



August 20, 2024

Marlene Dortch, Esq.
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

RE: Draft Recommendations Approved by the World Radiocommunication Conference Advisory Committee for WRC-27 (OIA Docket No. 24-30)

Dear Ms. Dortch:

The Alliance for Automotive Innovation (“Auto Innovators”), which represents the automotive ecosystem in the U.S., including automakers, suppliers, battery makers, and technology companies, hereby submits comments to the Federal Communications Commission (“Commission”) on the draft recommendations of the World Radiocommunication Conference (“WRC”) Advisory Committee for the 2027 World Radiocommunication Conference (“WRC-27”). In particular, Auto Innovators submits comments on **Agenda Item 1.7.**, which relates to “studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution 256 (WRC-23).”

Auto Innovators understands the importance of maximizing the efficient use of spectrum resources, including for incumbent services. We acknowledge, however, that the Commission continues to explore access to spectrum bands for new or additional uses, such as advanced wireless broadband networks and technologies.

The National Spectrum Strategy has identified the 7 125-8 400 MHz band as meriting study for wireless broadband use on a licensed and/or unlicensed basis or shared-spectrum basis. The WRC also identified the band for sharing and compatibility studies ahead of WRC-27. One current use of spectrum in the 7 125-8 400 MHz band is ultra-wideband (“UWB”), which is particularly suitable for accurately measuring distance and determining the precise position and type of objects in the vehicle environment, while not requiring the same amount of power or battery consumption as other communications technologies. For this reason and because it is less susceptible to relay attacks, UWB has become a significant enabling technology for more secure key fobs.

According to a 2024 Auto Innovators survey of its member companies, approximately 20 percent of new vehicles use UWB for key fobs. Over the next five years, this percentage is set to increase, with a majority of automotive companies reporting plans to increase use of UWB

technology for key fobs. More specifically, survey respondents indicate that 65 percent of new vehicles available for sale in five years will utilize UWB technology for key fobs. The survey also reveals that, over the next five years, automotive companies will increase the utilization of UWB technology for a host of other features for consumers, including digital keys, hands-free trunk release, remote parking, driver/occupant detection and status applications, and precise positioning for vehicle charging.

It is critical that any action related to the 7 125-8 400 MHz band fully protects existing and future uses of the band for UWB technology. Auto Innovators agrees that national spectrum policy “must respect current spectrum users, ensuring incumbents are protected from harmful interference and avoiding risks to national security, public safety, scientific research, or commercial operations.”¹

To that end, considering the current and future automotive uses of UWB, Auto Innovators urges the U.S. to adopt **Alternative 2** as its view at WRC-27. It is imperative that “[sharing and compatibility] studies demonstrate coexistence mechanisms can be employed to safeguard incumbent operations and can ensure that such an identification to IMT would not impose additional regulatory or technical constraints on those incumbent services.” Such an approach will help protect technological innovation and ensure continued access to state-of-the-art automotive technologies and services.

Auto Innovators appreciates the opportunity to submit comments to the Commission on the proposed U.S. view on the potential use of IMT in the 7 125-8 400 MHz frequency band.

Sincerely,



Tara Hairston
Senior Director, Technology Policy

¹ *National Spectrum Strategy*, Nov. 13, 2023, at 17, https://www.ntia.gov/sites/default/files/publications/national_spectrum_strategy_final.pdf.