

**STATEMENT OF  
COMMISSIONER MICHAEL J. COPPS**

***Re: Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186; Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band, Second Memorandum Opinion and Order, ET Docket No. 02-380***

It's been a long time coming, but it looks like white spaces' time has indeed come. This is a truly major step to make more spectrum available for wireless broadband. I have long advocated the full-scale development of white spaces technology to maximize the spectrum resource. In the absence of innovative technological solutions, too much spectrum—and prime spectrum below 1 GHz, at that—will lie fallow. When we last addressed white spaces on November 4, 2008, a momentous day in many ways, we left too many questions unresolved about the use of white spaces within the broadcasting spectrum. A lot has changed since then, including a focused commitment to ensuring that every American has access to affordable, value-laden, opportunity-creating broadband. Now we finally resolve the difficult questions and set ourselves on a course to unleash the tremendous potential of the white spaces.

Throughout the implementation of the National Broadband Plan, I have emphasized the countless ways that transformative broadband technology intersects with nearly all aspects of our everyday lives. The opportunities created by white space technologies are endless: whether it's increasing the reach of broadband to unserved and underserved populations, including Tribal Lands; whether it's giving local governments tools for implementing smart city, eco-friendly wireless applications; whether it's providing robust wireless coverage for school children, inside and outside the classroom. The possibilities are just about limitless.

We began our work on white spaces mindful of these opportunities, but with a focus on how to address the needling challenges of avoiding potential interference with other occupants of the TV spectrum—including broadcasters, cable headends and wireless microphone users, licensed and unlicensed. I am proud of our Office of Engineering and Technology staff for confronting the hard questions head on, and bringing us an item that provides a technologically-sound way forward. Here again, hero status goes to Julie Knapp and his team for persevering, asking all the right questions, doing the rigorous testing and analysis, and bringing us an item that is both visionary and balanced. Unlicensed spectrum is no longer just about garage door openers, and it is the type of clever, outside-the-box thinking demonstrated here that is exactly the kind of thinking that the United States needs to encourage if it is to continue to lead in technology innovation.

Recognizing the importance of licensed wireless microphones to electronic news gathering and the reality that many venues—Broadway theaters, sports arena, churches and schools—have come to rely on unlicensed wireless microphones, we have gone to great lengths to accommodate their needs. In fact, we take the bold step of setting aside two reserve channels nationwide, where wireless microphones can operate without the potential of interference from white spaces devices. In addition to the reserve channels, wireless microphones have other channels available in the TV bands that are not available for white spaces devices. For large events that need more than the channels available in a given area for wireless microphones, we will allow users to register the time, place and duration in the TV Bands Database. The Commission will ensure transparency in this process, and—in order to register—will require large users to demonstrate that all other spectrum above Channel 7 is unavailable for wireless microphone use. I believe that this approach will not only ensure adequate spectrum for both wireless microphones and white spaces devices, but also encourage wireless microphone

manufacturers to make much-needed improvements to equipment efficiency and interference resistance.

One of the great lessons that I quickly learned here at the FCC is the power of technology to turn scarcity into abundance. Now is the time for us to implement a framework that allows innovators and entrepreneurs to use technology to bring the promise of under-used white spaces spectrum from the test mode to widespread use. We are providing that golden opportunity today, and I look forward to seeing new devices widely-available in consumer markets next year.

A great example of white spaces potential was demonstrated last week when the Hocking Valley Community Hospital in Ohio—working with Google and Spectrum Bridge—became the first hospital to utilize white spaces for the purposes of telemedicine. Down in Wilmington, North Carolina, using an 18-month experimental license from the FCC, Mayor Bill Saffo has unveiled a municipal wireless white spaces network that transmits video of traffic along highways, monitors water level and quality, saves energy by remotely turning off lights at ball parks and provides public Wi-Fi in some areas. I hope and expect to see examples like these popping up all over the country.

Again, thanks to Julie Knapp and his team for their tireless work in bringing us today's Order. They have given us a workable balance that promotes wireless broadband use of the white spaces, allows venues to continue to use wireless microphones and protects the operations of broadcasters. The American people will reap real benefits from your work here. Of course, your work is not yet done. We have wisely delegated the technical issues surrounding the creation of the TV Bands Database administrators to OET. I hope this will move expeditiously and that we can get that Database management up-and-running within the next two months. Thanks to the Chairman for his leadership here and to all my colleagues who have supported this step, asked great questions and made good suggestions to improve the item. Finally, let's recognize the vast stakeholder input we have enjoyed here—although to say we always "enjoyed it" might be just a tad of a stretch. Absent the robust dialogue and input we have had from so many stakeholders, this would be a lesser item.