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# Alexicon *insider*

INFORMATION AND ADVOCACY FOR THE  
RURAL TELECOMMUNICATIONS INDUSTRY

## Regulatory Headlines

### House Passes 5G Bill

The House on Wednesday passed a slew of bills aimed at giving the U.S. a leg up over China in the race to implement the super-fast next-generation wireless networks known as 5G. The trio of bipartisan bills, which passed the House near-unanimously, would funnel U.S. government resources into steering international wireless policy while securing the burgeoning networks against cyberattacks and foreign influence.

### FCC Establishes Huawei, ZTE Process

The U.S. Federal Communications Commission (FCC) said on Friday it will accept public comments until Feb. 3 on its determination that China's Huawei Technologies Co Ltd and ZTE Corp pose national security risks. In November, the FCC voted unanimously to bar U.S. rural wireless providers from tapping an \$8.5 billion government fund to purchase Huawei or ZTE telecommunications equipment.

### States Hit Back on Sprint/T-Mobile Merger

State attorneys general seeking to block a proposed merger between Sprint and T-Mobile US again poo-pooed approvals of the deal granted by federal regulators, as part of a rebuttal to calls for a court to back the authorities' decision.

### Latest USDA ReConnect Awards

The U.S. Department of Agriculture's ReConnect program has loaned \$48 million to the Wilkes Telephone Membership Corp. to deploy high speed broadband infrastructure in eight Virginia counties.

### CA Privacy Law Explained

Your data, whether it's your name, your location, or your shopping habits, has been a commodity for decades now. Collected, bought, sold, shared, transferred — however businesses get it, a lot of them have access to a lot of information about you. They use it in ways you never agreed to (and often that you're not even aware of), and they make a lot of money off of it.



## Market Watch

- [TDS Completes \\$80M Deal](#)
- [Half of Broadband Homes Own Smart TV](#)
- [Verizon Targets Bundles with Mix & Match](#)
- [CenturyLink Bring Your Own Internet](#)



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# Technology Trends

*New and notable technology and services*

## Pai Talks 5G at CES 2020

FCC chairman Ajit Pai told a CES crowd that he thought 5G wireless technology could indeed help close the rural digital divide but conceded there were challenges to building out the next-generation technology to wherever it needed to go. Pai was interviewed by Consumer Technology Association president and CEO Gary Shapiro Tuesday (Jan. 7) at CTA's CES 2020 techstravaganza in Las Vegas Tuesday.

## Path Forward for Global 5G Wireless

The 5G Wireless portfolio of standards is essentially complete, with stakeholders approving key enhancements last week to the physical layers of 5G New Radio for the upcoming 3GPP Release 17, and a new round of refreshes scheduled for the following June. In many countries, including the US, 5G mobile service is being rolled out for the first time from 4G LTE radio towers, upgraded for transmissions at multiple frequency bands -- not the highest mmWave scale, although still greater bandwidth.

## The Danger of Ransomware

Ransomware tops the list of cybersecurity threats for 2020. While there have been efforts to convince individuals, corporations and municipalities not to pay ransoms, the simple fact is that whenever one is paid, the attack becomes a success that encourages cyberthieves to try again. Ransomware attacks increased 18 percent in 2019, up from an average 12 percent increase over the past five years, according to research from cyber risk insurance firm Chubb. It accounted for 40 percent of all manufacturers' cyber claims, and for 23 percent of cyber claims for smaller businesses last year.

## Consumer IoT Learning Curve

A panel of US operator executives admitted they are still wrangling with how best to approach the consumer IoT segment, after focusing initial growth efforts on the enterprise sector. David Allen, director of product development for IoT solutions at AT&T, said operators started with enterprise because B2B business models "are very well understood" and easier to establish.

## Industry Gears Up For Wi-Fi 6E

Broadcom is ready for the Federal Communications Commission (FCC) to unleash the 6 GHz band for Wi-Fi, announcing Wi-Fi 6E solutions for the band. The "6E" designation means Wi-Fi 6 devices are capable of operating in the 6 GHz band. While the FCC has yet to formally unleash the band, Broadcom notes that doing so would enable up to 1,200 MHz of spectrum for Wi-Fi use, which WLAN access point (AP) manufacturers can leverage to deliver faster speeds, higher capacity...



## **IN FOCUS** **FCC Draft** **RDOF Order**

After Chairman Pai [announced](#) the FCC will vote on the Rural Development Opportunity Fund (RDOF) order during the January open meeting, a [draft](#) of the item to be considered was released. The RDOF, initially contained in an [NPRM](#) last August, is basically a rebranded price cap carrier CAF Phase II where the support being received by large carriers for the past few years will be awarded via a competitive auction.

Consistent with the NPRM, the FCC will, if passed, allocate \$16 billion over 10 years for Phase I—census blocks where current data shows no 25/3 Mbps broadband service availability. An additional \$4.4 billion over 10 years will be allocated to Phase 2, which is for unserved locations in partially served census blocks.

Of the \$20.4 billion budget, \$16 billion will be redirected from (1) the price cap carrier statewide offers (\$1.5b per year), and (2) the \$100m per year originally earmarked by the FCC for the Remote Areas Fund (RAF). The FCC then proposes to add another \$4.4b (over 10 years) to further fund the program, presumably from revising the universal service fund contribution factor.

For the Phase I auction, eligible areas will include (1) census blocks for which price cap carriers currently receive CAF Phase II model-based support (2) census blocks that were eligible for, but did not receive, winning bids in the CAF Phase II auction, (3) census blocks where a CAF Phase II auction winning bidder has defaulted, (4) census blocks excluded from the offers of model-based support and the CAF Phase II auction because they were served with voice

and broadband of at least 10/1 Mbps, (5) census blocks served by both price cap carriers and rate-of-return carriers to the extent that census block is in the price cap carrier's territory, (6) census blocks that are currently unserved outside of price cap carriers where there is no certified high-cost ETC providing service, such as the Hawaiian Home-lands, and any other populated are-as unserved by either a rate-of-return or price cap carrier, and (7) census blocks identified by rate-of-return carriers as ones where they do not expect to extend broadband (as was done with the CAF Phase II auction).

As to the auction procedures, the FCC expects the auction to work similarly to the CAF Phase II (auction 903) process. In addition, the FCC will adjust the funding threshold for rural Tribal communities down by 25% to \$30 per month, which is similar to the "Tribal Broadband Factor" the FCC used for ACAM support.

There will be an estimated six million locations eligible for Phase I. As of now, it is unknown when the auction will commence, but later in 2020 is a good bet. The RDOF potentially presents an opportunity for broadband providers to support deployment in price cap carrier areas that are sorely in need of quality broadband service.



## Alexicon at Work

Alexicon continues to work with national groups to determine the best way forward for broadband data gathering and mapping. Current efforts include discussions with the Broadband Mapping Coalition (group led by USTelecom) and CostQuest for a efficient method to identify and report serviceable locations in Tribal areas, and working with NTCA to address the issue of location counts for CAF BLS deployment obligations.

## *Meetings and Conventions*

Dion Nero will attend the Alaska Telephone Association Winter Conference in Hawaii on January 26-29.



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