

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

In the Matter of	)	IB Docket Nos. 11-109 and 12-340,
	)	DA 16-442
License Modification Applications of Ligado	)	
Networks Subsidiary LLC	)	IBFS File Nos. SAT-MOD-20151231-
	)	00090, SAT-MOD-20151231-00091,
	)	and SES-MOD-20151231-00981

**COMMENTS OF VIASAT, INC.**

ViaSat, Inc. submits these comments in response to the Public Notice released by the Commission on April 22, 2016,<sup>1</sup> which seeks comment with respect to the above-captioned license modification applications filed by Ligado Networks Subsidiary LLC (“Ligado”) on December 31, 2015 (collectively, the “Applications”).<sup>2</sup> In the Applications, Ligado proposes that the Commission impose additional operational restrictions on the company’s ancillary terrestrial component (“ATC”) authorizations in order to resolve concerns raised by the Global Positioning System (“GPS”) industry. These conditions are consistent with agreements that Ligado recently has reached with the largest GPS manufacturers.<sup>3</sup>

ViaSat is a leading provider of communications solutions across a wide variety of technologies (both terrestrial and satellite), and it uses a fleet of spacecraft to provide its Exede broadband service in the Ka band to fixed and mobile terminals. ViaSat’s advanced satellite broadband network technology has revolutionized the satellite industry by reducing the “cost per

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<sup>1</sup> *Comment Sought on Ligado’s Modification Applications*, Public Notice, IB Docket Nos. 11-109 and 12-340, DA 16-442 (Apr. 22, 2016).

<sup>2</sup> Applications of LightSquared Subsidiary LLC, IBFS File Nos. SAT-MOD-20151231-00090, SAT-MOD-20151231-00091, and SES-MOD-20151231-00981.

<sup>3</sup> See Letter from New LightSquared LLC to FCC, IB Docket Nos. 12-340 and 11-109 (Dec. 31, 2015).

bit” of delivering broadband service, providing a high-quality service to end users, and affording millions of Americans an effective competitive alternative to wired and wireless terrestrial services.

In 2014, ViaSat and Ligado entered into a strategic relationship that has facilitated ViaSat’s ability to offer managed services using L-band space segment capacity over Ligado’s state-of-the-art SkyTerra 1 satellite. As one of the most powerful commercial satellites ever built, SkyTerra 1 provides ubiquitous coverage throughout North America, and offers significant advantages to ViaSat’s customers, which include U.S. government users. Ligado’s satellite allows ViaSat to bring higher data throughputs to smaller devices, provide an order of magnitude capacity improvement over comparable L-band legacy systems, and otherwise offer reliable, always-on, low-latency service that offers broadcast and multicast data transport and embedded voice over a highly secure network.<sup>4</sup> In short, Ligado’s space segment capacity is an important piece of ViaSat’s network architecture.

As a satellite operator and services provider, Viasat understands how important it is to protect existing satellite networks from harmful interference. Indeed, ViaSat believes that the Commission must exercise caution in authorizing new services so as to ensure that existing services are adequately protected. At the same time, ViaSat has endorsed efforts to facilitate the efficient use of limited spectrum resources through advanced sharing techniques, backed by carefully crafted technical rules and procedures.

Based on information provided by Ligado on the record, it appears that Ligado shares this mindset. Indeed, ViaSat is convinced that Ligado’s proposal reflects a crucial step forward in

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<sup>4</sup> See generally *LightSquared and ViaSat Enter Strategic Relationship* (Mar. 10, 2014), available at <https://www.viasat.com/news/lightquared-and-viasat-enter-strategic-relationship#sthash.MPWWBgA7.dpuf>.

the development of innovative hybrid technologies in the L band. Among other things, Ligado has made significant compromises and agreed to reduce the power and out-of-band emissions (“OOBE”) levels at which it otherwise would be authorized to operate. Ligado also has agreed to forego use of a full 10 megahertz of spectrum in the vicinity of the GPS band.

Critically, major GPS manufacturers support Ligado’s proposal and agree that its adoption would protect commercial GPS devices. For example, Trimble Navigation Limited has described the “technical parameters and other conditions” proposed by Ligado as reflecting “a reasonable compromise relative to the important competing policy considerations raised by Ligado’s previous proposals,” which collectively “are in the public interest.”<sup>5</sup> Similarly, Garmin International, Inc. has expressed support for the analysis presented by Ligado in connection with its proposal and explained that Garmin “remains committed” to the implementation of that proposal.<sup>6</sup>

In ViaSat’s view, Ligado has aptly demonstrated the significant benefits that would flow from the availability of hybrid satellite-terrestrial technologies in the L band. The use of such technologies would create significant opportunities in both the data communications space and the positioning, navigation, and timing (“PNT”) space. Among other things, such technologies could be leveraged to ensure ubiquitous network coverage, facilitating the availability of voice and data service throughout the United States and encouraging innovation in PNT applications and technologies. But these advances cannot materialize unless the Commission acts to facilitate more flexible uses of the L-Band spectrum proposed by Ligado.

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<sup>5</sup> See Letter from Trimble Navigation Limited to FCC, IB Docket Nos. 11-109 and 12-340 (May 20, 2016).

<sup>6</sup> See Letter from Garmin International, Inc. to FCC, RM-11681, IB Docket Nos. 11-109 and 12-340 (Mar. 9, 2016).

For the reasons set forth above, ViaSat believes that allowing flexible use of the L band, consistent with Ligado's proposal, would facilitate the provision of new capabilities to these customers.

Respectfully submitted,

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May 23, 2016

## CERTIFICATE OF SERVICE

I, Jarrett S. Taubman, hereby certify that on this 23rd day of May 2016, I served true and correct copies of the foregoing "Comments of ViaSat, Inc." by first class mail, postage prepaid, upon the following:

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