

Federal Communications Commission  
International Bureau  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

18 June 2009

Subject: Engineering Certification of SES Americom Inc.:

To whom it may concern:

This letter certifies that SES Americom Inc. ("SES Americom") is authorized by the Commission to operate the AMC-15 satellite at Orbital location 105°W.L. SES Americom is aware that ViaSat, Inc. ("ViaSat") has been granted Commission authorization to operate transmit/receive steerable antennas for aeronautical mobile-satellite service (AMSS), under Call Sign E050318, using fixed-satellite service frequencies pursuant to ITU RR 5.504A, on a non-conforming, non-interference basis<sup>1</sup> and that ViaSat seeks to modify its FCC authorization to add AMC 15 operating at 105° W.L. as a point of communication. SES Americom is familiar with the technical and operating parameters of the licensed system and the conditions as defined in the Order and Authorization. SES Americom acknowledges that the proposed operation has the potential to create unacceptable interference into adjacent satellite networks.

SES Americom understands that, as described in ViaSat's modification application, ViaSat proposes to add a new antenna type that is very similar to the currently authorized antenna. This coordination letter covers both antenna types. Each is a transmit/receive 29.2 cm by 29.2 cm AMSS steerable reflector antenna. SES Americom understands that the antennas will operate within ViaSat's currently authorized AMSS network in accordance with the terms and conditions of its current authorization and that this modification application seeks no changes to the technical characteristics of the AMSS network as currently authorized that would result in an increase in the aggregate off-axis e.i.r.p. density for the uplink.

When communicating with AMC-15, ViaSat will operate its reflector antenna within the 14.0 - 14.5 GHz FSS uplink band, and the 11.7 - 12.2 GHz FSS downlink band. ViaSat will operate using direct sequence spread spectrum so that the aggregate off-axis e.i.r.p. transmissions, from all co-frequency AES terminals within the footprint of the satellite, will be within the off-axis EIRP envelope set forth in Section 25.218(f) of the FCC's rules. The aggregate downlink e.i.r.p. density at any frequency will not exceed 10dBW/4 kHz.


SES Americom confirms that the use of the above referenced transmit/receive reflector antennas by ViaSat, installed and operated in accordance with the conditions in ViaSat's existing license and as proposed by this modification application, is within the levels

<sup>1</sup> See *ViaSat, Inc., Application for Blanket Authority for Operation of 1,000 Technically Identical Ku-Band Aircraft Earth Stations in the United States and Over Territorial Waters*, FCC File Nos. SES-LIC-20051028-01494, SES-AMD-20060314-00440, SES-AMD-20070309-00325, Order and Authorization, DA 07-4674 (rel. Nov. 20, 2007) ("Order and Authorization").

# SES AMERICOM

coordinated with the adjacent satellite operators within  $\pm 6^\circ$  and should not cause unacceptable interference into adjacent satellites operating in accordance with the FCC's 2-degree spacing policy. SES Americom will include the antennas, as described above, in all future satellite network coordinations. ViaSat shall comply with all such coordination agreements reached by the satellite operators. Furthermore, ViaSat agrees that it will accept interference from adjacent satellites to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the reference patterns defined in Section 25.209 of FCC rules. If the use of these antennas should cause unacceptable interference into other systems, ViaSat has agreed that it will terminate transmissions immediately upon notice from the affected parties.


Very truly yours,

  
Krish Jonnalagadda  
Manager, Spectrum Development  
SES Americom

6/19/09  
Date

Acceptance by ViaSat:

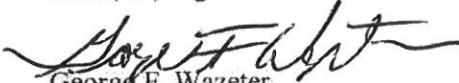
ViaSat testifies that the information provided to SES Americom and reflected in this certification letter is true and accurate to the best of ViaSat's knowledge. ViaSat will comply with all coordination agreements reached by SES Americom for AMC-15.

  
Daryl T. Hunter, P.E.  
Director, Regulatory Affairs  
ViaSat, Inc.

6/19/09  
Date

Acceptance by Telesat

Telesat agrees to operation of the above antenna with the technical parameters described herein with respect to Anik-F1R at 107.3° West longitude, which has a nominal geocentric separation of two point three (2.3) degrees from AMC-15.

  
George F. Wazeter  
Director, Regulatory Affairs  
Telesat

6/19/09  
Date