

**STATEMENT OF  
COMMISSIONER MIGNON L. CLYBURN**

**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***

All trends point to an ever increasing demand for advanced wireless services, which means that we need to both promote efficient uses, and reallocate more spectrum, for commercial benefits. Since reallocating sufficient spectrum, to meet the needs of wireless consumers is a multi-year process, the time to start planning our mobile future, is now.

While many wireless carriers are in the midst of deploying 4G networks, the industry is already calling for a Fifth Generation that will substantially exceed the capacity of existing mobile technologies. While there is no consensus on the definition of 5G, some believe it could accommodate an eventual 1000-fold increase in traffic demand and support high-bandwidth content with speeds in excess of 10 gigabits per second. Achieving these objectives will likely require the development of new networks that will deliver service through multiple, widely-spaced frequency bands, using macrocells, microcells, unlicensed as well as licensed transceivers. While some companies agree there is room for further efficiency gains in the bands below 3 GHz, they generally believe that provision of 5G-level service will require use of higher frequency bands, such as those above 24 GHz.

In planning for the future use of bands above 24 GHz, we need a better understanding of those state of the art and potential future developments in technology, for it will require us to study the best ways to manage interference among operators and other licensees that operate in the same or adjacent bands. And of course, we want to spur creative ideas for the best licensing and authorization blueprints on mobile operations above 24 GHz.

So I commend the Chairman for starting the process with this Notice of Inquiry and thank Roger Sherman, Julie Knapp and their staffs at the Wireless Telecommunications Bureau and Office of Engineering and Technology for presenting this thoughtful item.