

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Application of )  
Starlink Services, LLC for Designation )  
as an Eligible Telecommunications Carrier ) Docket No. UT-210059  
for Purposes of Receiving Rural Digital )  
Opportunity Fund Support )

**STARLINK SERVICES, LLC RESPONSE TO PETRICHOR BROADBAND, LLC  
COMMENTS**

Starlink Services, LLC (“Starlink”) hereby responds to the comments filed by Petrichor Broadband, LLC (“Petrichor”) in Docket No. UT-210059 on May 7, 2021.

Petrichor opposes Starlink’s application<sup>1</sup> for designation as an Eligible Telecommunications Carrier (“Application”) alleging: (1) Starlink will use the copper-based public switched telephone network (“PSTN”) to provide services, and (2) the Application fails to adequately explain “how” Starlink will provide services as required by WAC §480-123-030.

Petrichor’s claims are simply wrong, and Starlink’s Application should be approved by the Commission.

**I. Starlink Will Provide Services Through Satellite Technology, not the PSTN.**

Starlink’s Application clearly states that its services will be provided through its satellite network (Application, page 7), and that Starlink will provide its customers with *access* to the PSTN as required by 47 CFR §54.101(a)(1) and (b). (Application, page 9).

Petrichor apparently confuses the difference between: (a) how communications companies provide voice-grade service (*for example*, satellite; VoIP over coaxial cable or fiber; copper), versus (b) what it means to provide “access to the PSTN” (interconnection; the ability to

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<sup>1</sup> Amended Application of Starlink Services, LLC for Designation as an Eligible Telecommunications Carrier for Purposes of Receiving Rural Digital Opportunities Fund Support; Request for Expedited Consideration dated March 25, 2021.

deliver calls to and receive calls from the PSTN). Starlink will provide voice-grade services over its satellite network, which includes interconnection services for the delivery and receipt of calls with the PSTN. As a result, Petrichor's objections to Starlink's Application are without any factual basis and are irrelevant to the approval criteria for the Application.

## **II. Starlink's Application Meets Washington's Requirements for ETC Designation.**

Petrichor also argues that Starlink does not meet Washington's requirements for ETC designation because it has failed to provide sufficient detail regarding how it plans to meet the approval criteria in WAC §480-123-030. Petrichor's arguments are without merit.

Starlink addressed all of the approval criteria for ETC designation in its Application and in its responses to the data requests from Staff. The following is a summary of Starlink's submissions to the Commission:

### ***(a) A description of the area or areas for which designation is sought***

The census blocks for which Starlink seeks designation are listed on Exhibit 1 to the Application.

### ***(b) A statement that the carrier will offer the services supported by federal universal service support mechanisms throughout the area for which it seeks designation, 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 ETC);***

Starlink's statement that it will offer the services supported by federal universal service support mechanisms in the census blocks is in Section IV.b. of its Application.

### ***(c) A description of how it will provide each supported service;***

Starlink described how it will provide each supported service:

- Voice-grade services will be provided over Starlink's satellite facilities
- Voice-grade services will be provided over VoIP technology, which includes the 911/E911 services inherent in VoIP platforms, databases, and communications with PSAPs

- Starlink will provide Lifeline services in accordance with applicable federal and state regulations
- Broadband data services, which includes broadband services to all residents, businesses, schools, libraries and rural health care providers in the census blocks awarded to Starlink, will be provided over Starlink’s satellite facilities. (Application, Section IV.c.)

***(d) A substantive plan of the investments to be made with initial federal support during the first two years in which support is received and a substantive description of how those expenditures will benefit customers;***

Starlink’s confidential attachments to the Application include information concerning the investments to be made during the first two years and beyond. The benefits to customers are described in Sections IV.b. and IV.c. of the Application.

***(e) A statement that the carrier will advertise the availability of services supported by federal universal service mechanisms, including advertisement of applicable telephone assistance programs, such as Lifeline, that is reasonably calculated to reach low-income consumers not receiving discounts;***

Starlink has stated it will comply with all regulatory requirements for services supported by federal universal service mechanisms. (Application, Sections IV.b and IV.c, and Responses to Data Requests 19, 20, 21 and 23.)

***(f) For wireless petitioners, a map in .shp format of proposed service areas (exchanges) with existing and planned locations of cell sites and shading to indicate where the carrier provides and plans to provide commercial mobile radio service signals;***

The map shape file requirement does not apply to Starlink as a satellite service provider.

***(g) Information that demonstrates its ability to remain functional in emergency situations including a description of how it complies with WAC 480-120-411 or, for a wireless carrier, information that demonstrates that, when commercial power is not available, it has a reasonable amount of backup power (fixed, portable or other backup power source) for its cell sites, and backup power for its switches as pre-scribed in WAC 480-120-411(3) for LEC central offices; and cell sites do not include any small cell facility as defined in RCW 80.36.375 (2)(d) or any in building wireless installation; and***

As a satellite service provider, Starlink's network has built-in redundancy that is designed to keep the end user in full service even when a local emergency like a power outage affects an element of Starlink's service delivery network. For example, end users will have the option for a 24-hour backup battery supply for their equipment to keep them in service in case of a local power outage (Response to Data Request 20.b); if a gateway experiences a power outage, Starlink's network immediately shifts traffic to one of the other gateways that serve the satellites (Response to Data Request 20.g); and if a satellite is out of service for any reason, traffic will be automatically routed to one of the other satellites that are serving the end user's location at that time (Response to Data Request 20.b).

***(h) Information that demonstrates that it will comply with the applicable consumer protection and service quality standards of chapter 480-120 WAC or, for a wireless carrier, a commitment to comply with the Cellular Telecommunications and Internet Association's (CTIA) Consumer Code for Wireless Service. Information regarding the version of the CTIA code adopted and where to obtain it is set forth in WAC 480-123-999.***

The Commission has presented several data requests, asking for additional information about the service quality of Starlink's network. The service quality data requests may be categorized into the following topics: capacity; latency, and local environmental conditions.

- Capacity: As Starlink's customer base grows and data usage on its network increases over time, the increased traffic will be handled by the additional satellites that Starlink is scheduled to launch, and the additional gateways that are scheduled to be constructed. In addition, there will be significant improvements in satellite technology over time, similar to the improvements in the cellular network from 1G to 2G to 3G to 4G and now to 5G, which will create additional satellite broadband capacity for all customers. (Declaration of Matt Johnson)

- Latency: Starlink’s network latency is well within the FCC’s guidelines for broadband services. Starlink currently has a large number of beta-test customers, including many in Washington state. The network latency for these customers is well within the FCC’s guidelines for broadband. (Response to Data Request 29; Declaration of Matt Johnson)
- Local Environmental Conditions: Washington state’s environmental conditions, like clouds, rain, snow and tall trees, do not have an adverse impact on Starlink’s service quality. For example, clouds, rain and snow do not adversely impact Starlink’s network performance because the radio frequency bands and power levels used by Starlink’s satellites and ground equipment continue to perform despite those environmental conditions, similar to the satellite services used by local television broadcast networks and cable TV earth station networks. In addition, the tall trees in Washington state do not mean that customers are unable to use Starlink’s services. Customers need to have a view of the sky in order to use Starlink’s satellite services. Starlink will work with its customers to identify the best location on their property to take advantage of the sky view that is available at their service location. If the available sky view is too small to support a connection to Starlink’s satellite network (even after trying different installation options and taller mounting structures for the satellite dish), the lack of sky view is property-specific and is no indication that the entire census block is unserved. (Response to Data Request dated May 13, 2021; Declaration of Matt Johnson)

In summary, Starlink’s services will comply with federal and state service quality regulations.

### **III. Conclusion.**

As described above and in the Application, Starlink satisfies all state and federal requirements for ETC designation. Furthermore, designating Starlink as an ETC for purposes of receiving RDOF support is in the public interest because it will enable Starlink to receive support

that will facilitate rapid deployment of broadband and VoIP service to the Service Area in Washington at speeds and latency comparable to terrestrial systems in urban locations.

Respectfully submitted,

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