

**SEPARATE STATEMENT OF
CHAIRMAN MICHAEL K. POWELL**

Re: Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies (ET Docket No. 03-108); Authorization and Use of Software Defined Radios (ET Docket No. 00-47), Notice of Proposed Rulemaking and Order (Adopted December 17, 2003)

Today we take another step forward to improve access and efficiency of our Nation's spectrum and to provide opportunities beyond today's horizon. I am pleased to support this item that grew out of the Spectrum Policy Task Force and that explores the many benefits of smart radio technology and its real-time processing capabilities. Last week, I had the pleasure of visiting several high-tech companies and met with tribal communities that are taking advantage of these new and innovative technologies.

Recent advances in smart radio technologies have the potential to provide more innovative, flexible, and comprehensive use of spectrum while at the same time minimizing the risk of harmful interference. On a real-time basis, smart radios determine their location or environment, have the flexibility to select the best frequencies to use, know how to avoid interference with existing users, and can use vacant spectrum channels. Not only do they have flexibility to use a variety of frequencies, they also can understand and transmit in many different formats.

Smart radio technologies also offer potential solutions to the increasingly crucial interoperability demands facing public safety entities and other licensed users to enable them to coordinate response and recovery efforts and ensure national security. Because they can use different frequencies and modulation techniques, smart radios could also translate signals between two different radio systems. This ability may enable more interoperability between public safety first responders – so that, in an emergency, firefighters from one jurisdiction could more effectively communicate with firefighters in another jurisdiction.

Today's Notice of Proposed Rulemaking and Order is part of a larger effort to expand opportunities for wireless services in rural America. We recently adopted two Notices of Proposed Rulemakings designed to foster advanced telecommunications in rural America. First, an NPRM on how we can clarify rules to minimize regulatory costs and provide incentives to serve rural markets. And second, an NPRM on modified power limits, new technologies such as smart antennas, and streamlined equipment approval.

In this proceeding, we will consider the technical capabilities as well as proposed changes to the Commission's rules and equipment authorization processes to accommodate and enable more efficient use of software defined radio and cognitive radio system technologies. Of special note is the potential of smart radios to facilitate spectrum leasing transactions, including possible leasing of public safety spectrum that would not otherwise be possible without the technology.

The possible uses for smart radios are wide ranging. The challenge before the Commission is to determine how we can open the door for these technologies so as not to shut out any of their tremendous potential.