

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

In the Matter of)	
)	
Ligado Networks LLC)	RM-11681
)	
Request to Initiate a Rulemaking to Allocate)	
the 1675-1680 MHz Band for Terrestrial)	
Mobile Use Shared with Federal Use)	

COMMENTS OF CTIA

I. INTRODUCTION

CTIA submits these comments in response to the request of Ligado Networks LLC (“Ligado”) to launch a rulemaking to reallocate the 1675-1680 MHz band for shared commercial use, and to develop rules for sharing that band with government users and making it available via auction.¹ CTIA has long been an advocate of measures that bring new spectrum to market and promote innovation, investment, and competition in the mobile broadband marketplace. To that end, CTIA supports initiatives by the Administration, Congress, the Commission, and stakeholders to identify and allocate more spectrum to help maintain U.S. leadership in the global mobile marketplace, advance the U.S. economy, and accommodate the explosive growth in demand for mobile broadband. To meet these goals, CTIA supports Commission action to adopt a Notice of Proposed Rulemaking to repurpose the 1675-1680 MHz band for shared commercial use.

¹ See *Comment Sought to Update the Record on Ligado’s Request that the Commission Initiate a Rulemaking to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use Shared with Federal Use*, Public Notice, DA 16-443 (Apr. 22, 2016) (“*Ligado 1675-1680 MHz Public Notice*”).

II. EVER-GROWING DEMAND FOR MOBILE DATA REQUIRES NEW SPECTRUM RESOURCES.

Consumer demand for broadband services continues to increase exponentially, underscoring the need to bring more spectrum to market. CTIA's Year-End 2015 Survey results show that wireless data traffic has grown roughly three times since 2013 and more than 11 times since 2011.² In fact, wireless data traffic has grown 25 times since CTIA first reported 388 billion MB of wireless data traffic in 2010.³ This demand is not showing any signs of waning. Cisco's latest Visual Networking Index report predicted that mobile data traffic in the U.S. will grow six times from 2015 to 2020.⁴ Similarly, Ericsson's North American Mobility Report anticipates smartphone data traffic growing six-fold from 2015 to 2021.⁵

These figures demonstrate that, even with the broadcast Incentive Auction⁶ and the anticipated action in the Spectrum Frontiers proceeding,⁷ spectrum supply faces challenges keeping up with demand. While operators are continuously leveraging new technologies and

² See Comments of CTIA, WT Docket No. 16-137, at 86-87 (May 31, 2016) ("CTIA Mobile Wireless Competition Comments") (citing CTIA, CTIA'S WIRELESS INDUSTRY SUMMARY REPORT, YEAR-END 2015 RESULTS (May, 23 2016)); see also CTIA, Year-End U.S. Figures from CTIA's Annual Survey Report ("CTIA Annual Survey Results"), <http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey> (last visited June 15, 2016).

³ CTIA Mobile Wireless Competition Comments at 86-87; see also *supra* CTIA Annual Survey Results.

⁴ See CISCO, VNI MOBILE FORECAST HIGHLIGHTS, 2015-2020, http://www.cisco.com/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (select "United States" and "2020 Forecast Highlights") (last visited June 15, 2016).

⁵ See ERICSSON, ERICSSON MOBILITY REPORT: NORTH AMERICA, at 2 (June 2016), <https://www.ericsson.com/res/docs/2016/mobility-report/emr-rnam-june-2016.pdf>.

⁶ See *Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567 (2014).

⁷ See *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, Notice of Proposed Rulemaking, 30 FCC Rcd 11878 (2015).

investing in network densification in an attempt to keep up with demand,⁸ the critical “third leg of the stool” is spectrum. As the Commission has stated, “increasing consumer demand for mobile broadband is increasing service providers’ need for spectrum at an unprecedented rate and this is projected to grow further.”⁹

Given the long timeframes associated with freeing spectrum for mobile services, action is required now to ensure the pipeline does not become depleted. While the Commission must continue to facilitate the auction and timely deployment of low-, mid-, and high-band spectrum, repurposing the 1675-1680 MHz band for shared commercial use is one way to help keep the spectrum pipeline flowing.

III. THE COMMISSION SHOULD INITIATE A RULEMAKING TO CONSIDER SHARED COMMERCIAL USE OF 1675-1680 MHz.

The 1675-1680 MHz proposal by Ligado represents an opportunity to repurpose more spectrum for mobile broadband use and spur additional investment, innovation, and competitive forces in the broadband marketplace. Ligado is asking the Commission to make the 1675-1680 MHz band available via auction as part of a series of recent filings it has made with the Commission.¹⁰ These include coexistence agreements with major GPS manufacturers, as well as modification applications proposing new power limits and other conditions for terrestrial use of Ligado’s L-Band MSS spectrum while permanently abandoning terrestrial use rights to

⁸ See CTIA Mobile Wireless Competition Comments at 69, 73-83, 85.

⁹ *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Eighteenth Report, 30 FCC Rcd 14515, 14549 ¶ 47 (WTB 2015).

¹⁰ See, e.g., Letter from Gerald J. Waldron, Counsel to LightSquared, to Marlene H. Dortch, Secretary, FCC, IB Dkt. Nos. 12-340 & 11-109 (Dec. 31, 2015).

1545-1555 MHz (the Ligado spectrum closest to GPS).¹¹ These efforts by Ligado to bring more spectrum to market deserve the Commission's prompt attention. While the Commission is seeking comment on the GPS coexistence agreements and L-Band proposals in a related proceeding,¹² CTIA also encourages the Commission to open a rulemaking to consider the other issues directly relevant to Ligado's overall plans.

Here the Commission is asking whether to initiate a rulemaking to reallocate 1675-1680 MHz for shared commercial use; to write the proposed service rules for sharing that band with government users; and to establish a process to auction the spectrum by the end of the year.¹³

CTIA supports Ligado's request to initiate a rulemaking to repurpose the 1675-1680 MHz band and make it available via auction for shared commercial use. While the band is currently used for federal meteorological uses, including radiosondes (to be relocated out of the band) and existing and planned weather satellites, CTIA agrees that the Commission should commence a rulemaking to examine whether the band can be shared with terrestrial commercial operations under rules that would adequately accommodate existing radiosondes prior to their relocation and protect weather satellites in the band.¹⁴ If so, that rulemaking should provide a primary terrestrial non-federal mobile service allocation in the 1675-1680 MHz band, and establish terrestrial service rules for shared federal/non-federal operations in the band. The rulemaking should also adopt rules to make the spectrum available via auction.

¹¹ *See id.*

¹² *See Comment Sought on Ligado's Modification Applications*, Public Notice, DA 16-442 (Apr. 22, 2016) ("*Ligado L-Band Public Notice*").

¹³ *Ligado 1675-1680 MHz Public Notice* at 6-8.

¹⁴ *See id.* at 7.

Ultimately, access to new spectrum bands can promote more innovation, investment, and competition in the broadband marketplace, all to the benefit of U.S. consumers and the U.S. economy. CTIA therefore supports commencement of a rulemaking proceeding on Ligado's proposal to reallocate the 1675-1680 MHz band for shared commercial use and associated service and auction rules.

IV. CONCLUSION

For the reasons discussed above, the Commission should initiate a rulemaking to consider making the 1675-1680 MHz band available via auction for shared commercial use, and to adopt associated service and auction rules. Repurposing this band for shared commercial use is one more step the Commission can take to help accommodate the explosive growth in demand for mobile broadband.

Respectfully submitted,

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