Service Date: May 20, 2021

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of

DOCKET UT-210059

STARLINK SERVICES, LLC

ORDER 01

For Designation as an Eligible Telecommunications Carrier in the State of Washington Pursuant to 47 U.S.C. § 214(e)(2)

GRANTING ELIGIBLE
TELECOMMUNICATIONS
CARRIER DESIGNATION
FOR THE PURPOSE OF
RECEIVING SUPPORT FROM THE
FEDERAL RURAL DIGITAL
OPPORTUNITY FUND

BACKGROUND

On January 4, 2021, Starlink Services, LLC (Starlink or Company) filed a petition (Petition) with the Washington Utilities and Transportation Commission (Commission) requesting designation as an Eligible Telecommunications Carrier (ETC) in select census blocks in in all Washington state counties except Steven and Pend Oreille under 47 U.S.C. § 214(e)(2), applicable rules of the Federal Communications Commission (FCC), and Chapter 480-123 Washington Administrative Code (WAC), for the purpose of receiving federal Rural Digital Opportunity Fund (RDOF) support. Starlink proposes to provide voice and broadband service, including Lifeline service, to Washington consumers in 52,086 locations identified by the FCC as unserved by broadband service at speeds less than 25 Mbps up and 3 Mbps down. ETC designation would allow the Company to receive federal universal service support through the FCC's RDOF program for service to these locations.

¹ See Rural Digital Opportunity Fund; Connect America Fund, WC Docket Nos. 19-126, 10-90, Report and Order, 35 FCC Rcd 686, ¶ 2 (released Feb. 7, 2020) (RDOF Order), clarified on reconsideration by Rural Digital Opportunity Fund Auction (Auction 904); Rural Digital Opportunity Fund; Connect America Fund, AU Docket No. 20-34, WC Docket Nos. 19-126, 10-90, FCC 20-127, Order on Reconsideration (released Sept. 29, 2020).

- 2 On March 25, 2021, Starlink filed an amended petition and its FCC long-form application that addresses the Company's RDOF substantive investment plans.
- 3 Starlink requested designation as an ETC throughout 7,849 census blocks, identified in its Petition at Exhibit 1, where the Company will operate as a winning bidder in the FCC's RDOF Phase I reverse auction. In its Petition, Starlink committed to offer voice and broadband services throughout its designated service area either using its own facilities or a combination of its own facilities and resale of another carrier's services. Starlink has also committed to make Lifeline services available to low-income consumers and will advertise all supported services throughout its service area. Starlink services will rely on the managerial and technical expertise of SpaceX² in delivering service to consumers.
- In response to Commission Staff's (Staff's) request, Starlink provided its initial plan of investments. These investments will enable the Company to begin deployment of the supported services. Starlink has committed to meeting the deployment milestones established for the RDOF program. The Company will offer commercially at least one voice and one broadband service meeting the relevant service requirements to the required number of locations within the timeframe required by the RDOF rules.
- Starlink's amended petition includes the network diagram that is required by the FCC to be certified by a professional engineer as being capable of delivering at least 95 percent of the awarded locations in each state, and that its voice and broadband services meet the requisite performance requirements.
- Starlink noted that customers of SpaceX's beta program may experience brief losses of connectivity, which the Company explains is related to ongoing improvements to its service. In response to Staff inquiries, Starlink has stated that the issue of loss connectivity will not be experienced by customers of RDOF-supported services and that there will be no loss of connectivity in its RDOF locations.³ With its ongoing deployment

² Starlink is a Delaware limited liability company and is a wholly owned subsidiary of SpaceX. SpaceX designs, manufactures, and launches rockets, spacecraft, and satellites and now offers broadband service over the world's largest satellite constellation.

³ Starlink's response to Informal Staff Data Request No. 28(b).

Q. Starlink Beta FAQs indicates that "There will also be brief periods of no connectivity at all...

of satellites and associated terrestrial facilities, Starlink expects to continue to improve its performance and to expand services.⁴

Based on its bid, Starlink must meet the Above Baseline performance tier standard.⁵
Starlink committed to providing internet and voice services using SpaceX's LEO NGSO satellites using Ku- and Ka-band spectrum.⁶ The Company will offer these services by using the Starlink constellation of satellites, ground gateway sites, and consumer premise equipment.⁷ Starlink asserts that it will be able to offer broadband at speeds of 100 Mbps downstream and 20 Mbps upstream with latency of less than 100 milliseconds, as required by the Company's winning "Above Baseline" performance tier bid. The Company also plans to offer two terabytes of monthly usage. Although specific rates for services in RDOF locations are still being developed, Starlink commits to setting its rates for services at or below the FCC's reasonable comparability benchmark for voice and broadband services.

A. [...] These losses of connectivity are related to ongoing improvements to our service. As the Starlink constellation improves through additional satellite launches and improved technology, the user experience will also improve. SpaceX's beta program does not currently offer a voice product. RDOF locations will not experience this loss of connectivity because it is not our intent to offer the beta quality product to RDOF users. These losses of connectivity will be resolved when we introduce RDOF services to our customers...."

Q. Please describe how the company complies with WAC 480-120-411.

A. [...] the Starlink network has already successfully demonstrated it can surpass the FCC's "Above Baseline" and "Low Latency" performance tiers, including meeting and exceeding 100/20 megabits per second throughput to individual users, and demonstrating performance of 95% of network round-trip latency measurements at or below 31 milliseconds. . . .

⁴ See Starlink's response to Informal Staff Data Request No. 20(b).

⁵ See 47 C.F.R. § 54.805(b).

⁶ Ku-band utilizes approximately 12-18 GHz segment and Ka-band uses the 26.5-40GHz segment of the electromagnetic spectrum.

⁷ Starlink's response to Informal Staff Data Request No. 17. Starlink indicates that SpaceX charges a single upfront \$499 equipment fee in its beta program. Furthermore, Starlink is working to drive down its own costs related to CPE so that it can lower prices to its consumers. Starlink is considering other options such as financing, payment plans, or rent-to-own.

- On May 7, 2021, Petrichor Broadband (Petrichor) filed comments in this Docket opposing Starlink's Petition. Petrichor argues that Starlink's proposal includes satellite delivery of broadband services while relying on existing aging and failing public switched telephone network for the delivery of voice and public safety services. Petrichor asserts that this fails to comply with goals of RDOF, fails to meet Washington broadband speed goals, and relies on rather than improving or replacing the aging network (copperbased public switched telephone network, or PTSN). Supporting Starlink's infrastructure, Petrichor argues, is not in the public interest. Petrichor further alleges that Starlink's Petition fails to detail how it will achieve the requirements set out in WAC 480-123-030(1)(c) because the Company does not explain how it will provide emergency or Lifeline services as required. Finally, Petrichor alleges that Starlink's satellite technology is capable of only 100 Mbps maximum speeds, less than the State's goals and far less than anticipated needs in 2030 (1 Gbps) and beyond. Petrichor argues this insufficient infrastructure is not in the public interest.
- The comments also include a March 17, 2021, letter to the FCC requesting changes to the RDOF Phase 1 auction to improve broadband availability in unserved and underserved locations in rural areas. The letter proposes three changes to the RDOF Phase 1 auction program and recommends three modifications to its processes. Specific to Starlink, the letter expresses concern that the Company will struggle to meet its 100 Mbps obligations under RDOF as soon as 2028. Petrichor argues that, by 2030, demand for Gigabit speeds will be commonplace and well beyond the capacity of Starlink's low-earth orbit satellite technology.
- On May 19, 2021, Starlink filed a response to Petrichor's comments. Starlink explains that it intends to use satellite technology only, not the copper based PSTN as Petrichor alleges. Rather, Starlink intends to provide voice-grade services over its satellite network, including interconnection services for the delivery and receipt of calls with the PSTN. In other words, Starlink explains, it merely provides its customers the ability to deliver calls to and receive calls from the PTSN. Starlink also maintains it has provided sufficient information to meet the requirements set out in Commission rules for petitions seeking ETC designation.
- In its response comments, and at the open meeting on May 20, 2021, Starlink addressed the service quality of its satellite-based system. The Company stated that the effect of environmental conditions, such as clouds, snow, and tall trees will not interrupt service. Although, as Starlink acknowledged, inclement weather may degrade service, according to the Company, the customer's connection will not be lost. Starlink explained that tall

trees are not a barrier to service so long as the customer has a view of the sky. With regard to access to 911 and enhanced 911 service, Starlink stated that it will comply with all 911 requirements and that customers will connect to public safety answering points through the managed service provider that the Company will use to provide voice service.

- Ernie Rasmussen, Washington State Department of Commerce's tribal liaison, provided comment at the open meeting on potential interests of Washington's tribes. He stated that the midyear convention of the Affiliated Tribes of Northwest Indians (ATNI) will begin May 24. He made clear that he does not speak for any of the tribes. Because Starlink will be providing service in tribal areas, he asked the Commission to delay a decision on the Petition until after the May 27 conclusion of the ATNI convention to provide the ATNI with an opportunity to provide any concerns to the Commission that it may have with this Petition.
- In response to Mr. Rasmussen's comments, counsel for Starlink identified that it has reached out to tribal communities in Washington, that it currently serves several tribal areas, and that Starlink had not received any concerns from tribal communities in Washington.
- Staff believes the Company has demonstrated its ability to remain functional in emergency situations, and Starlink has stated that it will comply with the applicable consumer protection and service quality standards of the Commission in Chapter 480-120 WAC.
- Staff recommends that the Commission grant Starlink's Petition for designation as an ETC within the 37 counties where it will operate as a winning bidder or the purpose of receiving RDOF support.

DISCUSSION AND DECISION

16 Common carriers designated as ETCs under 47 U.S.C. § 214 are eligible to receive federal universal service support. State utility commissions are responsible for designating common carriers as ETCs for the purpose of receiving such funds. The Commission will approve the petition of a carrier requesting ETC designation if the petition meets the requirements of WAC 480-123-030, the designation will advance some

⁸ 47 U.S.C. § 214(e)(2).

or all the purposes of universal service found in 47 U.S.C. § 254, and the designation is in the public interest.⁹

- State commissions are authorized to designate a carrier as an ETC for a service area that the state commission designates if the carrier meets the following two requirements of 47 U.S.C. § 214(e)(1) throughout the service area:
 - A. Offer the services that are supported by federal universal service support mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier); and
 - B. Advertise the availability of such services and the charges therefor using media of general distribution.
- The FCC has established the definition of services supported by federal universal support mechanisms in 47 C.F.R. § 54.101(a). In addition to providing these services, ETCs must comply with all other relevant federal universal service rules in 47 C.F.R. Part 54. Carriers seeking RDOF support must meet the FCC RDOF requirements at 47 C.F.R. Part 54, Subpart J.
- We are satisfied with Starlink's response to Petrichor's comments and agree with Staff that Starlink can provide the services supported by federal universal support mechanisms including the RDOF. In addition, we decline to grant Ernie Rasmussen's request to postpone our approval of this Petition due to the lack of specificity of his concerns, the lack of time available to consider any concerns that might be raised by the ATNI or its members regarding this matter, and the burden that the delay would place on the Company on a matter that was publicly noticed. We note that Starlink states that it has has conducted outreach with tribal communities in Washington state.
- We thus find that Starlink's Petition, supplemented by the Company's long-form application, meets the Commission's requirements for ETC petitions in Chapter 480-123 WAC, and conclude that it is consistent with RDOF and other federal requirements.

 Designation of Starlink as an ETC will serve the public interest by making voice and broadband available to Washingtonians who currently lack high-speed broadband service.

⁹ WAC 480-123-040.

¹⁰ See 47 U.S.C. § 254(c)(1).

FINDINGS AND CONCLUSIONS

- 21 (1) The Commission has jurisdiction over the subject matter of this order and is authorized to designate Eligible Telecommunications Carriers in Washington under 47 U.S.C. § 214(e)(2), 47 C.F.R. §54.201(b)–(c), RCW 80.36.610, and Chapter 480-123 WAC.
- 22 (2) Starlink is a telecommunications company doing business in the state of Washington and registered with the Commission.
- 23 (3) Starlink meets the requirements under 47 U.S.C. § 214(e)(1) for designation as an ETC because it will offer and advertise the services supported by federal universal service support throughout its ETC service area.
- 24 (4) Starlink's designation as an ETC will advance the purposes of universal service found in 47 U.S.C. § 254 because the Company will offer voice telephony, broadband, and Lifeline services, consistent with the FCC's universal service requirements, to locations identified by the FCC as unserved by broadband service at speeds less than 25 Mbps up and 3 Mbps down, which will facilitate universal service.
- 25 (5) Designating Starlink as an ETC is in the public interest because the Company has demonstrated it will meet RDOF program service requirements, which will make high-speed Internet service available to Washington consumers in 52,086 locations. Because Starlink holds a winning bid in the RDOF auction at the Above Baseline performance tier standard, designating the Company as an ETC will result in the availability of broadband service at speeds = meeting and exceeding 100/20 megabits per second throughput to individual users, and network round-trip latency measurements at or below 100 milliseconds for Washington consumers who currently have no access to broadband or who have Internet access only at speeds of less than 25 Mbps up and 3 Mbps down.
- 26 (6) Starlink's Petition meets the requirements of the Commission's ETC rules in Chapter 480-123 WAC.
- 27 (7) The census blocks in Exhibit 1 to the Petition comprise an appropriate ETC service area because Starlink holds the winning bid for those census blocks following the FCC's RDOF Phase I reverse auction.

28 (8) This matter came before the Commission at its regularly scheduled meeting on May 20, 2021.

ORDER

THE COMMISSION ORDERS:

- 29 (1) Starlink Services, LLC's petition for designation as an ETC is hereby GRANTED, for the census blocks set forth in Exhibit 1 to the Petition.
- 30 (2) The Commission retains jurisdiction over this matter for purposes of effectuating this order.

DATED at Lacey, Washington, and effective May 20, 2021.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chair

ANN E. RENDAHL, Commissioner

JAY M. BALASBAS, Commissioner