

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

In the Matter of)
)
Amendment of Parts 73 and 74 of the) MB Docket No. 08-253
Commission’s Rules to Establish Rules)
for Replacement Digital Low Power)
Television Translator Stations)

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

CTIA – The Wireless Association (“CTIA”)¹ respectfully submits these comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) above-captioned Notice of Proposed Rulemaking (“NPRM”).² CTIA strongly opposes the Commission’s proposed creation of a new “replacement” digital television translator service in the lower 700 MHz band, as such operations would pose a significant risk of harmful interference to primary licensees in that band. Moreover, such an action would disrupt licensees’ reasonable expectations regarding the utility of licenses purchased at auction, while failing to provide any long-term public benefit. Further, resolution of interference between primary Commercial Mobile Radio Service (“CMRS”) operations and secondary digital TV translators would likely be difficult to resolve, and creates an unacceptable administrative burden for primary licensees.

¹ CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including 700 MHz, cellular, Advanced Wireless Service, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

² *Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Replacement Digital Low Power Television Translator Stations*, Notice of Proposed Rulemaking, FCC 08-278 (2008) (“NPRM”).

I. INTRODUCTION AND BACKGROUND

Wireless carriers spent more than \$19 billion in four separate FCC spectrum license auctions to obtain exclusive spectrum rights to 700 MHz spectrum.³ Of this total, more than \$14 billion was spent for spectrum previously containing TV channels 52-59, the spectrum that the Commission now has proposed for secondary use by new “replacement” digital television translator service operations.⁴ Under the proposal in the NPRM, eligibility for new low power television (“LPTV”) translators will be limited to full-power stations seeking supplemental fill-in coverage to replicate their current analog coverage.⁵ The Commission has proposed to further limit use of former television stations 52-59 – the lower 700 MHz band – to LPTV translators that cannot be accommodated in the digital core.⁶

As stated above, CTIA strongly opposes the proposal set forth in the NPRM. Spectrum in the lower 700 MHz band has been reallocated on a primary basis for commercial fixed and mobile uses. These primary users cannot share the band with the proposed service without significant risk of harmful interference to the primary license holders, interference which contravenes the well-settled expectations of licensees and which would be extremely difficult to resolve.

³ See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced, Public Notice, 15 FCC Rcd 18026 (2000) (“Auction 33 Public Notice”); Lower 700 MHz Band Auction Closes: Winning Bidders Announced, Public Notice, 17 FCC Rcd 17272 (2002) (“Auction 44 Public Notice”); Auction of Lower 700 MHz Band Licenses Closes: Winning Bidders Announced for Auction No. 60, Public Notice, 20 FCC Rcd 13424 (2005) (“Auction 60 Public Notice”); Auction of 700 MHz Band Licenses Closes: Winning Bidders Announced for Auction 73, Public Notice, 23 FCC Rcd 4572 (2008) (“Auction 73 Public Notice”).

⁴ NPRM at ¶¶ 4, 8.

⁵ *Id.* at ¶ 2.

⁶ *Id.* at ¶ 4.

Additionally, creation of this secondary translator service will ultimately confuse consumers of broadcast services. Viewers that only recently were instructed to tune to a particular channel as part of the DTV Transition could be forced to switch yet again to another channel on an area-by-area basis, but without the pervasive messaging of the nationwide DTV Transition, as primary 700 MHz wireless licensees deploy in their spectrum.

II. THE USE OF THE LOWER 700 MHZ BAND BY NEW DIGITAL TV TRANSLATORS SHOULD NOT BE PERMITTED

The Commission should not permit the use of the lower 700 MHz band for new digital TV translators, as such operations will cause significant harm to primary operations and undermine mobile wireless broadband buildout while providing a negligible public benefit. Wireless carriers, including many of CTIA's member companies, bid more than \$14 billion on lower 700 MHz spectrum in Commission auctions with the understanding that they would have the exclusive right to use this spectrum for commercial fixed and mobile services without interference from new in-band operations. The Commission's proposal contravenes these well-settled expectations. Because prior LPTV use of the lower 700 MHz band has been frozen and the Communications Act of 1934, as amended, required existing full power broadcasters to cease operations in this band as of February 17, 2009, bidders had no notice that additional users could be introduced into the band for the DTV translator service under consideration in this NPRM. Indeed, the potential for such action may well have affected prices paid for lower 700 MHz licenses.

The lack of prior notice to auction bidders and likely negative impact on the utility of these previously-auctioned bands would render the Commission's actions *ultra vires* if it were to proceed with creating the proposed digital TV translator service. Such a decision would both risk the integrity of the agency and its auction process and create uncertainty for capital markets

to assess foreseeable risks associated with future auctions. Instead of allowing replacement TV translators in the lower 700 MHz band, the Commission should focus its efforts on the numerous alternative methods cited in the NPRM as possible remedies to service loss.⁷

As digital TV translators and new CMRS operations in the lower 700 MHz band are fundamentally incompatible and interference cannot be mitigated through engineering practices, any digital TV translator use of the lower 700 MHz spectrum would be at best a short-term solution without any real public benefit. The Commission's buildout requirements for wireless licensees in this spectrum⁸ coupled with licensees' own aggressive plans to buildout wireless services ensures that there will be very little room, even on a temporary basis – if any – for secondary digital TV translator operations in this band except on a transitional basis. Translators only will be allowed to operate for as long as primary wireless licensees have not built out their networks, and the Commission's proposal to limit use of this spectrum to areas where no spectrum is available in the digital core necessarily means that these "loss areas" will ultimately be unserved. The NPRM's conclusion that the proposal "would permit full-service television stations to operate new digital translators to maintain existing service"⁹ is therefore incorrect with respect to the lower 700 MHz spectrum – if television stations are relegated to placing translators in that band, service loss is inevitable.

This service loss means that consumers of broadcast services, the intended beneficiaries of these new TV translators, ultimately would be subjected to greater confusion. Specifically, television viewers have been informed that on February 17, 2009 (or perhaps now even months

⁷ NPRM at ¶ 2.

⁸ See 47 C.F.R. § 27.14.

⁹ NPRM at ¶ 3.

later), they must tune to a station's particular digital channel. Imagine the subsequent confusion when, under the process considered in the instant NPRM, these viewers could lose their signal or would have to switch to another frequency – perhaps in another band requiring a converter box, but without the pervasive, national messaging, education and converter box discount and distribution program that has marked the DTV Transition. For example, thousands of viewers in the eastern region of a television market could be forced to switch one month, followed by viewers in the northwestern region of the same market being forced to switch four months later as primary 700 MHz wireless licensees deploy their spectrum. Who would be responsible for getting the necessary equipment to consumers and how would the crucial education and messaging be communicated to viewers?

Further, CTIA submits that the FCC should be wary of inadvertently creating incentives for full service broadcast stations to expand their service area beyond the “loss areas” through the deployment of new digital translators.¹⁰ CTIA notes that, should broadcasters require additional spectrum to fill in coverage holes, they have the option of acquiring it on the secondary market in the same manner as wireless carriers.

The proposed rules also will impose an unreasonable burden on primary licensees in the band, as interference between primary CMRS operations and secondary digital TV translators could be difficult to resolve. The NPRM provides no significant detail on how interference is to be measured or determined between these incompatible spectrum uses. Rather, digital TV translator operators would simply be required to notify CMRS licensees of their intent to operate

¹⁰ *Id.* at ¶ 7 (contemplating permitting *de minimis* extensions of the service beyond a broadcast station's existing analog contours). Indeed, the Commission should be especially careful not to create such an opportunity in light of the competing broadcast service offerings between full power broadcast stations and 700 MHz licensees such as QUALCOMM, Inc., which operates a mobile television service.

30 days prior to initiation of service.¹¹ The Commission has provided absolutely no guidance on the parameters or procedures that a lower 700 MHz band licensee may use to dispute the application of a secondary digital TV translator, and the entire burden of determining whether interference may result appears to fall on the new 700 MHz licensees. Indeed, in other contexts in the broadcast and FCC rules, termination of secondary operations requires a demonstration of actual interference, and CTIA strongly disagrees that this model should apply to translators operating in the lower 700 MHz band. Quite simply, shifting to primary licensees the onus of demonstrating interference—and actually experiencing harm—is unreasonably burdensome and at odds with the terms of the 700 MHz auctions.¹² Instead, at a minimum, primary CMRS licensees must have the authority to approve or reject any new digital TV translator based on projected interference.

CTIA stresses that the dynamic nature of interference to mobile CMRS users traveling in and out of interference range of stationary broadcast transmitters cannot be managed in the same way as interference to fixed users. For example, wireless coverage and reception are constantly changing due to factors such as the propagation characteristics of the spectrum being utilized, network capacity, weather, topography, foliage, the number of customers using the cell or cell sector, and whether a customer is in-building or in-car. Certain factors – network capacity, weather, foliage, etc. – change seasonally, daily, and hourly. Further, mobile wireless coverage

¹¹ *Id.* at n. 4.

¹² For example, when the Commission established rules for LPTV and TV translator stations, it held that interference resolution would either need to be addressed through an onerous notification process in cases of potential interference or that, in the case of actual interference, “a primary wireless licensee maintains the right to require that a secondary broadcast licensee immediately cease operations that cause actual interference to its operations.” *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 Rules for Digital Class A Television Stations*, Report and Order, 19 FCC Rcd 19331, ¶¶ 72-75 (2004).

areas, system capacity, and throughput all suffer when wireless networks must contend with other operations in their bands. It is well-established that, “[w]hen an external source adds noise to the environment, the total noise rises.”¹³ When the total noise rises, the noise floor increases, thereby impacting carriers’ ability to efficiently utilize the spectrum.

Even if the Commission were to clarify coordination procedures between primary wireless licensees and secondary broadcast licensees in cases of actual or projected interference, this process is untenable and unacceptable. Primary lower 700 MHz licensees bid on this purportedly exclusive spectrum with no notice of the proposed service, and they should not be required to engage in negotiations to use spectrum for which they paid the U.S. Treasury significant amounts of money.

¹³ Charles Jackson, Raymond Pickholz, and Dale Hatfield, *Spread Spectrum is Good – But it Does Not Obsolete NBC v. U.S!*, 58 FED. COMM. L.J. 245, 260 (2006).

III. CONCLUSION

For the reasons stated above, CTIA strongly opposes the NPRM proposal to create a replacement TV translator service on channels 52-59 and urges the Commission to reject it, as the proposed service would unacceptably hinder the operations of primary licensees in the band.

Respectfully submitted,

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Dated: January 12, 2009

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