



QUALCOMM Incorporated

1730 Pennsylvania Ave., NW ■ Suite 850 ■ Washington, DC 20006 ■ Tel: 202.263.0022 [www.qualcomm.com](http://www.qualcomm.com)

April 16, 2014

**Via ECFS**

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Amendment of the Commission's Rules with Regard to  
Commercial Operations in the 3550-3650 MHz Band – GN Docket No. 12-354**

Dear Ms. Dortch:

This afternoon, Dean Brenner, Durga Malladi, and the undersigned from QUALCOMM Incorporated (“Qualcomm”) spoke via telephone with David Goldman, senior legal advisor to Commissioner Jessica Rosenworcel about issues raised in the above-referenced proceeding. During the teleconference, Qualcomm explained that, in filings made more than a year ago, it closely reviewed the technical basis for the exclusion zones in the NTIA Fast Track Report and provided the FCC with unchallenged technical analyses showing how the exclusion zones can be reduced by an order of magnitude by deploying small cells that operate with much lower transmit power than typical cellular macrocells that were used in the NTIA Fast Track Report.

Qualcomm’s analysis, which considered the impact of ground-based, airborne, and shipborne radar systems on small cell deployments in the coastal area of San Diego, showed that the exclusion zone can be less than 10 miles inland when considering the ability of a small cell to co-exist with radar systems. Qualcomm also reiterated to Mr. Goldman that reducing the exclusion zones in the NTIA Fast Track Report, which cover 60% of the U.S. population, is critically important to the success of the 3.5 GHz band because the band would not be commercially viable if the spectrum is not available in areas where so many Americans live.

Qualcomm also reiterated the benefits of using Authorized Shared Access (“ASA”) in this band. ASA is a two-tier spectrum sharing framework that allows commercial licensees to operate within the interstices of the 3.5 GHz band when and where government users are not operating, and to quickly vacate the spectrum when the government needs to operate. ASA thus prevents interference to and from incumbent government users and enables coast-to-coast mobile broadband operations via licensed small cells when and where the spectrum is available.

By providing a secure interface between federal users and ASA rights holders, the ASA framework will protect sensitive information, such as when and where incumbent federal users are operating. Moreover, the implementation of ASA is completely transparent to the end user device. From the end user device’s perspective, operating on 3.5 GHz under ASA is no different from operating on any other band; operation is allowed when the network is informed that the

band is available. Thus, operation within the ASA framework does not require any changes to the device or the underlying cellular technology.

Respectfully submitted,

*John W. Kuzin*

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Senior Director, Government Affairs – Regulatory

cc: David Goldman