



FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON DC

Mike O'Rielly  
Commissioner

January 5, 2018

The Honorable Cory Gardner  
U.S. Senator  
354 Senate Russell Office Building  
Washington, D.C. 20510

The Honorable Michael Bennet  
U.S. Senator  
261 Senate Russell Office Building  
Washington, D.C. 20510

Dear Senators Gardner and Bennet:

I sincerely appreciate your December letter sharing your views on the exploration and possible use of spectrum allocated for the Multichannel Video Distribution and Data Service (MVDDS), i.e., the 12.2 to 12.7 GHz band, for mobile 5G services. U.S. government leadership, including that of Congress and the Federal Communications Commission, is necessary to create the environment for the development and advancement of 5G technologies and services, including the so-called Internet of Things, by the U.S. private sector, especially as several countries seek to overtake our wireless superiority.

A likely 5G ecosystem will need low-, mid- and high-band spectrum in order to bring forward expected faster speeds, added capacity, and significantly lower latency. However, these new 5G technologies, which may have the capability to revolutionize wireless offerings, will be integrated with existing 4G offerings, preventing the reallocation of currently utilized frequencies. This means that to fuel the deployment of 5G services, additional spectrum bands will be needed in the coming years.

The Commission has the obligation to review and examine closely all spectrum bands to ensure that each band is being used as efficiently as possible. In addition to our work on the low-band spectrum as part of the broadcast incentive auction and the multiple frequencies made available in the millimeter wave bands, the Commission issued, in August of last year, a Notice of Inquiry to explore flexible use for mid-band spectrum (e.g., 3.7 GHz to 24 GHz). Comments in this proceeding were received in the fall and the Commission is determining next steps, which hopefully will include a reallocation over time of the 3.7 to 4.2 GHz and 6.0 GHz bands, a particular interest to me.

As your letter notes, MVDDS is a band worthy of examination and there is a willingness by some current license holders for such flexible use, although it does present some challenges as well. Other licensees within the band may need substantial interference protections at potentially enormous costs, if even technologically feasible, to ensure that they can continue to serve their existing customers. Engineering analysis would be needed to determine the parameters for possibly introducing any new wireless services into this band; the results of which may call into question the merits of such a reallocation.

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As the Commission considers this or any other band for 5G services, I will certainly keep your views in mind. Please do not hesitate to contact me if I may be of any assistance as the Commission's spectrum review and allocation process continues.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike O'Rielly". The signature is written in a cursive, slightly slanted style.

Michael O'Rielly