

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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)	ET Docket No. 02-380
)	
International Comparison and Consumer)	
Survey Requirements in the Broadband)	
Data Improvement Act)	GN Docket No. 09-47
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Development of Advanced)	
Telecommunications Capability to)	
All Americans in a Reasonable and Timely)	
Fashion and Possible Steps to Accelerate Such)	
Deployment Pursuant to Section 706 of the)	
Telecommunications Act)	GN Docket No. 09-137

**COMMENTS OF THE PUBLIC INTEREST SPECTRUM COALITION—NBP Public
Notice # 26**

The Public Interest Spectrum Coalition (“PISC”) commenters¹ making this submission urge the Commission, when considering the questions raised by *NBP Public Notice # 26*,² to take into account the value of unlicensed spectrum use in the bands currently occupied by broadcasters. This spectrum could be rapidly deployed for unlicensed, mobile broadband use, without first requiring time-consuming spectrum clearing efforts, pursuant to the framework set forth in the above-captioned TV White Spaces proceeding. As PISC argued in its Reply Comments³ to

¹ For the purpose of these comments, PISC consists of Public Knowledge, Media Access Project, New America Foundation, and Consumer Federation of America.

² Data Sought on Uses of Spectrum, *Public Notice*, DA 09-2518 (rel. Dec. 2, 2009).

³ Reply Comments of the Public Interest Spectrum Coalition to Fostering Innovation and Investment in the Wireless Communications Market, *Notice of Inquiry*, 24 FCC Rcd. 11322, GN Docket No. 09-157 (2009), filed Nov. 5, 2009.

the Commission's *Notice of Inquiry* on Innovation and Investment in the Wireless Communications Market, "it is impractical, inefficient and ultimately anti-consumer to attempt to meet the growing demand for mobile data consumption primarily through traditional reallocations of exclusively-licensed spectrum by auction."⁴ For this reason, PISC continues to believe that "a substantial share of newly-cleared spectrum [should] be reallocated for unlicensed use on a national basis. These new unlicensed bands should include at least one very substantial and contiguous unlicensed band with superior propagation characteristics, below 1 GHz if feasible ... [which offers] data rates that will complement licensed 4G mobile offerings."⁵

The Commission recently "adopt[ed] rules to allow unlicensed radio transmitters to operate in the broadcast television spectrum at locations where that spectrum is not being used by licensed services ['white spaces']...."⁶ To "maximize the opportunities for operation of unlicensed devices in all areas,"⁷ the Commission decided to "allow both fixed and personal/portable unlicensed TV band devices ['white spaces devices'] to operate on channels 21-36 and 38-51...[and] fixed devices to operate on channels 2 and 5-13 and channels 14-20 outside of areas where PLMRS/CMRS services operate."⁸ Since the Commission announced what channels would be available to white spaces developers, companies have begun investing in

⁴ PISC Reply Comments at 1-2.

⁵ *Id.* at 39-40.

⁶ Unlicensed Operation in the TV Broadcast Bands, *Second Report & Order and Memorandum Opinion & Order*, 23 FCC Rcd. 16807, ¶ 1 (2008).

⁷ *Id.* at ¶ 148.

⁸ *Id.*

deployment with those rules as guidance.⁹ The FCC should not interfere with these ongoing efforts by failing to take white spaces devices into account when formulating the National Broadband Plan. Given this ongoing investment and the high value of unlicensed use of spectrum in the broadcast frequencies, the Plan should at least preserve the same amount of spectrum already made available for unlicensed devices in the broadcast bands.

Preserving broadcast service and making spectrum available for unlicensed, mobile broadband use are not mutually exclusive goals, and the Commission can pursue both of them. For example, Section A of *NBP Public Notice #26* asked what factors the Commission should “consider when examining and comparing the benefits of spectrum used for over-the-air television broadcasting and those of spectrum used for wireless broadband services.” PISC notes that, with regard to white spaces and other unlicensed devices, the benefits of wireless broadband services can coexist with the benefits of existing broadcast uses.

In Section B of the Public Notice, the FCC sought comment on “Potential Approaches to Increase Spectrum Availability and Efficiency.” That Section does not note that one approach to increasing spectrum availability and efficiency of the broadcast bands for broadband data and other uses is the increased use of unlicensed devices that share capacity with broadcasters. The use of unlicensed

⁹ *E.g.*, Press Release, White Spaces Database Group, “Tech Industry Leaders Join to Develop Guidelines for White Spaces Database” (Feb. 4, 2009) (announcing the formation of a group consisting of Comsearch, Dell, Google Inc., HP, Microsoft Corporation, Motorola Inc., and NeuStar), *available at* http://www.google.com/intl/en/press/pressrel/20090204_whitespaces.html.

devices in the broadcast spectrum could make more capacity available for broadband data in the short term, without requiring relocation of incumbent users.

In Section D of the Public Notice, the FCC sought comment on market-based mechanisms to improve the availability of spectrum for wireless broadband use. PISC notes that unlicensed uses of spectrum allow for uses where the transaction costs that the marketplace otherwise might impose for clearing spectrum would be prohibitive.¹⁰ By drastically lowering barriers to entry for the use of spectrum, unlicensed spectrum can allow for many uses that have significant economic benefit.¹¹ Thus, the Commission should not overlook the benefits of unlicensed uses of spectrum nor focus exclusively on auction mechanisms.

Finally, PISC observes that the FCC has recently begun taking applications “for new digital-only LPTV and TV translator stations in rural areas, for major changes to existing analog and digital LPTV and TV translator facilities in those areas, and, in the case of incumbent analog stations, for digital companion channels.”¹² Expansion of use of the spectrum by broadcasters could both complicate later spectrum relocation plans and inhibit the use of white spaces devices. While filings have been accepted for rural areas since August, applications

¹⁰ See Arnon Tonmukayakul and Martin B.H. Weiss, A Transaction Cost Analysis of Secondary vs. Unlicensed Spectrum Use, presented at the Telecommunications Policy Research Conference (TPRC’06), Arlington, VA, Sept. 29–Oct. 1, 2006, <http://web.si.umich.edu/tprc/papers/2006/569/tprc06.pdf>.

¹¹ See RICHARD THANKI, THE ECONOMIC VALUE GENERATED BY CURRENT AND FUTURE ALLOCATIONS OF UNLICENSED SPECTRUM 57-65 (2009), http://www.ingeniousmedia.co.uk/websitefiles/Value_of_unlicensed_-_website_-_FINAL.pdf.

¹² Commencement of Rural, First-Come, First-Served Digital Licensing for Low Power Television and TV Translators Beginning August 25, 2009, Public Notice, DA 09-1487 (rel. June 29, 2009).

will not be accepted for non-rural areas until January 25, 2010. Thus, the FCC still has time to ensure that it does not pursue simultaneous, contradictory policy goals by taking applications for new broadcast uses while simultaneously exploring reallocation of broadcast spectrum.

Respectfully submitted,

Public Interest Spectrum Coalition

Public Knowledge
Media Access Project
New America Foundation
Consumer Federation of America

By:

/s/

John Bergmayer
Public Knowledge
1818 N St. NW
Suite 410
Washington, DC 20036

/s/

Matthew F. Wood
Media Access Project
1625 K Street, NW
Suite 1000
Washington, DC 20006

December 22, 2009