

May 05, 2017

Via ECFS Filing and U.S. Mail

Honorable Ajit Pai, Chairman
Federal Communications Commission
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Washington, D.C. 20554

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Re: ET Docket No. 15-26, *Amendments of Parts 1, 2, 15, 90, and 95 of the Commission's Rules to Permit Radar Services in the 76-81 GHz Band*; Request for Expedited Consideration.

Dear Chairman Pai:

I am writing to you in my capacity as Regional President - Chassis Systems Control of Robert Bosch, LLC (Bosch). I would first like to congratulate you on the commencement of your appointment as Chairman of the Commission and wish you a long and very successful tenure.

Secondly, I would ask for your help in addressing at the earliest possible time an urgent matter left pending by your predecessor. Bosch was the petitioner (RM-11666, filed in May of 2012) in the above-captioned docket proceeding. Docket 15-26 considers, among other related matters, the allocation of the band 77-81 GHz to the radiolocation service for use for short-range automotive radars. The *Notice of Proposed Rulemaking*, 30 FCC Rcd. 1625 was released February 5, 2015, and is presently pending before the Commission. Our concern is that this proceeding has been pending for an inordinately and unjustifiably long time. The regulatory relief proposed in the Petition will, when enacted, save lives and prevent serious injuries by reducing the number and severity of vehicular crashes. It is therefore most urgent that the proceeding be adjudicated and resolved without further delay.

Short-range vehicular radar systems in the band 77-81 GHz are critical to improved automobile safety in the United States. They will serve as the foundation of advanced safety systems, including distance warning, collision



warning, collision mitigation (partial braking, automatic emergency braking and other systems), blind spot detection, parking lot rear cross traffic alerting, backup and parking assistance, and lane change assistance. These new deployments for automotive radar systems are *true safety systems*, and will assist in reducing collisions between automobiles and also between automobiles and bicyclists, motorcyclists and pedestrians. Future applications in this same band will also serve as key components of future automated vehicles.

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The two frequency ranges now in use for long-range automotive radar systems in the United States at 24 GHz and 76-77 GHz cannot accommodate the implementation of new safety functions for automotive radars. This is due to insufficient bandwidth and, thus, insufficient object discrimination. There is a need for a wider bandwidth segment for short-range radars. There are various reasons for the necessary wider bandwidth for newer radar deployments, but in general there is a need for better range separation, range accuracy, angular accuracy and good object discrimination. This requires an increased bandwidth of up to 4 GHz within the higher frequency band.

Automotive radars in Japan and Europe now utilize the 77-81 GHz band. Harmonization with the 77-81 GHz band would further enable cost efficiencies to also be realized in the United States and assist in increasing the deployment of collision mitigation systems and safety features. This endeavor comes at a particularly critical juncture in the United States as vehicle-related fatalities and injuries are notably increasing. Preliminary 2016 data from the National Safety Council projects that as many as 40,000 people died in motor vehicle crashes last year.

There was no opposition to the proposed allocation of this band for automotive radars in the comments filed in response to either the Bosch Petition for Rulemaking or to the proposal contained in the Notice of Proposed Rulemaking. Bosch has worked with the Commission's Office of Engineering and Technology to explain the importance of the allocation and the worldwide harmonization of automotive radars at 77-81 GHz, but due to other priorities, this urgent proceeding has been pending for a total of six years. I am sure that you agree that this is not a satisfactory processing time for a rulemaking proceeding of this nature, especially one that will play an important role in saving lives and preventing injuries to the public. The delay has been detrimental to the worldwide harmonization effort for automotive radars, and to the improved safety of persons and property that 77-81 GHz short-range radar technology seeks to achieve.



We respectfully request your assistance and leadership in resolving the proceeding going forward. Thank you in advance for your attention to this matter.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "S. Winchip", written over a horizontal dashed line.

Scott Winchip
Regional President – Chassis Systems Control
Robert Bosch, LLC