Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
ViaSat Inc. Application for Authority to	)	IBFS File No. SES-LIC-20170401-00357
Deploy Fixed Earth Stations	)	Call Sign E170088

REPLY OF O3B LIMITED

O3b Limited ("O3b") submits this reply regarding the above-captioned application in which ViaSat, Inc. ("ViaSat") seeks authority to deploy four million 0.75 meter and 10,000 1.8 meter fixed earth stations that will communicate in the Ka-band with geostationary orbit ("GSO") satellites.[1]

In its Petition to Defer the ViaSat Application,[2] O3b argued that prior to acting on ViaSat's filing the Commission should require additional information regarding how ViaSat will ensure that its earth stations will adequately protect non-geostationary orbit ("NGSO") systems in the 28.6-29.1 GHz and 18.8-19.3 GHz frequencies where they have primary status (together, the "NGSO Primary Bands"). In particular, O3b pointed out that the ViaSat Application relies on outdated analyses of its GSO satellites' ability to share with NGSO systems and does not explain how each of its proposed millions of earth stations would know when to cease transmissions in the NGSO Primary Bands in order to protect NGSO systems and how ViaSat

[1] ViaSat, Inc., Call Sign E170088, File No. SES-LIC-20170401-00357 (the "ViaSat Application").

[2] Petition to Defer of O3b Limited, Call Sign E170088, File No. SES-LIC-20170401-00357, filed June 2, 2017 (the "O3b Petition").

would ensure that such muting was implemented.[3] The ViaSat Response[4] provides no additional information on these critical points.

Instead, ViaSat again refers back to NGSO sharing showings it made when it applied for its ViaSat-1 and ViaSat-2 satellites – showings that expressly took into account only a limited number of types of NGSO systems.[5] ViaSat explains that it will use the same technique it previously described to protect NGSO operations, terminating the satellite's transmissions in the NGSO Primary Bands for the duration of any in-line event with an NGSO satellite.[6] While O3b agrees that the in-line avoidance approach can be effective to facilitate sharing, the implementation details are important and are absent from the ViaSat materials.

Most significantly, ViaSat focuses solely on the design capabilities of its satellites. ViaSat does not reveal what capabilities of its proposed earth station terminals will allow the terminals to calculate the parameters and duration of an in-line event and mute transmissions in the NGSO Primary Bands for the duration of that event. ViaSat's technical exhibit concludes with a statement indicating that ViaSat will protect NGSO operations in the uplink portion of the NGSO Primary Bands by "inhibiting uplink transmissions from earth stations during in-line events," referring back to the discussion in the foregoing pleading. In fact, however, there is no such discussion that explains how, in practice, ViaSat will ensure that its proposed earth stations do not transmit in this spectrum during in-line events.

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[3] O3b Petition at 2-4.

[4] Opposition and Response of ViaSat, Inc. Call Sign E170088, File No. SES-LIC-20170401-00357, filed June 15, 2017 (the "ViaSat Response").

[5] *See id.* at 2-3.

[6] *Id.*

Because ViaSat has not demonstrated that it can operate on an unprotected, non-interference basis in the NGSO Primary Bands, the Commission should defer action on the ViaSat Application pending submission of additional information on this critical issue.

Respectfully submitted,

O3b LIMITED

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June 27, 2017

CERTIFICATE OF SERVICE

I hereby certify that on this 27th day of June, 2017, I caused a true and correct copy of the foregoing "Reply of O3b Limited" to be sent by first class mail, postage prepaid, to the following:

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