

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Use of the 5.850-5.925 GHz Band*, ET Docket No. 19-138.

Today, we put an end to two decades of waste and inefficient use of the valuable 5.9 GHz band. Going forward, this spectrum will not only advance the deployment of state-of-the-art automobile safety systems, but also those cutting-edge technologies that rely on unlicensed spectrum.

Many, many years ago, Commissioner Rosenworcel and I took up the task to champion these frequencies, as the best opportunity for unlicensed expansion, due to their location next to the current 5 GHz Wi-Fi band. Additionally, I proposed the potential split of this 75 megahertz band into a 30 megahertz automobile safety channel and a 45 megahertz unlicensed block, in line with an industry group's similar proposal. Many manufacturers and car companies engaged in this debate fully agree that 30 megahertz meets their current needs and is in line with the global community's approach to 5.9 GHz auto-safety systems. Further, the Commission has provided other spectrum to car companies to deploy safety systems, such as radars and LiDAR, that have been used to introduce some of the safety applications initially planned for DSRC. So, I am extremely pleased – bordering on ecstatic – that, after so many years of talk, there is finally action. After all the obstacles and setbacks we have had to overcome, the vision that I outlined many years ago and for which I took many arrows, and accepted many concessions, is now becoming reality.

What is most promising about this new unlicensed allocation is the ability of Wi-Fi providers to rapidly incorporate it into their existing offerings as soon as the order is effective. Most equipment will be able to take advantage of this spectrum with only a quick software upgrade. The importance of our in-home networks, which rely on the availability of sufficient unlicensed spectrum to meet demand, has been highlighted during this pandemic: we depend on our Wi-Fi systems to do our jobs or schoolwork; communicate with friends and family; video-conference with our doctors; and entertain ourselves while isolating at home. In fact, we can thank Wi-Fi for allowing many of us, including myself, to participate in and observe this Commission meeting.

While I am pleased with the overall direction of today's item, there are some things that we should have done differently. In particular, the transition time to relocate the few DSRC incumbents out of the new unlicensed portion of the band should have been six months instead of one year. While I understand that there are some roadside infrastructure and vehicles equipped with DSRC, most existing equipment is being used for testing purposes and experimental use. After 20 years, just over 15,000 cars were ever equipped with DSRC, and only 3,000 of those cars were commercially sold and none are currently for sale. That's 3,000 cars out of the almost 275 million registered vehicles on the road in the U.S. today, with *none* on the lot waiting to be sold. Amazing. The roadside infrastructure, therefore, is not being used to keep Americans safe, but rather for government-funded demonstrations and trials of a system that will never come to be. That is essentially a road to nowhere. Waiting a full year for this spectrum to be fully available is much, much too long: this spectrum is needed *now* to expand unlicensed capacity and to provide the larger channel sizes needed to increase speed and lower latency. We shouldn't pretend to be unlicensed champions while unnecessarily delaying the full use of the band. Instead, we should be moving to maximize outdoor unlicensed use, even if such use is approved under our special temporary authority process, pending resolution of the remaining issues identified in the Further Notice.

Further, the Order should have clearly stated that the 30 megahertz reserved for the auto industry can only be used for safety purposes. Everyone admits that is the intent, and the auto industry even

pledges that this is the case. Then why exactly can't it be certain in our rules? Is it because we all secretly acknowledge that some industry proponents want to misuse the "safety" band? Under no circumstances should the Commission be giving spectrum handouts to an industry to provide services that are commercially available using other frequencies. Unfortunately, even though I proposed edits to address this problem, they did not carry the day and were not approved by Commission leadership. However, I do appreciate that reserving this spectrum for safety purposes only was added to the Further Notice.

Lastly, I am extremely disappointed that the Commission did not take a technology-neutral approach in this item. It would have been far more beneficial if the Commission had simply provided the spectrum for vehicular safety systems and allowed car manufacturers and the various proponents to determine the best technology path. Alas, there seems to be a consensus that the auto industry will not be able to come to such an agreement, leaving the Commission, which is not an auto safety expert, in the untenable position of picking the winners and losers in this tug of war.

In this vein, history is repeating itself. Once again, we are codifying a technology in our rules. While C-V2X is a very promising safety technology, we do not know what will be available two, five, or ten years from now. I fear we will end up, like we did with DSRC, with our rules being based on a specific technology, precluding technological innovation and advancement. C-V2X is certainly the right direction to go in the immediate future for auto safety, but it doesn't need to be embedded in our rules in order to be successful.

Regardless of these shortcomings, this item overall does a lot of good by permitting both unlicensed use and C-V2X auto-safety applications and creating a framework to ensure that harmful interference will not occur. Further, I appreciate that many of my requested edits were included. Now that C-V2X is the car safety application of the near future, we have to allow industry to actually access the spectrum. The Chairman's proposal posted three weeks ago did not provide any certainty as to when the spectrum would be available. I am pleased that my request to ensure that the spectrum will be accessible for C-V2X, with some limitations, in the near term, using a waiver process was supported by my colleagues. This certainty, as opposed to forcing parties to wait for resolution of the Further Notice, will allow the automobile industry to make definitive plans, place equipment orders, and ultimately get the safety technology into cars.

I am also pleased that my suggestion was implemented to move the discussion of NTIA's proposed exclusion zones for outdoor unlicensed use to the Further Notice. Unlicensed users will need to protect the federal incumbents in the band, but more consideration is needed with regard to exclusion zones versus coordination zones and their appropriate sizes. We never should have considered going down that wrong path in the first place.

In the end, I thank my colleagues for endorsing this important item and for considering my many requested edits. I especially want to thank Commissioner Rosenworcel for working with me over the years on introducing unlicensed use in this band. I also appreciate that Chairman Pai presented us with a draft permitting indoor use before I leave the Commission. I look forward to following the ongoing proceeding as it relates to outdoor use and the completion of the transition of DSRC to C-V2X as an observer, and I hope that it will be concluded with all due haste. I also want to thank the hardworking professionals, especially the staff of the Office of Engineering and Technology, for their efforts and getting us to this point.

People ask me all the time what my experience was like at the Commission. I tell them that with a sound vision, strategic moves, and extraordinary perseverance, a Commissioner can move mountains. This item will always be a testament to my point.

I approve.