

March 17, 2022

## **VIA ELS**

Ms. Marlene H. Dortch Secretary Federal Communications Commission 45 L Street, NE Washington, DC 20554

**Re:** ELS File No. 0190-EX-CN-2022

Dear Ms. Dortch:

RS Access, LLC submits this letter concerning the latest Starlink application to deploy earth stations in motion ("ESIMs"), particularly earth stations aboard aircraft, in the 12.2-12.7 GHz ("12 GHz") band.<sup>1</sup>

As a general matter and as discussed in further detail below, Starlink's application not only breaches the public interest but also includes a specific deficiency that justifies dismissal. Starlink seeks experimental authority for earth stations aboard aircraft.<sup>2</sup> But, in the supporting interference protection exhibit, Starlink asserts the opposite and, therefore, concludes that the section 25.228(i) power-flux density limits for earth stations aboard aircraft do not apply.<sup>3</sup> These restrictions do apply, however. And Starlink should address its compliance with this provision as it does in the same exhibit for other section 25.228 provisions.<sup>4</sup> With no relevant assessment available for section 25.228(i), the application should not receive further consideration.

Further, the Commission has acted with extreme caution in allowing even temporary or experimental ESIM use of the 12 GHz band. In Starlink's case, the Commission's Office of

<sup>&</sup>lt;sup>1</sup> See Application of Space Exploration Technologies Corp. ("Starlink"), ELS File No. 0190-EX-CN-2022 (filed Feb. 18, 2022) ("Application"). In its application, Starlink requested two-year experimental authority to operate no more than five earth stations aboard aircraft simultaneously using the 12 GHz band, among other Ku-band frequencies.

<sup>&</sup>lt;sup>2</sup> See Application, Experimentation Description at 1.

<sup>&</sup>lt;sup>3</sup> See Application, ESIM Noninterference Attachment at n.6 (citing 47 C.F.R. § 25.228(i)).

<sup>&</sup>lt;sup>4</sup> See id. at nn.5, 10 (citing 47 C.F.R. § 25.228(c), (i)).

Engineering and Technology demanded the company "remov[e]" all reference to the 12 GHz band from an experimental ESIM application as a precondition to grant.<sup>5</sup>

The present 12 GHz experimental ESIM application requires similar care. Because as RS Access has explained previously,<sup>6</sup> authorizing ESIM operations in the 12 GHz band would:

- (i) run counter to existing 12 GHz allocations and service rule constraints;<sup>7</sup>
- (ii) serve no clear need given the wealth of alternative frequencies available for ESIM use; and
- (iii) reduce the Commission's flexibility in the ongoing rulemaking proceeding concerning whether or not to allow more intensive use of the 12 GHz band by terrestrial licensees.<sup>8</sup>

While grants of time-limited experimental authority for fewer than five devices in aviation deployments do not raise the same public policy concerns as the authorization of larger numbers of devices for longer periods of time near existing or planned terrestrial deployments, the broader concerns that ESIMs raise counsel against authorizing experimental ESIM use of the 12 GHz band. If the Commission allows Starlink to rectify the application discrepancy described above without dismissing the instant application and nonetheless grants it, RS Access requests the experimental grant include language—similar to what appears in Starlink's Part 25 authorizations—to reinforce the temporary nature of the authorization and the lack of any expectancy in continued use of the 12 GHz spectrum by virtue of an experimental authorization. A proposed license condition appears below:

This authorization is subject to modification to bring it into conformance with any rules or policies adopted by the Commission in the future. Accordingly, any investments made toward operations in the bands authorized in this order by [Starlink] in the United States assume the risk that operations may be subject to additional conditions or requirements as a result of any future Commission actions.

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<sup>&</sup>lt;sup>5</sup> See E-mail from Doug Young, Electronics Engineer, FCC, to Kristina Key, Administrator, SpaceX, ELS File No. 1522-EX-ST-2021 (filed Oct. 29, 2021) (directing Starlink to "[s]ubmit a new narrative exhibit removing all mention of 12.2-12.7 GHz" from Starlink's application for special temporary authority to operate a mobile user terminal on an experimental basis").

<sup>&</sup>lt;sup>6</sup> See, e.g., Petition to Deny in Part of RS Access, IBFS File No. SES-LIC-20210309-00698 (filed May 21, 2021); Letter from Trey Hanbury, Counsel for RS Access, LLC, to Marlene H. Dortch, Secretary, FCC, IBFS File No. SES-LIC-20210309-00698 (filed July 30, 2021).

<sup>&</sup>lt;sup>7</sup> See Amendment of Parts 2 and 25 of the Commission's Rules to Facilitate the Use of Earth Stations in Motion Communicating with Geostationary Orbit Space Stations in Frequency Bands Allocated to the Fixed Satellite Service et al., Second Report and Order et al., 35 FCC Rcd 5137 ¶¶ 45-46 (2020); see also 47 C.F.R. § 2.106 n.NG527A.

<sup>&</sup>lt;sup>8</sup> See generally Expanding Flexible Use of the 12.2-12.7 GHz Band, Notice of Proposed Rulemaking, 36 FCC Rcd 606 (2021).

This includes, but is not limited to, any conditions or requirements resulting from any action in the proceedings associated with WTB Docket 20-443.9

The Commission has adopted cautionary language similar to the text proposed here in other experimental grants. Taking similar precautions here would reinforce FCC spectrum allocations and service rules and help promote a timely and even-handed evaluation of new, more intensive use of the 12 GHz spectrum.

Please contact me with any questions regarding this submission.

Respectfully submitted,

## /s/ V. Noah Campbell

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cc: Ronald Repasi\*
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\*via email

<sup>&</sup>lt;sup>9</sup> See, e.g., Space Exploration Holdings, LLC, Order and Authorization et al., 36 FCC Rcd 7995 ¶ 97(w) (2021).

<sup>&</sup>lt;sup>10</sup> See, e.g., Hawkeye 360, Inc., Grant, ELS File No. 1455-EX-ST-2019 (granted Nov. 14, 2019) ("HawkEye 360, Inc. shall be aware that this authorization is without prejudice to any determination that may be made regarding any future requests for continued operations of the Pathfinder experimental satellites, but HawkEye 360, Inc. should have no expectations of automatic approval of future submissions requesting operations in this frequency band.").