

**Before the
Federal Communications Commission
Washington, DC 20554**

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| In the Matter of |) | |
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| Amendment of Parts 15, 73 and 74 of the Commission’s Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones |) | MB Docket No. 15-146 |
| |) | |
| Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions |) | GN Docket No. 12-268 |
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COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”) submits these comments in response to the Notice of Proposed Rulemaking and Public Notice in the above-captioned dockets.¹ The wireless broadband spectrum to be repurposed in the incentive auction is critical to promoting mobile competition and meeting consumers’ ever-growing demand for licensed wireless services. Relatedly, spectrum in the 600 MHz band will be essential to promoting greater unlicensed operations and continued innovation by manufacturers of unlicensed white space

¹ *Amendment of Parts 15, 73 and 74 of the Commission’s Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones*, Notice of Proposed Rulemaking, 30 FCC Rcd 6711 (2015) (“*Vacant Channel NPRM*”); *Procedures for Competitive Bidding in Auction 1000 Including Initial Clearing Target Determination, Qualifying to Bid and Bidding in Auctions 1001 (Reverse) and 1002 (Forward)*, AU Docket No. 14-252, GN Docket No. 12-268, WT Docket No. 12-269, MB Docket No. 15-146, Public Notice, FCC 15-78 (rel. Aug. 11, 2015) (“*Bidding Procedures Public Notice*”); *see also Amendment of Parts 15, 73 and 74 of the Commission’s Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones*, MB Docket No. 15-146, GN Docket No. 12-268, Order, DA 15-918 (rel. Aug. 12, 2015) (establishing September 30, 2015 as the initial filing deadline in this proceeding).

devices. As the Commission noted, unlicensed devices are “an important part of our nation’s communications capabilities,”² and consumers have come to rely on unlicensed and licensed technologies working in tandem, such as a Bluetooth headset linked to a mobile phone. CCA therefore supports the Commission’s tentative conclusion to place relocated broadcast stations in the duplex gap when necessary to maximize the amount of licensed spectrum made available at auction, and to reserve a second vacant channel in the television band for unlicensed devices and wireless microphones in those few markets where the duplex gap is subject to impairment.

CCA has long supported placing broadcast stations in the duplex gap to minimize unavoidable impairments while, most importantly, maximizing broadband spectrum availability.³ Nevertheless, placing broadcast stations in the duplex gap will reduce the amount of spectrum available for unlicensed devices and wireless microphones. Unlicensed advocates have explained that access to at least three, six-megahertz channels within the 600 MHz band is required to ensure sufficient economies of scale to support the development of 600 MHz unlicensed equipment and that loss of the duplex gap could threaten that development.⁴ That is why CCA was one of the first supporters of the “replacement channel” proposal that the

² *Vacant Channel NPRM*, 30 FCC Rcd at 6715 ¶ 10.

³ *See, e.g.*, Reply Comments of Competitive Carriers Association, AU Docket No. 14-252, GN Docket No. 12-268 at 21-22 (filed Mar. 13, 2015) (proposing a channel-stacking plan that “tak[es] advantage of duplex and guard band spectrum where available” to minimize impairments).

⁴ *See, e.g.*, Comments of Microsoft Corp., ET Docket No. 14-165, GN Docket No. 12-268 at 2 (Feb. 4, 2015) (“[I]nnovators, manufacturers, and network operators need access to three or more 40 mW, 6 MHz channels in every market for personal/portable [white space device] use in order for an unlicensed ecosystem to flourish in the 600 MHz band.”).

Commission has tentatively concluded to adopt in this proceeding.⁵ Using the duplex gap for displaced broadcasters while reserving a second channel for unlicensed use in the repacked television band will maximize available spectrum in the forward auction, minimize impairments, and promote the deployment of new and innovative unlicensed technologies.

The Commission has expansive power to adopt spectrum management policies, when necessary, that promote the public interest.⁶ Expanding the spectrum available to support unlicensed devices will promote the public interest in a vibrant unlicensed device ecosystem.⁷ The Commission's actions, meanwhile, impose few costs on other stakeholders. As explained more fully below, the duplex gap will be impaired in only a handful of markets, and identifying a second vacant channel in those markets will affect a small number of LPTV stations, TV translator stations, and BAS systems. These users operate on a secondary basis and are afforded only limited rights under the Commission's rules.⁸

Furthermore, Congress intended the incentive auction to increase the amount of valuable low-band spectrum available for mobile broadband.⁹ Additional spectrum for mobile broadband

⁵ See Letter from Rebecca Murphy Thompson, General Counsel, CCA to Marlene H. Dortch, Secretary, FCC, AU Docket No. 14-252, GN Docket No. 12-268 at 3 (filed July 14, 2015).

⁶ See *Cellco P'ship v. FCC*, 700 F.3d 534, 541-42 (D.C. Cir. 2012) (explaining that the Commission has "broad authority to manage spectrum . . . in the public interest.") (internal quotation and citation omitted).

⁷ See *Vacant Channel NPRM*, 30 FCC Rcd 6715-16 ¶ 10.

⁸ See 47 C.F.R. §§ 74.702(b), 74.703 (explaining that LPTV and TV translator stations may not interfere with and must accept interference from primary services in the television band); see also *Vacant Channel NPRM*, 30 FCC Rcd at 6713 ¶ 5 ("Other licensed broadcast-related users are permitted to operate on a secondary basis, including LPTV and TV translator stations, fixed BAS, and low power auxiliary stations . . .") (internal citations omitted).

⁹ See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §§ 6402 (codified at 47 U.S.C. § 309(j)(8)(G)), 6403 (codified at 47 U.S.C. § 1452), 126 Stat. 156

will increase competition in the wireless marketplace and improve the quality of service provided to American consumers.¹⁰ Therefore, maximizing the amount of 600 MHz spectrum available to licensed operators is a critical goal of the upcoming incentive auction. Similarly, one of the few points of nearly unanimous agreement within this proceeding is that the Commission should minimize impairments to licenses in the forward auction.¹¹ But not repacking broadcasters in the duplex gap would hamstring the Commission’s ability to achieve high nationwide spectrum-clearing targets and reclaim relatively unimpaired spectrum.

The Incentive Auction Task Force (“IATF”) has conducted a series of simulations showing that an alternative proposal to protect the duplex gap from broadcaster relocation would result in the selection of lower spectrum-clearing targets.¹² Specifically, the IATF concluded that, using the “one-block-equivalent” standard for limiting nationwide impairments,¹³ the

(2012) (“Spectrum Act”); *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Notice of Proposed Rulemaking, 27 FCC Rcd 12357, 12368 ¶ 26 (2012) (“*Incentive Auction NPRM*”) (“Congress passed the Spectrum Act in early 2012 [and] authorized the Commission to conduct incentive auctions to help meet the increasing demand for spectrum to provide highly valued wireless broadband services . . .”).

¹⁰ *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6571 ¶ 5 (2014) (“*Incentive Auction R&O*”) (noting that the new 600 MHz band plan through which the Commission was reallocating spectrum would “promote competition and innovation by creating opportunities for multiple license winners and for future as well as current wireless technologies.”)

¹¹ See *Bidding Procedures Public Notice* ¶ 12, n.41 (providing a comprehensive list of commenters urging the Commission to minimize impairments in the forward auction).

¹² *Incentive Auction Task Force Releases Initial Clearing Target Optimization Simulations*, Public Notice, 30 FCC Rcd 4854, 4856 ¶ 6 (2015) (“*Simulation Public Notice*”); see also Letter from Gary M. Epstein, Chair, Incentive Auction Task Force, FCC to Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-268, WT Docket No. 12-269, AU Docket No. 14-252 at 2, n.4 (filed July 10, 2015) (“*July 10 IATF Letter*”).

¹³ See *Bidding Procedures Public Notice* ¶¶ 39-40.

Commission would be prevented from meeting clearing targets of 84 and 114 megahertz without relocating broadcasters in the duplex gap in a limited number of markets.¹⁴ The same simulations show that failing to use the duplex gap would reduce the number of unimpaired licenses offered in the forward auction while increasing the number of “Category 2” licenses and heavily impaired licenses that the Commission will not offer at all. Specifically, the IATF found that protecting the duplex gap could increase the number of Category 2 or heavily impaired licenses by as much as 19 percent.¹⁵ Given the importance of reaching high nationwide clearing targets and minimizing license impairments, CCA supports the Commission’s decision to use the duplex gap for broadcaster relocation.

The burdens imposed on TV translators, LPTV stations, and BAS facilities by the Commission’s decision to reserve a second vacant channel in a handful of markets will be insignificant when compared to the enormous public benefits resulting from increased low-band spectrum availability and increased mobile wireless competition. The IATF’s simulations demonstrate that the Commission would need to impair the duplex gap in a maximum of seven markets, only one of which would be a top-twenty market.¹⁶ The Commission has explained that there should be a significant amount of spectrum available within the television band for secondary broadcasters, “particularly outside of the central urban areas of the largest television

¹⁴ *Simulation Public Notice*, 30 FCC Rcd at 4856, n.16 (“[S]imulation results reflect that protecting the duplex gap at lower participation scenarios would result in the selection of lower clearing targets.”).

¹⁵ *Id.* at 4857 (showing that, at broadcaster participation levels of 50-60 percent, the number of Category 2 and unoffered licenses under the Commission’s proposal would be 185, but that prohibiting the placement of broadcasters in the duplex gap would increase that number to 220).

¹⁶ *July 10 IATF Letter*, Appx. at 3-5 (showing that, depending on the clearing target, the Commission may impair the duplex gap in either Cleveland, OH or Los Angeles, CA, but not both).

markets.”¹⁷ Furthermore, the Commission has explicitly noted that “the areas encompassing the vast majority of population across the country would have at least two vacant channels available” for broadcast applicants such as LPTV and TV translator stations.¹⁸

In any event, based on the operating parameters of these secondary broadcasters, it appears unlikely that they will be significantly limited by the Commission’s decision here. As the *Vacant Channel NPRM* explains, LPTV and TV translator stations have coverage areas that are smaller than full power television stations, and can therefore engineer facilities that operate in the unused spectrum between full power stations.¹⁹ Similarly, TV translator stations, by their nature, are generally deployed in less densely populated regions of the country that should have significant amounts of broadcast spectrum available, regardless of whether one or two channels are reserved for unlicensed devices and wireless microphones.

In a recently filed Petition for Reconsideration, the National Association of Broadcasters (“NAB”) requests that the Commission reconsider its decision to selectively place television stations in the duplex gap, alleging that this is a “new” decision and a “change of course” from prior proposals.²⁰ But the Commission has long considered placing broadcast stations in the

¹⁷ *Incentive Auction R&O*, 29 FCC Rcd at 6577 ¶ 22.

¹⁸ *Vacant Channel NPRM*, 30 FCC Rcd at 6716 ¶ 11.

¹⁹ *See id.* (“[T]he impact on broadcast applicants, including LPTV and TV translator stations, in terms of the availability of channels for future use, will be limited because multiple vacant channels will still exist in all or most markets as a consequence of the need to avoid interference between primary broadcast stations in the incentive auction final channel assignment process.”).

²⁰ Petition for Reconsideration of the National Association of Broadcasters, GN Docket No. 12-268, WT Docket No. 12-269, AU Docket No. 14-252, MB Docket No. 15-146 at 3 (filed Sept. 10, 2015) (“*NAB Petition*”).

duplex gap,²¹ just as NAB has opposed that proposal.²² NAB further alleges that the Commission has failed to address the needs of wireless microphones,²³ yet the Commission explicitly considered and addressed NAB’s concerns.²⁴ While acknowledging that placing stations in the duplex gap may affect wireless microphones, the Commission explained that “the goals of repurposing spectrum for mobile broadband use, minimizing impairments, and ensuring a successful auction militate in favor of flexibility and outweigh the potential benefits of protecting the duplex gap from *any* impairment.”²⁵ The Commission not only considered the issues raised by NAB, but also explicitly rejected those concerns. The Commission did so based on the overall goal of meeting “the increasing demand for spectrum to provide highly valued wireless broadband services,”²⁶ and in accordance with its statutory guidance to “make such reassignments of television channels as the Commission considers appropriate.”²⁷

The Commission tentatively concludes to selectively place broadcast stations in the duplex gap while reserving an additional channel within the television band in those impaired

²¹ See, e.g., *Incentive Auction NPRM*, 27 FCC Rcd at 12402 ¶ 126 (proposing a band plan that housed broadcast channels between the 600 MHz uplink and downlink portions of the band); *Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002*, Public Notice, AU Docket No. 14-252, GN Docket No. 12-268, 29 FCC Rcd 15750, 15765 ¶ 35 (2014) (proposing to place broadcast stations in the 600 MHz band based on a goal of minimizing impairments, and recognizing that “this approach may result in assigning television stations to the duplex gap . . .”).

²² See, e.g., Comments of the National Association of Broadcasters, GN Docket No. 12-268 at 9 (filed June 14, 2013); Reply Comments of the National Association of Broadcasters, GN Docket No. 12-268 at 2 (filed June 28, 2013).

²³ *NAB Petition* at 3.

²⁴ See *Bidding Procedures Public Notice* ¶ 26, n.91.

²⁵ *Id.* ¶ 31.

²⁶ *Incentive Auction NPRM*, 27 FCC Rcd at 12368 ¶ 26.

²⁷ Spectrum Act § 6403(b)(1)(B)(i).

markets for unlicensed device and wireless microphone operations, which strikes a deft balance between competing interests. The Commission is supporting its primary goals of minimizing impairments and maximizing reclaimed spectrum in the forward auction while recognizing the public benefits provided by unlicensed devices and wireless microphones. CCA supports the Commission's tentative conclusions in these proceedings and urges the Commission to move forward with its plan to begin the incentive auction on March 29, 2016.

Respectfully submitted,

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