

**STATEMENT OF  
COMMISSIONER BRENDAN CARR**

Re: *Spectrum Horizons*, ET Docket No. 18-21

One reason the U.S. has led the world in wireless is because we moved quickly to open up new spectrum bands for innovative uses. We have not waited for technologies to develop fully before giving entrepreneurs the incentives to invest and experiment. We saw this in the 1980s when the FCC took what many referred to as “garbage bands” and opened them up for unlicensed use. Today, 89% of households with broadband connections use Wi-Fi and other unlicensed technologies to connect to the Internet. In the 2000s, the Commission took similar action by opening up spectrum above 40 GHz. That decision provided the running room for many of the vehicular radar and other innovative technologies that are now on the market. And most recently, the Commission allocated large swaths of spectrum in the millimeter wave bands to allow 5G and other cutting edge uses—even though many people thought it impossible to deploy mobile wireless services in these bands only a few short years ago.

We continue that tradition today by breaking another spectrum frontier—we propose to open up bands above 95 GHz. We are already seeing researchers around the world experiment with innovative new technologies in these bands. For instance, a television network in Japan conducted a trial run of transmitting HD video in the 120 GHz band all the way back in 2008, and in 2014, Japan allocated adjacent spectrum for that purpose. More recently, an international consortium of researchers has concluded that the terahertz band may be used for the detection of materials, ranging from illegal drugs to cancer cells.

But in the U.S., there has been less opportunity to experiment. Our rules have tended to limit innovation in the bands above 95 GHz. We turn the corner today by proposing to open up large swaths of this spectrum for licensed, unlicensed, and experimental use. This should help ensure that innovators and entrepreneurs in the U.S. have the incentives to invest and develop new technologies for the benefit of American consumers.

I want to thank the Office of Engineering and Technology, the Wireless Telecommunications Bureau, and the International Bureau for their work in developing today’s item. It has my support.