

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Parts 1, 2, 15, 90 and 95 of the Commission’s Rules to Permit Radar Services in the 76-81 GHz Band)	ET Docket No. 15-26
)	
Amendment of Part 15 of the Commission’s Rules to Permit the Operation of Vehicular Radar Services in the 77-78 GHz Band)	RM-11666
)	
Amendment of Sections 15.35 and 15.253 of the Commission’s Rules Regarding Operation of Radar Systems in the 76-77 GHz Band)	ET Docket No. 11-90 RM-11555
)	
Amendment of Section 15.253 of the Commission’s Rules to Permit Fixed Use of Radar in the 76-77 GHz Band)	ET Docket No. 10-28
)	
Amendment of the Commission’s Rules to Permit Radiolocation Operations in the 78-81 GHz Band)	WT Docket No. 11-202
)	

**REPLY COMMENTS OF
ASSOCIATION OF GLOBAL AUTOMAKERS, INC.**

The Association of Global Automakers¹ submits the following Reply Comments in regard to the proposed rule issued by the Federal Communications Commission (FCC) on “Operation of Radar Systems in the 76-81 GHz Band,” as published in the Federal Register on March 6, 2015 (80 Fed. Reg. 12120). That proposal would authorize expanded vehicle radar and other applications in the 76-81 GHz band and was developed in response to a petition filed by Robert Bosch, LLC (“Bosch”).

¹ The Association of Global Automakers represents international motor vehicle manufacturers, original equipment suppliers, and other automotive-related trade associations. We work with industry leaders, legislators, and regulators to create the kind of public policy that improves vehicle safety, encourages technological innovation, and protects our planet. Our goal is to foster a competitive environment in which more vehicles are designed and built to enhance Americans’ quality of life. For more information, please visit www.globalautomakers.org

We appreciate the FCC's efforts to facilitate the continued introduction and safe operation of vehicle radar technology. The expressed goal of the FCC's proposal is to "develop a flexible and streamlined regulatory framework that will encourage efficient, innovative uses of the spectrum and to allow various services to operate on an interference-protected basis."² The FCC's proposal recognizes "that the usage of vehicular radar applications has continued to grow and evolve since the Commission issued the *Vehicular Radar R&O*, and that providing expanded access to the 76-81 GHz band could help those applications deliver important public benefits."³ We concur in the Commission's assessment on this point.

According to a recent report by Grand View Research⁴, the global market for vehicle collision avoidance sensors is likely to triple over the 2013 to 2020 period, from \$3.2 billion to \$10 billion. According to the report, radar-based sensors accounted for over 35 percent of the market in 2013, and that segment is further expected to gain market share through 2020. Continued growth of the installation of vehicle crash avoidance systems is supported by consumer information programs that have been implemented in recent years. Historically, the NHTSA and IIHS consumer information systems are widely used in vehicle advertising and have contributed to increased consumer demand for advanced safety features in new vehicles.

Beginning with the 2011 model year, the National Highway Traffic Safety Administration (NHTSA) has included crash avoidance technologies in its "5-Star Ratings System."⁵ Among the technologies that the agency recommends in its consumer information program are lane departure warning and forward collision warning systems. On January 22, 2015, Transportation Secretary Anthony Foxx announced that NHTSA plans to add advanced emergency braking systems to the list of recommended technologies in the 5-Star Ratings.⁶

On September 27, 2013, the Insurance Institute for Highway Safety (IIHS) announced the inclusion of forward collision warning and automatic braking systems in its safety ratings system. In order for vehicle models to receive high ratings in the IIHS "Top Safety Pick" system, the vehicles must have implemented forward collision warning and/or automatic braking technology.⁷

² See 80 Fed. Reg. 12120.

³ See 80 Fed. Reg. 12123.

⁴ See <http://globenewswire.com/news-release/2015/03/05/712678/10123444/en/Collision-Avoidance-Sensors-Market-By-Technology-Radar-Camera-Ultrasound-LiDAR-By-Application-Adaptive-Cruise-Control-ACC-Blind-Spot-Detection-BSD-Parking-Assistance-Is-Expected-To.html> .

⁵ For further information on the NHTSA consumer information on crash avoidance technologies, see http://www.safercar.gov/staticfiles/safetytech/st_landing_ca.htm#st_tabs .

⁶ See NHTSA press release, <http://www.nhtsa.gov/About+NHTSA/Press+Releases/NHTSA-sets-AEB-plans,-highlights-lives-saved-repoort> .

⁷ For further information on the inclusion of crash avoidance technologies in IIHS ratings, see <http://www.iihs.org/iihs/ratings/ratings-info/front-crash-prevention-tests> .

For these and other advanced crash avoidance technologies to achieve their full potential, it is necessary for them to operate in an interference-protected environment. We request that the Commission consider carefully the interference concerns identified in the rulemaking comments filed by our member companies Bosch and Delphi Automotive Systems. In particular, we request that the Commission revise its proposal that would permit radiolocation generally in the 76-81 GHz band, including fixed radar installations. A number of factors cited in the Delphi comment suggest that compatibility issues could arise. For example, Delphi points out the critical nature of the orientation of fixed radar installations in relation to vehicle traffic flow, in terms of potential interference effects. Delphi also cites testing in Europe which identified potential interference of this nature.

This aspect of the proposal should not be pursued in the absence of clear data showing that generic fixed radar systems in this band would not be incompatible with automotive radars and other incumbent uses in that band. Additional studies of this matter should be pursued prior to any decision to all sharing of the spectrum band. In addition to addressing any potential incompatibilities, interference studies would help determine proper operating parameters for fixed radar installations and the necessary level of regulation for such installations.

Global Automakers appreciates the Commission's consideration of our comments. Should you have any questions on this matter, please contact me.

Sincerely,



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Senior Director, Safety

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