

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Accelerating Wireless Broadband Deployment)	WT Docket No. 17-79
by Removing Barriers to Infrastructure)	
Investment)	
)	
Accelerating Wireline Broadband Deployment)	WT Docket No. 17-84
by Removing Barriers to Infrastructure)	
Investment)	

**JOINT REPLY COMMENTS OF QUINTILLION NETWORKS, LLC AND
QUINTILLINO SUBSEA OPERATIONS, LLC**

Quintillion Networks, LLC and Quintillion Subsea Operations, LLC (collectively “Quintillion”), by their attorneys, hereby submit these comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) *Notice of Proposed Rulemaking and Notice of Inquiry*¹ and *Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment*² in the above captioned proceedings.

I. INTRODUCTION.

Quintillion applauds the FCC’s much-needed efforts to identify ways to eliminate barriers to wireline and wireless broadband deployment. Removing barriers to deployment will allow operators to improve their quality of service and lower prices by fostering competition in

¹ Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, *Notice of Proposed Rulemaking and Notice of Inquiry*, 32 FCC Rcd 3330 (2017). These Joint Reply Comments are timely filed. The FCC extended the deadline to file reply comments to July 17, 2017. *See* Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, *Order*, DA 17-525, WT Docket No. 17-79 (rel. May 26, 2017).

² Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, *Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment*, 32 FCC Rcd 3266 (2017).

the provision of internet services. As it reviews the submissions in the instant proceedings, the FCC must bear in mind the unique challenges faced by the companies that construct and operate networks in Alaska. Currently, many Alaskans in Quintillion's service territory rely on outdated terrestrial or satellite based Internet service. Both of these products provide customers with network speeds, capacity, and service that are reminiscent of networks from the early 2000s, not the modern networks that now serve the vast majority of the United States population.

Quintillion is one company that has taken head on the challenge of constructing a high-speed, modern network to connect parts of Alaska that are currently unserved by true broadband. Earlier this year, Quintillion launched a terrestrial network connecting central and northern Alaska, and later this year, Quintillion will launch another segment of its network that connects several communities along the northwest coast of the state. As a result, for the first time ever, many Alaskans have been or soon will be given access to high-speed Internet service through Quintillion's fiber backhaul.

II. THE HISTORY AND MISSION OF QUINTILLION.

The Quintillion entities are privately funded companies headquartered in Anchorage, Alaska. Quintillion is constructing a network that will span over 1,200 miles and deploy advanced coherent multi-terabit technology with optical add-drop multiplexing capabilities (the "Quintillion System"). The Quintillion System will be deployed as a trunk and branch configuration with six landings in rural coastal communities in Alaska: Nome, Kotzebue, Point Hope, Wainwright, Utqiagvik (Barrow), and Prudhoe Bay. Traffic from these communities will be backhauled to Prudhoe Bay, where the Quintillion System will interface with the state-of-the-art broadband terrestrial fiber system of Quintillion Networks, which launched in April of this year. Quintillion's service to the rural coastal Alaska communities is expected to begin by December 1, 2017.

The Quintillion System is part of a multi-phase international telecommunications project that plans to link Alaska to Canada, Europe, and Asia with a fiber-optic broadband cable running along the Arctic Ocean through the Lower Northwest Passage.

Quintillion will wholesale middle-mile and backhaul communications capacity on the terrestrial fiber system at prices up to 90% lower than available on competitive satellite and microwave systems. Quintillion intends to operate as a private operator and will sell capacity on its cable and terrestrial systems on a wholesale basis to telecommunications companies. The Quintillion System and the interconnecting terrestrial fiber network of Quintillion Networks will enable competitive retail providers to bring affordable high-speed broadband access and other advanced communications services for the first time to certain communities in Northwestern and Northern Alaska.

The Quintillion System and the supporting terrestrial fiber network each were developed and are being deployed using only private risk capital. Quintillion is not using universal service funds to construct its network. This service will promote the competitive introduction of broadband in rural and remote Northwestern and Northern Alaska at speeds enjoyed by users in most urban locations in the lower forty-eight states.

III. REMOVING BARRIERS TO DEPLOYMENT IS PARTICULARLY CRITICAL IN ALASKA.

The Commission can and must take steps to promote the deployment of middle-mile facilities. Middle-mile facilities will be crucial to the deployment of 4G and 5G service in Alaska. Unfortunately, parts of rural and Bush Alaska are severely lacking in middle-mile networks; thus, large portions of Alaska remain underserved by modern telecommunications

networks. Indeed, Chairman Pai, Commissioner Clyburn, and Commissioner O’Rielly recently discussed the need to modify the Alaska Plan to support middle-mile deployment.³

Deploying middle-mile facilities in Alaska is more important now than ever. Alaska needs middle-mile facilities to connect to existing backhaul connections, including the new Quintillion Fiber hubs in Nome, Kotzebue, Point Hope, Wainwright, Utqiagvik (Barrow), and Prudhoe Bay. Alaska’s sheer size, unforgiving terrain, dispersed population, and harsh climate make the deployment of wireless and wireline networks difficult. Eliminating excessive delays during the pre-construction period is particularly important to deployment of infrastructure in Alaska because the state’s geographic factors and climate provide for short build seasons, and even a brief delay in approvals can put off construction for a full year.

Alaska’s size and uncompromising terrain are critical factors in deploying telecommunications infrastructure. Alaska is by far the largest state in the country. In fact, it is bigger than the next three largest states (Texas, California, and Montana) combined. Lakes, rivers, and mountains cover the state. These beautiful natural resources, however, isolate many communities and villages and the only way of reaching most remote areas in Alaska is by aircraft or boat. Alaska also is the least densely populated state in the country. Approximately half of the state’s population resides in three cities – Anchorage, Fairbanks, and Juneau – where residents have access to modern telecommunications networks. Unfortunately, it is rural and

³ Connect America Fund; Universal Service Reform – Mobility Fund; Connect America Fund – Alaska Plan, *Report and Order and Further Notice of Proposed Rulemaking*, 31 FCC Rcd 10139, 10205 (2016) (Commissioner Clyburn stating “some carriers likely cannot even deploy basic broadband service to their current voice customers without better middle-mile support”); *id.* at 10207 (Commissioner Pai noting Alaska has a problem that much of the United States does not: “[h]igh-capacity, terrestrial middle-mile connections between communities are few and far between”); *See also* Statement of Commissioner O’Rielly acknowledging the need to improve middle mile availability. *Id.* at 10211.

Bush Alaska that have the least densely populated areas and generally lack competitive options for broadband Internet access. Moreover, the state has relatively low temperatures in the summer and is extremely frigid in the winter.⁴ Taken together, this means that companies must construct networks that span great distances and traverse difficult terrain in build seasons that are far shorter than those in much of the lower 48 states. Without changes to the FCC's rules, communities across Alaska will remain unserved by the modern, high-speed networks that are prevalent throughout the rest of the United States.

As the FCC considers proposals submitted in the instant proceedings, it must focus on adopting rule changes that foster competition. Quintillion has observed firsthand the benefits that come with local competition in the provision of broadband services. Prior to the introduction of a competitive terrestrial broadband operator, GCI provided broadband service to the Nome City School District at a rate equivalent to approximately \$300,000 per month per 100 Mbps. DRS Technologies recently won a contract to begin providing the school district with service, in part using wholesale capacity from Quintillion's network. DRS Technologies' bid for the contract was less than \$100,000 per month for 100 Mbps – reducing the price of service by at least 70%. In many cases, these kinds of cost reductions also reduce the burden on the federal universal service fund. The FCC can and should ensure that any policies it adopts as a result of these proceedings promotes competition to underserved areas.

⁴ For example, the average low temperature in Deadhorse, Alaska for the month of February is -22 degrees Fahrenheit while the average *high* is -13 degrees Fahrenheit. See *Deadhorse , Alaska Monthly Weather*, Weather Channel, https://weather.com/weather/monthly/1/USAK0064?from=36hr_bottomnav_undeclared.

IV. THE FCC HAS THE AUTHORITY TO ADOPT RULES TO REDUCE UNNECESSARY REGULATORY BARRIERS CREATED BY STATE AND LOCAL ZONING/PERMITTING PROCESSES.

Section 230 of the Communications Act is a Congressional finding that makes clear that the development of the Internet provides great benefits to all Americans and that it is the policy of the U.S. to promote the continued development of the Internet unfettered by Federal or State regulation.⁵ The FCC must use its statutory authority to implement this Congressional finding and reduce the state and local regulations that inhibit the deployment of broadband networks.

As several commenters have noted, Section 253(a)⁶ and Section 332(c)(7)⁷ of the Communications Act gives the FCC the authority to ban state or local regulations that “prohibit or have the effect of prohibiting” service.⁸ The broad language in these provisions broadly authorizes the FCC to eliminate state and local statutes, regulations, decisions, and any other requirements that create excessive delays in negotiations and approvals for rights-of-way agreements and permitting for telecommunications networks and services.

In the *2009 Declaratory Ruling*,⁹ the FCC relied on a party’s ability to seek judicial recourse through Section 332(c)(7)(B)(v) if a locality was not acting in accordance with FCC rules. However, judicial proceedings under Section 332 are time consuming and costly to litigate, which can have the effect of slowing deployment of new broadband facilities.

⁵ 47 U.S.C. 230.

⁶ 47 U.S.C. 253(a).

⁷ 47 U.S.C. 332(c)(7).

⁸ See, e.g., Comments of the Telecommunications Industry Association; Comments of Crown Castle International Corp.; Comments of AT&T; and Comments of Sprint Corporation.

⁹ Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review etc., *Declaratory Ruling*, 24 FCC Rcd 13994 (Nov. 18, 2009), *aff’d*, *City of Arlington v. FCC*, 668 F. 3d 229 (5th Cir. 2012), *aff’d*, 133 S. Ct. 1863 (2013).

Quintillion recognizes that certain states and localities, particularly those in small or rural communities, may face challenges implementing FCC rules and policies that promote the deployment of telecommunications services. Accordingly, the FCC should continue to provide guidance to states and localities on best practices, as well as their legal obligations. The FCC created the Broadband Deployment Advisory Committee to bring together those that have an interest in making recommendations on broadband deployment to the FCC. This is one such step that will provide a forum for state and local governments to collaborate with the FCC in the deployment of infrastructure for their residents. The FCC should look for other opportunities to continue this important dialogue.

V. THE FCC CAN PROMOTE THE DEPLOYMENT OF MIDDLE-MILE FACILITIES BY ELMINATING RULES THAT CAUSE EXCESSIVE DELAYS IN THE DEPLOYMENT OF NEW BROADBAND INFRASTRUCTURE.

Municipalities should not be able to abuse the process provided in Section 332(c)(7)(B)(v) to evade or delay consideration and approval of wireless facilities. The FCC must, therefore, make clear that Section 332(c)(7) does not permit municipalities to impose unnecessary delays in the approval process. Specifically, the FCC should exercise its statutory authority under Section 332(c)(7) to adopt rules that provide that if a municipality fails to act “within a reasonable period of time” that a pending application shall be deemed granted, and that set specific time frames for action on applications.

Specifically, the Commission should adopt rules that eliminate excessive delays in negotiations and approvals for rights-of-way agreements and permitting for telecommunications services. The FCC’s rules should preclude any moratoria or *de facto* moratoria on acceptance, processing, and action on siting applications. In particular, the FCC should incorporate the

proposal submitted by a number of parties to adopt a deemed granted rule under 332(c)(7).¹⁰

Section 332(c)(7)(B) provides that local governments must act “within a reasonable time” after an application is filed.¹¹ Absent timely action, a pending application should be deemed granted, which allows the operator to proceed with its plans. Moreover, the Fifth Circuit has made clear that the Commission has the authority to adopt rules that do not impose additional limitations on states and localities:

Although the legislative history surrounding the passage of § 332(c)(7) indicates Congress intended the provision to remove from the FCC the authority to make new rules limiting or affecting state and local government authority over wireless zoning decisions, the legislative history, like the statute itself, is silent as to the FCC’s ability to use its general rulemaking power to provide guidance with respect to limitations § 332(c)(7)(B) expressly imposes on state and local governments. In other words, the legislative history does no more than indicate Congress’s intent to bar the FCC from imposing additional limitations on state and local authority. It does not indicate a clear intent to bar FCC implementation of the limitations already expressly provided for in the statute.¹²

A deemed granted rule and other rules designed to ease regulatory burdens will lessen the likelihood that any one locality can interfere with deployment of facilities that extend beyond that locality. Today, a locality, if it chose to do so, could stymie expansion of the network beyond the locality by making unreasonable and unnecessary demands of the provider seeking authority to construct the network. The Commission must adopt measures that make clear that localities cannot use a provider’s desire to expand or improve its network to extort the company to comply with unreasonable and often unrelated demands. Doing so will encourage localities to

¹⁰ See, e.g., Comments of the T-Mobile USA, Inc.; Comments of Competitive Carriers Association; and Comments of Verizon.

¹¹ 47 U.S.C. 332(c)(7)(B).

¹² *City of Arlington v. FCC*, 668 F.3d 229, 253 (5th Cir. 2012), *aff’d* 133 S. Ct. 1863 (2013).

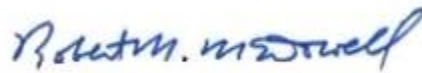
work as partners, not adversaries, in the deployment of networks and operators will be able to create reliable plans and benchmarks as they seek to extend their network.

VI. CONCLUSION

Quintillion encourages the FCC to take the steps described herein to reduce the burdens that delay the deployments of wireless and wireline network infrastructure.

Respectfully submitted,

QUINTILLION NETWORKS, LLC AND QUINTILLION
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A handwritten signature in blue ink, reading "Robert M. McDowell", is positioned above a horizontal line.

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