

ADDITIONAL INFORMATION SUPPORTING C-BAND AUTHORIZATION

After contacting the Wireless Bureau regarding an updated status of application file number SES-LIC-20181031-03653, call sign E190040, submitted for fixed- satellite service (“FSS”) earth station license in the 3.7-4.2 GHz Band, TelAlaska Cellular, Inc. (“TelAlaska”) offers additional information to impart upon the Wireless Bureau the necessity of authority granted toward this application.

Providing mobile and broadband service to Alaska is particularly challenging. Such challenges include “its remoteness, lack of roads, challenges and costs associated with transporting fuel, lack of scalability per community, satellite and backhaul availability, extreme weather conditions, challenging topography, and short construction season.”¹ Therefore, TelAlaska must utilize a variety of technologies to provide dependable services, and often must do so in innovative ways. This includes using FSS in conjunction with its terrestrial, mobile, and fixed wireless networks. TelAlaska relies on the 3.7 GHz band to provide communications services to rural Alaska.

Here, TelAlaska is seeking to file for a new FSS Earth Station in the C-Band. A new Alaska teleport allows TelAlaska to respond to the needs of its rural customers statewide in an economic

¹ *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, 10162, ¶ 72 (2016) (“*Alaska Plan R&O*”) (citing *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17829, ¶ 507 (2011) (“*USF/ICC Transformation Order*”), *aff’d sub nom. FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014)).

and efficient manner. This teleport is the link providing not only mobile wireless voice and broadband services, but also supports broadband service for health care and schools on Alaska Native Lands throughout the state. The remote communities, where TelAlaska brings broadband via satellite, rely on numerous services, including ecommerce and access to government services, provided over the internet. Many communities are without roads beyond the community, and rural residents are unable to travel to hub communities or urban areas for their everyday needs. This new teleport enables TelAlaska to bring internet to their homes. Additionally, a reliable communication network for first responders is extremely important throughout remote Alaska. The First Responder Network Authority (FirstNet) is a means for advancing the nationwide public safety broadband network improving communications to allow for improved public safety response. FirstNet and AT&T are leveraging private sector resources and infrastructure.² This teleport will enable TelAlaska to support FirstNet in providing access and transport between the remote communities and FirstNet's network switch at its hub location in Anchorage, Alaska.

The new teleport will support approximately 26 communities in remote Alaska ranging from the North Slope Borough to the Aleutian Islands, a distance of approximately 1,100 miles by air. See attached Exhibit A. The remote communities supported by C-Band are not connected by road to access fiber backhaul. These remote communities are isolated from population centers within Alaska, from one another, and from basic infrastructure required to connect them. The nearest affordable fiber access to Unalaska is Anchorage, approximately 800 miles by air. Constructing terrestrial transport to the remote communities is cost prohibitive. These "roadless" communities may require submarine cable including landing stations, ~~those~~ construction of roads or other right-of-ways through undeveloped land, and all would ~~may~~ pass through protected areas

²<https://www.firstnet.gov/network>

requiring additional permitting and authorizations. Additional microwave deployment is too costly due to lack of commercial power and transportation of fuel to remote sites. TelAlaska has looked at constructing fiber between existing fiber backhaul locations and near communities. A recent proposed project between existing fiber backhaul in Nome and the nearest community, approximately 70 miles with no permanent road access, revealed estimated project costs at \$5-6 million due to remoteness. To the extent that GCI's TERRA Network is in communities currently supported by C-band, the middle mile transport pricing using the TERRA network is not economically affordable at this time.

TelAlaska has reviewed alternative satellite bandwidth. Access to Ka-Band is not available in all markets and none of the major Ka HTS operators are planning any new satellites that will be able to serve Alaska in the next 5-7 years. Ka-Band is not proven in Northern part of Alaska and not viable near or above the Arctic Circle. Both the Ka-Band and Ka-Band do not have the atmospheric penetration capability of C-Band and is vulnerable to extended outages due to weather making them unreliable.

As noted above, granting TelAlaska authority for a new C-Band Earth Station will permit TelAlaska to continue to offer essential services to rural and remote areas throughout Alaska. TelAlaska has no reasonable alternative, as the C-Band presents the only current economically viable option for providing such communications services to these villages on a going-forward basis as attempts to use options for transport are not feasible. TelAlaska has a demonstrated need for this authorization to provide necessary services now and in the future.

Exhibit A

- TelAlaska C-Band Supported Site
- Fiber Routes

