

Exhibit A

Description of Application and Waiver Request

ViaSat, Inc. (“ViaSat”) seeks blanket authority to operate 50,000 temporary-fixed earth stations to communicate with the ViaSat-1, WildBlue-1 and Anik-F2 satellites, each of which has been authorized by the Commission to serve the United States in the proposed frequency ranges. The terminals will utilize the 28.35-29.1 GHz and 29.5-30.0 GHz (uplink) bands and the 18.3-19.3 GHz and 19.7-20.2 GHz (downlink) bands on ViaSat-1 at the nominal 115° W.L. location, and the 29.5-30.0 GHz (uplink) band and the 19.7-20.2 GHz (downlink) band on WildBlue-1 and Anik-F2 at the nominal 111° W.L. location.¹

These proposed temporary-fixed terminals will be a variation of the Ka band terminals already authorized to communicate with ViaSat-1, WildBlue-1 and Anik-F2. This new antenna type is similar to ViaSat’s previously licensed Ka band blanket terminals, but has a reflector with detachable side panels that allow the antenna to be stored in a compact case suitable for rapid deployment by first responders, or other applications requiring easy transport and faset setup. ViaSat currently holds a blanket license authorization under call sign E100143 (SES-LIC-20101217-01585) to operate a large number of user terminals in the 18.3-19.3 GHz, 19.7-20.2 GHz, 28.35-29.1 GHz and 29.5-30.0 GHz bands using the ViaSat-1 satellite.² In granting the ViaSat-1 Blanket License and the ViaSat-1 Authorization, the Commission granted authority to operate on the 28.6-29.1 GHz band on a secondary allocation and granted a waiver of the U.S. Table of Frequency Allocations to use the 18.8-19.3 GHz band for GSO FSS downlink operations.³ In addition, the Commission permitted blanket licensing of earth stations in the 28.6-29.1 GHz and 18.8-19.3 GHz bands in the ViaSat-1 Blanket License. The temporary fixed antennas proposed in this application will operate on these same frequencies when communicating with ViaSat-1, and thus, ViaSat requests the same waivers, to the extent necessary. The bases for such waiver showings for this new terminal type are no different than those already approved in the ViaSat-1 Authorization and the ViaSat-1 Blanket License. ViaSat respectfully incorporates by reference those prior showings.⁴ ViaSat requests that the Commission permit operations and blanket licensing in the 18.8-19.3 GHz band in this case.

¹ ViaSat’s affiliate, WB Holdings 1 LLC, is blanket licensed under call sign E050033 to operate a large number of user terminals in the 19.7-20.2 GHz and 29.5-30.0 GHz bands on WildBlue-1 and Anik-F2.

² See File Nos. SES-LIC-20101217-01585; SES-AMD-20110128-00074 (granted Oct. 20, 2011) (“ViaSat-1 Blanket License”); See File Nos. SAT-LOA-20110722-00132, as amended (granted Oct. 14, 2011); SAT-LOI-20080107-00006, as amended (granted Aug. 18, 2009) (“ViaSat-1 Authorization”).

³ See *id.*; see also 47 C.F.R. § 2.106, n. NG165.

⁴ See File Nos. SES-LIC-20101217-01585; SAT-AMD-20080623-00131.

Antenna Performance

The antenna meets the performance requirements in Section 25.138(a), as illustrated by the off-axis EIRP spectral density plots attached hereto as Exhibit C. In addition, the power flux-density at the earth's surface produced by emissions from each of the satellite points of communication are within the -118 dBW/m²/MHz limit set forth in Section 25.138(a)(6). In addition, the proposed earth station terminal conforms to the antenna performance standards in Section 25.209 in the receive frequency bands with few minor exceptions, as demonstrated by the antenna gain patterns attached hereto as Exhibit B. Consistent with Section 25.209(c)(1) and Section 25.138(e), ViaSat does not seek additional protection from receive interference that is attributable to any shortfall in the receive antenna pattern performance.

Radiation Hazard Analysis

A radiation hazard analysis for the proposed antenna is attached hereto as Exhibit D. As demonstrated by the results of the analysis, the maximum permissible exposure limit (MPE) is met for protection of the General Population/Uncontrolled Exposures – 1 mW/cm² averaged over a thirty minute period. The automatic shut-down capabilities described in the analysis, coupled with the terminal's use of uplink power control and non-continuous operation, ensures that the general population will not be exposed to levels of electromagnetic radiation that exceed the Commission's limits.