

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Room TW-A325
Washington, DC 20554

Re: LightSquared Subsidiary LLC Request for Modification of its Authority for an Ancillary Terrestrial Component, IBFS File No. SAT-MOD-20101118-00239; IB Docket No. 11-109

Dear Ms. Dortch:

Thank you for this opportunity to offer reply comment concerning the interference report submitted by the Technical Working Group and LightSquared's new roll-out plan and Recommendations. The undersigned organizations represent farmers and agribusinesses engaged in or servicing precision agricultural practices in all 50 states. While our members support the development of wireless broadband services in rural America, we are deeply concerned that LightSquared's proposed network will cause unacceptable interference to signals from the Global Positioning System (GPS). Consequently, we urge the Federal Communications Commission (FCC) not to permit LightSquared to proceed with its wireless network until it can be clearly demonstrated that no interference to GPS applications will occur. There has been no such demonstration to date.

The wide availability of GPS has been a boon to precision agriculture and the environment. GPS technology has enabled growers to map the precise application of seeds, fertilizer, and crop protection materials, tailored to the particular soil or topography of their farmland. This capability has produced remarkable increases in crop yield and decreases in input costs while advancing important environmental benefits. In turn, at the current adoption rate of GPS use, these improvements are responsible for nearly \$20 billion in higher farm revenue, which represents nearly 12% of overall U.S. crop revenue. As the adoption rate rises, so too will the growth in farm revenue from the use of GPS technology.

If the reliable availability of GPS technology were lost, our members would incur higher costs due to loss of productivity in labor, and less efficient use of inputs like fertilizer, irrigation and pesticides. The resulting higher costs and lower outputs would inevitably result in higher consumer prices and a reduction in environmental benefits, both of which would have impacts well-beyond agriculture. Given the historic volatility of crop prices, and the chronically uncertain future of agriculture production, our growers simply cannot afford to lose dependable, consistent access to GPS technology and the benefits it provides to precision agriculture.

We whole-heartedly agree that the development of wireless broadband services ought to be a priority of U.S. telecommunications policy. Our members support federal efforts to expand capacity for broadband services; however, expanded broadband services must not result in the degradation or loss of ubiquitous GPS. The cost to production agriculture from the loss of GPS would simply be too great.

It is our understanding that the testing of LightSquared's proposed network demonstrated significant interference with GPS signals even if it uses only its lower 10MHz block of channels – LightSquared's latest proposal. Given the massive difference in signal strength between GPS satellites thousands of miles overhead in orbit and LightSquared's powerful proposed terrestrial network, and the challenges of filtering out such strong signals in an adjacent band, it is not surprising that interference occurred. Unfortunately, these tests appear to confirm our fears that the resulting interference would pose an unacceptable risk to precision agricultural practices.

We also understand that LightSquared has discussed modifying its proposed network by initially installing base stations only in urban areas, with the hope of mitigating interference to farmers operating high-precision receivers in rural areas. Under this scenario, LightSquared would endeavor to develop filtering technology capable of creating a reliable barrier between the company's broadband transmissions and the GPS signals necessary for reliable use for precision agriculture. Since so little testing was done on operations solely in the lower 10 MHz band, it remains unclear to us what threats this modified plan would pose. However, the limited testing that has been conducted demonstrates that significant interference remains even in the lower block. We are not aware of any new filtering technology either in prototype or commercial form available that could be used by farmers. Perhaps such devices will one day be available, but so far they are not, and there are no reasonable prospects that they will become available any time soon.

It is unreasonable to move forward on such a patently uncertain path as that currently proposed until such a commercially-feasible filtering device is both developed and proven in the field. Moreover, we do not know what the costs would be for farmers to deploy filtering devices. Farmers and ranchers have invested heavily to purchase GPS devices for their equipment, and it would be unreasonable to move forward with LightSquared's proposed network knowing that interference from the network will render these investments useless or expose farmers to yet unknown costs.

At a minimum, the FCC should not allow LightSquared to proceed until thorough testing is done on LightSquared's new deployment proposal. In the event that additional testing shows continued interference, we suggest that the only sensible mitigation strategy is for LightSquared to work with the FCC and the National Telecommunications and Information Administration to locate appropriate spectrum outside of the L-band for LightSquared's proposed wireless network. Such a solution could provide needed expansion of broadband services.

Thank you for the opportunity to share our views.

American Soybean Association
American Sugar Alliance
National Association of Wheat Growers
National Barley Growers Association
National Corn Growers Association
National Cotton Council of America
National Council of Farmer Cooperatives

National Potato Council
National Sunflower Association
Northarvest Bean Growers Association
U.S. Canola Association
USA Dry Pea and Lentil Council
USA Rice Federation