## STATEMENT OF COMMISSIONER BRENDAN CARR

Re: Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, GN Docket No. 14-177

We have a problem. And it's a good one to have.

So many technologists and entrepreneurs are devoting their resources and brainpower to providing fast Internet service to Americans that they're elbowing each other to get their hands on previously fallow or underused spectrum.

November was the FCC's "Space Month," when we authorized or gave market access to four separate companies investing in fast Internet delivered from the sky. At least two companies have since launched next-generation low earth satellites, or LEOs. This technology promises speeds and latency that approximate what most Americans get from their home broadband. These companies are aiming to cover the entire United States, bringing more choice and competition to communities across the country. With the right regulatory framework in place, we are seeing technology and the private sector work to close the digital divide.

Not to be outdone, terrestrial wireless providers are racing to roll out 5G. We already have the largest commercial deployment of 5G in the world. And by the end of this year 5G will be live in more than 40 cities around the country. You can buy the first 5G phone now, and the second is coming shortly. Businesses are using 5G hotspots as their primary access points. And many families for the first time are beginning to feel that they have a choice for high-speed, home Internet.

All of this is great news for American consumers, but there's a catch: these satellite and wireless providers want to use the same millimeter wave spectrum. So it is our responsibility at the Commission, in partnership with our counterparts at NTIA who represent federal government users, to figure out how to sort through these competing priorities.

On that count, two themes run through this order.

The first is the Commission's ongoing commitment to using market principles to allocate spectrum. With respect to the 37 GHz band, which saw some back and forth in the run up to today's vote over coordination zones, the order now provides additional clarity about the rights that federal and private sector users will have. This additional certainty will help ensure that we have another successful highband auction. With respect to the 50 GHz band, the order addresses interference from satellite use of the band so that this spectrum might also be auctioned and used for 5G.

The second theme running through the order is the benefit of wringing the most use out of every available megahertz of spectrum. Millimeter wave spectrum is in high demand now, evidenced by the roughly \$2 billion worth of bids thus far in our 24 GHz auction. Terrestrial wireless providers project increased demand for 5G services, and they would like to preserve wide bands of spectrum in 50 GHz. Satellite companies could use the uplink capacity for their own Internet services. They note that their earth stations point upwards, towards space, and so are unlikely to cause interference with future terrestrial uses. In fact, we implemented a sharing regime between satellite and terrestrial uses in the 24 GHz band, and we import a similar arrangement into 50 GHz through this order.

I want to thank the Wireless Bureau for its work on this item, and its non-stop work on clearing and auctioning spectrum. I also want to thank the Chairman for his work over the past few weeks to bring

additional clarity to license rights in the  $37~\mathrm{GHz}$  portion of this order. Our decision is greatly improved by that effort. The item has my support.