this band. I'm eager to work with my Indian counterparts and other leaders around the world to harness the benefits of the 6 GHz band for Wi-Fi and then work together toward global harmonization of this spectrum.

Ultimately, I think Wi-Fi 6 and 5G will complement each other nicely and form a powerful 1-2 punch of licensed and unlicensed innovation.

To this point, I've talked about how everybody wants next-generation wireless networks that are ultra-fast, high-capacity, and widely available. One more thing we'll demand of tomorrow's networks is that they must be secure. When 5G is embedded in almost every aspect of our society and economy—from businesses to homes, hospitals to transportation networks, manufacturing to the power grid—that means securing our networks will become much more important and much more difficult. An important part of network security is the integrity of the communications supply chain—that is, the process by which products and services are manufactured, distributed, sold, and ultimately integrated into our communications networks.

For years, U.S. government officials have expressed concern about the national security threats posed by certain foreign communications equipment providers. Hidden "backdoors" to our networks in

routers, switches, and other network equipment can allow hostile foreign powers to inject viruses and other malware, steal Americans' private data, spy on U.S. companies, and more.

The equipment at the heart of 5G networks currently comes from just a few global suppliers. And the largest right now is the Chinese company Huawei. This has raised concerns, given that Chinese law requires all companies subject to its jurisdiction to comply with requests from the country's intelligence services, and bars disclosure of these requests to any third parties.

To counter this risk, the FCC has prohibited the use of money from our Universal Service Fund to purchase or obtain any equipment or services produced or provided by companies posing a national security threat. We have also initiated a process to catalog, remove, and replace unsecure equipment from USF-funded communications networks. We've denied authorization to China Mobile to enter the U.S. market. And we've issued show-cause orders to Chinese state-owned companies that already had received such authorizations. Finally, Congress recently passed and the President signed the Secure and Trusted Communications Networks Act to further strengthen the integrity of communications networks and the communications supply chain. On July 16, the FCC will vote to start the process for implementing that law.

I'm not the only panelist who believes that, when it comes to 5G, we cannot afford to make risky choices and just hope for the best. Under Mathew Oommen's leadership, Reliance Jio will not be using Huawei's equipment in its 5G networks. I applaud Mathew for his leadership on this issue. The more that allies in the United States and India can work together and make security decisions based on shared principles, the safer that our 5G networks will be.

On that note, I'll wrap it up. Thanks again to USIBC for convening this forum. I look forward to today's discussion and to working with you in the days ahead to seize the opportunities of 5G and expand digital opportunity across the United States and India.