

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Application of RigNet SatCom, Inc. to |
Modify Existing Earth Station Onboard | Call Sign: E980235
Vessel (“ESV”) Blanket License to Add |
New Remote Terminals | File No:

APPLICATION TO MODIFY ESV BLANKET LICENSE

By this application, RigNet SatCom, Inc. (“RigNet”) respectfully seeks to modify its existing C-band and Ku-band earth station onboard vessel (“ESV”) blanket authorization, Call Sign E980235, by adding two (2) new ESV terminal types to the license and expanding the satellite arc for its previously licensed ESV terminals. The proposed modification will allow RigNet to more effectively provide essential satellite communications services to its customers in the maritime and energy industries, where alternative services are generally unavailable.

I. Discussion

Pursuant to Sections 25.117 and 25.222 of the Commission’s rules, 47 C.F.R. §§ 25.117 and 25.222, RigNet seeks to add the following Ku-band ESV terminals for operations in the 11.7-12.2 GHz band (space-to-Earth) and the 14.0-14.5 GHz band (Earth-to-space):

- 250 Sea Tel Model USAT-24 0.60m stabilized Ku-band ESVs (ESV R-14); and
- 250 Sea Tel Model USAT-30 0.75m stabilized Ku-band ESVs (ESV R-15).

These Ku-band ESVs will be used in RigNet’s authorized network to provide a wide array of broadband satellite communications services to marine barges and vessels in motion in U.S. and international waters. The ESVs will be used in concert with licensed hub earth stations located

throughout United States¹ and will only communicate with U.S.-licensed satellites and non-U.S.-licensed satellites on the Commission’s Permitted Space Station List. The Sea Tel ESV terminals are well known to the Commission, have been previously licensed for similar maritime operations and are eligible for routine processing under the Commission’s rules.²

The subject ESV terminals are designed to meet the Commission’s ESV requirements set forth in Section 25.222 of the Commission’s rules, including: (i) maintaining off-axis EIRP within the levels codified in the applicable FCC mask; (ii) maintaining a pointing accuracy of 0.2° or better; (iii) automatic cessation of emissions within 100 ms if pointing offset exceeds 0.5°; and (iv) not resuming transmissions until pointing accuracy is within 0.2°. In addition to these fundamental operational characteristics, RigNet will operate the Sea Tel terminals in accordance with the geographic limitations and coordination provisions in the Commission’s rules designed to protect other users of spectrum.³

The attached FCC Form 312 Schedule B and Technical Appendix contain the relevant information relating the technical parameters of the proposed ESV operations, including radiation hazard studies and a declaration of conformity for the ESV terminals.⁴ In addition to adding new

¹ The ESV terminals may communicate with certain hub earth stations licensed under Call Signs: E060388, E000275, E990541, E920698 and E020191.

² See, e.g., Data Technology Solutions LLC, File No. SES-MOD-20150227-00103, Call Sign E100084.

³ See generally 47 C.F.R. § 25.222(c) & 25.222(d).

⁴ RigNet notes that, although the FCC declaration of conformity cites the 2009 version of the Commission’s rules, the relevant EIRP spectral density limits and operational requirements have been relaxed (i.e., made less restrictive with flattening/removal of the “wings” from the off-axis ESD masks). Thus, compliance with the more restrictive, prior version of the rules is necessarily compliant with the current less-restrictive rules and sufficient to support this request. In addition, because the antennas’ performance characteristics have not changed, the material

ESV terminals to the license, RigNet seeks to expand the satellite arc for each of its previously licensed ESV terminals to 1° W.L.- 180° W.L.⁵ Expanding the satellite arc will allow RigNet better operational flexibility, allowing it to take full advantage its Permitted List authorization. RigNet does not seek to add any additional satellite points of communication and the requested satellite arc expansion will apply to Permitted List satellites only.

II. Public Interest Statement

Grant of this application will serve the public interest by allowing RigNet to continue to provide essential connectivity services to users in the maritime and energy industries and support critical operational communications throughout U.S. and international waterways. Addition of the new ESV terminals will help RigNet deliver more reliable broadband satellite services to a wide array of users in offshore locations, including marine barges, mobile oil and gas support vessels and other in-motion maritime users, that may be unable to obtain communications services through alternative facilities. RigNet's customers will be able to utilize high-speed Internet access, corporate VPN, e-mail, voice and other services, including important emergency communications.

III. Conclusion

Based on the foregoing, RigNet respectfully requests that the Commission grant its request to modify its existing ESV blanket license, Call Sign E980235, by adding authority to operate new Ku-band ESV terminals and expanding the satellite arc for its Permitted List operations.

accurately represents RigNet's ESV proposed operations. RigNet has also confirmed with the manufacturer that the attached declaration of conformity is the current and only version available.

⁵ See Technical Appendix, III. Currently in the license, the authorized Ku-band ESV satellite arc is from 43° W.L.- 143° W.L.; the authorized C-band ESV satellite arc is from 32° W.L.- 139° W.L.