

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Unlicensed Use of the 6GHz Band

ET-18-295

Expanding Flexible Use of the Mid-Band Spectrum
Between 3.7 GHz and 24 GHz

GN-17-183

COMMENTS OF RIGNET SATCOM, INC.

RigNet Satcom, Inc. (“RigNet”) submits these comments in connection with the above-captioned Notice of Proposed Rulemaking¹ regarding potential use of the 6 GHz band for unlicensed services.

Making additional spectrum available for unlicensed wireless services in geographic areas with a demonstrated shortage of capacity would result in public interest benefits. At the same time, RigNet also believes that 6 GHz terrestrial microwave services are a critical element of the U.S. communications network that must be preserved. RigNet therefore urges the Commission to protect incumbent fixed point-to-point operations.

I. INTRODUCTION

RigNet is a leading provider of communications services to the energy and maritime sectors. RigNet operates a 6GHz fixed microwave services network to deliver communications connectivity to customers in the Gulf of Mexico.

¹ See *Unlicensed Use of the 6 GHz Band*, Notice of Proposed Rulemaking, ET Docket No. 18-295, *et al.* (October 23, 2018).

In addition, RigNet utilizes terrestrial wireless technologies to serve its commercial customers. For example, RigNet operates the most extensive WiMax network in the Gulf of Mexico to support the data-intensive operations of rigs and vessels. This network utilizes 6 GHz fixed microwave technology as its backbone.

These important commercial communications result in significant benefits for U.S. consumers. From energy exploration to infrastructure and development projects, RigNet provides communications connectivity for remote operations with significant economic and social impacts. It is therefore in the public interest for the Commission to balance protecting incumbent 6 GHz terrestrial operations while augmenting use of unlicensed frequencies in this band.

II. RIGNET OPERATES A LARGE FIXED MICROWAVE NETWORK THAT COULD BE ADVERSELY AFFECTED BY UNLICENSED OPERATIONS

Links Operated by RigNet

The Commission has granted RigNet over 80 call signs in both, the upper 6 GHz and Lower 6 GHz bands. Most of these links operate offshore in the Gulf of Mexico and together, these call signs hold 93 backbone paths. In total, RigNet's 6 GHz offshore network provides services to over 300 Oil and Gas Production platforms, including support for a Tier 1 4G/5G LTE network, and WiMax access network through BRS spectrum. The microwave network serviced by RigNet provides mission critical communication to the offshore platforms, including control production, safety, fire and gas systems, as well as voice and data communications on offshore oil and gas production platforms.

Impact of Harmful Interference on RigNet Links

Harmful interference from unlicensed operations in the 6 GHz band could have a detrimental impact to the oil and gas market that RigNet services. Nearly all of the 6 GHz paths operated by RigNet cross over water which increases the possibility of being affected by interference.

The RigNet microwave network covers the majority of the Gulf of Mexico. Besides licensed bands, each production platform has a notable concentration of radiocommunications unlicensed bands. Due to the critical nature of this system, any harmful interference would endanger life, equipment and the environment. It would not be prudent to introduce additional unlicensed bands in the Gulf of Mexico.

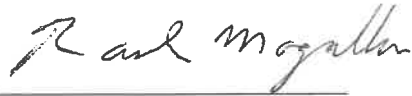
With over 25 years of RF experience operating in the Gulf of Mexico environment, RigNet has concluded the 6 GHz band is the only spectrum capable of providing reliable communications to deliver the needed bandwidth due to the temperature inversions that occur during the fall, winter, and early spring seasons. So reliable and critical is this band for production platforms, that RigNet recently made a substantial investment in upgrading to 60MHz and dual 30MHz channels.

III. CONCLUSION

For the foregoing reasons, RigNet urges the Commission to protect incumbent fixed microwave systems operating in the 6 GHz band. The Commission should also ensure that affected fixed microwave service providers are fully compensated for the costs of accommodating new unlicensed services in the 6 GHz band.

Respectfully submitted,

RIGNET SATCOM, INC.

A handwritten signature in dark ink, appearing to read "Raul Magallanes", is written over a horizontal line.

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