

INCOMPAS 2021 Policy Summit Highlights Regulatory and Network Buildout Issues

The event covered key issues for competitive broadband providers, including the homework gap, net neutrality, broadband mapping and the FCC's RDOF reverse auction.

By Sean Buckley / *Broadband Communities*

FCC's Brendan Carr: Title II Was a Monumental Mistake

As the United States nears the end of Joe Biden's first 100 days, the president faces pressure from constituents and other leaders to reinstate the net neutrality rules the FCC overturned in 2017. At the time, state legislators in California responded by introducing net neutrality legislation at the state level.

Now the big question is this: Are there ways to reconcile differences regarding net neutrality?

Brendan Carr, a Republican FCC commissioner, told attendees during the INCOMPAS summit that there should be a "path forward" for net neutrality.

"If you separate out the question of whether there is legal authority from the rules of the road, you will identify so much common ground," Carr said. "In the last Congress, Senators Roger Wicker and Kyrsten Sinema worked to codify basic rules of the road – no blocking, throttling and a lot of other rules to put in that bucket – and I would support that."



Brendan Carr

SMALLER CARRIER IMPACT

Though significant discussion on net neutrality centered on how the largest ISPs, such as AT&T and Comcast, would deal with Title II, smaller carriers also had a mixed response to Title II rules.

Carr said the main issue he had with the previous net neutrality rules was reclassifying ISPs under Title II, which allowed the FCC to regulate internet service providers as if they were utilities.

"If you look back at the two-year experiment with Title II, it proved that it was a monumental mistake," he said.

In 2017, 22 small cable providers signed a letter to the FCC asking for the end of net neutrality, arguing the policy imposed "onerous burdens" on their businesses. Other providers, including Common and Monkeybrains, told *The Verge* in 2017 that they did not have any issues with net neutrality. Still other providers, including central Arkansas provider Aristotle, agreed to the basic principles of net neutrality but saw other issues with the Title II classification.

Aristotle pointed out that FCC reporting requirements such as network performance, data caps and other network statistics could cost

it up to \$40,000 a year.

Carr did not cite any specific providers he saw that were affected by Title II regulation but emphasized that implementing it again as part of a net neutrality law would be a mistake.

“If you look at the small providers trying to build out internet infrastructure, the onslaught of Title II regulation drove them to pull back on investments and network builds,” Carr said. “At a point in time in this country when internet connectivity is more important than ever before, it would be a mistake to go back to that.”

LIGHT-TOUCH REGULATION

As the pandemic hit, people were forced to work and study from home, which required more broadband bandwidth. Carr cites how well networks were able to hold up during the COVID-19 pandemic as proof that U.S. regulations are successful.

“If you look at COVID-19 ... I think that was the definite stress test for our country’s approach to internet regulation,” he said. “If you look at countries that have more heavily regulated internet providers, their networks performed far worse than

[networks] did in the United States.”

Carr added that by having a less burdensome regulatory regime, service providers are more likely to continue to expand networks.

“Our light-touch approach over the past 20 years ... has stimulated massive investment in our networks,” he said. “We have a lot of investment, new infrastructure builds going out, more miles of fiber being deployed, competition is increasing, and prices are coming down.”

Rep. Pallone: Universal Broadband Plan Needs to Address Access, Affordability and Skills

As chairman of the House Energy and Commerce Committee, Rep. Frank Pallone (D-NJ) has a lot on his plate these days. In addition to helping find a way to conquer the COVID-19 pandemic and provide relief to rebuild the economy, access to broadband is a key issue.

The committee’s jurisdiction is far-reaching. It includes issues pertaining to health care, energy, the environment, commerce, food and drug safety, consumer protection and communications technology.

Pallone, who has held a seat on the committee since 1993, told attendees during the INCOMPAS summit that providing broadband to more people is a multifaceted issue.

His colleague House Majority Whip James E. Clyburn launched the new Rural Broadband Task Force, which will work to advance solutions ensuring that all Americans have access to high-speed internet by 2025.

“Making broadband universal is our goal,” Clyburn said. “It’s not just about running lines to every house but rather about a lot of different things.”

MOVING FORWARD ACT

To meet Clyburn’s universal broadband goals, three gaps first must be addressed: lack of access to broadband, affordability of service, and lack of training in using computing equipment to navigate the internet.

In 2020, the House Energy and Commerce Committee and the House overall laid out a foundation for a major infrastructure build called the Moving Forward Act (H.R. 2). It dedicated more than \$100 billion for broadband-related programs. Then-Senate Majority Leader Mitch McConnell did not bring it up in the Senate, however, so it never passed.

“Our committee is mainly addressing things directly related to COVID-19, [such as] crushing the virus, testing and getting out the vaccine,” Pallone said, adding that he expected that if an economic stimulus package passed, it would include “investment in infrastructure and other things that will create jobs.”

Indeed, the Biden administration’s \$1.9 trillion COVID-19 relief bill (H.R. 1319), passed in March, has more than \$17 billion in funding that could subsidize broadband, including a homeowners assistance fund states can tap to subsidize broadband for low-income residents during the pandemic.

Meanwhile, Clyburn recently introduced the Accessible, Affordable Internet for All Act, which authorizes more than \$94 billion to provide affordable, high-speed internet access to unserved and underserved communities.

That is in addition to the \$3.2 billion in the Emergency Broadband Benefit Program Congress approved

last December, which helps households struggling to pay for internet service during the pandemic. It provides a discount of up to \$50 per month toward broadband service for eligible households and up to \$75 per month for households on tribal lands. Eligible households also can receive a one-time discount of up to \$100 to purchase a laptop, desktop computer or tablet from participating providers if the providers contribute \$10–\$50 toward the purchase price.

“I encourage all of the internet providers represented by INCOMPAS to participate because it’s voluntary,” Pallone said.

GETTING BROADBAND MAPPING RIGHT

Broadband mapping has been one of the vexing issues for figuring out where broadband is available in an area. Under the traditional FCC mapping method, a town is considered served by broadband even if only one home has access.

One ray of light came in 2020, when then-President Donald Trump signed S.1822, the Broadband Deployment Accuracy and Technological Availability (DATA) Act, into law. The legislation is designed to increase the accuracy of the FCC’s broadband availability maps by strengthening the broadband data collection process.

Among other things, the DATA Act requires the FCC to collect granular service availability data from wired, fixed wireless and satellite broadband providers. It also creates a process for consumers; state, local and tribal governments; and other groups to challenge FCC maps with their own data

and require the FCC to determine how to structure that process without making it overly burdensome for challengers.

Pallone said broadband mapping, passing bills to battle robocalls, and helping smaller carriers migrate away from Huawei gear are three cornerstone issues resolved in a bipartisan manner.

“We did pass the DATA Act, and at the end of the year, we had the money to do it,” he said. “The issue now is to generate the right maps.”

As a next step, he said, “We need to make sure the Biden administration moves quickly with the maps ... used to form funding and policy decisions.”

Sen. Ed Markey: We Need to Bring Finality to the Net Neutrality Debate

As the nation recently celebrated the 25th anniversary of the Telecom Act of 1996, Massachusetts Sen. Ed Markey (D-MA), a key internet freedom advocate, will soon introduce a bill to bring back net neutrality.



Sen. Ed Markey

The proposed new law aims to end the debate over net neutrality and secure open internet protections for Americans under Title II regulations. Net neutrality establishes rules stipulating that service providers offering broadband services should treat all internet traffic equally and not block, throttle or prioritize any content or data over others for commercial purposes.

In December 2017, then-FCC Chair Ajit Pai’s Restoring Internet Freedom Order was approved in a 3:2 vote along party lines. Pai’s order rolled back the net neutrality protections that Tom Wheeler, former chair, put in place.

Several states, including Washington and Oregon, previously passed legislation similar to the net neutrality rules adopted under Wheeler. California passed a bill in its state Senate to reestablish net neutrality and prohibit zero-rating programs in the state. In February, the U.S. Department of Justice dropped its 2018 lawsuit challenging California’s net neutrality rules.

With a soon-to-be Democratic-led FCC in place and now a Democratic White House, Markey is keen on passing a permanent net neutrality law.

“I want Congress to bring finality to the net neutrality issue,” he said.

“In order to preserve the free and open personality of the internet, we need strong and enforceable net neutrality rules and FCC authority over broadband access.”

He added, “We need to reverse the wrong-headed decisions of the Trump FCC, and that’s what I am going to be working to advance.”

ENABLING ACTIVISM, PROTECTING CONSUMERS

The presence of net neutrality rules gives a voice to activist groups that want to drive awareness on issues such as gun control and racial equality.

“The reality is that net neutrality is also a civil rights issue,” Markey said. “Today, individuals of all walks of life are carrying the torch of American activism on the streets and also online.”

The absence of net neutrality could keep people from expressing their views.

“Without net neutrality, Americans may be slowed down or stopped when they attempt to speak their minds on social media [and] livestream or organize peaceful protests,” he said. “We can’t allow that to happen as our country strives to root out systemic racism and other injustices.”

Net neutrality should also protect consumers from large companies’ using their personal data. In recent years, companies have used online algorithms to monetize people’s privacy.

“It’s time to step back and begin to put in place the guardrails that protect people from the misuse of power, which the internet has put into the hands of certain private-sector individuals,” Markey said, adding that power should be “in the hands of the individuals who use the internet.”

DRIVING COMPETITION, EQUITY

In addition to making sure the internet

is open under net neutrality, fostering competition is also important. Markey pointed out that consolidating the telecom industry put all the power into the hands of a few players.

“While we fight to make the internet free and open, we have to ensure competition in the online ecosystem,” he said. “I have long opposed harmful consolidation in the telecom industry, and I will continue to oppose mergers that raise prices, stifle competition and stifle real innovation.”

Although the Telecommunications Act of 1996 aimed to drive competition, the industry can do more. For example, there has been a host of megamergers between the likes of AT&T and DirecTV and T-Mobile and Sprint. Charter acquired Time Warner Cable.

“When we passed the [Telecommunications Act of 1996], I said we would unleash a revolution of new changes that will be the product of competition,” Markey said. “We have made great strides toward that goal, but that work remains unfinished because the technology industry is increasingly dominated by a powerful handful of companies.”

Another issue that continues to rise is discriminatory data usage. Data discrimination, often referred to as “discrimination by algorithm,” is bias that occurs when predefined data types or data sources are intentionally or unintentionally treated differently than others are.

“We must address issues around discriminatory data uses and biased algorithms that are harming vulnerable populations in our country,” Markey said. “That means enacting a comprehensive federal privacy law that includes data use limitations.”

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FCC's Starks: RDOF Stakes Are High

Geoffrey Starks, a former head of the FCC's Enforcement Bureau and a current commissioner, focuses on making sure participants in the Rural Digital Opportunity Fund (RDOF) deliver on what they promise.



Geoffrey Starks

When the FCC established the RDOF last February, Starks voted to approve the plan but dissented in part over concerns related to the FCC's mapping mechanism. He cited two issues: distributing funds based on deeply flawed Form 477 mapping data and a confusing and counterproductive approach toward coordinating RDOF money with state funds.

Under a two-phase process, the FCC will direct up to \$20.4 billion of Universal Service Fund money over 10 years to finance broadband networks in unserved rural areas.

"I wrote in RDOF that we're able to make sure we can hold folks accountable, so I do understand why Congress has questions," Starks said. "The stakes are high. We are spending an enormous amount of ratepayer money, and communities have been waiting far too long for this broadband infrastructure."

Starks was hardly alone in citing concerns about RDOF. At the time the FCC voted, fellow commissioner and now interim FCC Chair Jessica Rosenworcel, said the agency should know exactly where broadband service is available before it spends any money.

"Right now, if a single subscriber in a census block is identified as having broadband, we conclude broadband is available throughout," said Rosenworcel. "That's not right. We rush billions of dollars out the door in what feels like a broadband publicity stunt without taking a broad view of what the nation needs."

A RIGOROUS REVIEW

During the first phase of the RDOF reverse auction, the FCC awarded

\$9.2 billion in funds to a diverse set of traditional wireline service providers, cable operators, electric cooperatives, fixed wireless providers and satellite companies. To ensure accountability for any provider that applies for RDOF funds, the FCC has instituted a rigorous review process.

"We require a lot from companies at the long-form stage for good reasons," Starks said. "This is a live controversy before us, so I don't want to prejudge those reviews at this stage, but I am going to follow this very closely."

Questions have been raised, however, about the ability of some applicants, such as LTE Broadband and SpaceX, to deliver on their promised bandwidth claims.

LTE Broadband was awarded \$1.3 billion in the RDOF auction to provide gigabit speeds to rural areas using fixed wireless technology. The provider said it would also use fiber. Meanwhile, several experts questioned how SpaceX plans to use low-Earth-orbit (LEO) satellite technology to deliver 100 Mbps services.

In early February, NTCA—The Rural Broadband Association and the Fiber Broadband Association (FBA) submitted to the FCC a technical assessment and model to help the agency review RDOF long-form applications for LEO satellite broadband networks. Analysis conducted by Cartesian, based on current publicly available information, estimates that Starlink will face a capacity shortfall by 2028, and more than 56 percent of Starlink's RDOF subscribers will not be fully served. (For more on this, see "LEO Satellites: A Path to Nowhere?" p. 72.)

NTCA and the Fiber Broadband Association are not the only organizations that have raised concerns about LEO satellites and broadband wireless providers' ability to provide high-speed broadband services.

Electric cooperatives, which had a large presence in RDOF, cite similar concerns. Among them is Conexon's Rural Electric Cooperative RDOF Consortium, made up of more than

30 different applicants, which was awarded \$1.1 billion to provide high-speed broadband to 22 states across 618,000 locations.

Jim Matheson, CEO of the National Rural Electric Cooperative Association (NRECA), an industry trade organization that represents electric cooperatives bidding for RDOF funding, encouraged the FCC to take a close look at satellite and broadband wireless players.

"We ask you to direct commission staff to undertake a comprehensive review of the detailed business plans and technical showings in the long-form applications submitted by winning bidders proposing gigabit-tier fixed wireless and hybrid fixed-wireless solutions," Matheson said in a letter to the FCC. "We also believe a comparable, in-depth review is appropriate related to the winning bids of entities relying on low-Earth-orbit satellites bidding at the 100/20 Mbps tier. It is critical that the FCC ensure that these bidders possess the technical ability to meet their committed service obligations in all areas in which they secured winning bids at the funding level in which they bid."

Wireless operators are not taking this criticism lightly. The Wireless Internet Service Providers Association (WISPA) wrote a letter to the FCC, refuting what it said is "unwarranted criticism leveled at certain winners of the RDOF Phase I auction, and the RDOF process as a whole."

WISPA called out NTCA for claiming fixed-wireless access networks cannot deliver gigabit speeds.

The association stated that the unlicensed 60 GHz band and soon-to-be-available 6 GHz band devices make gigabit download wireless speeds a realistic alternative to fiber broadband.

"WISPs operate across a range of frequencies, from TV white space up through the millimeter wave bands, and while not all of these spectrum bands are capable of delivering gigabit services, that does not rule out provision of such services in many targeted areas," the WISPA letter said.

GETTING MAPS IN ORDER

Mapping continues to be an Achilles heel for developing broadband plans. Under the current FCC mapping regime, a community is deemed served even if only one home has broadband access.

Congress passed the Broadband Deployment Accuracy and Technological Availability (DATA) Act last March, which aims to reform how the FCC collects, verifies and maps broadband data and builds upon the Digital Opportunity Data Collection (DODC) report and order that the FCC adopted in August 2019.

A lack of accurate maps has been a point of frustration for consumers who often see that the FCC considers their communities served even though they can't get access.

"For far too long, states, consumers and cities have called on the FCC to

get its broadband data in order," Starks said. "We've heard from households that have had the all-too-real but disappointing experience of looking at that broadband map that says their home has broadband when they know that it is not available at their location."

He added, "I was a strong supporter of the DATA Act and widely acknowledged the flaws in our maps both for RDOF as well as for the 5G mobility fund."

For its part, the FCC adopted additional rules for the DODC to ensure the agency collects precise and accurate broadband deployment data.

The new rules specify which fixed and mobile broadband internet access service providers are required to report availability and/or coverage data and adopt requirements for reporting speed and latency for fixed technologies. In addition, they require fixed broadband internet access providers to report

whether broadband services are offered to residential and/or business customers.

Now that Congress has provided the funding to create new maps, Starks said he expects to see "quick action."

"We have bipartisan agreement around the importance of getting our maps in order," he said. "New maps must be completed, especially as we move from Phase I to Phase II of RDOF and obviously with regard to the 5G fund."

Starks and other members of the FCC also want the RDOF to reward broadband networks that can support long-term needs.

"When you look historically, we paid a lot of good money to deliver 4/1 Mbps broadband services," he said. "We need to make sure that with that 10-year commitment, we think about what the needs are going forward as well as address affordability, especially during the pandemic."

Broadband Providers Battle Inconsistent Local Permitting Obstacles

Federal laws have great influence on governing broadband and fiber buildouts, but local ordinances, and the permitting processes to get access to a city's or town's infrastructure, also pose various challenges and opportunities for providers.

The Great Broadband Buildout panelists at the INCOMPAS summit said that though federal investment is critical, so are smart local solutions that attract competition and investment.

On a local level, service providers typically run into four key issues in public rights of way (ROW): permitting, fees, access in infrastructure and specialized access to railroad crossings and bridge crossings.

"In terms of broadband deployment, there are a lot of obstacles with respect to deploying in the public rights of way," said Ronald W. Del Sesto Jr., a partner at the law firm Morgan Lewis.

PERMITTING INCONSISTENCIES REMAIN

A key issue service providers face when they move to deploy fiber and wireless facilities in a town or city is that every

community has different rules about how to access public ROW.

Zayo, a large metro and long-haul fiber provider to businesses and other carriers, found that the permitting situation was different before COVID-19.

"The permitting process pre-COVID-19 was either too opaque or it changed based on incoming leadership within local governments," said Brandon Reed, vice president of underlying rights and government relations for Zayo. "We have also seen it being used as a way to thwart our ability to negotiate for actual and direct costs."

Fatbeam, a fiber provider that has been expanding its presence in the Pacific Northwest, agrees.

Different permitting processes in different locations "hamper our ability to be consistent with delivery, and this can contribute to capital costs of



Tony Perkins

deployment," said Tony Perkins, COO of Fatbeam. "There is a consistent set of obstacles we all face, and any effort we can put forward as companies to assist with consistency is probably what we look forward to the most."

The same issue exists for wireless players that require access to wireline facilities to backhaul traffic. Though some wireless operators, such as Verizon, will build out their own fiber for backhaul, most providers must secure wholesale circuits from third parties in places where they don't have their own wireline facilities.

Milo Medin, vice president of wireless services at Google, noted several challenges wireless operators face.

"There is one network, which is the wired network, and there's a little bit of wireless at the end of it," he said. "There's at least one large city that has stopped processing permits to deploy



Milo Medin

wireless infrastructure in the middle of the pandemic, which has led to a lot of frustration for wireless operators trying to generate new capacity by deploying new base stations.”

Medin added that wireless franchise fees can also hold up deployments.

“Many communities have wireless franchise fees that can be quite large,” he said. “Some of these fees were designed for cellular operators, but fixed-wireless operators have different business models, so this can have consequences that can retard wireless infrastructure deployment.”

Uniti Group, which has been expanding its wireline metro and long-haul fiber networks organically and through acquisitions, said getting to know local town and city permitting officials is important.

This comes as the provider noted strong fourth-quarter bookings for its wireless offerings as a result of network densification efforts and the broader rollout of 5G services within its markets. Uniti also sees increased demand for its non-wireless service

offerings and leasing-up anchor wireless builds.

“We approach the permitting process as all relationship-based,” said Kelly McGriff, vice president and deputy general counsel at Uniti. “We try to help people with their task and to understand we are trying to provide a service to the citizens in their community.”

Though Uniti acknowledges there are common challenges with permitting and accessing ROWs, such as fees and technical ordinances, these issues are not insurmountable.

“There are challenges at the local, county and state level with getting access to rights of way, which are all obstacles we all try to work around,” McGriff said. “Brandon from Zayo and I have been to many late-night city council meetings where we get to know them and when you do that, it paves the way a bit.”

NAVIGATING THE PANDEMIC

The pandemic has impacted how service providers collaborate with communities and attempt network

builds. The interactions between providers and permitting authorities changed, in part because authorities were navigating how to work at home. Some providers found that there were delays in getting decisions made on simple issues, such as fees and permit costs.

Despite the challenges of the pandemic, Zayo, for one, saw an increase in sales of dark fiber, Ethernet and connectivity it sells to carrier and business customers during the pandemic. Reed said that when the pandemic shuttered businesses and forced businesses to have workers work remotely, the service provider made a point to collaborate with local cities and municipalities to ensure constant network connectivity.

“As people faced office closures and the reality of stay-at-home orders set in, the hard work of telecom service providers [was clear]. They needed to be on the front lines and accessing streets, sidewalks and highways to deploy what became not a need, but a demand,” he said.

COVID-19 also placed a challenge on Fatbeam’s network build efforts.

“As we go into each market, we try to find ways to partner with entities that we’re engaging with and COVID-19 did not help this much,” Perkins said. “There was some lack of resources and some decisions being made in different municipalities with fee and cost structures.”

Uniti acknowledges that COVID-19 created challenges. The provider and other members of the Broadband Deployment Advisory Committee worked through these issues during the first days of the pandemic.

“Many municipalities were hitting pause on things and how they process permits and receive payments when people are working from home,” McGriff said. “We have approached all [partnerships] on a case-by-case basis and have been able to overcome those challenges.” ❖

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EXPERT PERSPECTIVES

“We want to make sure we get unserved areas equipped with broadband and get people connected.”

– Sen. Bob Latta (R), Ohio

“Today, 12 million children lack the home internet access and devices they need to fully participate in virtual learning and that’s simply unacceptable.”

– Sen. Ed Markey (D), Massachusetts

“Leaving households disconnected will hurt our country’s ability to rebuild the economy and our workforce, diminish our ability to keep Americans and our health care systems safe by advancing telemedicine, and diminish the education horizon of our young learners everywhere.”

– Geoffrey Starks, FCC Commissioner

“Laws are blueprints and snapshots in time.”

– Mignon Clyburn, former FCC Commissioner

“One Touch Make Ready (OTMR) was a great first step, but we need to focus on what the evolution of OTMR looks like.”

– Tony Perkins, COO, Fatbeam