

**STATEMENT OF  
CHAIRMAN TOM WHEELER**

**Re: *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, GN Docket No. 14-177; Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183 (Terminated); Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz Bands, PP Docket No. 93-253 (Terminated); Petition for Rulemaking of the Fixed Wireless Communications Coalition to Create Service Rules for the 42-43.5 GHz Band, RM-11664, Notice of Inquiry***

An effective spectrum strategy requires an all-of-the-above approach. This means making more spectrum available for not only licensed but unlicensed uses; for both exclusive use and sharing. It also means exploring entirely new spectrum opportunities.

This Notice of Inquiry we adopt today explores the possibility of facilitating the use of a huge amount of spectrum that could be used strategically to help meet the growing demand for wireless broadband.

Years ago, engineers and policymakers debated the feasibility and practicality of using spectrum above 2 GHz for mobile wireless services. More recently, industry representatives have talked about 3 GHz as the upward cap on spectrum usable for mobile; yet, our 3.5 GHz proceeding is quickly challenging that presumption too.

It’s been long assumed that frequencies even higher up on the spectrum chart could not support mobile applications due to physical and technical limitations. But smart thinkers, innovators, and technologists are devising solutions to this previous perceived limitation.

By using innovative technologies that can simultaneously track and acquire multiple signals reflecting and ricocheting off obstacles in the physical environment, future devices might be able to leverage much higher frequency bands, those above 24 GHz, for mobile applications. This technology could theoretically dramatically increase wireless broadband speeds and throughput – up to 10 gigabits per second.

Some in the industry are referring to the use of these bands in the context of so-called “5G.” What 5G is, or what it’s not, is not the issue at this point. What *is* the issue is the encouragement of further development of next generation wireless service.

The Commission’s Technological Advisory Council looked into this possibility and suggested the Commission initiate a Notice of Inquiry to begin to better understand the state of the art.

Today’s NOI begins our formal inquiry into this technology – asking many detailed questions about how it works, and how it is different from current technology. The NOI also is designed to develop a record about how these technologies fit into our existing regulatory structures, including how they can be authorized, to make sure we are facilitating and not unduly burdening their further development.

The possibilities of 5G are very intriguing. The technology is certainly intriguing, but even more intriguing is what it means for the future of communications. It promises new user experiences, new deployment models, potentially even new industries. 5G will not be just better, faster, and cheaper; it likely will be something fundamentally different from what is possible today. And these possibilities may

extend beyond 5G to other technologies and communications applications, such as satellite or airborne communications, or spark new applications yet to be imagined.

At this stage of the process, we should all be open to possibility. I expect all stakeholders to take a fresh look and a fresh approach: one focused on solutions to the benefit of the American people, and not just parochial interests. Those parties that engage in a productive manner will ensure they are part of this conversation, and other solution-driven conversations.

To those who may not be comfortable with expanding our horizons in this way, I challenge you not to say “no” even before we start down this road. Be a part of the community that makes this happen, the community that says “yes” to new frontiers of spectrum use.

Thank you to the Wireless Telecommunications Bureau and the Office of Engineering and Technology for your creative and forward-looking thinking on this item.