



NEW AMERICA
FOUNDATION

December 23, 2013

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

Re: Notice of Oral *Ex Parte* Presentation

Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268;

Policies Regarding Mobile Spectrum Holdings, GN Docket No. 12-269

Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354

Operation of Part 15 Devices in the UNII Band, GN Docket No. 13-49

Expanding Access To Mobile Wireless Service Onboard Aircraft, WT Docket No. 13-301

Dear Ms. Dortch:

On December 19, 2013, Michael Calabrese of the New America Foundation, Harold Feld of Public Knowledge and Matt Wood of Free Press, on behalf of these groups affiliated with the Public Interest Spectrum Coalition (PISC), met with Roger Sherman, Chief, Wireless Telecommunications Bureau, and Brian Regan and Jessica Almond, also of WTB.

With respect to the incentive auctions proceeding (Docket No. 12-268), the PISC representatives emphasized that the public interest is best served by band plan, auction and repacking policies that strike a balance between broadcast stations, licensed mobile operators *and ensuring at least 24 MHz of unlicensed access in every market nationwide*. We acknowledged that although last year's Spectrum Act imposed certain statutory guideposts, the Commission can and should promote competition through auction design, and through permitting the unlicensed use of guard bands and remaining TV white spaces as described below.

We outlined five primary policies identified in PISC's incentive auction comments, which were filed by New America Foundation, Consumer Federation of America, Public Knowledge and the National Hispanic Media Coalition in January 2013 (the "January 2103 Comments"). These policies track closely with submissions in the comments of other unlicensed proponents.

These policies are essential to ensure a sufficient amount of unlicensed access (24 to 30 MHz or more) in *every* market, which is necessary to promote and sustain markets of national scope and scale for unlicensed chips, devices and services:

- Designating an unlicensed and *contiguous* duplex gap (and/or guard band) of at least 20 MHz.
- Maintaining two designated channels for wireless microphones, but opening them for shared unlicensed use; shrinking the separation distances that limit wireless microphone use of locally-vacant, out-of-market TV co-channels; and requiring microphones to rely first on out-of-market TV co-channels that are not available to unlicensed devices.
- The opening of Channel 37 for unlicensed access subject to TV Bands Database-enforced exclusion areas for radio astronomy and WMTS.
- Maintaining the status quo with respect to unlicensed access to 600 MHz spectrum, post-auction, in each local area until it is actually in use, applying the same “use-it-or-share-it” approach that the Commission has proposed for GAA access to licensed (Priority Access) spectrum in the 3.5 GHz band.
- “Repacking with a purpose” with respect to secondary broadcast licensees, particularly LPTVs, by strictly enforcing a substantial service requirement (i.e., no extensions or relocations for construction permits), not extending DTV transition deadlines, and requiring secondary broadcast licensees to share channels as a condition of reassignment and/or renewal if their service (e.g., a single standard definition digital signal) will not require a full 6 MHz channel.

With respect to wireless microphones, Mr. Calabrese and Mr. Feld voiced their continued strong support for maintaining two reserve channels for wireless microphones – at places and times needed – while opening that capacity for shared, unlicensed use to the extent possible. The PISC commenters have proposed a “win-win” for microphones and other unlicensed devices: There is no need to reserve TV channels *exclusively* for microphone use, since microphone operators have effective access to a large number of vacant TV channels that are not available for unlicensed use and that can meet their needs under ordinary circumstances. Microphones have historically operated co-channel to broadcast stations in neighboring media markets – on channels that are not available for even the lowest-power unlicensed devices under the Commission’s TVWS rules. For example, in New York City a video production facility or Broadway theatre should have little concern about receiving interference from over-the-air TV signals originating in Bridgeport, Connecticut (60 miles away).

Under current rules, co-channel wireless microphone operations must be separated by a distance of at least 113 kilometers (70 miles) from the television transmitter.¹ However, in

¹ *Incentive Auctions NPRM* at ¶ 223, citing 47 C.F.R. § 74.802(b)(3).

practice microphone operators feel comfortable operating at considerably shorter separation distances, particularly at indoor venues.

Although the PISC members that filed comments on this issue agree that professional microphone operators need the two reserved channels for certain very large and complicated events (e.g., televised professional sports, major civic events, multi-performance venues such as the Kennedy Center), we believe that on a day-to-day basis microphones can rely first (as they do now) on out-of-market TV co-channels that are *not* available for unlicensed use. We reiterated our proposal, set forth in the January 2013 Comments, that the Commission should authorize microphone operation on a far larger number of out-of-market TV co-channels. Moreover, the Commission should require both unlicensed and Part 74 microphones to first use non-TVWS channels and, when this is not sufficient for a particular event, request reservations on the two reserved channels through the TV Bands Database. Coordination through the TVDB will both facilitate non-interfering use among microphone operators and help to ensure the availability of channels for unlicensed use in every market.

In Thursday's meeting, the PISC representatives also reiterated their support for a generally uniform band plan that ensures a contiguous duplex gap and that optimizes – and is limited to – spectrum useful to competitive carriers. Market variation therefore should not undermine the viability of the unlicensed economy merely to create additional unpaired Supplemental Downlink (SDL) that would be useful only to the two dominant wireless carriers. The groups also noted that at a minimum there should be no spectrum licensed below Channel 37. The groups did not express a position concerning TDD.

The PISC representatives have also observed that large portions of 600 MHz band spectrum will remain unused in large portions of the country for many years after the incentive auction – and many rural and small town areas may not be built out even at the end of the initial license term. A use-it-or-share-it approach post-auction would maintain the status quo, since under current rules unoccupied 600 MHz spectrum does not lie fallow but can be *used* for broadband services, subject to automatic protections for incumbents enforced by the TV Bands Database (TVDB). Licensees lose no rights whatsoever and bear a *de minimus* burden to simply inform the Commission and/or one TVDB administrator 30 days (or possibly more) prior to commencing substantial service in a particular local area. Unlicensed devices can be immediately denied permission to operate.

The public interest representatives further noted that repacking and relocation will have an enormous impact on the future of the unlicensed economy. We asserted that repacking should be carried out with a goal of optimizing the usefulness of vacant TV band spectrum for rural broadband and other higher-power applications, since under current rules it requires three consecutive White Space channels for WISPs to provide fixed wireless service. We reiterated our support for a proposal by the Wireless Internet Service Providers Association (WISPA) that

would permit higher-powered operation on the middle six megahertz of two consecutive vacant TV White Space channels for fixed broadband operations, since this would accommodate a three megahertz guard band on each side of the higher-power broadband transmission.

The PISC representatives further recommended that the Commission adopt a policy of vigorously enforcing its rules to ensure that LPTV, translator and booster stations that are not entitled to interference protection do not have unwarranted protected status in the TV Bands Database. While many LPTV stations serve the public interest and enhance diversity, many others are not operating or are occupying more spectrum than needed for their single digital stream of content. We noted that the January 2013 Comments recommended that the Commission consider requiring secondary broadcast licensees to co-locate and share a single 6 MHz channel where feasible without reducing their free over-the-air broadcast service to the community.

With respect to 600 MHz auctions, the PISC representatives expressed their strong support for the adoption of a sub-1 GHz spectrum holdings limit in a pre-auction rule of general applicability. Low frequency spectrum is uniquely valuable, particularly for entrants and competitive carriers, with an enormous foreclosure value to the two dominant carriers that already hold 80% of the spectrum available for mobile broadband below 1 GHz. We urged completion of the general proceeding on aggregation limits prior to 600 MHz auction rules.

With respect to the 3.5 GHz band proceeding (Docket No. 12-354), the group reiterated PISC's support for the "Citizen's Broadband Service" concept proposed in the NPRM and *Revised Framework* Public Notice. More small cell band sharing is the most pro-consumer means of meeting exploding mobile data demand. We reiterated the strong support in PISC's comments and reply comments for the proposed 3-tier access model for federal spectrum sharing based on last year's PCAST recommendations. Most critically, the Commission's proposed 3-tier model – governed by a neutral Database mechanism (Spectrum Access System) – provides a framework for sharing additional Federal bands beyond 3.5 GHz.

PISC supports reserving, at least initially, a majority of the 3550-3700 MHz band for General Authorized Access (GAA) and no less than 50 MHz in any local market. Guaranteeing a substantial "floor" of at least 50 MHz in every market is necessary to ensure markets of national scope and avoid the fragmentation and big city availability problems that undermine the utility of TV White Spaces. Conversely, only a portion of the band, such as the 50 MHz total proposed in the NPRM, should initially be designated for exclusive secondary licensing (Priority Access) because undue exclusivity in this band would preclude a substantial and certain new allocation of unlicensed spectrum. We noted that the proposed geolocation database management system gives the Commission the flexibility to revise this relative allocation in the future depending on actual future use of PA and GAA.

In addition, the PISC representatives reiterated their support for GAA access to unassigned or unused Priority Access spectrum in the 3.5 GHz band on a “use-it-or-share-it” basis as proposed in the Commission’s *Revised Framework*. The advocates noted the diverse support for this approach in comments filed in response to the Public Notice.

In reference to Docket No. 13-301 (wireless operation onboard aircraft), Mr. Feld observed that underlays of the kind described here are quite routine. In answer to the question posed by Commissioner Pai in his dissent: “can anyone use a carrier’s spectrum provided they’re pretty sure they won’t interfere,” the answer has been “yes” since 1989 when the FCC authorized unlicensed underlays. Other precedent for non-interfering use of exclusively licensed spectrum includes ultra-wideband and the MVDDS. In short, there is nothing extraordinary or contrary to the FCC’s proposal to authorize a non-interfering service (whether licensed or unlicensed) on the same frequencies as cell phone licenses.

Respectfully submitted,

/s/

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