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July 21, 2015

**EX PARTE VIA ECFS**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: *Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002, AU Docket No. 14-252; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268***

Dear Ms. Dortch:

Recently released FCC data shows the disparate impact on licensed versus unlicensed use if the “duplex gap” is not used for broadcast relocation.<sup>1</sup> An FCC decision not to use the duplex gap to allow for broadcast spectrum relocation could materially impair the FCC’s ability to increase the amount of spectrum available for wireless broadband services to consumers in the United States while providing little, if any, benefits for unlicensed spectrum availability.

The FCC examined various spectrum-clearing scenarios where use of the duplex gap for broadcast relocation could affect the ability of unlicensed devices to use the same spectrum. The precise area of unlicensed impairment would vary depending on how much broadcast spectrum the auction ultimately clears, but the area is invariably small, only impacts one unlicensed channel and leaves unlicensed proponents significantly better off than they currently are.<sup>2</sup> The FCC specifically studied three auction outcomes: a moderate-participation scenario that would clear 84 megahertz; an intermediate-participation scenario that would clear 114 megahertz of spectrum; and a high-participation scenario that would clear 126 megahertz of spectrum. According to the FCC’s data, the 84 megahertz spectrum-clearing scenario would constrain unlicensed operations the most of any

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<sup>1</sup> Letter from Gary M. Epstein, Chair, Incentive Auction Task Force, Federal Communications Commission to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 12-268, WT Docket No. 12-269, AU Docket No. 14-252, Appendix at 3 (July 10, 2015) (“*July 10 IATF Letter*”).

<sup>2</sup> The largest market that could potentially be impaired is Los Angeles, where there is currently no 600 MHz spectrum available for unlicensed use. See GOOGLE SPECTRUM DATABASE, <https://www.google.com/get/spectrumdatabase/channel/> (last visited July 20, 2015). Even if the Commission needed to use the duplex gap in Los Angeles for broadcast relocation, the Commission plans to provide for unlicensed devices access to Channel 37 and a vacant reserved channel in the broadcast spectrum following the incentive auction.

outcomes studied. But even this scenario would likely still allow unlicensed devices unfettered access to the duplex gap in more than 400 out of 416 geographic markets in the United States.<sup>3</sup> Of the six designated market areas where unlicensed devices could suffer some form of impairment, moreover, only one of the markets would be a large population center; the other five markets would be considerably smaller.<sup>4</sup> Thus, the benefits to unlicensed spectrum availability from not using the duplex gap for broadcast relocation are small relative to the harm done to licensed broadband spectrum.

By contrast, the costs of not using the duplex gap are considerable, according to the staff analysis. Without using the duplex gap for broadcast relocation, the Commission's models project the incentive auction would have trouble clearing 114 megahertz of spectrum or potentially even 84 megahertz of spectrum, which many broadband advocates regard as the minimum amount of spectrum necessary for a successful auction.<sup>5</sup> The next highest spectrum-clearing target is 72 megahertz.<sup>6</sup> At this next level of spectrum clearing, the auction would offer only six blocks of spectrum, or just 60 megahertz, for broadband use, which is half the amount of spectrum Congress had sought in authorizing the incentive auction and much less spectrum than consumers will need to satisfy ever-increasing demand for mobile broadband connectivity.

Broadband licensees operating on a primary basis in the 600 MHz band will have to manage a substantial degree of impairment and market variability throughout the country despite having paid billions of dollars to the U.S. Treasury for the spectrum in which they will operate. By comparison, manufacturers of unlicensed devices operating on a secondary, non-interference basis in the 600 MHz band will have to tolerate partial impairments in just six markets despite having paid nothing to the U.S. Treasury for their spectrum. Asking unlicensed device manufacturers to manage some level of impairment in a maximum of six markets under one possible spectrum-clearing scenario for the benefit of devices operating on a secondary, non-interference basis hardly seems unreasonable.

If the Commission nevertheless feels compelled to eliminate the effects of any possible impairment from the duplex gap for the benefit of the spectrum in which unlicensed devices may one day operate, the Commission has a variety of tools to advance that goal that do not threaten to reduce the amount of spectrum made available for consumer wireless broadband services. Even before the release of the staff analysis on July 10, some parties offered proposals to achieve a

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<sup>3</sup> The staff analysis calculates impairments by designated market area (DMA). There are 210 DMAs in the United States, six of which are impaired in an 84 megahertz clearing scenario, according to the Commission's modeling. Because DMAs and partial economic areas (PEAs) do not neatly align, the precise number of affected PEAs cannot be determined based on the DMA impairment information.

<sup>4</sup> The largest market is Los Angeles, California. The other five markets are greater Harrisburg, Pennsylvania; Madison, Wisconsin; Buffalo, New York; Milwaukee, Wisconsin; and greater Flint, Michigan.

<sup>5</sup> *July 10 IATF Letter*, Appendix at 3-5; see also *Incentive Auction Task Force Releases Initial Clearing Target Optimization Simulations*, Public Notice, 30 FCC Rcd 4854, 4856 ¶ 6 (WTB 2015).

<sup>6</sup> The FCC did not include the effects of a prohibition on using the duplex gap for broadcast relocation at a 72 megahertz clearing target, and it is far from clear that the auction could meet even this lower-level target without targeted use of the duplex gap for broadcast relocation. Even if the amount of broadcast impairment remains the same as clearing targets shrink, a higher percentage of the total amount of broadband spectrum available will be impaired as the amount of broadband band decreases in size.



balanced outcome that would both promote unlicensed operations and protect the amount of spectrum available for licensed wireless broadband.

For example, if the FCC selectively uses the duplex gap for broadcast relocation, the Commission could reserve an additional vacant broadcast channel for unlicensed use in the handful of markets that may have an impaired duplex gap.<sup>7</sup> A related alternative is to adopt the proposal by former Representative Waxman to protect the duplex gap for unlicensed operations at spectrum-clearing targets above 84 megahertz, where spectrum is relatively abundant, but not protect the duplex gap for unlicensed use at spectrum-clearing targets of 84 megahertz or less, where ensuring a minimum amount of spectrum available for competitive wireless broadband services should assume the highest priority.<sup>8</sup>

The FCC could also adopt a mechanism that would allow the Commission to offer higher prices for broadcast stations in all markets, including for those stations located in markets that may have little or no direct competitive bidding among reverse-auction bidders.<sup>9</sup> So long as the Commission were to adopt some type of mechanism to drive prices to something approaching market rates where reserve-auction bidding is not especially vigorous, offering higher prices to broadcast stations would increase broadcaster participation and reduce the total number of stations encumbering the 600 MHz broadband spectrum.<sup>10</sup>

Whatever the solution, an inability to incorporate broadcast stations into the broadband duplex gap would materially impair the availability of spectrum for wireless broadband services to consumers in the United States. The FCC should not sacrifice greater broadband spectrum clearing as a cushion against the possibility that some spectrum-clearing targets might impair unlicensed spectrum availability in a very small number of mostly low-population markets.

The FCC should also take every measure possible to ensure that the pro-consumer spectrum reserve comes into effect before the two dominant incumbents can purchase all or most of the low-band spectrum that the 600 MHz incentive auction will make available.<sup>11</sup> Higher spectrum-

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<sup>7</sup> See Letter from Harold Feld, Senior Vice President, Public Knowledge to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 12-268, AU Docket No. 14-252 at 3-4 (July 9, 2015) (“*Public Knowledge Proposal*”); see also Letter from Rebecca Murphy Thompson, General Counsel, Competitive Carriers Association, to Marlene H. Dortch, Secretary, Federal Communications Commission, AU Docket No. 14-252, GN Docket No. 12-268 (July 14, 2015) (“*CCA July 14 Letter*”).

<sup>8</sup> Letter from Henry A. Waxman, Chairman, Waxman Strategies, to Tom Wheeler, Chairman, Federal Communications Commission, GN Docket No. 12-268, WT Docket No. 12-269, AU Docket No. 14-252, at 2 (July 9, 2015) (“*Waxman July 9 Letter*”).

<sup>9</sup> *CCA July 14 Letter* at n.12 (citing Reply Comments of Competitive Carriers Association, AU Docket No. 14-252, GN Docket No. 12-268 at 30-31 (Mar. 13, 2015)). See also Comments of the Expanding Opportunities for Broadcasters Coalition, GN Dockets No. 12-268, 12-269, AU Docket No. 14-252 (July 13, 2015).

<sup>10</sup> *Id.*

<sup>11</sup> See *CCA July 14 Letter* at 3-4; *Public Knowledge Proposal* at 1-2; Letter from Angie Kronenberg, Chief Advocate and General Counsel, COMPTTEL to Marlene H. Dortch, Federal Communications Commission, GN Docket No. 12-268, AU Docket No. 14-252, at 1-2 (July 16, 2015); Letter from Trey Hanbury, counsel to T-Mobile USA, Inc. to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 12-268, AU Docket No. 14-252 at 2-3 (July 10, 2015).



clearing targets will provide broadcasters with greater access to capital and broadband consumers with greater access to spectrum that promises improved broadband coverage inside buildings and over less densely populated areas. But under the currently proposed rules, pursuing higher spectrum-clearing targets creates the potential for a lengthy delay in establishing the spectrum reserve, which the dominant carriers could use to drive competitors out of the auction by raising forward-auction prices to foreclosure levels before the reserve comes into existence.

Therefore, at spectrum-clearing targets of more than 84 megahertz, the Commission should help ensure consumers enjoy the same or better competitive choices than they have today by limiting delays and triggering the reserve when bids exceed an average of \$2.00 per MHz-POP in the Top 40 markets or actual broadcast clearing costs, whichever occurs first.<sup>12</sup> The Commission could retain the status quo trigger for the spectrum reserve at spectrum-clearing targets of 84 megahertz or less, where the risk of anti-competitive abuse of the spectrum reserve trigger may be somewhat less.<sup>13</sup> Such an approach would close one of the bigger loopholes in the design of the spectrum-reserve trigger and limit the ability of the two dominant carriers to use an apparent design flaw to defeat the pro-consumer purpose of the spectrum reserve.

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Kathleen O'Brien Ham

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<sup>12</sup> T-Mobile USA, Inc. and Sprint Corp., Notice of *Ex Parte*, AU Docket No. 14-252, GN Docket No. 12-268, at 2-3 (July 16, 2015); see also *Public Knowledge Proposal* at 1 (proposing the adoption of a “single trigger for the reserve (and only the reserve) of \$2 MHz/pop in the top 40 PEAs”).

<sup>13</sup> *Waxman July 9 Letter* at 2.