

July 6, 2017

Dr. Brad Parkinson  
Vice Chair, National Space-Based PNT Advisory Board  
c/o Herbert C. Hoover Building  
Room 2518  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Dear Dr. Parkinson:

As you know, I attended the PNT Advisory Board meeting on June 28, 2017 in Baltimore. As I said to you in our brief sidebar discussion, I find it inexplicable that the Advisory Board invited Iridium's representatives to make a presentation when (a) Iridium's presentation *made no mention of GNSS or PNT* and claimed no relevance to either, and (b) the presentation focused solely on an issue that Iridium, a direct competitor and public detractor of Ligado, has raised at the FCC that also *has nothing to do with PNT*. Did the Board even bother to confirm whether what Iridium was saying was accurate? If it had, you might have learned that it is neither factually nor legally accurate. What possible reason could the Board have for giving a platform to Iridium's unfounded and irrelevant concerns?

Including Iridium's presentation, and not asking them a single question about GPS or PNT, is stunning when one considers that Iridium's band is closer to GNSS than Ligado's. Somewhat remarkably, in our brief conversation you indicated unawareness of this basic fact. As the attached chart shows, Iridium is actually 10 MHz closer to GNSS than Ligado. In addition, Iridium operates at out of band emissions levels that are 30-35 dB greater than Ligado's proposed terrestrial operations would. And Iridium's maximum EIRP is greater than 30 dB higher than Ligado's proposed terrestrial maximum EIRP. It makes one question the Board's reasons for including Iridium in the meeting at all.

Finally, I must comment on your opening statement that you "are not quite certain the details of [Ligado's] current proposal." How can that be? The specific details have been publicly on file since December 31, 2015, and information about our new deployment plan has been on file since September 8, 2016. I described the new proposal to the PNT Executive Committee by letter on July 13, 2016, and discussed it with you and Chairman Stenbit in person on May 18, 2016 and December 7, 2016. I also discussed it with you on June 30, 2016. Dennis Roberson and Ken Zdunek both discussed the new proposal with the Advisory Board on multiple occasions last year. We also briefed Chairman Stenbit about it on July 5, 2016 and sent him a follow up letter on October 27, 2016. Dozens of parties have filed comments on the specific details of the proposal. At some point, willful blindness cannot serve as an excuse.

To ensure you have this information at hand, let me review the substantial differences between the LightSquared proposal you insist on referencing and Ligado's proposed operations. We propose to:

- relinquish the 1545-1555 MHz block closest to GNSS for terrestrial use;
- operate in the 1526-1536 MHz block at levels consistent with protecting certified aviation as determined by the FAA (and that analysis indicates a likely operational power range of 9-13 dBW);
- with regards to 1526-1536 MHz downlink band: implement a -85 dBW/MHz limit from 1541-1559 MHz; retain the -100 dBW/MHz limit from 1559-1610 MHz; and implement a -85 dBW/MHz limit for 1610-1650 MHz
- with respect to the spectrum to the right of GNSS, operate the uplink bands (1627.5-1637.5 MHz, and 1646.5-1656.5 MHz) at -7 dBW; and
- with regard to the uplink bands: modify the limit at 1610 from -71 dBW/MHz to -100 dBW/MHz; implement a -105 dBW/MHz limit at 1608 MHz, ramping up between the values at 1610 MHz and 1608 MHz; modify the limit at 1559-1608 from -95 dBW/MHz to -105 dBW/MHz; and modify the limit from 1541-1559 MHz from -43 dBW/MHz to -105 dBW/MHz.

As I have said to you on several occasions, these restrictions are also built into our agreements with the GPS manufacturers, but to cement these protections for all parties we submitted these operational restrictions as part of our application to the FCC for their approval.

I am available to discuss these facts with you and any other member of the advisory committee.

Sincerely,



Doug Smith  
President & CEO

cc: Members of PNT Advisory Board

Attachments

