

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

In the Matter of)	
)	
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
)	

COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc. (“T-Mobile”)¹ submits these comments in response to the Notice of Proposed Rulemaking and Public Notice in the above-captioned proceedings.² T-Mobile supports the Commission’s proposal to promote innovation in the 600 MHz band by preserving a vacant channel in all markets for unlicensed devices and wireless microphones. T-Mobile also supports preserving a second channel in those markets where the Commission must impair the

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

² *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) (setting September 30, 2015 as the Comment filing deadline in this proceeding).

duplex gap with relocated broadcasters to achieve higher spectrum clearing targets in the incentive auction.

The Commission has explained that unlicensed devices provide significant public benefits,³ and T-Mobile has long been a vocal advocate for unlicensed operations.⁴ T-Mobile was the first carrier to support worldwide Wi-Fi calling and every smartphone being sold by T-Mobile now supports the service.⁵ In fact, T-Mobile customers now average more than 9.4 million Wi-Fi calls per day.⁶ By ensuring that unlicensed devices and wireless microphones have nationwide access to spectrum in the reallocated television spectrum band, the Commission will promote investment and innovation in these technologies. T-Mobile therefore supports the Commission's proposal to preserve at least one UHF channel for unlicensed devices and wireless microphones in the 600 MHz band and to preserve a second channel in the few markets where the duplex gap will be impaired by relocated broadcasters.

Some parties have expressed concern over the potentially limited availability of channels for LPTV and TV translator stations if one or two vacant channels are preserved for unlicensed

³ *Vacant Channel NPRM*, 30 FCC Rcd at 6715-16 ¶ 10.

⁴ See Comments of T-Mobile USA, Inc., ET Docket No. 15-105, at 2-3 (June 11, 2015) (describing T-Mobile's support of unlicensed spectrum usage); see also Monica Allevan, *T-Mobile champions co-existence amid calls for FCC intervention in LTE-U*, FIERCEWIRELESSTECH (Aug. 3, 2015), <http://www.fiercewireless.com/tech/story/t-mobile-champions-co-existence-amid-calls-fcc-intervention-lte-u/2015-07-31> (“[T-Mobile] continue[s] to champion co-existence and [has] been innovating in the unlicensed band for many years now, having worked with partners to bring Wi-Fi calling to market for the first time in 2007 . . .”).

⁵ See Press Release, T-Mobile US, Inc., *T-Mobile Launches Un-carrier 7.0 Un-leashes Wi-Fi Worldwide* (Sept. 10, 2014), <http://newsroom.t-mobile.com/media-kits/un-carrier-7-media-kit.htm>.

⁶ T-Mobile US, Inc., Annual Report (Form 10-K), at 3 (Feb. 19, 2015).

devices and wireless microphones,⁷ but there will likely be ample capacity for these secondary broadcasters. The Commission has explained that multiple vacant channels will still exist in most areas because of the co- and adjacent-channel separation requirements, which protect primary broadcast stations from interfering with one another.⁸ The numerous simulations run by the Commission show at least two vacant channels will remain available in areas that cover a large majority of the U.S. population.⁹

Further alleviating concerns about spectrum availability for broadcasters is the Commission's initiation of a proceeding to facilitate channel sharing among LPTV and TV translator stations.¹⁰ T-Mobile supports granting LPTV and TV translator applicants greater flexibility to share channels in markets where spectrum availability is limited by unlicensed device and wireless microphone operations. These proposals would not only free additional spectrum and promote greater LPTV operations, but also allow LPTV and TV translator stations to reduce operating expenses by splitting the costs of tower leases and infrastructure with other low power, Class A, or full power television stations.

⁷ See *Ex Parte* Letter from Patrick McFadden, Vice President Spectrum Policy, Legal and Regulatory Affairs, National Association of Broadcasters, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 15-146 (July 27, 2015) (stating “there will not be enough channels for all of [the displaced translator and low power stations] to stay on the air after the auction”).

⁸ *Vacant Channel NPRM*, 30 FCC Rcd at 6716-17 ¶ 11 (“[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.”).

⁹ See *id.*

¹⁰ See *Amendment of Parts 73 & 74 of the Commission's Rules to Establish Rules for Digital Low Power Television & Television Translator Stations*, Third Notice of Proposed Rulemaking, 29 FCC Rcd 12536, 12542 ¶ 13 (2014).

The relatively small burdens associated with the proposed vacant channel demonstration requirement should not dissuade the Commission from promoting unlicensed operations in the 600 MHz band. A broadcaster wishing to construct a new, displacement, or modified broadcast station on a vacant channel will need to demonstrate that one or occasionally two channels will remain open for unlicensed uses.¹¹ This additional analysis requirement would not impose a significant burden; a broadcast applicant will benefit from the streamlined method of quickly determining whether its proposed facilities will affect the continued availability of vacant channels.¹² The small administrative burden of the proposed vacant channel demonstration should not stand in the way of the public benefits of robust unlicensed operations in the 600 MHz band.

The Commission has ample authority to preserve vacant television channels for shared use by white space devices and wireless microphones. Title III of the Communications Act of 1934, as amended, “endow[s] the Commission with ‘expansive powers,’” including “broad authority to manage spectrum . . . in the public interest.”¹³ Similarly, section 6403(b) of the Middle Class Tax Relief and Job Creation Act of 2012 provides for the UHF band reorganization.¹⁴ Section 6403(b)(1) broadly authorizes the FCC to reassign TV channels and reallocate such portions as the Commission considers appropriate. While section 6403(b)(5) of the Act provides that nothing in this grant “shall be construed to alter the spectrum usage rights of low-power

¹¹ *Vacant Channel NPRM*, 30 FCC Rcd at 6725-31 ¶¶ 35-50.

¹² *Id.* at 6716-17 ¶ 11. The Commission’s proposal to exempt modifications to Class A and full power television stations from the vacant channel demonstration is appropriate, as it will facilitate a rapid and non-disruptive transition and give these stations flexibility to propose expanded facilities and alternative channels. *See id.* at 6721 ¶ 20.

¹³ *Cellco P’ship v. FCC*, 700 F.3d 534, 541-42 (D.C. Cir. 2012); *see also* 47 U.S.C. § 303.

¹⁴ *See* Pub. L. No. 112-96, § 6403(b), 126 Stat. 156 (2012) (“Spectrum Act”).

television stations,” the Commission correctly notes that nothing in the Spectrum Act constrains the Commission’s broad authority, under section 303 of the Communications Act, to manage spectrum in the public interest.¹⁵ Section 6403(i)(1) states that nothing in section 6403(b) shall be construed to “expand or contract the authority of the Commission, except as otherwise expressly provided.”¹⁶

Though LPTV and TV translator stations have argued that section 6403(b)(5) of the Spectrum Act prevents the Commission from altering low-power television stations’ spectrum usage rights,¹⁷ that subsection solely defines the meaning and scope of that section. When proposing this vacant channel rule, the Commission did not alter the spectrum usage rights of LPTV and TV translator stations through the repacking process. Indeed, LPTV and TV translator stations operate on a secondary basis and “may not cause interference to, and must accept interference from, full-service television stations, certain land mobile radio operations and other primary services.”¹⁸

The Commission has both the authority and the duty to balance the needs of licensed mobile operations, unlicensed devices, wireless microphones, and incumbent broadcasters. The proposal to preserve one or two vacant channels within the television band for unlicensed

¹⁵ *Vacant Channel NPRM*, 30 FCC Rcd at 6719-20 ¶ 18.

¹⁶ Spectrum Act § 6403(i)(1).

¹⁷ See Comments of National Association of Broadcasters, GN Docket No. 12-268, at 4-6 (May 8, 2014).

¹⁸ *Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend the Rules for Digital Class A Television Stations*, Report and Order, 19 FCC Rcd 19331, 19333 ¶ 2 (2004); see also *Expanding the Economic & Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6673-74 ¶ 239 (2014).

operations and wireless microphones fulfills that duty, and T-Mobile therefore supports the Commission's tentative conclusions in these proceedings.

Respectfully submitted,

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