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March 9, 2021

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Politico

With little to no opportunities to grow the company through acquisitions of sizable cable operators, extending Charter Communications' network through regular edge-outs in rural areas coupled with a wave of new Rural Digital Opportunity Fund (RDOF) commitments has emerged as the next best option. "I think that rural build is like cable M&A," Chris Winfrey, Charter's chief financial officer, said Monday at the Deutsche Bank Media, Internet & Telecom Conference.

Charter was a big winner in phase I of the RDOF auction, qualifying to receive \$1.2 billion in federal government support to deploy networks covering 1.1 million locations in parts of 24 states. From a broader standpoint, Charter has committed to spend \$5 billion to cover more than 1 million new customer locations in the coming years. "You're essentially building a cable company here over several years from scratch," Winfrey said of the RDOF opportunity.

Charter expects to start some preliminary RDOF-related building this year, but does not expect it to have a material financial impact in 2021. "But the engine will be up and running, and I think 2022 will be the first decent-sized build year," he added. Winfrey noted that the paybacks on the rural projects are longer than for other typical capital-intensive projects, but said the internal rate

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Big Tech trustbuster

Protocol

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The Hill

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introduce legislation
to allow Americans
to take foreign
hackers to court

Harrisburg Patriot-News

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officials still missing
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COVID-19

of return on the rural opportunity is in the double digits. Those opportunities also come with relatively low risk because the deployments put Charter in position to drive high-service penetrations in areas where there is currently little or no broadband. "We think the returns are attractive," he said, holding that the economics are not that different from a cable M&A model, and represent a good path forward given the absence of any mid or larger-scale M&A from a cable footprint perspective.

The lack of such deals played out recently as Altice USA <u>failed</u> in its unsolicited play for Canadian MSO Cogeco and its Atlantic Broadband US division. Inorganic growth "is not in our hands," Winfrey said, noting that family-controlled and family-owned businesses will decide on when or if they become available for sale. But he also allowed that there's no minimum threshold for what Charter would consider buying, so long as the target fit in with its strategy to expand into adjacent areas. "We're open to anything," he said, noting that Charter has done deals with operators with systems that pass 1,000 or fewer homes.

Although Charter has alluded that it might be able to offload up to one third of its MVNO traffic on new networks that take advantage of both licensed and unlicensed CBRS spectrum, Winfrey stressed that the operator will be measured in its rollout of CBRS-based networks. "It's an opportunity. It's not something that we have to do," he said, noting that CBRS deployments will be largely based on the return on investment profile and targeted to high-traffic areas. "There's no rush to go deploy a network just to deploy a network. Our product can be very good...irrespective to how fast we go with CBRS because of the way it works together with Wi-Fi."

Touching on Charter's video business, Winfrey said not to expect a replay of 2020, when the cable operator ended up adding about 19,000 pay-TV subs. Adding video subs, absent the unique, pandemic-related conditions seen in 2020, is "unsustainable," he said. Winfrey reiterated that Charter's video success in 2020 was driven by pull-throughs that came from the operator's explosive broadband service growth. But he acknowledged that Charter has not given up on video, viewing it as an important piece of its broader connectivity business. He also hinted that Charter will soon announce the integration of several more app-based video options on its Spectrum Guide platform. – *LightReading*

SpaceX's satellite service is bringing <u>warp-speed internet</u> to rural parts of Maine, but early users say its high price and dropped connections may limit its contribution to widely expanding Maine's lagging high-speed internet.

The much-anticipated Starlink satellite network operates in an orbit that is much closer to Earth and holds many more satellites than those in existing networks, factors the company claims account for high speeds. One Reddit poster who says they live in rural Maine boasted last year of download speeds 33 times higher with Starlink than their previous service. But much remains unknown about the nascent network even as it has won federal funds to expand rural internet access in Maine, including whether it can keep its fast speeds when more customers and electronic devices are connected and to what degree it can be scaled to accommodate more users. It is being tested by about 10,000 users worldwide, according to a recent report SpaceX filed with federal regulators.

One of the early adopters is Maine's top official overseeing broadband access, Peggy Schaffer, executive director of the ConnectME Authority. She traded her

older satellite system recently for a Starlink connection at a second home in West Lubec. She said the initial \$500 equipment investment plus \$90 per month for service means the network is an option for people who have money and are unhappy with their current provider, but it is no panacea for Maine's rural broadband problem. "It's one of the tools in the arsenal, but it's not the only tool and it's not a perfect tool," Schaffer said. "None of them are."

The network is part of the attention-grabbing portfolio overseen by Elon Musk, the billionaire founder of the electric vehicle and clean energy company Tesla. Musk founded SpaceX in 2002 with the goal of colonizing Mars. It became the first private company to send astronauts into orbit and to the International Space Station in 2020. Starlink is a side project and the Maine clients differ sharply. Jack Gondela, a self-described "early adopter" of technology, switched recently from cable internet to Starlink at his home in Fairfield and said his upload speed is about 10 times faster.

Bill Frysinger of Northport, who recently signed up for the service after being on a waiting list for two years, is happy with the speed, but he is rigging up his own backup network so his old telephone line service will kick in when the satellite network is interrupted. "If Starlink goes out for 2 seconds on a Zoom call, it can mess up the meeting," he said.

Schaffer also pointed to the same brief lapses in connections that can add up to 6 minutes or more a day, attributing it to SpaceX not having enough satellites in orbit. The company, which plans to have more than 4,000 satellites in orbit, currently has one-quarter of that amount. Every two weeks, it launches 60 satellites on one rocket to fill in the gaps. The Starlink satellite network connects to gateways on the ground, including one at Loring Air Force Base in Limestone.

Starlink is also one of four companies awarded a total \$71.2 million over 10 years by the Federal Communications Commission to bring high-speed broadband to close to 28,000 rural locations in Maine. But Schaffer said its plans in Maine under that grant still are unclear and the company is tight-lipped. "Off the record, we don't have any new information to share at this time." a spokesperson responded to guestions last week.

A <u>study</u> by telecom consultancy Cartesian estimated that by 2028, some 56 percent of consumers who relied on Starlink would experience service degradations during peak broadband hours of 6 p.m. to 12 a.m. Cartesian based that on public information from the FCC grant process. The network's performance might be further diminished because SpaceX plans to use Starlink for military, commercial and other applications such as smart cars, Cartesian's vice president Michael Darque, vice president of Cartesian, told a Broadband Breakfast webinar in February.

For now, it is providing Mainers with slow or no internet connections with much desired high-speed access. Schaffer said the HughesNet internet she had been using has satellites about 22,000 miles away from Earth, while Starlink's are about 1,200 miles away. It wasn't possible with the old service to stream movies in West Lubec, but she can do that now. There is a potential negative side effect to Starlink as the state tries to bridge the digital divide, Schaffer said. In a poorer area, for example, if people who can afford the service sign up, other companies might find it difficult to expand because there won't be enough demand for their service. "Starlink has the potential to make it much harder to build out networks," she said. "It's a huge equity question of how to bring the networks to people who can't afford service but still need connections." – **Bangor (ME) Daily News**

T Mobile US Inc. will automatically enroll its phone subscribers in an advertising program informed by their online activity, testing businesses' appetite for information that other companies have restricted. The No. 2 U.S. carrier by subscribers said in a recent privacy-policy update that unless they opt out it will share customers' web and mobile-app data with advertisers starting April 26. For example, the program could help advertisers identify people who enjoy cooking or are sports enthusiasts, the company said.

T-Mobile's new policy will also cover Sprint customers acquired through the carriers' 2020 merger. Sprint had previously shared similar data only from customers who opted into its third-party ad program. A T-Mobile spokeswoman said the changes give subscribers advertising that aligns with their interests. "We've heard many say they prefer more relevant ads so we're defaulting to this setting," she said. (See below how to change your account settings.)

T-Mobile ended 2020 with more than 60 million phone users under its main brand and more than 20 million customers on prepaid plans. The company said the changes wouldn't apply to business accounts or children's lines. Many big tech companies are under pressure from regulators and privacy advocates to move in the opposite direction on user data. Google owner Alphabet Inc. recently pledged to change the part of its business that relies on records of users' browsing across websites, while Apple Inc. is adding strict new privacy protections for its device users.

AT&T Inc. automatically enrolls wireless subscribers in a basic ad program that pools them into groups based on inferred interests, such as sports or buying a car. An enhanced version of the program shares more-detailed personal information with partners from customers who opt into it. Verizon Communications Inc. likewise pools subscriber data before sharing inferences about them with advertisers, with a more-detailed sharing program called Verizon Selects for users who enroll. Its separate Verizon Media division shares data gathered through its Yahoo and AOL brands. T-Mobile said it masks users' identities to prevent advertisers and other companies from knowing what websites they visit or apps they have installed. The company tags the data with an encoded user or device ID to protect the customers' anonymity.

But privacy groups say those IDs can be linked back to people by comparing different data sets. "It's hard to say with a straight face, 'We're not going to share your name with it,' " said Aaron Mackey, a lawyer for the San Francisco-based Electronic Frontier Foundation, a consumer-privacy advocate. "This type of data is very personal and revealing, and it's trivial to link that deidentified info back to you."

Past telecom-industry efforts to take a piece of a multibillion-dollar digital ad market have stumbled more because of competitive pressures than privacy concerns. After spending more than \$9 billion to acquire Yahoo and AOL, Verizon has scaled back its internet ambitions and written down more than \$4 billion. The company has also sold assets and cut jobs after the business failed to loosen Facebook Inc.'s and Google's grip on the digital-ad market.

AT&T spent \$1.6 billion in 2018 to buy AppNexus, a digital ad exchange that formed the cornerstone of an ambitious bid to compete with Silicon Valley companies for online video advertising. The Wall Street Journal last year reported that much of that ad division, called Xandr, was for sale after the

company's revenue growth missed executives' original expectations. AT&T's and Verizon's digital-ad operations still dwarf T-Mobile's. T-Mobile bought Seattle startup PushSpring in 2019 to improve its business with marketers seeking to serve customers more-targeted ads. T-Mobile's ad and search sales that year amounted to \$506 million, a sliver of its \$45 billion in revenue.

U.S. law restricts how phone companies handle "customer proprietary network information" such as call logs and billing information, though there are few federal limits on how carriers use the troves of data generated by modern smartphones. The Federal Trade Commission in 2019 ordered several providers of wireless and cable internet services to reveal information about their privacy practices, but has yet to publish new information about the inquiry. Acting Chairwoman Rebecca Slaughter last month said she wants the commission to release a report on its findings by the end of the year. — Wall Street Journal







