# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of

| Application of Alaska Communications      | ) | Call Sign: E170205 |
|---|---|--------------------|
| Internet LLC for 60-Day Special Temporary | ) |                    |
| Authorization ("STA")                     | ) | File No. SES-STA   |

## **APPLICATION FOR SPECIAL TEMPORARY AUTHORIZATION**

Pursuant to Section 25.120 of the rules of the Federal Communications Commission (the "FCC" or "Commission"), 47 C.F.R. § 25.120, Alaska Communications Internet LLC ("Alaska Communications Internet") seeks this 60-day special temporary authorization ("STA"), commencing on Wednesday, January 30, 2019, 1 to continue to operate ten (10) remote earth station sites as part of its existing C-band very small aperture terminal ("VSAT") network² during the pendency of its underlying modification application for long-term operating authority. 3

Consistent with its existing STA for the identical operations proposed herein, 4 Alaska

Communications Internet also seeks to operate the previously licensed Dimond D hub site and five remote sites pursuant to updated operating parameters. Alaska Communications Internet will continue to operate these sites in portions of the C-band at fixed locations in Alaska while communicating with the EUTELSAT 115WB satellite located at the 114.9° W.L. orbital position.

Alaska Communications Internet requests this commencement date as specified in the Public Notice *Impact of Potential Lapse in Funding on Commission Operations* (DA 19-10, released January 2, 2019, "*Lapse in Funding Public Notice*").

See Alaska Communications Internet LLC, File No. SES-LIC-20171116-01257, Call Sign E170205, and subsequent modification and amendment applications ("ACI Network License").

<sup>&</sup>lt;sup>3</sup> See Alaska Communications Internet LLC, File No. SES-MOD-20180626-01472 ("ACI Modification Application").

See Alaska Communications Internet LLC, File No. SES-STA-20181109-03201 ("Kuspuk STA").

Grant of this STA will enable Alaska Communications Internet to continue delivering critically needed broadband services supported by the Commission's Schools and Libraries Universal Service Support Mechanism, commonly known as "E-rate," to students, teachers, and staff of the Kuspuk School District, Alaska, ensuring continuity of service to the school district during the academic year. Moreover, grant of this STA will strongly serve the public interest by allowing Alaska Communications Internet to continue providing enhanced broadband connectivity to schools and facilities in the Kuspuk School District, thus delivering improved educational opportunities and resources, enabling distance learning, and supporting staff, students, and teachers in these remote Alaska bush communities.<sup>5</sup>

Although the *ACI Modification Application* for regular authority to serve the Kuspuk School District sites came off of Public Notice on August 17, 2018, the application continues to be coordinated internally between the Commission's International Bureau ("IB") and the Wireless Telecommunications Bureau ("WTB"). Thus, pursuant to consultation with Commission staff, Alaska Communications Internet files this STA to extend its existing authority in the *Kuspuk STA* and allow these schools and their students, teachers, and staff to continue to realize the benefits of improved broadband services, while also affording the Commission sufficient time to review and process the *ACI Modification Application*.

Unlike Alaska's three largest population centers, and the surrounding rural communities, Alaska bush communities are isolated geographically from infrastructure resources commonly available elsewhere in the state, and the nation as a whole. Most bush communities cannot be accessed by road and are not connected to the state's power grid. To reach these communities, people, as well as goods and services, must arrive by plane, barge, snow machine, all-terrain vehicle, or other off-road transportation means. Communications services in these communities generally must rely on satellite or terrestrial point-to-point microwave transport links to Anchorage, Fairbanks, or Juneau.

## I. Background

Alaska Communications Internet is an affiliate of Alaska Communications Systems

Group, Inc. ("Alaska Communications"), a publicly-traded company that, through its subsidiaries, provides terrestrial wireline telecommunications and broadband-enabled services throughout

Alaska as the largest incumbent local exchange carrier in the state. Alaska Communications

Internet provides essential broadband and voice-over-Internet Protocol ("VoIP") services to enterprise, business, educational, health care, and residential customers throughout the state.

The ACI Network License authorizes Alaska Communications Internet to operate a network of C-band satellite earth stations in order to provide satellite services to diverse users in remote locations in Alaska. Specifically, from the gateway hub in Anchorage, Alaska, the network currently serves the Alaska Native population of St. Paul Island and the Tanadgusix Corporation ("TDX"), an Alaska Native corporation created pursuant to the Alaska Native Claims Settlement Act ("ANCSA"). In addition, the C-band VSAT network serves local businesses co-owned by the Bristol Bay Economic Development Corporation ("BBEDC"), providing broadband connectivity that supports the local fishing and seafood industries, as well as a test site located in Anchorage, Alaska. This Kuspuk STA extension request, and underlying ACI Modification Application, enable Alaska Communications Internet to deliver the well-recognized benefits of broadband telecommunications and Internet services to ten primary and secondary school locations supported by the Commission's E-rate support mechanism in additional Alaska bush communities. This

The incumbent local exchange carrier ("ILEC") subsidiaries of Alaska Communications are: ACS of Anchorage, LLC; ACS of Fairbanks, LLC; ACS of Alaska, LLC; and ACS of the Northland, LLC; see also ACS Long Distance, Inc., File Nos. ITC-214-19960612-00248, ITC-T/C-20050822-00382, ITC-T/C-20040414-00190 (International Section 214 authorization).

The BBEDC is a not-for-profit company whose mission is to promote economic growth and opportunities for residents of BBEDC's member communities through sustainable use of the Bering Sea resources. *See* http://www.bbedc.com.

extension is particularly important now that the 2018-2019 school year is underway and students have returned to classes.

Alaska Communications Internet incorporates by reference (and attaches as an Exhibit to this STA) the FCC Form 312 Schedule B and Technical Appendix provided with the *ACI Modification Application*. Those documents provide relevant information relating to the earth station operating parameters, performance information and radiation hazard analyses. At all ten remote sites, Alaska Communications Internet operates an identical 2.4m Prodelin Model 1244 (the "2.4m") earth station, which is the same model that is currently licensed in the *ACI Network License* and on the Commission's Approved Non-Routine Earth Station Antennas List ("Non-Routine Antenna List").<sup>8</sup> Moreover, Alaska Communications Internet will continue to operate the earth stations below the maximum EIRP spectral density ("ESD") levels authorized in the *ACI Network License* and consistent within levels previously approved by the Commission.<sup>9</sup>

#### II. Discussion

With this STA request, Alaska Communications Internet seeks authority to continue to operate ten (10) remote earth station sites as part of the *ACI Network License*, each of which completed coordination on June 22, 2018, to communicate with the EUTELSAT 115WB satellite in portions of the C-band. Consistent with the *Kuspuk STA* and *ACI Modification Application*, in

Wireless LLC, File No. SES-LIC-20120116-00058, Call Sign E120017).

See Approved Non-Routine Earth Station Antennas, <a href="https://www.fcc.gov/approved-non-routine-earth-station-antennas">https://www.fcc.gov/approved-non-routine-earth-station-antennas</a>; Letter to Marlene H. Dortch, "Alaska Communications Internet LLC – Section 1.65 Letter Regarding Application for C-Band Very Small Aperture Terminal ("VSAT") Blanket License, File No. SES-LIC-20171116-01257, Call Sign 170205" (filed on Dec. 22, 2017) (citing Harris Corporation, File No. SES-LIC-20060302-00342, Call Sign E060075; Intelsat LLC, File No. SES-LIC-20091027-01364, Call Sign E090186; Globe

<sup>&</sup>lt;sup>9</sup> Each site will utilize an iDirect modem, which assigns individual time slots for each earth station's transmissions, and thus there is no potential for aggregation of transmissions resulting in an exceedance of the off-axis ESD levels provided in this application.

order to accommodate larger bandwidth carriers for the increased traffic to the new Kuspuk sites and add corresponding receive frequencies to the currently licensed remote sites, this STA also seeks to continue operation in additional C-band transmit frequencies and with increased antenna input power for the previously licensed Dimond D hub.

Alaska Communications Internet acknowledges the Commission's Public Notice placing a temporary freeze on the filing of all new or modification applications for earth stations in the 3.7-4.2 GHz band, effective as of April 19, 2018. The *Temporary Freeze Public Notice* does not include a freeze on requests for special temporary authority for short-term operations, and thus the instant request is outside the scope of the freeze. In the *ACI Modification Application*, Alaska Communications Internet more thoroughly discusses the reasons why a waiver of the *Temporary Freeze Public Notice* is justified in connection therewith.

In addition, Alaska Communications Internet incorporates by reference the waiver request made in the *ACI Modification Application*<sup>11</sup> to permit Alaska Communications Internet to use up to 144 megahertz of bandwidth on EUTELSAT 115WB.<sup>12</sup> Although the Commission previously waived Section 25.115(c)(2)(i)(B) in the *ACI Network License* to permit Alaska Communications Internet to use 72 megahertz of spectrum in each direction on Transponder 01C

See Public Notice, Temporary Freeze on Applications for New or Modified Fixed Satellite Service Earth Stations and Fixed Microwave Stations in the 3.7-4.2 GHz Band, 90-Day Window to File Applications for Earth Stations Currently Operating in the 3.7-4.2 GHz Band, DA 18-398 (rel. on April 19, 2018) ("Temporary Freeze Public Notice"). See also, Public Notice, GN Docket Nos. 17-183, 18-122, "International Bureau Announces 90-Day Extension of Filing Window, to October 17, 2018, to File Applications for Earth Stations Currently Operating in 3.7-4.2 GHz Band; Filing Options for Operators with Multiple Earth Station Antennas," DA 18-639 (rel. Jun. 21, 2018).

<sup>&</sup>lt;sup>11</sup> See ACI Modification Application, Legal Narrative, Section III.

See 47 C.F.R. § 25.115(c)(2)(i)(B) (permitting a C-band VSAT network to utilize up to 20 megahertz of spectrum in each direction of transmission on up to three satellites, *i.e.*, up to 60 megahertz total).

of EUTELSAT 115WB, growing demand for Alaska Communications Internet's C-band satellite services in Alaska now necessitates use of an *additional* 72 megahertz of spectrum (*i.e.*, 144 megahertz total, across Transponders 01C, 07C, and 08C) on EUTELSATSAT 115WB in its network.

As demonstrated in the *ACI Modification Application*, the additional transponder capacity is imperative to be able to properly scale and offer the most reliable connectivity solutions to the remote communities of Alaska. The additional spectrum is necessary to deliver the required services to the ten Kuspuk School District locations, which cannot be added to the current network within the currently licensed 72 megahertz range. The additional spectrum thus enables the delivery of critically needed broadband telecommunications and Internet access services in the Alaska bush, where terrestrial connectivity is simply unavailable.

## A. Dimond D Hub Frequencies

Previously, the Commission granted Alaska Communications Internet a license to communicate with Transponder 01C on EUTELSAT 115WB, operating at 3704-3776 MHz (space-to-Earth) and 5929-6001 MHz (Earth-to-space). In order to effectively serve the ten new Kuspuk School District sites using the Dimond D hub, Alaska Communications Internet requires additional capacity on EUTELSAT 115WB. Alaska Communications Internet, therefore, has leased Transponder 07C, operating in the 3944-4016 MHz (space-to-Earth) and 6169-6241 MHz (Earth-to-space) bands. Utilizing the previously licensed 3.8m hub, Alaska Communications Internet uses the new EUTELSAT 115WB Transponder 07C uplink and downlink (*i.e.*, 72 megahertz in each direction in a single polarization) as the forward link (from the hub to each Kuspuk School District remote site). Virtually all of that bandwidth is required to deliver the broadband service speeds to all ten locations required under the Kuspuk School District's contract. Any remaining bandwidth on Transponder 07C, in addition to the currently licensed

bandwidth on Transponder 01C, is used to continue to serve Alaska Communications Internet's existing customers and preserve operational flexibility and capacity to provide reliable connectivity to all customer locations.

Full use of Transponder 07C in this way allows Alaska Communications Internet to utilize wider carriers with greater bandwidth capacity at the Dimond D hub, maximizing its ability to deliver high-speed connectivity to the Kuspuk School District. As demonstrated in the *ACI Modification Application* Schedule B, while the utilization of a 72 megahertz carrier bandwidth results in a lower EIRP density – thus reducing the potential for interference with other operations in the band – it also requires that Alaska Communications Internet slightly increase the input power into the antenna. In the *ACI Modification Application*, Alaska Communications Internet provides an updated radiation hazard study for the Dimond D hub reflecting the increased input power.

#### **B.** Site Locations

Alaska Communications Internet seeks to continue to operate the following ten sites as part of its C-band VSAT network in Alaska (together, the "Kuspuk School District sites"):

- Aniak School District Office ("Aniak DO") (geographic coordinates: 61° 34' 55.6" N, 159° 32' 18.3" W)
- Junior Senior High School ("JSHS") Aniak, AK (geographic coordinates: 61° 34′ 48.8″ N, 159° 33′ 06.7″ W)
- Auntie Mary Nicoli Elementary School ("AMNES") Aniak, AK (geographic coordinates: 61° 34′ 49.0″ N, 159° 31′ 51.7″ W)
- Crow Village Sam School ("CVSS") Chuathbaluk, AK (geographic coordinates: 61° 34' 23.7" N, 159° 14' 57.8" W)
- Jack Egnaty Senior School ("JESS") Sleetmute, AK (geographic coordinates: 61° 42' 9.7" N, 157° 10' 14.9" W)
- Johnnie John Sr School ("JJSS") Crooked Creek, AK

(geographic coordinates: 61° 51′ 48.6″ N, 158° 08′ 18.2″ W)

- Gusty Michael School ("GMSHS") Stoney River, AK (geographic coordinates: 61° 47' 13.6" N, 156° 35' 17.7" W)
- George Morgan Senior High School ("*GMHS*") Kalskag, AK (geographic coordinates: 61° 31′ 57.9″ N, 160° 20′ 50.0″ W)
- Joseph & Olinga Gregory Elementary School ("*JOGES*") Kalskag, AK (geographic coordinates: 61° 32' 41.9" N, 160° 19' 3.7" W)
- Zackar Levi Elementary School ("ZLES") Kalskag, AK (geographic coordinates: 61° 30' 43.6" N, 160° 21' 41.5" W)

Each site uses an identical 2.4m VSAT earth station of the same model that is authorized in the *ACI Network License* for similar fixed C-band operations and is on the Commission's Non-Routine Antenna List.<sup>13</sup> Although the 2.4m earth station does not comply with the gain mask in Section 25.209 of the Commission's rules, Alaska Communications Internet demonstrates in the incorporated Schedule B that it will operate the terminals at maximum ESD levels below those currently authorized in the *ACI Network License* and in compliance with the ESD mask set forth in Section 25.218(d) of the Commission's rules.<sup>14</sup>

At each site, the earth station is mounted on an existing rooftop in an area inaccessible to the general public. Their locations are not among any "districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places," and thus they fall within the exemptions of Section 1.1306(a)-(b) and Note 1 to that rule. Accordingly, no

<sup>&</sup>lt;sup>13</sup> Supra n. 6; see, e.g., Harris Corporation, File No. SES-LIC-20060302-00342, Call Sign E060075.

<sup>&</sup>lt;sup>14</sup> See 47 C.F.R. § 25.218(d).

<sup>&</sup>lt;sup>15</sup> 47 C.F.R. § 1.1307(a)(4).

See 47 C.F.R. § 1.1306, Note 1 ("The provisions of §1.1307(a) requiring the preparation of EAs do not encompass the mounting of antenna(s) and associated equipment (such as wiring,

environmental assessment is required as part of this application because each proposed site is categorically exempt under Section 1.1306 of the Commission's rules, 47 C.F.R. § 1.1306.

The flexibility to use additional transponder capacity is essential to enable Alaska

Communications Internet to offer reliable connectivity to the Kuspuk School District sites. Not only is 72 megahertz of spectrum insufficient to enable service to all current customers of Alaska

Communications Internet, but the entire Transponder 01C frequency range is unavailable at three of the new remote sites, necessitating an alternative solution. In all cases, Alaska Communication

Internet seeks to receive hub transmission of the forward link in Transponder 07C frequencies from 3944-4016 MHz (space-to-Earth). With respect to the return links from each remote site back to the hub, the individual carriers will be narrower in bandwidth and Alaska Communications

Internet needs flexibility to position those return link carriers within up to 72 MHz of bandwidth on EUTELSAT 115WB, depending on certain site-specific limitations.

Specifically, for seven of the Kuspuk School District sites, the return link (from the remote site back to the hub) will utilize Transponder 01C frequencies already included in the *ACI Network License*. As discussed below, however, Alaska Communications Internet has encountered cofrequency terrestrial operations in the entire range covered by the Transponder 01C uplink band at three Kuspuk School District sites in the area of Kalskag, Alaska, and thus needs to utilize alternative frequencies for the uplink to EUTELSAT 115WB at those locations to avoid interference.<sup>17</sup> Without this flexibility, Alaska Communications Internet will be unable to serve

cabling, cabinets, or backup-power), on or in an existing building, or on an antenna tower or other man-made structure, unless §1.1307(a)(4) is applicable.").

Those three sites will utilize a portion of the Transponder 07C frequency range previously discussed, but on the opposite polarity, in order to avoid interference with the forward link from the hub.

these rural Kuspuk School District sites, inhibiting "the delivery of earth station services, including broadband access, to rural Americans." <sup>18</sup>

# C. Operating in Transponder 07C Downlink Frequencies at Existing Licensed Remote Sites

Alaska Communications Internet also seeks to continue to operate in additional downlink frequencies at its five currently licensed remote earth station sites so each site can receive downlink (space-to-Earth) transmissions from the Dimond D hub on Transponder 07C (*i.e.*, 3944-4016 MHz).<sup>19</sup> Currently, the *ACI Network License* includes five remote sites, each of which is authorized to receive the downlink frequencies in the range of 3704-3776 MHz, used by EUTELSAT E115WB Transponder 01C, as follows:

- Site 1: 100 Harbor View Drive, St. Paul, AK Geographic Coordinates: 57° 7' 23.0" N, 170° 16' 45.0" W
- Site 2: 600 Telephone Ave., Anchorage, AK
   Geographic Coordinates: 61° 11' 10.5" N, 149° 52' 15.57" W
- Site 3: Excursion Inlet, Alaska Geographic coordinates: 58° 24' 55.3" N, 135° 26' 36.4" W
- Site 4: Kodiak Island, Alitak, AK Geographic Coordinates: 56° 53' 52.2" N, 154° 14' 43.0" W
- Site 5: Naknek, AK Geographic Coordinates: 58° 43' 43.7" N, 157° 00' 0.90"

Alaska Communications Internet plans, to the extent possible, to consolidate its transmit and receive operations over time so that the forward link from the Dimond D hub to *all* remote sites, including the previously licensed sites identified above, takes place using a single 72

See FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service That Share Terrestrial Spectrum, Report and Order, FCC 01-177, RM-9649 (2001), ¶ 25 ("CSAT Report & Order").

<sup>&</sup>lt;sup>19</sup> In addition, in the FCC Form 312 Schedule B, Alaska Communications Internet updates the Site ID (Schedule B, E1) for the previously licensed remote sites.

megahertz wide carrier that saturates Transponder 07C. In order to put this plan into effect, all remote sites must be authorized to receive the Transponder 07C downlink frequencies in the range of 3944-4016 MHz.

#### D. Frequency Coordination

Alaska Communications Internet engaged Micronet Communications, Inc. ("Micronet") to perform frequency coordination in support of the *ACI Modification Application*, which was completed on June 22, 2018. Pursuant to Sections 25.115(c)(2)(ii) and 25.203 of the Commission's rules, 47 C.F.R. §§ 25.115(c)(2)(ii) and 25.203, Micronet has conducted a coordination analysis on behalf of Alaska Communications Internet that considers all existing, proposed, and prior coordinated microwave facilities within the contours of the proposed earth stations at the Kuspuk School District sites. Moreover, Micronet has fully coordinated the Transponder 07C frequencies at the Dimond D hub, as well as the new Transponder 07C receive frequencies at the five existing remote sites.

As demonstrated in the *ACI Modification Application* frequency coordination reports, there is no potential for interference into other users of the C-band spectrum sought herein by Alaska Communications Internet. First, Alaska Communications Internet's proposed operations at the Dimond D hub in Transponder 07C frequencies in the 3944-4016 MHz (space-to-Earth) and 6169-6241 MHz (Earth-to-space) bands are fully compatible with other FCC-licensed operations in the band.

Second, as noted, at each Kuspuk School District site, Alaska Communication Internet plans to receive in Transponder 07C frequencies from the 3944-4016 MHz (space-to-Earth).

Depending on certain site-specific frequency limitations, Alaska Communications Internet will

either transmit in the 5929-6001 MHz band (Transponder 01C)<sup>20</sup> or the 6189.565-6237.565 MHz band (Transponder 08C).<sup>21</sup> Transponder 08C was selected specifically to support three Kuspuk School District sites – *GMHS*, *JOGES* and *ZLES* (the "Kalskag Sites") – because Micronet was unable to clear any available spectrum on Transponder 01C. Such site-specific spectrum limitations illustrate the need for operational flexibility to permit use of the additional 72 megahertz frequency range from 6169-6241 MHz (Earth-to-space, across two transponders), as well as the corresponding downlink frequencies, on EUTELSAT 115WB.

Micronet received no objections in response to its Prior Coordination Notices, and Alaska Communications Internet currently operates its network with no reported cases of interference.

Alaska Communications Internet will coordinate any additional hub or remote operations prior to bringing them into use as part of the C-band VSAT network.

# **III.** STA Request & Public Interest Considerations

Alaska Communications Internet respectfully requests this 60-day STA pursuant to Section 25.120 of the Commission's rules, 47 C.F.R. § 25.120. Section 25.120(b)(3) states that the Commission may grant a temporary authorization for up to 60 days if the STA request has not been placed on Public Notice and the applicant plans to file a request for regular authority for the service. As noted, the *ACI Modification Application* has already been filed with the Commission and the Public Notice period for the application ended on August 17, 2018. Based

To prevent interference to nearby terrestrial microwave operations, Alaska Communications Internet will limit its transmit operations to the 5960.2-6001 MHz band at the *Aniak DO*, *JSHS*, *CVSS* and *AMNES* sites.

The Transponder 08C frequencies are within the Transponder 07C transmit frequency range, such that the use of Transponder 08C does not result in any additional frequency bandwidth being used by the network, and enabling Alaska Communications Internet to limit its Section 25.116(c)(2)(i)(B) waiver request to the 144 megahertz total. Transponder 08C operates on the opposite polarity to Transponder 07C, enabling re-use of those frequencies for the return link at the Kalskag Sites.

on consultation with Commission staff, ongoing coordination between the IB and the WTB has necessitated this STA extension request to ensure Alaska Communications Internet has appropriate authority during the Commission's ongoing review of the *ACI Modification*Application. Pursuant to Commission rules and precedent, Alaska Communications Internet understands that this timely filed request will effectively extend its current temporary authority until the Commission acts on the instant application, affording sufficient time for coordination between the IB and the WTB.<sup>22</sup>

Grant of this 60-day STA will strongly serve the public interest by allowing Alaska Communications Internet to continue providing broadband services to multiple Kuspuk School District elementary and secondary schools, as well as the district office, in remote Alaskan bush communities, helping to improve educational opportunities by providing advanced satellite connectivity that will support access to educational resources, research materials, distance learning, and cloud-based record storage and other services. The proposed operations will also greatly advance the public interest goals of E-rate, as mandated by Sections 254(h)(1)(B) and 254(h)(2)(A) of the Communications Act, 47 U.S.C. §§ 254(h)(1)(B), (h)(2)(A) and numerous Commission orders.<sup>23</sup> The educational resource and distance learning opportunities supported by

\_

See 47 C.F.R. §§ 25.120 & 25.163(b); Administrative Procedure Act § 9(b). See also 47 C.F.R. §1.955(b); In the Matter of Marc D. Sobel Application for Consent to Assign the License for Conventional 800 MHz SMR Station KKT934, Montrose, California, Memorandum Opinion & Order, FCC 05-90, ¶¶ 2 & 6. Please note that although in the ordinary course a request for extension of temporary authority must be received by the Commission at least 3 working days prior to the expiration date of the existing temporary authorization (see 47 C.F.R. 25.120(a)), the Commission's Lapse in Funding Public Notice (DA 19-10) has granted an automatic extension of the filing deadline to the day after the resumption of normal FCC operations.

 $<sup>^{23}</sup>$  E.g., E-rate Modernization Order, at ¶ 2 ("High-speed broadband, to and within schools, connects students to cutting-edge learning tools in the areas of science, technology, engineering and math (STEM) education, necessary for preparing them to compete in the

E-rate are particularly important in the Alaska bush, where schools in small communities have limited resources and may struggle to reach the 10-student enrollment minimum to qualify for state education funding.<sup>24</sup> (Indeed, the Kuspuk School District schools covered by this STA request and the *ACI Modification Application* serve between 15 and 94 students each.<sup>25</sup>)

Disproportionately, bush villages in Alaska are home to vulnerable communities of Alaska Natives, for whom the enhanced educational opportunities offered by broadband are particularly critical. By directly supporting the Kuspuk School District, Alaska Communications Internet is helping to enhance regional well-being and promote educational programs for students and teachers. Moreover, permitting additional transponder capacity on EUTELSAT 115WB (144 megahertz total for uplink and downlink) will allow Alaska Communications Internet to be

global economy. High-speed broadband also creates opportunities for customized learning, by giving our students and their teachers access to interactive content, and to assessments and analytics that provide students, their teachers, and their parents real-time information about student performance while allowing for seamless engagement between home and school. Finally, high-speed broadband expands the reach of our schools and creates opportunities for collaborative distance learning, providing all students access to expert instruction, no matter how small the school they attend or how far they live from experts in their field of study."), ¶ 4 ("[W]e recognize the critical role the E-rate program plays in the lives of our students and communities and the importance of ensuring that the program supports sufficient, equitable, and predictable support for high-speed connectivity to and within schools and libraries. It is a crucial part of the Commission's broader mandate to further broadband deployment and adoption across our nation.").

See, e.g., Tegan Hanlon, "Two Small Schools in Southeast Alaska Shut Their Doors," Anchorage Daily News (Sept. 15, 2016) (reporting that public schools in Port Protection and Tenakee Springs, Alaska had failed to reach the 10-student minimum and would close, having exhausted savings that kept the schools open after enrollment declined, and observing that, "[e]ach year, two to three schools typically close in Alaska"), available at: <a href="https://www.adn.com/alaska-news/education/2016/09/14/two-small-alaska-schools-shut-their-doors/">https://www.adn.com/alaska-news/education/2016/09/14/two-small-alaska-schools-shut-their-doors/</a>; Michelle Theriault Boots, "The Last Kid in Cold Bay," Anchorage Daily News (Aug. 8, 2015) (reporting school closure), available at: <a href="https://www.adn.com/features/alaska-news/rural-alaska/2016/12/22/the-last-kid-in-cold-bay/">https://www.adn.com/features/alaska-news/rural-alaska/2016/12/22/the-last-kid-in-cold-bay/</a>.

Alaska Department of Education and Early Development, Public Schools Database, *available at:* <a href="https://education.alaska.gov/DOE\_Rolodex/SchoolCalendar/Home/SchoolsList?districtId=29">https://education.alaska.gov/DOE\_Rolodex/SchoolCalendar/Home/SchoolsList?districtId=29</a>

able to properly scale and offer the most reliable connectivity solutions to the Kuspuk School District facilities.

## IV. Conclusion

Based on the foregoing, the public interest would be served by a grant of Commission authority to Alaska Communications Internet to continue to operate ten (10) additional remote sites as part of its C-band VSAT network in Alaska, and operate the previously licensed hub and remote sites with updated operating parameters, for a period of 60 days commencing on January 30, 2019.