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February 9, 2018

By Electronic Filing

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: SES and Intelsat Notice of *Ex Parte* Presentations, GN Docket No. 17-183

Dear Ms. Dortch:

On February 7 and 8, 2018, representatives of SES and Intelsat met to discuss the above-referenced proceeding with Will Adams, Legal Advisor to Commissioner Carr; Rachael Bender, Legal Advisor to Chairman Pai; Umair Javed, Legal Advisor to Commissioner Rosenworcel; and Louis Peraertz, Senior Legal Advisor to Commissioner Clyburn. In addition, SES and Intelsat met with staff from the FCC's International Bureau ("IB"), Wireless Telecommunications Bureau ("WTB"), Office of Engineering and Technology ("OET"), and Office of Strategic Planning and Policy Analysis ("OSP") on February 8, 2018. The IB representatives were: Tom Sullivan, Jim Schlichting, Jennifer Gilsenan, Robert Nelson, Jose Albuquerque (by phone), Christopher Bair, Diane Garfield, and Michael Mullinix. The WTB representatives were: Don Stockdale, Dana Shaffer, Matthew Pearl (by phone), Blaise Scinto, Paul Powell, Peter Daronco (by phone), and Ariel Diamond. The OET representatives were: Julius Knapp, Michael Ha, Nicholas Oros, Brian Butler (by phone), and Bahman Badipour. The OSP representatives were: Jonathan Levy and Evan Kwerel.

For SES, Christophe De Hauwer, SES Chief Strategy and Development Officer; Kimberly Baum, SES Americom Vice President, Spectrum Management & Development Americas; and outside counsel to SES Michele Farquhar of Hogan Lovells US LLP attended all the meetings. The undersigned outside counsel to SES attended the meetings with Mr. Adams and with IB, WTB, OET and OSP. For Intelsat, Bruno Fromont, Intelsat Corporation Senior Vice President, Strategy & Asset Management, and Susan H. Crandall, Associate General Counsel, attended all the meetings. Hazem Moakkit, Vice President, Corporate & Spectrum Strategy, attended the meetings with Ms. Bender, Mr. Javed, and Mr. Peraertz, and with IB, WTB, OET and OSP. Outside counsel to Intelsat Jennifer Hindin of Wiley Rein LLP attended the meetings with Ms. Bender and Mr. Peraertz, and Henry Gola of Wiley Rein LLP attended the meetings with Mr. Adams and with IB, WTB, OET and OSP.

The purpose of the meetings was to describe a joint proposal by SES and Intelsat for a market-based solution that would free up a target of approximately 100 MHz of C-band downlink spectrum in the contiguous U.S. ("CONUS") for licensed terrestrial mobile operations while preserving critical incumbent satellite uses in the band. The attached overview of this secondary market proposal formed the basis for the discussion.

In response to questions, SES and Intelsat clarified that although they have proposed that the consortium of satellite operators would offer spectrum blocks on a market-by-market basis, they contemplated that those markets could be aggregated to allow for full CONUS coverage and are open to offering a full-CONUS market area for some or all spectrum blocks as well. The parties indicated that a Notice of Proposed Rulemaking could propose the size of the spectrum blocks to be offered and could also consider whether to impose local market spectrum aggregation limits on Coordinated Mobile Licensees.

In addition, SES and Intelsat emphasized that SMA proceeds are intended to compensate consortium members not just for the significant costs associated with spectrum clearing, but also for their substantial investments in C-band satellite facilities and the opportunity costs of losing access to the targeted 100 MHz as well as adjacent spectrum that would be impaired due to the introduction of terrestrial services. SES and Intelsat together have roughly \$15 billion invested in C-band facilities that serve the United States. The parties noted that unlike terrestrial facilities, in-orbit satellites cannot be modified to operate in different spectrum. As a result, a reduction of the spectrum available for satellite use represents a substantial and unrecoverable lost revenue stream.

SES and Intelsat explained that they determined that a target of 100 MHz was reasonable based on analysis of their current fleets and customer requirements. This analysis led the parties to conclude that although the process would be extremely difficult and costly, clearing a target of 100 MHz would be feasible on an expedited basis, making new terrestrial wireless spectrum available to implement 5G services within eighteen months to three years following issuance of a Commission order.

Finally, SES and Intelsat also addressed questions regarding the Broadband Access Coalition ("BAC") proposal to introduce fixed point-to-multipoint services in C-band downlink spectrum. The parties noted that the BAC ignores the intensive satellite use of C-band, including thousands of cable headends scattered across the country that use all or virtually all of the C-band downlink spectrum – SES provided the example of a small cable system with 15,000 customers that currently receives signals from 23 of 24 C-band transponders. Moreover, the BAC approach is fundamentally incompatible with the parties' proposal to clear a portion of C-band downlink spectrum for terrestrial mobile use. In order to reconfigure satellite services into a smaller portion of the C-band, satellite operators will require the flexibility inherent in the Commission's policy of full-band, full-arc earth station licensing, as customers will need to be shifted to different satellites and frequencies in order to vacate the target portion of the spectrum.

Please address any questions regarding these matters to the undersigned.

Respectfully submitted,

/s/ Karis A. Hastings

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Attachment

cc: Will Adams
Rachael Bender
Umair Javed
Louis Peraertz

WTB:

Don Stockdale
Dana Shaffer
Matthew Pearl
Blaise Scinto
Paul Powell
Peter Daronco
Ariel Diamond

OSP:

Jonathan Levy
Evan Kwerel

IB:

Tom Sullivan
Jim Schlichting
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The Secondary Market C-Band Proposal

SES and Intelsat have jointly developed further details of the market-based proposal initially presented by Intelsat-Intel in the Mid-Band NOI proceeding. The proposal best serves the Commission's policy objectives: bringing highly-valuable mid-band spectrum to market voluntarily, in an efficient and expeditious manner, and with minimal FCC administration while preserving critical incumbent satellite services.

Background

SES and Intelsat are focused on ensuring that C-band FSS services that are an indispensable backbone of the country's communications infrastructure are protected and preserved. Our customers depend on C-band FSS for a variety of critical services, including:

- Delivery of news, sports, and entertainment video and audio programming and emergency alerts to more than 100 million households nationwide
- Lifeline communications links to residents of remote areas such as Alaskan bush villages
- Offerings by government agencies, both civilian and military, that are vital to public safety, including the distribution of weather data, support for missile warning systems, and communications capacity for Naval vessels
- Restoration of services following an emergency, such as the devastating 2017 hurricanes

Any proposal for expanded terrestrial use of C-band spectrum must allow these essential satellite services to continue to be provided with near-perfect reliability. Other options in the record involving co-frequency sharing fail this test. Further, as several parties in the record recognize, co-frequency sharing would preclude terrestrial mobile operations in a significant portion of the country.

The Secondary Market C-Band Proposal

Overview – The Intelsat-SES market-based proposal would create a Consortium of C-band satellite operators to clear and make available a specified portion of C-band downlink spectrum for licensed terrestrial mobile service through secondary market agreements on a market-by-market basis, while maintaining and protecting critical satellite services. The proposal would:

- Free up a target of approximately 100 MHz of C-band downlink spectrum, starting at 3700 MHz (with impairment of additional frequencies beyond the cleared spectrum).
- Rely on the Consortium to handle the clearing.
- Compensate all affected parties (including earth station and fixed microwave operators) for their reconfiguration and relocation costs, as well as prior investment and opportunity costs for Consortium members.

Secondary Market Agreements ("SMAs") – The Consortium would negotiate SMAs with prospective terrestrial mobile service providers, who would then apply to the FCC for a Coordinated Mobile License authorizing the provision of terrestrial mobile service in the agreed-upon market area and spectrum block. In exchange for compensation, the Consortium would clear protected incumbent users and contractually relinquish primary protection in the portion of the band covered by the SMA.

Consortium – The Consortium would be open to all C-band satellite operators providing service to all or a portion of the lower 48 states pursuant to FCC-issued licenses or grants of market access.

The Terrestrial Licenses – The size of the spectrum blocks for each Coordinated Mobile License would be consistent with 5G standards and uniform in each licensed market area. It is expected that the blocks and the technical parameters of the mobile network, designed to facilitate compatibility with satellite services, would be determined by the FCC in a rulemaking based on inputs from the Consortium and potential buyers.

- SMAs would be offered on a market-by-market basis, with the ability to aggregate for nationwide coverage.
- After execution of an SMA, the prospective mobile carrier would apply to the FCC for a Coordinated Mobile License, which would be conditioned on compliance with any permanent license conditions negotiated by the prospective mobile carrier and the Consortium, including protection of a small number of TT&C/critical telepo sites.
- The Coordinated Mobile Licenses would have a renewable term length of ten years (plus the reconfiguration/relocation period during the initial term).

Regulatory Changes Needed – The FCC would promulgate rules to: (1) add a co-primary allocation to the Table of Allocations for terrestrial mobile service in the C-band downlink spectrum, footnoted to condition such use on reaching an SMA with the Consortium; and (2) by rule, remove primary status protection for incumbent C-band operators in the areas included in a Coordinated Mobile License grant.

Incentives – The FCC could require annual updates from the Consortium on the SMAs, the reconfiguration/relocation process, Consortium membership, and the overall program status. The FCC could also seek public comment on the program after a pre-defined amount of time and make any necessary adjustments.

Formation and Operation of the Consortium – The initial members, SES and Intelsat, would negotiate a Consortium Agreement, and additional eligible C-band satellite operators must become parties to the Consortium Agreement in order to become Consortium members. Eligible C-band satellite operators that elect not to become Consortium members would still have their reconfiguration and relocation costs covered. The Consortium would act in accordance with all applicable antitrust laws.

- Membership interest in the Consortium would be based on an equitable predetermined metric reflecting the U.S. C-band operations of each Consortium member. Commercially sensitive data of members would not be shared between or among members, and would be managed by an independent auditor.
- To ensure that the Consortium possesses effective and timely decision-making ability, a Managing Committee would have responsibility to execute all actions to be undertaken by the Consortium. Each initial member would appoint one representative to the Managing Committee, and the other members voting together would appoint one representative to the committee.