



NEW AMERICA
FOUNDATION

May 6, 2014

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, Docket No. 12-269

Dear Ms. Dortch:

On May 2, 2014, Michael Calabrese of the New America Foundation and Harold Feld of Public Knowledge, on behalf of the Public Interest Spectrum Coalition (PISC), met with Roger Sherman, Chief of the Wireless Telecommunications Bureau (WTB), Julie Knapp, Chief of the Office of Engineering and Technology, and Paul Murray, WTB Assistant Bureau Chief and Chief Counsel.

The PISC representatives expressed the continuing concern in the public interest community that the draft incentive auction order circulating represents an unbalanced approach that, if adopted, is likely to kill off the Commission's longstanding goal – a goal reiterated in the NPRM – to facilitate nationwide markets for unlicensed innovation and connectivity in the low-band spectrum below 700 MHz.

The public interest advocates noted that the NPRM's stated goal to adopt a balanced policy will be thwarted if the band plan does not ensure multiple channels of unlicensed spectrum useful for wireless *broadband* to close coverage gaps and promote innovation. A band plan that forecloses unlicensed access in the largest urban markets would be both unnecessary under the statute and actually contrary to Congressional intent. Although the Middle Class Tax and Job Relief and Job Creation Act of 2012 restricts the Commission's discretion with respect to allocating spectrum cleared by the purchase of spectrum rights from TV broadcasters through the

reverse auction (Section 6402), the statute explicitly does not limit the Commission's authority or discretion with respect to the assignment or reallocation of spectrum that is currently not assigned to broadcast stations or spectrum that remains within the TV band allocation post-auction (Section 6403). We clarified that we are not asking the Commission to use the incentive auction to clear a contiguous channel for reallocation to unlicensed use, but that we are asking the Commission to respect Congressional intent by assigning sufficient and technically reasonable guard bands *only* for unlicensed use.

The PISC representatives stated that a balanced policy more in keeping with the intent of the statute and compromise it represents would include the following policies necessary to avoid killing the anticipated benefits of a nationwide market for unlicensed broadband connectivity, chips, devices and services incorporating the now-completed 802.11af standard:

- **The Order should find that a duplex gap of least 11-12 MHz wide is technically reasonable.** This is clearly supported in the record and the minimum necessary to accommodate a 6 MHz unlicensed channel under current TVWS rules. Even if a narrower duplex gap is technically necessary for a particular band plan, a wider duplex gap would be technically reasonable for other band plans.
- **Restrict use of the duplex gap and lower guard band to unlicensed devices, as Congress intended,** with no ability of Part 74 wireless microphone licensees to make reservations that block use of this very limited contiguous unlicensed band. Allocating the guard bands to contiguous unlicensed use was a hard-fought compromise specifically intended by Congress in the Spectrum Reform Act of 2012.
- **Maintain one or both channels currently designated for wireless microphones** – to ensure microphone operators licensed under Part 74 have a go-to channel – and designate the channel(s) post-auction. The channel should be available for unlicensed devices where and when it's not in use, subject to protecting microphones that make reservations via the TV Bands Database.
- **Permit unlicensed access to Channel 37 subject to TV Bands Database** – enforced by the minimum exclusion areas necessary to protect radio astronomy and WMTS.

The advocates further stated that proposals by Part 74 microphone interests to allow licensed microphone reservations in the duplex gap that would block unlicensed use are unnecessary to ensure electronic news gathering and other critical microphone operations have safe channels in the ongoing TV band. First, as noted above, as part of the repacking process, the Commission can assign at least one and preferably two of the remaining channels in each market for wireless microphone reservations. In most markets Channel 36 is already designated as a microphone channel, although there is no need for this shared microphone/unlicensed channel to be contiguous nationwide.

Second, Part 74 microphone operators can rely and do rely regularly on the many unused local TV channels that are *not* available for use by unlicensed devices. Since it is not possible, given the broadcast viewership protections in the statute, for the Commission to repack TV stations in a market on every single channel, we asserted that there will certainly continue to be a number of locally-vacant channels in every market nationwide where Part 74 microphones can be permitted to make reservations for safe use of their low-power microphones. The *TV White Spaces Second MO&O* made general reference to these additional channels several times:

The two reserved TV channels will accommodate a minimum of at least 16 wireless microphones, and the additional channels that are not available for TVBDs at most locations will accommodate many additional wireless microphones. . . . Such entities may consult with a TV bands database to identify the reserved channels at their location, as well as the TV channels that may not be available for TV band devices.¹

Wireless microphones have historically operated co-channel to broadcast stations in distant media markets and continue to do so. For example, in New York City a video production facility or Broadway theater should have little concern about receiving interference from over-the-air TV signals originating in Bridgeport, Connecticut (60 miles away) or possibly even Newark, New Jersey (11 miles). Indoor venues are particularly shielded from distant TV signals. PISC documented in its initial comments in this proceeding that at the Rockefeller Center in New York City (home to TV production facilities for NBC Universal), the Shure Inc. microphone user look-up database shows that in addition to channels 22 and 42, which are reserved exclusively for microphones, there are 10 non-TVWS channels available with no broadcaster operating within 70 miles (the FCC separation distance); plus an additional 6 channels with no broadcaster operating within 50 miles; and yet another 4 channels with no broadcaster operating within 10 miles.² In contrast, the TV Bands Databases show only one vacant channel available for unlicensed use.

The PISC representatives also expressed concerns with the reported recommendations that are circulating with respect to both an updated transaction screen on spectrum holdings and limits on bidders in the 600 MHz incentive auction. PK and OTI believe it would be counterproductive to add new spectrum to the screen without applying a weight that recognizes that different frequencies have substantially different utility and impacts on competition. We stated that new spectrum should not be added to the screen until the Commission adopts a weighting system. We also noted that as a general matter, and especially here, clear rules are preferable to "enhancement factors" and other subjective criteria.

With respect to the specific rules for the 600 MHz incentive auction, while we acknowledged that the proposal to set aside "reserve" spectrum in each market for carriers without substantial

¹ *TV White Spaces Second MO&O*, at ¶ 14-15.

² See <http://www.shure.com/americas/support/tools/wireless-frequency-finder>; Comments of the Public Interest Spectrum Coalition, Docket No. 12-268, *et al.* (Jan. 25, 2013) at 32-37.

holdings is intended to promote competition, we warned that it might have the unintended effect of simply locking in the status quo. Today, two carriers are dominant due in part to the advantage of disproportionate holdings of low-band spectrum. Under the proposal as we understand it, in each market both AT&T and Verizon would be able to gain substantial spectrum, regardless of any screen, with less than half of the spectrum in each market reserved for competitors. For example, a 30 megahertz “reserve” in a 35-by-35 megahertz auction would permit the two dominant carriers to acquire *at least* 40 of the 70 megahertz – leaving the overall foreclosure of sub-1 GHz spectrum largely unchanged from today.

A better approach would be to ensure that all carriers can bid in each market, but to structure the auction so that the dominant carriers bid against each other – driving revenues higher while also promoting competition. To that end, the Commission should, at a minimum, designate only 20 or at most 30 megahertz as “non-reserved” spectrum with the rest “reserved” to enhance competition. The cap should be on non-reserved spectrum available to carriers already controlling one-third or more of the low-band spectrum in a market – and not on new entrants and competitive carriers seeking sufficient sub-1 GHz spectrum to have a hope to compete.

Respectfully submitted,

/s/

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