

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Amendment of Part 15 of the Commission’s Rules for Unlicensed Operation in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, and	)	ET Docket No. 14-165
	)	
Amendment of Part 74 of the Commission’s Rules for Low Power Auxiliary Station in the Repurposed 600 MHz Band and 600 MHz Duplex Gap	)	
	)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions	)	GN Docket No. 12-268
	)	

To: The Commission

**REPLY OF xG TECHNOLOGY, INC.**

xG Technology, Inc. (xG), by its representatives, hereby submits its Reply to the comments filed in response to the Commission’s *Notice of Proposed Rulemaking (NPRM)* in these proceedings.

xG first notes that a common theme running through the filed comments is the issue of potential interference among devices operating in the TV bands and the 600 MHz band; and with good justification. Interference avoidance is the overriding issue facing the Commission in establishing rules for operation in these bands. Curiously, however, those commenters stating they had tested interference-avoidance equipment for use in this environment had not tested cognitive radio equipment at all except for Shure Incorporated (Shure), which states that it has been actively involved in all phases of FCC laboratory and field testing to evaluate viability of different cognitive radio technologies proposed for White Space operation. Shure adds that it

has contributed extensive engineering and hardware to the FCC test effort and coordinated FCC field test at FEDEX field and Broadway to evaluate cognitive radio technologies in real-world environments.<sup>1</sup> The fact that xG's cognitive radio equipment was not included in the reported testing is undoubtedly due to the fact that the equipment was still in the development stage at the time and had not received formal FCC equipment certification. However, as reflected in xG's comments in these proceedings, its xMax™ cognitive radio equipment is now approved for commercial use in the U.S. and provides a viable alternative to the Commission's proposals for interference avoidance and mitigation.

xG joins with the WhiteSpace Alliance (WSA) in promoting the opportunistic use of licensed spectrum by unlicensed cognitive radios. xG agrees that such devices, driven by geolocation databases (or together with sensing technologies and beaconing approaches), can operate on vacant, unassigned frequencies, as well as on frequencies that may be licensed but are not yet in use.<sup>2</sup> Along with WSA, xG supports the maximum availability of unlicensed spectrum in licensed bands.

xG agrees with and supports generally the comments of Google Inc. in describing the major changes that are needed to maximize use of the TV Bands and 600 MHz band with the least possible prospect of interference.

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<sup>1</sup> *Comments of Shure Incorporated*, at fn. 4.

<sup>2</sup> *Comments of WhiteSpace Alliance*, at 2-3, citing *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567 (2014), ¶680, wherein the Commission specifically authorized the continued operation of white space devices on repurposed TV band spectrum pending commencement of operations by the new wireless licensee.

Respectfully submitted,

**xG TECHNOLOGY, INC.**

*/s/ Harold Mordkofsky*

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