Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
KVH Industries, Inc. Application for	)	File No. SES-MOD- _____
Modification of Blanket License to Add	)	Call Sign E090001
5,000 V30 ESIMS	)	

MODIFICATION APPLICATION

KVH Industries, Inc. ("KVH") respectfully requests that the Commission modify the above-captioned blanket license to authorize KVH to add 5,000 V30 earth stations in motion ("ESIMs") terminals operating in Ku-band Fixed-Satellite Service ("FSS") frequencies. Grant of the requested authority is consistent with Commission rules, policy and precedent, and will serve the public interest by enabling KVH to deploy its V30 terminals to provide additional and improved broadband mobility service to maritime customers.

I. INTRODUCTION AND PUBLIC INTEREST SHOWING

KVH is a global leader in the provision of satellite communications services to support the maritime industry. KVH is always seeking to identify improvements to its products and services to provide maritime customers with increased reliability, data transmission speeds and more compact form factors to support their communications requirements. The V30 provides a significant advancement to KVH's existing 0.37 meter maritime antenna (the V3) without resulting in increased interference to other users of the Ku-band. The V30 benefits from the same operational and technical measures that KVH developed for its V3 antenna more than a decade ago to ensure pointing accuracy and to minimize off-axis interference. Therefore, the expeditious grant of this application is warranted and would support the public interest.

II. COMPLIANCE WITH SECTION 25.228

As detailed below, KVH's V30 terminal complies with all relevant provisions of Part 25, including Section 25.228 governing ESIMs.

Section 25.228(a). Off-Axis EIRP Spectral Density

KVH's V30 complies with the off-axis effective isotropically radiated power ("EIRP") power spectral density ("PSD") standards set forth in Section 25.218(f). Included with this application is an attachment providing measured antenna patterns using worst case bandwidth and power levels to demonstrate compliance with the off-axis mask.

Section 25.228(b). Cessation of Emissions

KVH certifies that its V30 terminal is self-monitoring, and will automatically cease transmissions within 100 milliseconds if a condition occurs that would cause the V30 to exceed

the off-axis mask. The V30 will not resume transmission until the condition that caused it to exceed the off-axis mask is corrected. The operational and technical measures employed by KVH's ESIM antennas are described in the narrative attachment for KVH's V3 antenna,[1] which used the same measures to ensure pointing accuracy and tracking. Pursuant to the Commission's authority, KVH has successfully operated its V3 antenna for approximately a decade without resulting in harmful interference to other users of the Ku-band.

Section 25.228(c). Network Control and Monitoring Center ("NCMC")

Each V30 will be monitored by the KVH's NCMC and will comply with a "disable transmission" command from the NCMC within 100 milliseconds of receiving the command. The NCMC will monitor the operation of each V30 in its network, and transmit a "disable transmission" command to any V30 that exceeds the authorized off-axis mask. The NCMC will not allow the V30 to resume transmissions until the condition that caused the V30 to exceed the off-axis mask is corrected.

Section 25.228(d). Installation of V30 Terminals

The installation of V30 terminals on vessels will be done by qualified installers who understand the antenna's radiation environment.

Section 25.228(e)(1). Control of Maritime V30 Terminals

The V30 terminals will be controlled using an NCMC that is located in the United States.

Section 25.228(e)(2) and (f). Point of Contact

A 24/7 point of contact with the authority and ability to cease all emissions from maritime V30 terminals will be maintained, as indicated in the accompanying Form 310.

Section 25.228(e)(3). Recording and Retention of Transmit Data

The NCMC communicating with V30s on vessels of foreign registry will maintain detailed information on each vessel's country of registry and a point of contact for the relevant administration responsible for licensing those ESIMs.

Section 25.228(j)(1) and (2). Protection of NASA TDRSS Facilities

ESIM licensees proposing to operate in the 14.0-14.2 GHz (Earth-to-space) frequency band within 125 km of the NASA Tracking and Data Relay Satellite System ("TDRSS") facilities at Guam; White Sands, New Mexico; and Blossom Point, Maryland are subject to coordination with NASA through NTIA's Interdepartmental Radio Advisory Committee ("IRAC"). KVH will use GPS to ensure that V30 terminals do not operate in the 14.0-14.2 GHz sub-band within 125 km of NASA's TDRSS facilities at Guam, White Sands, or Blossom Point until and unless it completes

[1] *See* KVH Industries, Inc., IBFS File No. SES-MOD-20110126-00062, Narrative Attachment at 23-25 (filed Jan. 26, 2011).

coordination. KVH acknowledges that it is required to notify the International Bureau once it has completed such coordination.

Section 25.228(j)(3). Protection of Radio Astronomy Services ("RAS")

ESIM licensees proposing to operate in the 14.47-14.5 GHz sub-band in the vicinity of RAS observatories observing in the 14.47-14.5 GHz band are subject to coordination with the National Science Foundation ("NSF"). KVH will use GPS to ensure that V30 terminals do not operate in the 14.47-14.5 GHz sub-band within the delineated coordination radius of the RAS facilities listed in Table 1 to Section 25.228(j)(3) until and unless it completes such coordination. KVH acknowledges that it is required to notify the International Bureau once it has completed such coordination.

Section 25.115(a)(1). FCC Form 312 and Schedule B

KVH has completed and electronically submitted FCC Form 312 and Schedule B, together with the required application fee.

Section 25.115(m)(3)(ii). Geographic Area

KVH requests authority to operate the V30 terminals in the continental United States ("CONUS"), Alaska, Hawaii, and U.S. territories and possessions, as well as in territorial and international waters.

Section 1.1310. Radio Frequency Hazard Analysis

KVH has included a radio frequency ("RF") safety analysis as an additional exhibit to this application.