

January 14, 2014

EX PARTE VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269
Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions, Docket No. 12-268

Dear Ms. Dortch:

On Friday, January 10, 2014, Kathleen Ham, Steve Sharkey, Chris Wieczorek, Josh Roland, Indra Chalk, Michael Amend from T-Mobile USA, Inc. (“T-Mobile”),¹ Dr. Greg Rosston and Dr. Andrzej Skrzypacz, consultants to T-Mobile, and Trey Hanbury of Hogan Lovells US LLP, counsel to T-Mobile, met by telephone conference with Gary Epstein and Edward Smith of the Incentive Auction Task Force; Evan Kwerel of the Office of Strategic Planning and Policy Analysis; Brett Tarnutzer, Margaret Wiener, Sasha Javid, Jonathan McCormack and Martha Stancil from the Wireless Telecommunications Bureau; and Paul Milgrom and Ilya Segal of Auctionomics, a consulting firm that is advising the Commission regarding auction theory.

The participants reviewed T-Mobile’s comments filed in response to a Public Notice seeking comment on whether the Commission should offer package bidding in the context of the incentive auction.² In those comments, T-Mobile highlighted the drawbacks of package bidding, which include the creation of an excess supply of licenses upon the withdrawal of a package bid; the creation of new mechanisms to game the auction process; and the competitive risks associated with effectively granting package bidders an additional right to withdraw bids compared to individual license bidders. Given the risks, drawbacks and complexities associated with package bidding, participants on the call discussed alternative mechanisms that can reduce

¹T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

² See *Wireless Telecommunications Bureau Seeks Comment on a Proposal to License the 600 MHz Band Using Partial Economic Areas*, GN Docket Nos. 12-268, 13-185, Public Notice, DA 13-2351 (WTB, rel. Dec. 11, 2013); Comments of T-Mobile USA, Inc., GN Docket No. 12-268 (filed Jan. 9, 2014).

exposure risk without substantially increasing gaming opportunities or computational challenges. Reasonable spectrum aggregation limits, for example, can constrain exposure risk in a manner similar to package bidding, but without unduly increasing either auction complexity or gaming opportunities. Specifically, spectrum aggregation limits reduce the risk that any bidder could lose a substantial number of key markets by preventing one or two carriers from acquiring all or substantially all of the available licenses in any given area.

Participants on the call also addressed how to design auction rules that take into account licenses that are impaired by interference. During the meeting, T-Mobile and its representatives discussed the possibility of developing different categories of impairment based upon a standardized formula for predicted interference over a population within a geographic license area. While bidders might ultimately use a different formula to assess actual impairment based on the operator's specific network architecture, system performance, and operating parameters, the use of a standardized formula would provide bidders with a common baseline against which to measure the degree of impairment for any given geographic area license. Although T-Mobile continues to analyze the proper bounds for possible impairment categories, the relevant categories of population impairment might include: (i) unimpaired licenses; (ii) licenses with between 0-10 percent impairment; (iii) licenses with between 10-20 percent impairment; and (iv) licenses with a larger than 20 percent impairment. Adopting multiple categories of impairment would allow bidders to express their preferences for similar licenses without the risk of over-paying for an impaired license. Although this approach could potentially require additional categories of licenses, the Commission's auction interface could account for this by allowing bidders to express demand for impaired licenses in terms of a discount from the unimpaired license. In other words, a bidder could bid for an unimpaired license and at the same time declare that they value the impaired license at a certain dollar or percentage discount from the unimpaired license bid, or the Commission could determine a set discount based on the level of impairment as determined by the percentage of population impacted. The auction software would then automatically adjust the bids to allow arbitrage among the different licenses in a given geographic area to find the optimal outcome. This method of addressing impairment would have the advantage of allowing a seamless auction process while still accounting for material differences among different categories of licenses.

Consistent with section 1.1206(b)(2) of the Commission's rules, please associate this letter with the above-referenced dockets.

Respectfully submitted,

/s/ Trey Hanbury

Trey Hanbury
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