

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Amendment of Parts 73 and 74 of the
Commission's Rules to Establish Rules for
Replacement Digital Low Power Television
Translator Stations

MB Docket No. 08-253

**REPLY COMMENTS OF DELL, INC.,
GOOGLE INC., AND MICROSOFT CORP.**

Dell, Google, and Microsoft fully support the Commission's efforts to complete the DTV transition, and agree that all Americans should have the same level of television service they received via analog signals.¹ As the Commission recognizes, broadcasters have numerous tools at their disposal to achieve this goal, including adjusting antenna height, increasing transmit power, constructing distributed transmission systems, employing different antennas, moving transmitter locations, changing broadcast channels, using the subchannels of nearby stations, and/or partnering with existing low power stations.² While the replacement digital translator service the Commission now proposes might also play a limited role in maintaining existing television service levels, the record in this proceeding makes clear that safeguards to govern such systems will be necessary to ensure that TV band spectrum can provide Americans with both high quality television *and* innovative wireless broadband applications. If new replacement translators are used

¹ *See Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Replacement Digital Low Power Television Translator Stations*, MB Docket No. 08-253, Notice of Proposed Rulemaking (¶ 3) (rel. Dec. 23, 2008) ("*NPRM*").

² *See id.* at ¶ 2.

only where more efficient tools are unavailable, it will not be necessary to trade one beneficial TV band use for the other.

1. Replacement Digital Translators Should be a Solution of Last Resort.

Unlike most signal loss solutions identified by the Commission, replacement digital translator systems are inherently spectrally inefficient, requiring multiple 6 MHz channels to deliver the signal of a single television station.³ Indeed, as the Commission explained in the Digital Transmission Systems proceeding, one of the advantages of using DTS systems rather than translators to address signal loss is that “DTS uses the stations’ already allotted frequency, whereas translators require one or more additional frequencies” to achieve the same result.⁴ Accordingly, replacement translators should not be authorized in any manner that would decrease broadcasters’ incentive to deploy DTS systems and/or the other more spectrally efficient means the Commission has provided.⁵

Most importantly, given the need to find more ways of providing broadband service to all Americans, a new replacement translator service that is not carefully tailored in the proper way could foreclose the use of many unlicensed white space channels – taking away with one hand what the Commission just gave to consumers with the other hand.⁶ While some have speculated that deploying replacement translator

³ See *NPRM* ¶ 4 (discussing channels on which replacement translators could operate).

⁴ *Digital Television Distributed Transmission System Technologies*, Report and Order, 23 FCC Rcd. 16731 (¶ 6) (2008).

⁵ See, e.g., Comments of AT&T, Inc. at 5-6; Comments of the Community Broadcasters Association at 2. See also Comments of the Rural Telecommunications Group, Inc. at 9 (observing that “television broadcasters already have the means to prevent loss of service to analog viewers if they wish to do so”).

⁶ See *NPRM* ¶ 6 (“We seek comment on the effect, if any, of this new translator service on the prospects for future white spaces use of the spectrum.”).

systems “would not have a significant impact on unlicensed device deployment,”⁷ this is simply not so. Because white space devices cannot transmit within the service contour of a full-power television station even when a viewable signal is not present, replacement translator systems would result in numerous locations where a white space device would have to avoid two television channels simply to protect a single television signal.⁸ Such systems could therefore dramatically reduce or eliminate available white space spectrum, particularly in densely populated areas where the majority of television channels already are occupied.

This concern is far from hypothetical. The replacement translator rules as drafted could allow a broadcaster to deploy a replacement translator even for signal loss areas “as small as a city block.”⁹ Moreover, broadcasters have now sought even more “latitude” from the Commission in demonstrating that an area is not served by the underlying full power station.¹⁰ In other words, this proceeding could provide the means for full-power broadcasters to needlessly restrict access to spectrum that would otherwise be used for applications ranging from innovative wireless services to local community television.¹¹ For this reason, Dell, Google, and Microsoft fully agree that no new replacement digital

⁷ Comments of Cohen, Dippell and Everist, PC at 1.

⁸ *See generally Unlicensed Operation in the TV Broadcast Bands, Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd. 16807 (2008) (“*White Spaces 2d R&O*”). Indeed, white space devices are “required to protect low power TV services [at] 41 dB μ V/m, the same threshold of service they protect for full service TV stations.” *Id.* at 16865 (¶ 65).

⁹ *See* Comments of TCA, Inc. at 4.

¹⁰ Comments of the National Association of Broadcasters and the Association of Maximum Service Television, Inc. at 3.

¹¹ *See generally White Spaces 2d R&O*; Comments of the Community Broadcasters Association.

translator system should be authorized “absent a showing that [other technological solutions are] technically infeasible.”¹²

2. Protection for Replacement Digital Translators Should Be Limited to Existing Analog Service Contours.

The Commission has recognized that it will be “necessary to ensure that the replacement translator service is limited to only those situations where a station seeks to restore service to a loss area.”¹³ Although the Commission has tentatively concluded that it will allow a “*de minimis*” expansion of service as a result of deploying replacement translators, some of the proposals in this proceeding confirm the need to place strict and precise limits on such expansion.¹⁴ As CTIA has cautioned, a *de minimis* exemption otherwise could “inadvertently creat[e] incentives for full service broadcast stations to expand their service area ... through the deployment of new digital translators.”¹⁵ The Commission should avoid this result by making clear that any interference protection afforded the replacement translator system is co-extensive with the Grade B analog contour of the underlying full power station.

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Digital television technology has enabled broadcasters to make far more efficient use of spectrum. As a result, frequencies that once carried only analog signals can now

¹² See Comments of the Community Broadcasters Association at 2.

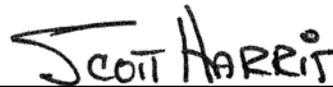
¹³ *NPRM* ¶ 9.

¹⁴ For example, the National Translator Association has suggested that protection for replacement translator systems should be permissible up to “10km outside the boundary of the primary station.” Comments of the National Translator Association at 2. See also Comments of Cohen, Dippell and Everist, PC at 2 (arguing that replacement translators should “be permitted to expand outside the predicted Grade B service area by 25 percent of the translator normally protected service area”).

¹⁵ Comments of CTIA – The Wireless Association® at 5.

provide higher quality television as well as a range of innovative wireless broadband services – and, of course, this is precisely why the digital transition was undertaken. While it is undeniably important to ensure that Americans do not lose existing television service as a result of the DTV transition, doing so in a spectrally inefficient way will foreclose many exciting new uses for this spectrum. For this reason, it will be critical for the Commission to establish an appropriately balanced approach that authorizes replacement digital translator systems only where more spectrally efficient solutions are unavailable, and limits protection for those systems to existing analog service areas.

Respectfully submitted,



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