

May 27, 2010

Marlene Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554



Re: Notice of *Ex Parte* Presentation
GN Docket No. 09-157 (Spectrum Innovation and Investment)
GN Docket No. 09-51 (National Broadband Plan)
WT Docket No. 08-167 (Wireless Microphones)
WT Docket No. 05-265 (Roaming Obligations)
ET Docket No. 04-186 (TV White Spaces)
RM-11361 (Wireless Attachment and Use Rights)

Dear Ms. Dortch:

On Wednesday, May 26, 2010, Michael Calabrese, Sascha Meinrath, Benjamin Lennett, and Dan Meredith of the New America Foundation; Chris Riley of Free Press; John Bergmayer of Public Knowledge; and Matt Wood of Media Access Project (collectively, the “Public Interest Representatives”) met with Julius Knapp, Chief, Office of Engineering and Technology (“OET”); Ruth Milkman, Bureau Chief, Wireless Telecommunications Bureau (“WTB”); John S. Leibovitz, WTB Deputy Bureau Chief; Bruce A. Romano, OET Associate Chief (Legal); Geraldine Matisse, Chief, OET Policy & Rules Division; and Stuart Benjamin, the Commission’s Distinguished Scholar in Residence (collectively, the “Commission Attendees”).

During the meeting, the Public Interest Representatives discussed generally a range of spectrum policy issues raised in the National Broadband Plan, as well as in proceedings to be launched as a result of the Plan and in other proceedings currently pending at the Commission.

The Public Interest Representatives first reiterated positions set forth in their joint and individual filings in the above-captioned dockets regarding the importance of both unlicensed and opportunistic access to spectrum. In particular, the Public Interest Representatives urged the Commission to consider establishing for unlicensed use, as part of the Commission’s spectrum reallocation efforts pursuant to the National Broadband Plan, a contiguous band of substantial size located at a suitably low frequency – for example, below 3 GHz. Such an allocation would permit continued innovation and investment in broadband technologies, generating tremendous consumer welfare akin to and potentially surpassing the value generated by WiFi.

Furthermore, the Public Interest Representatives emphasized that making more spectrum available for unlicensed and opportunistic use would ease congestion experienced by licensees and ultimate end-users of licensed spectrum. Thanks to the increasing prevalence of hybrid networks and cognitive devices, data from mobile and wireless broadband users increasingly flows over different paths from moment to moment, with “intelligent” devices dynamically choosing the best route for sending and receiving communications. The Public Interest

Representatives reported that complementary offloading of data from major carriers' networks already occurs today, as evidenced most recently by AT&T's decision to establish a WiFi hot spot in New York City's Times Square. Such offloaded data continues to rise as a proportion of total traffic. As a result, bits more and more frequently travel at low power, over short distances, and over shared spectrum into self-provisioned, high-capacity local area networks, rather than traveling at higher power and over greater distances to 3G and 4G infrastructure. The Commission's adoption of wireless "Carterfone" principles and its establishment of automatic data roaming rules would further enhance such efficiencies, promoting innovation and expanding consumer choice by empowering innovators to continue the deployment of new cognitive devices and the development of emerging wireless broadband business models.

The Public Interest Representatives then respectfully suggested that the Commission move expeditiously to the conclusion of various proceedings impacting use of the TV White Spaces (or "TVWS"), and noted as well that any elimination or reduction in the amount of TVWS spectrum resulting from TV band reconfiguration should be offset by the creation of an additional band or bands for unlicensed use within the reclaimed TV spectrum. In that event, the designation of a new, contiguous band or bands for unlicensed use should ensure that these allocations are of a frequency and channel width complementary to 4G spectrum assignments. Locating bands for unlicensed or shared use in spectral proximity to heavily-used licensed bands will decrease chip manufacturing costs and make hybrid networks and dynamic devices even more efficient, providing the most practical, pro-consumer, and spectrum-efficient means to meet the projected growth in demand for mobile data capacity.

Even under the current configuration of the TV band, however, the Commission's planned database for TVWS frequencies can and should be expanded to include unused or under-utilized government and commercial spectrum at other frequencies. These other bands could be made available for opportunistic use, in various locations and at various times, until such bands may be built out or needed for a primary use in such areas. In this regard, the Public Interest Representatives have suggested in prior filings that the federal Spectrum Relocation Fund be expanded to provide funding not just for federal users clearing and relocating from certain bands, but also for modernization of federal users' technology to facilitate more efficient and dynamic sharing of spectrum that might otherwise lay fallow during times of minimal use by currently authorized users.

The Public Interest Representatives also emphasized the benefits of concluding the Commission's wireless microphone proceeding in the near term – ideally, during the third quarter of 2010, as projected in the Broadband Action Agenda timeframe for resolving outstanding challenges to TVWS implementation. The Commission should address wireless microphone use in a manner that does not disadvantage such devices, but that also does not license or prioritize them over wireless broadband devices so vital to promoting investment and meeting growing demand for mobile data services. The Commission therefore should authorize the currently unauthorized use of TV bands by wireless microphones, but do so strictly under Part 15 rules, classifying such microphones as unlicensed devices co-equal to TV broadband

devices. The Public Interest Representatives articulated their view that expansion of Part 74 for presently unauthorized microphone operators would be unnecessary and unwise, and that imposing both database querying requirements and sensing requirements on TV broadband devices would not serve the public interest – especially if any such sensing requirements are unduly onerous and overly protective of heretofore unauthorized microphones, and consequently reduce inappropriately the number of available channels for TV broadband devices

In sum, the Public Interest Representatives cautioned that certain Commission actions could, if unbalanced by countervailing measures, severely hamper or even destroy the national market for TV broadband devices and the utility of the TV White Spaces for broadband services and innovation. This loss of utility for mobile broadband could result either from reallocating TVWS spectrum to other uses incompatible with opportunistic access, and doing so without providing for new unlicensed allocations within this same band; or from granting unwarranted priority for wireless microphones operating within TVWS, when such devices already enjoy advantages in terms of maximum power limits and channels reserved for them in major markets.

In response to various questions from the Commission Attendees, the Public Interest Representatives also submit with this letter copies of three papers authored or co-authored by representatives from the New America Foundation's Open Technology Initiative and its Wireless Future Program.¹ Although these papers were not discussed during the meeting on which this *ex parte* notification reports, they do help to establish the theoretical and practical framework for implementation of several real-world models for unlicensed and opportunistic access to government and commercial spectrum. Building on these contributions and others, including submissions from the Public Interest Representatives' respective organizations, the Commission should move expediently to coordinate on these matters with other government agencies, federal and commercial spectrum holders, broadband entrepreneurs and innovators, and an array of stakeholders including consumers and public interest groups.

We submit this letter today pursuant to Section 1.1206(b) of the Commission's rules, 47 C.F.R. §1.1206(b). Please contact the undersigned should you have any questions.

Respectfully submitted,

/s/ Matthew F. Wood

Associate Director
Media Access Project

¹ These papers are: Victor W. Pickard & Sascha D. Meinrath, "Revitalizing the Public Airwaves: Opportunistic Unlicensed Reuse of Government Spectrum" (2009); Michael Calabrese, "The End of Spectrum 'Scarcity': Building on the TV Bands Database to Access Unused Public Airwaves" (2009); and Benjamin Lennett & Sascha D. Meinrath, "Seven Key Options for Spectrum Allocation and Assignment" (forthcoming July/August 2010).

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Ruth Milkman
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