January 21, 2011

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C.  20554

Re:  Ex Parte Notification – IB File No. SAT-MOD-20101118-00239

Dear Secretary Dortch:

On behalf of QUALCOMM Incorporated (“Qualcomm”), this is to report that on Thursday, January 20, 2011, Cormac Conroy, Vice President, Engineering for QUALCOMM CDMA Technologies, John Kuzin, Senior Director-Regulatory of Qualcomm, and I had a conference call with the following FCC staff members concerning matters relating to the above-referenced application: Michael Ha, Brian Butler, and Mark Settle (of the Office of Engineering and Technology), Robert Nelson and Sankar Persaud (International Bureau), Wayne McKee (Media Bureau), and Emil Cherian (Enforcement Bureau).

During the call, Mr. Conroy provided the FCC staff with a technical overview of Qualcomm’s Assisted GPS (“AGPS”) solution used in millions of cell phones and other mobile devices. He also described the evolution of the solution over the last decade. Moreover, he summarized Qualcomm’s overall approach to achieving sufficient protection in Qualcomm’s AGPS solution against self interference from the phone’s cellular (i.e., uplink) transmitter into the phone’s GPS receiver operating on the GPS L1 band. Protecting against self-interference from the cellular uplink has typically been the major consideration in the system design – as an example, rejection of the device’s cellular transmitter simultaneously operating on the AWS-1 band at 1710 MHz, 135 MHz away from the GPS L1 band. Finally, he explained that Qualcomm is now in the process of evaluating the extent of interference from LightSquared L Band LTE base stations (i.e., downlink) into the GPS receivers of cell phones using Qualcomm’s AGPS solution, particularly legacy phones already in the market today, given the close proximity of the L and GPS L1 bands.

In addition, also on January 20, 2011, I had two other calls with Michael Ha of the Office of Engineering & Technology. In the first call, I explained that Qualcomm determined the extent of filtering that is required to enable a phone to avoid self interference to the GPS receiver operating in the GPS L1 band when simultaneously transmitting data via terrestrial LTE on the L Band, assuming use of Qualcomm’s standard AGPS solution. I stated that Qualcomm understands that a currently available Avago FBAR filter provides such protection.
I explained that Qualcomm has not determined whether this filter provides sufficient protection to avoid interference to the GPS receiver from LTE base stations operating on the L band. In the second call, I told him that the part number of the Avago filter was ALM-1712.

Respectfully submitted,

Dean R. Brenner
Vice President, Government Affairs

cc (via email):

- Brian Butler
- Emil Cherian
- Michael Ha
- Wayne McKee
- Robert Nelson
- Sankar Persaud
- Mark Settle