

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Microsoft Corporation Request to amend 47 CFR)	ET Docket No. 14-165
Sections 15.703, 15.707, 15.709, 15.711 and 15.712)	
for Unlicensed Operations in the Television Bands,)	RM No. 11840
Repurposed 600 MHz Band, 600 MHz Guard		
Bands and Duplex Gap, and Channel 37		

**COMMENTS OF THE AMERICAN SOCIETY FOR HEALTHCARE ENGINEERING
OF THE AMERICAN HOSPITAL ASSOCIATION**

The American Society for Healthcare Engineering (“ASHE”) of the American Hospital Association (“AHA”) provides these comments pursuant to Section 1.405 of the Commission’s Rules, 47 C.F.R. § 1.405, in response to Microsoft Corporation’s Petition for Rulemaking filed May 3, 2019,¹ which was placed on Public Notice on May 9, 2019.² Microsoft seeks changes to the Commission’s technical rules governing unlicensed television White Space devices (“WSDs”), including permitting WSDs to operate at higher power and at increased heights above average terrain, in order to facilitate the provision of rural broadband services.

ASHE has a significant interest in the Microsoft Petition because of its potential adverse impact on the Part 95 Wireless Medical Telemetry Service (“WMTS”). In 2001 ASHE was designated by the FCC as the frequency coordinator for WMTS and was assigned the responsibility to create and maintain a database of WMTS licensees and deployments as the

¹ Microsoft Corporation, Petition for Rulemaking, ET Docket No. 14-165 (May 3, 2019) (“Microsoft Petition”).

² Public Notice: Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, Report No. 3127, RM No. 11840 (May 9, 2019).

primary source of information concerning each licensee's location and technical parameters.³

WMTS devices are used in hospitals to transmit waveforms and other physiological data from patient measurement devices to a nearby receiver's antenna in order to provide early detection of life-threatening physiologic developments so that appropriate intervention can be rendered in a timely manner. WMTS devices monitor electrocardiogram (ECG), oxygen saturation, blood pressure, respiration, and a variety of other characteristics, providing patients with mobility and comfort while allowing them to be monitored for adverse symptoms.⁴

Licensed WMTS systems operate in one of two main frequency bands, the 608-614 MHz band (TV Channel 37) and the 1.4 GHz band (1395-1400 MHz and 1427-1432 MHz). WMTS Channel 37 is bordered on its lower side by spectrum allocated to television broadcasters and, if not licensed in a particular market to a TV broadcaster, available for unlicensed WSDs of the type that the Microsoft Petition addresses. The FCC adopted rules that would allow WSDs to operate on Channel 37 under specified parameters that are supposed to protect WMTS operations from harmful interference.⁵ ASHE is a member of the WMTS Coalition that filed a still-pending petition for reconsideration to correct a number of technical issues relevant to WSD operation on Channel 37 in the current rules.⁶ WMTS equipment manufacturer GE Healthcare ("GEHC") separately filed a petition for reconsideration, also seeking more appropriate protection for WMTS operations from potential interference from WSDs.⁷

³ See Amendment of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service, *Order*, 16 FCC Rcd 4543 (2001).

⁴ See Amendment of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service, *Report and Order*, ET Docket 99-255, 15 FCC Rcd 11206 (2000).

⁵ *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37*, Report and Order, 30 FCC Rcd 9551 (2015) (the "*Part 15 Report and Order*").

⁶ Petition for Reconsideration of the WMTS Coalition, GN Docket No. 12-268 (Dec. 23, 2015).

⁷ Petition for Reconsideration of GE Healthcare, GN Docket No. 12-268 (July 28, 2015)

ASHE supports efforts to promote broadband connectivity in rural America. As a representative of the hospitals that use WMTS for life-monitoring services, however, ASHE remains concerned about threats of co-channel or adjacent channel interference to WMTS operations. Although the Microsoft Petition does not expressly reference Channel 37, ASHE is concerned whether the rule changes proposed by Microsoft are intended to apply to WSD operations on Channel 37 and adjacent channels also.

In this respect, ASHE supports the comments that GEHC is submitting on the Microsoft Petition. Specifically, ASHE does not oppose Microsoft's proposed rule changes, provided they will not apply to operations in Channel 37 and adjacent channels and thus will not affect Channel 37 WMTS. However, if Microsoft intends for its proposals to apply to Channel 37 and adjacent channels, for the reasons discussed in the GEHC comments, ASHE opposes any increases to the currently permissible radiated power and antenna height above average terrain limits. Without further clarification that the proposed rules will apply solely to TV White Space channels below Channel 36, the Commission should deny Microsoft's Petition.

Respectfully submitted,

**The American Society for Healthcare
Engineering of the American Hospital
Association**

s/ Tim Adams

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