

**STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN**

Re: *Promoting More Efficient Use of Spectrum Through Dynamic Spectrum Use Technologies*, ET Docket No. 10-237, Notice of Inquiry; *Promoting Expanded Opportunities for Radio Experimentation and Market Studies under Part 5 of the Commission's Rules and Streamlining Other Related Rules*, ET Docket No. 10-236, *2006 Biennial Review of Telecommunications Regulations—Part 2 Administered by the Office of Engineering and Technology (OET)*, ET Docket No. 06-105, Notice of Proposed Rulemaking.

I commend the Chairman for his leadership in promoting the policies put forth in these companion items. If our Nation wants to more effectively compete, we must encourage greater research and development and more efficient spectrum use. Such R&D is not only necessary for the advancement of monumental communication innovations, such as the Internet and the World Wide Web, but it is also critically important to the success of individual businesses and to our overall National economy. A White House study, conducted in September 2009, found that research and development is one of the most important pillars in building a foundation for an economy that could create jobs and drive sustainable growth.

All of the initiatives in the experimental license NPRM encourage greater R&D, which will enable individual entities to do more with their experimental authorizations, facilitate collaboration among industry and academics, and streamline rules. The two initiatives I find particularly noteworthy are the research and medical program experimental radio licenses.

Universities and non-profit research institutions have proven they deserve the enhanced experimental authorizations, reduced oversight, and streamlined application process that the research program license would give. For example, using experimental licenses, research institutions have not only developed ultra-fast, 1 Gigabit per second, research and education broadband networks, but they have also demonstrated public service leadership by advocating that we help connect these networks to anchor institutions in low-income communities.

This recommendation can lead to important short-term and long-term economic benefits. Community connection projects are, by their nature, job intensive, so connecting these research and education networks to low-income communities, can lead to immediate job creation and investment opportunities. For instance, Rutgers University reports, that the Global Environment for Network Innovations (GENI) project, which involves 29 universities, has created hundreds of jobs in New Jersey alone.

The National Broadband Plan also explained how Case Western University's project to connect its ultra fast, 1 Gigabit per second network to homes, schools, libraries and museums in a low-income community in Cleveland, Ohio, is creating jobs. This project is also leading to software and service development for environmental efficiency, health, and many other applications. These are just a few examples of why we should do as much as we can, as quickly as we can, to encourage universities and research institutions to engage in more research and development of communications technologies.

Designing the medical program experimental authorization to promote more test bed facilities for new wireless medical devices could speed the development of important achievements in health care. I thank the Food and Drug Administration and the American

Society for Healthcare Engineering for collaborating with us on this initiative. The item encourages researchers and physicians to work with Veterans Affairs facilities and military services, early in the development of these new devices, I am pleased to see. Our Wounded Warriors have made great sacrifices in defense of our Nation, and we owe it to them to create an environment that can lead to faster medical breakthroughs, and help them make the best of their return to civilian life.

The medical program experimental license could also accelerate innovations in telemedicine to further empower both doctors and patients. Advances in video technology and medical broadband applications are allowing physicians to collaborate with their colleagues across the globe, in real time, on difficult cases. For those suffering from long term and chronic illnesses, remote patient monitoring offers greater mobility and independence. Our agency should continue to promote technologies and policies that will give those, in greatest need of medical care, more flexibility in finding the right treatment for them.

The scholarship in today's *Notice of Inquiry* on dynamic spectrum use technologies also sends the proper message that we must encourage more efficient use of spectrum. The *Notice* recognizes that, to best advance these technologies, the Commission must have a clear understanding of how the various parts of the spectrum are being used today. The item then asks detailed technical questions to ensure that we have a comprehensive record on the latest developments in dynamic spectrum technologies. In promoting flexible use policies – such as the leasing of licensed spectrum through the secondary market – the *Notice* presents a cogent analysis of the possible techniques our policies already permit.

I thank Doug Sicker, Julie Knapp, and the other technology evangelists in the Office of Engineering and Technology, the Office of General Counsel, and the Wireless Telecommunications Bureau, for their hard work on these items.