January 4, 2012

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th St. SW
Washington, DC 20554

Re: LightSquared Subsidiary, LLC
Ex Parte Communication. IB Docket No. 11-109
IBSF File No. SAT-MOD-20101118-00239

Dear Secretary,

This letter is to express opposition to LightSquared’s request to the FCC for affirmation of its license to use L-band spectrum adjacent to the GPS band for terrestrial LTE base stations, and to oppose LightSquared’s high power use of satellite spectrum for terrestrial base stations.

LightSquared obtained satellite communication spectrum and successfully had it reclassified for terrestrial use at a much higher power level, with the stipulation that no interference with sat-comm signals would be allowed. Yet we find that LightSquared’s terrestrial LTE project would interfere with GPS sat-comm signals. Government and independent test studies (e.g. – NPEF, NTIA) have shown that LightSquared’s use of the L-Band by its terrestrial base stations would have a significantly detrimental impact on the ability of current generation GPS units to receive satellite communications for the calculation of coordinates, from consumer to survey grade units.

As you know, the 911 “Phase II” Service is dependent on quality location data from mobile phones during 911 calls. This location data is often calculated by “aGPS”, or Assisted-GPS, wherein cellular networks do the calculating of the phone’s coordinates based on the GPS satellite data provided by the mobile phone. Degradation of the accuracy this location data by LightSquared’s base station signals would not be in the best interests of citizens calling 911 from their mobile phones.

The map data used in 911 Dispatch GIS’ is based on GPS data created by professional and survey grade GPS units used by contractors, governments, and surveyors. We in the 911 Services need this GIS data to be as accurate as possible to be a reliable reference for the real-time mapping of mobile phone 911 Phase II locations. Without accurate GIS base data underlying it, 911 Phase II locations have less relevance to geographic features, diminishing their usefulness in finding mobile phone 911 callers. Degradation of high-precision GPS data would not be in the best interests of mobile phone 911 callers and the many other users of high-precision GPS data (military, surveyors, aeronautics, etc.).
Lastly, LightSquared’s stance on the issue is rather offensive. At last year’s NENA national conference, LightSquared’s representative essentially told the 911 community that his company was not concerned about the GPS interference that would be created by the company’s high-powered terrestrial L-band use. He told the assembled 911 community that it’s not LightSquared’s fault that the FCC didn’t do its job of thoroughly vetting the proposal, that the FCC should have found the GPS conflict before approving LightSquared’s application and LTE project, and that the GPS conflict isn’t LightSquared’s problem because the FCC already gave its approvals. He also noted that it’s not LightSquared’s problem that the current generation of GPS units has wide-band receivers capable of receiving the powerful bleed over from LightSquared’s proposed transmitters in the adjacent band.

LightSquared’s intended terrestrial use of the satellite communications L-band would violate the terrestrial reclassification stipulation of there being no satellite communications interference. LightSquared’s position on the issue demonstrates a remarkable lack of concern over the problems the company will cause for the use of GPS data by the emergency services, military services, aeronautical users, and consumers. If LightSquared’s spectrum application and LTE project are affirmed as is, LightSquared will significantly degrade the 911 Phase II location accuracy of the very phones to which it will be providing LTE service. Compounding the problem would be the degradation in the accuracy of the GPS-derived GIS base data used to map 911 Phase II data in real-time. Therefore the FCC is strongly urged to not affirm, but to rescind LightSquared’s high-powered terrestrial use of the satellite communications L-band, and to rescind approval for the company’s LTE project.

Sincerely,

Matt Goetsch

Cc: Congressman Scott Tipton, Senator Michael Bennet, Senator Mark Udall