

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Telecommunications Carriers Eligible for Universal Service Support)	WC Docket No. 09-197
)	
Wireline Competition Bureau Seeks Comment on Petitions for Designation as an Eligible Telecommunications Carrier for the Purpose of Becoming Eligible to Receive Connect America Fund Phase II Auction Support)	
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To: The Chief, Wireline Competition Bureau

OPPOSITION OF HUGHES NETWORK SYSTEMS, LLC

Hughes Network Systems, LLC (“Hughes”) hereby opposes the petition of Viasat Carrier Services, Inc. (“Viasat”) for designation as an eligible telecommunications carrier (“ETC”) for purposes of becoming eligible to receive Connect America Fund Phase II (“CAF-II”) auction support.¹ As discussed in more detail below, grant of Viasat’s application would be inconsistent with the requirement that ETC applicants have the ability to comply with the service requirements applicable to the support that they will receive.² The Petition must therefore be denied.

As a bidder in the high-latency category in the CAF-II auction, the service requirements applicable to Viasat include the obligation to demonstrate voice quality meeting a mean opinion

¹ Petition for ETC Designation of Viasat Carrier Services, Inc., WC Docket No. 09-197 (filed Feb. 19, 2019) (“Petition”). *See also Wireline Competition Bureau Seeks Comment on Petitions for Designation as an Eligible Telecommunications Carrier for the Purpose of Becoming Eligible to Receive Connect America Fund Phase II Auction Support*, WC Docket No. 09-197, Public Notice, DA 19-101 (rel. Feb. 20, 2019) (“Public Notice”).

² 47 C.F.R. § 54.202(a)(1)(i).

score (“MOS”) of 4 or greater per the methodology established by the *Performance Metrics Order*.³ The *Performance Metrics Order* requires voice quality testing using a modified version of the “conversational-opinion test” described in the ITU-T P.800 protocol but testing actual customers using the provider’s own equipment in a residential (non-laboratory) setting.⁴

The Commission should approach Viasat’s certification that it can meet the MOS 4 voice quality requirement as described in the *Performance Metrics Order* with great skepticism. The ITU-T has produced a computational model for estimating the predicted conversation-opinion test MOS score of networks with various characteristics.⁵ Per this ITU-T model, even under the more ideal laboratory conditions described in the ITU-T P.800 standard, a network with 600 ms of round-trip latency—which is an inalterable characteristic of geostationary satellite service such as Viasat’s—can produce a best-case MOS conversational score of 3.72.⁶

In certifying to its ability to meet the applicable service requirements in the Petition, Viasat states simply that its “capabilities for providing the services in accordance with these requirements are detailed in its FCC Form 683 long form application and are incorporated by reference.”⁷ The Commission has not yet made any portions of CAF-II auction winning bidders’

³ *Connect America Fund*, WC Docket No. 10-90, Order, 33 FCC Rcd 6509 (WCB WTB OET 2018) (“*Performance Metrics Order*”).

⁴ *Id.* at 6525-26 ¶¶ 44-45.

⁵ *The E-model: A Computational Model for Use in Transmission Planning*, ITU-T G.107 (June 2015) at 15, <https://www.itu.int/rec/T-REC-G.107-201506-I/en>.

⁶ The ITU-T’s E-model calculation tool is available at <https://www.itu.int/ITU-T/studygroups/com12/emodelv1/calcul.php>. Inserting the value “300” in the “mean one-way delay” field and leaving the other default values, which represent a reasonable approximation of good network conditions, generates a conversational MOS score equivalent of 3.72.

⁷ Petition at 6-7.

long-form applications public.⁸ Viasat should not be permitted to cross-reference an inaccessible filing to support its alleged compliance with a requirement for ETC status. This prevents meaningful public comment on the issue. This alone is grounds for rejection of the petition (or at least requiring Viasat to publicly amend the filing and seek further comment).

In Viasat's filings seeking ETC status before state commissions, Viasat has asserted that, in July 2018, it conducted "internal testing using the ITU-T Recommendation P.800 conversational opinion test and other parameters required by the FCC. The tests consisted of Viasat, Inc. employees randomly calling VoIP subscribers and conducting" the voice quality test.⁹

Significantly, however, one of the "other parameters required by the FCC" for CAF Phase II voice quality testing is that "live interviews and surveys must be conducted *by an independent agency or organization*."¹⁰ As Viasat acknowledges, its tests were conducted by "Viasat, Inc. employees," not an independent agency or organization. In addition, Viasat provides no information about whether other requirements for MOS testing in the *Performance Metrics Order* were met. As such, Viasat's "preliminary testing" does not meet the FCC's requirements, and is not responsive to the concern that Viasat's voice service does not meet FCC-established standards for voice quality for high-latency bidders in the CAF-II auction.

Viasat may be hoping that the Commission will modify the CAF-II performance standards so that it can meet them, but this is not a sufficient basis for Viasat to make the

⁸ Commission staff has indicated that this information is accessible solely via a Freedom of Information Act request, and so Hughes has submitted one.

⁹ Viasat, Inc., Response to Staff's First Request for Information of Viasat Carrier Services, Inc., Kentucky Pub. Serv. Comm'n Case No. 2018-00330 (Jan. 9, 2019) at 8, question 10, *citing Performance Metrics Order*, 33 FCC Rcd 6509, 6525-26 ¶¶ 44-45.

¹⁰ *Performance Metrics Order*, 33 FCC Rcd at 6526 ¶ 46 (emphasis added).

required certification. As Hughes has argued at length, however, the *Performance Metrics Order's* decision to limit high-latency bidders in the nationwide CAF-II auction to a real-world variant of the ITU-T P.800 conversational-opinion test effectively imposed a gating criterion on auction participation by geostationary satellite providers and cannot be modified after the fact without totally undermining the results of the auction.¹¹ In any event, Commission requirements remain valid notwithstanding pending petitions for reconsideration, and it would be inconsistent with the Commission's rules for Viasat to certify to compliance to a Commission requirement in reliance on a pending petition for reconsideration of that requirement.¹²

Viasat has not demonstrated that it is capable of meeting the CAF-II service standards for high-latency bidders. Its Petition for ETC status is inconsistent with Section 54.202(a)(1)(i) of the Commission's Rules and must be denied.

Respectfully submitted,

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March 6, 2019

¹¹ See Hughes Opposition to Viasat's Petition for Reconsideration, WC Docket No. 10-90 (filed Nov. 7, 2018); Hughes Reply to Oppositions to Petitions for Reconsideration, WC Docket No. 10-90 (filed Nov. 19, 2017); Letter from Jennifer A. Manner, Hughes, to Marlene H. Dortch, FCC, WC Docket No. 10-90 (filed Dec. 7, 2018); Letter from Jennifer A. Manner, Hughes, to Marlene H. Dortch, FCC, WC Docket No. 10-90 (filed Feb. 4, 2019).

¹² See 47 C.F.R. § 1.429(k) ("the filing of a petition for reconsideration shall not excuse any person from complying with any rule or operate in any manner to stay or postpone its enforcement").