

January 18, 2018

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW

Re: *Ex Parte* of SES S.A. and O3b Limited

**Inquiry Concerning Deployment of Advanced Telecommunications
Capability to All Americans in a Reasonable and Timely Fashion, GN Docket
17-199**

Dear Ms. Dortch:

SES S.A. (“SES”) and its subsidiary O3b Limited (“O3b”) (together, “the Companies”) submit this filing in response to the inaccurate information regarding the capabilities of satellite broadband technology presented by the Institute for Local Self-Reliance (“ILSR”) and Next Century Cities’ (NCC) in their reply comments to the Commission’s Section 706 Notice of Inquiry (“Section 706 NOI”).¹ Specifically, ILSR and NCC incorrectly assert that satellite broadband networks have neither the capacity nor the capability to support advanced broadband and cloud-based services.² Existing systems are already supporting such services and additional capacity is planned in the next one to five years to respond to additional demand. The Companies offer these comments to ensure that the Commission is fully aware of the role of satellite services in providing innovative solutions to ensure the deployment of advanced telecommunications capability to all Americans.

As previously expressed by the Companies in the Comment phase of the proceeding,³ non-geostationary (“NGSO”) satellite constellations continue to help meet growing broadband demand throughout the United States and globally. SES currently operates twelve NGSO Medium Earth Orbit (“MEO”) satellites that deliver high-throughput, low-latency broadband connectivity and enables broadband connectivity speeds of up to 2 Gbps, allowing for optimal

¹ Reply Comments of ILSR and NCC in GN Dkt. No. 17-199 filed October 6, 2017 (“ILSR Filing”).

² ILSR Filing at pg. 2

³ Comments of O3b Limited in GN Dkt. No. 17-199 filed September 21, 2017.

application acceleration.⁴ The MEO constellation enables connectivity on a variety of mobile platforms, including for passengers and crew on cruise ships,⁵ and also enables key real-time broadband applications, including VOIP, video and voice conferencing, video streaming, and cloud-based services. Beginning in 2018, SES will add eight MEO satellites and a new constellation of seven next-generation MEO satellites, O3b mPOWER⁶, which will be capable of delivering multiple terabits of throughput globally to connect exponentially more communities and businesses all over the world.

Contrary to ILSR's assertions, today's satellite broadband services are indeed able to support new interactive, cloud-based, smart technologies and Wi-Fi devices.⁷ Commonly used applications such as Skype, Facebook, and video gaming are in use on O3b-enabled networks. O3b links operate with less than 150 milliseconds of latency, which allows its use for networks that must support common software applications like Microsoft Office 365 (which requires a latency of less than 300 milliseconds) and operate in compliance with standard performance characteristics.⁸

In particular, O3b's low-latency MEO satellite constellation meets the same performance standards for cloud computing that are standard to terrestrial networks. O3b's network has been tested and certified by a third-party organization, Iometrix, that it is fully Metro Ethernet Form ("MEF") compliant. MEF certification is a leading international standard for next generation, cloud-based services like Azure, AWS and Google Compute Engine. Thus, the O3b network is comparable to any terrestrial-based offering that also maintains a MEF certification.

The Companies urge the Commission to continue to consider innovative solutions, including satellite services in any broadband deployment plan, to ensure the deployment of advanced telecommunications capability to all Americans. The Companies remain readily available to assist in furthering the Commission's efforts.

Please contact the undersigned if you have any questions or require any additional information.

⁴ See Via Satellite, *Interview with Steve Collar CEO, O3b Networks*, (August 1, 2012), <http://www.satellitetoday.com/publications/2012/08/01/steve-collar-ceo-o3b-networks/>.

⁵ See FierceWireless, *SES Uses Beamforming To Steer Capacity On Ships*, (November 3, 2017), <https://www.fiercewireless.com/wireless/ses-uses-beamforming-to-steer-capacity-ships>.

⁶ See Press Release, SES Networks, *SES Opens New Era in Global Connectivity with O3b mPower*, (September 11, 2017), <https://www.ses.com/press-release/ses-opens-new-era-global-connectivity-o3b-mpower>.

⁷ ILSR Filing at pg. 2.

⁸ See attached SES Declaration of Ewald Schrap, January 3, 2018.

Respectfully submitted,

/s/ Suzanne Malloy
Vice President of Regulatory Affairs
O3b Limited
900 17th Street NW, Suite 300
Washington, DC 20006