

March 4, 2022

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# Alexicon *insider*

INFORMATION AND ADVOCACY FOR THE  
RURAL TELECOMMUNICATIONS INDUSTRY

## Regulatory Headlines

### [FCC Announces 2.5 GHz Auction](#)

FCC Chairwoman Jessica Rosenworcel announced Tuesday at Mobile World Congress in Barcelona that the US government agency will auction off spectrum in the 2.5GHz band in July for use in 5G networks, paving the way for telecom companies to further expand their midband holdings.

### [Broadband Mapping Contract Settled](#)

CostQuest Associates said...that it has officially been contracted to provide broadband location data needed to update the National Broadband Map. The FCC selected the company months ago but the contract award was delayed because LightBox, another company that bid on the contract, protested the decision.

### [FCC Nomination Advances](#)

A divided Senate Commerce Committee voted Thursday to send President Biden's nominees to the FCC and FTC to the Senate floor for confirmation votes.

### [USF Contribution Reform Debate](#)

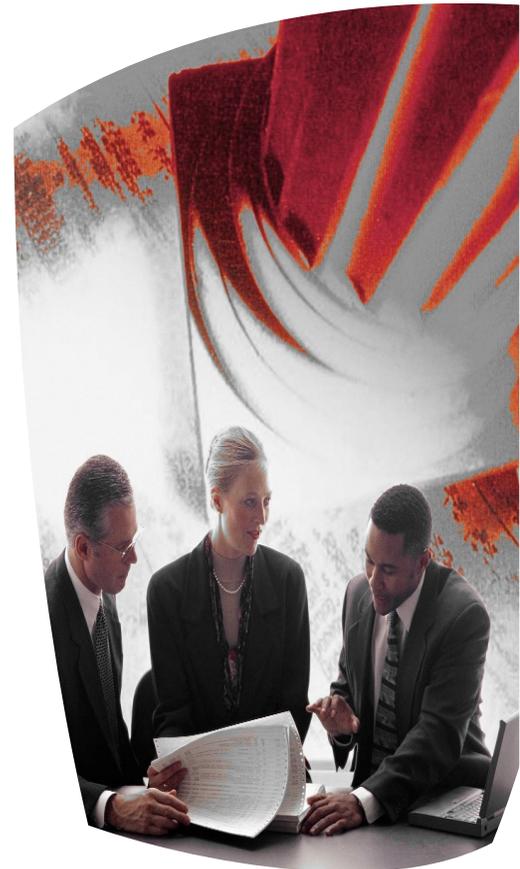
In addition to making unprecedented funding available for broadband, the infrastructure act signed into law late last year also directed the FCC to study the impact of the new government broadband funding on the Universal Service Fund program.

### [NTIA Announces BIP Grants](#)

The NTIA has announced the award of 13 grants, totaling more than \$277 million, as part of the Broadband Infrastructure Program.

### [FCC Action on Pole Replacement Costs](#)

Operators could soon see long-standing pole attachment issues resolved, with the U.S. Federal Communications Commission (FCC) announcing plans to initiate a rulemaking procedure to address the subject as large-scale broadband deployments ramp up. FCC Chairwoman Jessica Rosenworcel said the Commission will tackle the topic at its upcoming meeting on March 16.



## Market Watch

[Fiber is Having a Moment](#)

[Consolidated Sells Kansas City Assets](#)

[Broadband Usage Exceeds Half-Terrabyte](#)

[Broadband Infrastructure Playbook](#)



Questions? Comments?  
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# Technology Trends

*New and notable technology and services*

## Robocalls Still Happening

Someone out there really, really wants to help me avoid expensive car problems. Their recorded voice tells me that they've been trying to reach me about an extended warranty my car doesn't have, yet which is somehow about to expire. I just have to press 1 to learn more. They're persistent: I get multiple calls a day from multiple phone numbers across the country.

## SpaceX Launches 47 Starlink Satellites

SpaceX is aiming to launch more rockets in 2022 than it has in any year past, and with today's successful Starlink launch, it's well on its way to reaching that goal. The Starlink 4-9 mission lifted off at 9:25 AM EST (6:25 AM PST) from pad 39A at Kennedy Space Center in Florida and was SpaceX's ninth of a planned 52 launches this year. That's an impressive launch cadence of about one per week, aligning with SpaceX CEO Elon Musk's dedication to rapid reusability.

## AT&T to Leverage Streetlights for 5G

AT&T is speeding 5G deployment by leveraging one of the most common sights of everyday life: the streetlight. Gordon Mansfield, the carrier's vice president of Mobility Access & Architecture, wrote in a blog post that 5G deployments are slowed by the need to acquire sites, engineer designs and secure permits. As a result, the installation process can take as long as 12 to 18 months.

## Hackers Delivering DDoS Attacks

LAST AUGUST, ACADEMIC researchers discovered a potent new method for knocking sites offline: a fleet of misconfigured servers more than 100,000 strong that can amplify floods of junk data to once-unthinkable sizes. These attacks, in many cases, could result in an infinite routing loop that causes a self-perpetuating flood of traffic. Now, content-delivery network Akamai says attackers are exploiting the servers to target sites in the banking, travel, gaming, media, and web-hosting industries.

## Top 2022 Security Threats

2022 will be another busy year for enterprise incident responders as ransomware, supply chain and myriad zero-day attacks will continue to rise, according to Cisco's Talos security experts. To help address the threats, the Cisco Talos team used a blog and online presentation to detail steps enterprises can take to defend themselves against the growing field of bad actors and also to point out lessons learned from recent damaging exploits such as the Log4j vulnerability...



## IN FOCUS

### FCC NOI on Border Gateway Protocol

The FCC, partially in response to Russian cyberattacks related to the invasion of Ukraine, proposes to use its authority under the Communications Act to address vulnerabilities threatening the security and integrity of the Border Gateway Protocol (BGP). In a recent [Notice of Inquiry](#), the FCC seeks input on any steps that should be considered "to help protect and strengthen the nation's communications network and other critical infrastructure from vulnerabilities posed by BGP, and how we can best facilitate the implementation of industry standards and best practices to mitigate the potential harms posed by these vulnerabilities."

BGP is essentially the postal service of the internet—the edge routers in autonomous systems (basically networks operated by various entities—businesses, utilities, financial, government) use BGP to look at all available paths for internet traffic and choose the best route. Because the structure of the internet is constantly changing, every system must be kept up-to-date regarding new and obsolete routes. This is done through peering sessions where autonomous systems share routing information. The whole system basically operates on trust.

The FCC seeks comment on a number of topics, including

- \* Are there any entities that do not operate BGP routers that can assist in strengthening BGP security? Examples include ICANN and its affiliate, IANA
- \* Whether the industry has defined metrics for identifying BGP routing security incidents
- \* Security measures that have been developed and deployed by industry to secure BGP
- \* What threats should the FCC consider in addition to BGP hijack-

ing?

- \* To what extent have network operators implemented any of the available BGP security measures developed by industry?
- \* Does the FCC have a role in helping U.S. network operators deploy BGP security measures?
- \* What are the one-time and ongoing costs of implementing BGP security measures?
- \* Should BGP security measure deployment be prioritized to, for example, critical infrastructure?

## BGP Vulnerabilities and Hijacking

BGP contains vulnerabilities that can be triggered by accidental or intentional actions:

- ⇒ Russian network operators have been suspected of exploiting BGP's vulnerability to hijacking, including instances in which traffic has been redirected through Russia without explanation. In late 2017, for example, traffic sent to and from Google, Facebook, Apple and Microsoft was briefly routed through an Internet service provider in Russia
- ⇒ In April 2018, attackers deliberately created bad BGP routes to redirect traffic that was meant for Amazon's DNS service. The attackers were able to steal over \$100,000 worth of cryptocurrency by redirecting the traffic to themselves.

## Reminders

- \* **Broadband Performance Pre-Testing** began 1Q22 for ACAM II, CAF BLS, and CAF II auction support recipients. The first report is due to USAC on April 7, 2022.
- \* The **ACP** began on 12/31/21. The transition from the EBB program to the ACP ended on 3/1/22. Please see the 11/22/21, 11/29/21, 12/9/21, and 12/30/21 updates for more information
- \* Voice service providers are prohibited from accepting calls from providers not appearing in the [Robocall Mitigation Database](#)



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