

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

In the Matter of)
)
Authorization of Next Generation TV for) GN Docket No. 16-142
Permissive Use as a Television Standard)

REPLY COMMENTS OF CTIA

I. INTRODUCTION.

CTIA¹ submits these reply comments in response to the Commission’s Public Notice seeking comment on a Joint Petition for Rulemaking on a new broadcast television standard.²

CTIA applauds the efforts of the broadcast industry to continue to evolve and serve their viewers. CTIA’s interest in this proceeding is limited to any potential impact on the broadcast television incentive auction, the post-auction repacking process, or the post-repacking 600 MHz frequency environment. Specifically, CTIA asks the Commission to:

- ***Keep the post-auction repacking process and timeline in place.*** As the ATSC 3.0 transition appears to be in its early stages, the ATSC 3.0 transition should not impact in any manner the 39-month transition set for the broadcast incentive auction repacking process.

¹ CTIA® represents the U.S. wireless communications industry. With members from wireless carriers and their suppliers to providers and manufacturers of wireless data services and products, the association brings together a dynamic group of companies that enable consumers to lead a 21st century connected life. CTIA members benefit from its vigorous advocacy at all levels of government for policies that foster the continued innovation, investment and economic impact of America’s competitive and world-leading mobile ecosystem. The association also coordinates the industry’s voluntary best practices and initiatives and convenes the industry’s leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, D.C.

² *Media Bureau Seeks Comment on Joint Petition for Rulemaking of America’s Public Television Stations, the AWARN Alliance, the Consumer Technology Association, and the National Association of Broadcasters Seeking to Authorize Permissive Use of the “Next Generation TV” Broadcast Television Standard*, Public Notice, 31 FCC Rcd 3858 (2016).

- ***Avoid straining the \$1.75 billion repacking budget.*** Neither Congress in the Spectrum Act nor the Commission at the time it adopted rules envisioned that a technology upgrade would accompany the repacking. Particularly given broadcast concerns about the sufficiency of the \$1.75 billion fund, broadcasters should be responsible for any costs associated with ATSC 3.0 equipment that are beyond the costs associated with repacking based on current technology.
- ***Understand the potential interference impact on wireless licensees.*** The interference impact of ATSC 3.0 is currently unknown, as both the Commission’s ISIX and *TVStudy* models are based on ATSC 1.0 broadcast signal characteristics. CTIA trusts that the broadcast industry will provide sufficient technical evidence in this proceeding on the continued positive co-existence between broadcast and wireless services.

II. THE TRANSITION TO ATSC 3.0 SHOULD NOT DELAY THE POST-AUCTION REPACKING PROCESS.

Whatever action the Commission takes in this proceeding with respect to ATSC 3.0, it should not do anything that would delay or interrupt the 39-month post-auction repacking process.³ Several parties in this proceeding have sought to tie the ATSC 3.0 transition to the post-auction repacking process.⁴ This is a step that was not contemplated by the Spectrum Act or by the Commission when it adopted its auction rules. Given that the ATSC 3.0 transition

³ See, e.g., *Policies Regarding Mobile Spectrum Holdings*, Report and Order, 29 FCC Rcd 6133, ¶ 81 (2014).

⁴ See, e.g., Letter from Rebecca Hanson, Sinclair to Marlene H. Dortch, FCC, GN Docket No. 16-142, at 2 (May 26, 2016) (“We urge the FCC to time its adoption of Next Generation TV with the post-auction repack of the television band.”); Comments of Graham Media Group, GN Docket No. 16-142, at 4 (May 26, 2016); Comments of Gray Television, Inc., GN Docket No. 16-142, at 4 (May 26, 2016).

appears to be at an early stage,⁵ not all internal broadcast issues have been resolved,⁶ and not all broadcasters have committed to its adoption,⁷ efforts to link the repacking process to the ATSC 3.0 transition appear unrealistic and should not be allowed to inject uncertainty into the FCC’s 39-month repacking schedule.

III. BROADCASTERS SHOULD NOT SEEK REIMBURSEMENT FOR ATSC 3.0-RELATED COSTS FROM THE REPACKING FUND.

While CTIA has no objection to broadcasters acquiring improved equipment as part of the repacking, broadcasters should be responsible for covering the costs in excess of that needed to acquire comparable facilities. Specifically, the reimbursement of technology transition expenses was not contemplated by the Spectrum Act or during any stage of the implementation

⁵ The ATSC 3.0 standard has not yet been completed or ratified. The framers of ATSC 3.0 recently extended their deadline for choosing a winning high dynamic range (“HDR”) proposal until September 30, suggesting that the timeline remains fluid and uncertain. *ATSC 3.0 Framers Delay HDR System Choice for 2 Months to ‘Get It Done Right’*, Communications Daily, at 12 (June 17, 2016). There is also a potential for engineering delays associated with the integration and rollout of a new technical standard. Further, a new broadcast standard could lead to deployment challenges for other key stakeholders. *See, e.g.*, Comments of the National Cable & Telecommunications Association, GN Docket No. 16-142, at 2 (May 26, 2016).

⁶ Proposals to tie the ATSC 3.0 transition to the repacking process appear to raise unanswered questions regarding *non*-repacked stations. Not all television stations will be repacked. If the upgrade to ATSC 3.0 becomes a reimbursable expense for repacked broadcast stations, presumably the non-repacked stations will be left to fund the technology upgrade at their own expense. This has the potential to place non-repacked stations at a unfair competitive disadvantage vis-à-vis their repacked counterparts.

⁷ Deborah D. McAdams, *Q&A: Renu Thomas on Disney/ABC’s Technology Future*, TVTechnology (Feb. 2, 2016), <http://www.tvtechnology.com/news/0002/qa-disneys-renu-thomas-on-abcdisneys-technology-future/277862>; *see also* Phil Kurz, *CBS’s Seidel Gives 3.0 a Lukewarm Reception*, TVNewsCheck (Apr. 22, 2016), <http://www.tvnewscheck.com/article/94186/cbs-seidel-gives-30-a-lukewarm-reception> (noting that CBS had not yet been presented with a business plan for ATSC 3.0, and that there was no transition plan that would not “disenfranchise viewers.”).

process.⁸ Any costs incurred by broadcasters as part of the transition to ATSC 3.0 should not be submitted for reimbursement to the \$1.75 billion repacking fund, as there can be no argument that ATSC 3.0 functionality was “already present in the equipment that is being replaced” as per the Commission’s decision on reimbursable costs. Instead, the repacking fund should be used to help “make whole” those broadcasters who will be required to relocate to a new channel. Further, broadcasters have already expressed skepticism regarding the sufficiency of the \$1.75 billion fund, and permitting this fixed budget to offset additional costs now would only risk exacerbating this concern.

The Commission should seek assurances from the broadcast industry that broadcasters will not seek reimbursement of costs related to the ATSC 3.0 transition. For example, broadcasters should not seek reimbursement for the additional cost of upgraded or more powerful ATSC 3.0 equipment.⁹

⁸ *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, ¶ 624 (2014) (“We do not anticipate providing reimbursement for optional features beyond those already present. . . .If the cost to replace certain equipment is reasonably incurred as a result of the repacking process, we intend to reimburse for the cost of that equipment and recognize that this equipment necessarily may include improved functionality. We do not, however, anticipate providing reimbursement for new, optional features in equipment unless the station or MVPD documents that the feature is already present in the equipment that is being replaced.”).

⁹ Right now, the total costs associated with transitioning to ATSC 3.0 are unknown since ATSC 3.0 compatible transmitters, antennas and equipment (such as schedulers/framers, exciters, encoding systems) are still in development. GatesAir, RF System, http://www.gatesair.com/documents/news/Repack_RoadMap2015GAPRESSQTY.pdf. At least some broadcast transmitter manufacturers have indicated that ATSC 3.0 may require a larger transmitter to maintain coverage (as compared to existing ATSC 1.0 systems). GatesAir Solutions, ATSC 3.0: Transmitter and Monitoring, <http://www.gatesair.com/solutions/atsc-3.0-transmitter-and-monitoring> Broadcasters should also ultimately be responsible for any costs associated with dual mode (capable of transmitting both ATSC 1.0 and 3.0) equipment or software that goes beyond the cost of ATSC 1.0 equipment.

IV. THE COMMISSION SHOULD UNDERSTAND THE INTERFERENCE ENVIRONMENT ASSOCIATED WITH ATSC 3.0 TECHNOLOGY.

Absent from the discussion of ATSC 3.0 thus far is a consideration of the impact this technology could have on wireless operations in the 600 MHz band. The Commission has repeatedly acknowledged, that the coexistence of wireless and broadcast operations in the 600 MHz band requires the development and enforcement of carefully-drawn technical rules to prevent interference.¹⁰ The Commission's ISIX rules sought to protect both wireless and broadcast operations both during and after the repacking. In that proceeding, the Commission carefully considered data regarding the technical specifications of both wireless and broadcast signals in the 600 MHz band, and developed parameters aimed at minimizing interference for both stakeholder groups. This analysis was based entirely on the technical characteristics of ATSC 1.0 broadcast signals.¹¹ The Commission's *TVStudy* software, which plays a key role in auction administration, also was developed based on existing technology.¹² CTIA expects the broadcast community to provide all needed information to evaluate how, ATSC 3.0 would impact that analysis.

These changes could potentially affect the protections that forward auction licensees receive from broadcasters, and the FCC, broadcast community, and wireless industry should all have a common understanding on any interference issues introduced by the new technology.

¹⁰ *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Third Report and Order and First Order on Reconsideration, 30 FCC Rcd 12049, ¶¶ 2-4 (2015).

¹¹ *Id.* at Appendix C (“For broadcast television, this methodology assumes use of the Advanced Television Systems Committee's (ATSC) Digital Television (DTV) Standard.”).

¹² *Office of Engineering and Technology Releases and Seeks Comment on Updated OET-69 Software*, Public Notice, 28 FCC Rcd 950 (2013).

Just as NAB argued that detailed technical information regarding wireless deployments was essential to minimizing inter-service interference to broadcasters, so too should broadcasters provide interested parties with a clear understanding of how the change to ATSC 3.0 will impact the interference environment in the 600 MHz band.¹³

V. CONCLUSION.

The broadcast television incentive auction, once completed, will create innumerable benefits for the American public. CTIA supports the broadcast industry's efforts to evolve, as long as it does not delay or disrupt the use of new 600 MHz licenses purchased at auction.

Respectfully submitted,

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¹³ Reply Comments of the National Association of Broadcasters, GN Docket No. 12-268, ET Docket Nos. 13-26 and 14-14, at 4-5 (Feb. 5, 2015) (“[R]equiring wireless licensees to conduct and maintain copies of interference analyses is critical for minimizing inter-service interference . . . [wireless carriers] must conduct additional detailed analyses based on their actual proposed deployments, rather than the simplified inputs the Commission intends to use for the auction.”).