

**SEPARATE STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN**

Re: Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies ET Docket No. 03-108; Report and Order

I've been fortunate to be involved in our work on cognitive radio technologies since helping the Office of Engineering and Technology open its workshop on cognitive radio technologies in the spring of 2003. I remarked then that cognitive radios could play a key role in shaping our spectrum use in the future. As we see in our item today, the enormous potential of cognitive radios is being realized increasingly every day. I very much appreciate the effort of OET and others in pushing this forward – making sure our rules keep pace with this cutting edge technology.

I believe that cognitive radios will play an important role in “spectrum facilitation.” That means stripping away barriers – regulatory, economic, or technical – to get spectrum into the hands of operators serving consumers at the most local levels. Cognitive radios can literally leapfrog the technical and legal problems that currently hamper many of today's spectrum access opportunities. Spectrum policy is a two-sided coin: a framework for innovation on one side, with spectrum facilitation on the other.

These technologies should lead to the advent of smarter unlicensed devices that make greater use of spectrum than is possible today. Cognitive radios may also provide licensees with innovative ways to use their current spectrum more efficiently, and to lease their spectrum more easily on the secondary market. I've seen cognitive radios up close and am just amazed by their potential.

While we don't tackle the issue here, I remain particularly interested in our proposal from the original NPRM to allow higher power operation for unlicensed devices operating in rural and other areas of low spectrum use. I regularly hear from WISPs across the country that they need improved access to spectrum. Higher power operation can drive broadband deployment deeper and farther into all parts of America.

I also find the discussion of interruptible spectrum leasing very useful. Such a development may enable previously reluctant licensees to explore a technological fix to address some of the current challenges of spectrum leasing. It has been suggested that interruptible spectrum use could be a tool for public safety licensees should we decide to allow them to lease their spectrum to commercial providers in the future. While I remain unsure whether such a policy change is appropriate in light of our Herculean work on public safety spectrum use in the 700 and 800 MHz bands over the past couple of years, I very much appreciate the value in having a discussion on the technical aspects of interruptible spectrum leasing.

For these reasons, I enthusiastically support this item.