

Before the
Federal Communications Commission
Washington, DC

In the Matter of:)
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)
Authorizing Permissive Use of the “Next) GN Docket No. 16-142
Generation” Broadcast Television Standard)
)

COMMENTS OF THE ADVANCED TELEVISION BROADCASTING ALLIANCE

The Commission has opened this proceeding¹ to consider permitting television broadcasters to use the “Next Generation” broadcast television (“Next Gen TV” or “ATSC 3.0”) transmission standard adopted through the work of the Advanced Television Systems Committee (“ATSC”). The Advanced Television Broadcasting Alliance (“ATBA”)² strongly supports the Commission’s tentative conclusion to permit broadcasters to use ATSC 3.0 in lieu of the existing ATSC A/53 standard, which is wholly inadequate to meeting the needs of today’s and tomorrow’s consumers. We urge the Commission to move promptly to authorize use of ATSC 3.0 with minimal conditions and restrictions.³

Our comments are limited to addressing two aspects of the Commission’s tentative conclusions – the proposal to require that each ATSC 3.0 station arrange for an ATSC 1.0

¹ Notice of Proposed Rulemaking, *Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard*, GN Docket No. 16-142 (rel. Feb. 24, 2017) (“NPRM”).

² The ATBA is an organization comprised of hundreds of low-power television (“LPTV”) broadcasters, owners and operators of translators, and allied industry organizations and companies.

³ Although our comments are limited to addressing the questions raised in the NPRM regarding the need for a receiver mandate (see NPRM at ¶¶ 71-72), we question the Commission’s proposal to condition approval of Next Gen TV broadcasting on assuring that an ATSC A/53 simulcast of the primary channel remains available. Broadcasters – not the FCC – are best positioned to decide how best to deploy ATSC 3.0 to serve their local markets. In some cases a market may have too few stations to permit full simulcasting. A rigid simulcasting requirement could hinder the transition and result in a delay of introduction of advanced, innovative services and products to consumers.

simulcast,⁴ and the tentative conclusion that a Next Gen TV tuner mandate is not necessary at this time because a potential transition would be voluntary and market-driven, and because under the plan outlined in the NPRM ATSC 1.0 broadcasting would continue indefinitely.⁵ The NPRM notes that the petition for rulemaking that spurred the initiation of this proceeding, as well as comments filed by several parties, proposes simulcasting and agrees that no ATSC 3.0 tuner mandate is required at this time. Accordingly, the NPRM proposes to require ATSC 1.0 simulcasting and to revise Section 15.117(b) of the Commission's rules to make clear that the tuner requirement adopted pursuant to the All Channel Receiver Act⁶ does not apply to ATSC 3.0.

Although ATBA appreciates the importance of local simulcasting, both for viewers and because broadcasters rely on having the ability to reach all viewers within their coverage areas, an inflexible simulcasting mandate will frustrate, and may well prevent, the rapid introduction of Next Gen TV service. Without dedicated transition channels, even full power stations in markets with multiple full power broadcasters may face extreme challenges in arranging full time simulcasts in all cases. The impact on LPTV stations would be even more harsh: many, and perhaps most, LPTV stations do not have substantial contour overlap with another LPTV station. And with full power stations challenged to arrange simulcasting among themselves (and with LPTV stations unable to provide meaningful reciprocity of coverage), it is unlikely that LPTV stations will be able to join full power stations in market-wide plans.

⁴ See NPRM at ¶ 10.

⁵ See NPRM at ¶ 71.

⁶ All Channel Receiver Act, Pub.L. No. 87-529, 76 Stat. 150, codified at 47 U.S.C. § 303(s).

Important as simulcasting is, the requirement should be that each transitioning station make best efforts under the circumstances of its local market and the station itself. No station, low power or full power, should be denied the opportunity to deploy an innovative new technology simply because all spectrum for transition companion channels has been re-allocated to other uses and cross-hosting of ATSC 1.0 and 3.0 broadcasts is not feasible. Moreover, simulcasting, when undertaken, should not be subject to rigid requirements regarding format and content. Broadcasters will make the best judgments under circumstances of their specific markets, rights considerations, available resources, and the desire to introduce new features that may not be conducive to simulcasting.

While tentatively concluding not to exercise its authority to impose a Next Gen TV receiver requirement, the NPRM asks alternatively whether the Commission should require that new television receivers manufactured after a certain date include the capability to receive Next Gen TV signals and if so, when such a requirement should take effect.⁷ We support this alternative approach. Updating the Commission's ACRA rule is critical to the preservation of LPTV service. Repacking following the incentive auction will displace thousands of LPTV stations, which will be required to find new channels, if available at all, and build new facilities. The more flexible characteristics of Next Gen TV (including synchronized lower power sites) may allow LPTV stations to find spectrum for displacement channels in places where a displacement channel would otherwise be impossible. Moreover, as explained above, it will likely be impossible for most LPTV stations to find a host station to simulcast in the existing digital standard. Yet LPTV stations may wish to be early adopters of Next Gen TV in order to

⁷ See NPRM at ¶ 72.

distinguish their service. As low power stations seek to maximize any potential advantage to serve both fixed and mobile viewers, they require access to as many users as possible. Low power stations are a conduit for and the prime example of local programming access. As such, they are uniquely situated to provide local emergency warnings to local viewers – a service that is markedly enhanced by Next Gen TV capabilities. Assuring that tuners are in all receive devices enhances the service that low power stations can provide to the public. As many of these stations operate on a not-for-profit basis or at the margins of profitability, it is critical to their ongoing viability that their ATSC 3.0 broadcasts be receivable (especially given that many may face substantially smaller coverage areas post-repacking).

We urge the Commission to take steps to ensure that all devices that are designed to receive via radiofrequency transmissions and display television pictures received by those transmissions be capable of receiving and displaying all Next Gen TV broadcasts. These include not only devices that have been traditionally understood to be “television sets,” but also many other devices that are designed to receive television pictures broadcast simultaneously with sound. Ensuring that ATSC 3.0 signals can be received on the devices consumers use to watch television today is critically important to bringing the great leap of innovation inherent in ATSC 3.0, especially including its advance emergency alerting capabilities, to the American public.

Moreover, ensuring that the devices people actually use to watch television today can receive over-the-air television broadcasts is critical to maintaining free, universal over-the-air television service. It is not enough to ensure that broadcast programming is available on large screens in the home in an era when each year witnesses an accelerating shift of viewing to more convenient and flexible devices that allow viewers to access television wherever they are.

And the shift is profound: a just-released study by Accenture reports that the percentage of consumers who prefer to watch television shows on a traditional television set plunged from 52 percent in 2016 to 23 percent in 2017, tracking a four-year trend.⁸

There is no question that a device marketed and sold as a traditional television set or television receiver falls within the ambit of the ACRA. But many other devices that are sold in commerce and are in widespread use, including most current generation smartphones, also fall within the meaning of the ACRA, which covers any “apparatus designed to receive television pictures broadcast simultaneously with sound.” Smartphones clearly meet this standard. Each includes an RF front end receiver, hardware and software to decode and process audiovisual programming, and high resolution screens and audio outputs that in many cases are more technically capable than flat-screen television sets.

As more and more consumers shift their viewing to small, mobile screens, virtually every distributor of television programming is scrambling to get a larger share of small-screen television viewing. Dispelling any possible doubt that the future of television mass media, or at least a large part of it, is arriving through small-screen mobile devices, the major wireless service providers are pursuing growth through delivering television programming – in many cases, over the same spectrum that was previously allocated to and used by traditional over-the-air television broadcasting. Verizon’s “Go90” video service is available free-to-air on mobile

⁸ See Accenture Consulting, *Winning Experiences in the New Video World*, available at https://www.accenture.com/us-en/_acnmedia/PDF-50/Accenture-Winning-Experiences-Infographic.pdf (last visited May 9, 2017).

devices.⁹ AT&T's brands its "DIRECTV Now" service as "TV". When accessed via mobile devices it is functionally indistinguishable from the same over-the-air linear television provided by broadcast stations (e.g., "TV LIVE. Catch every moment of breaking news, sports and other live events."). AT&T advertises that it does not count DIRECTV Now usage against its subscribers' data caps.¹⁰

The Court of Appeals has found that the Commission's authority under the ACRA should be construed broadly:

The use of broad language in ACRA speaking only of "receiving *all* frequencies allocated by the Commission to television broadcasting," 47 U.S.C. §303(s) (emphasis added) to solve the relatively specific problem of UHF reception, militates strongly in favor of giving ACRA broad application.¹¹

Unquestionably, today's smartphones are "designed to receive television pictures broadcast simultaneously with sound" because tens of millions of smartphones do exactly that every day. They do so to such a great extent that entire new television businesses are being built to serve this market. They include services, such as Verizon's go90 platform, that qualify as "broadcasts" because they are available to and intended to be received by the general public free to air.¹² The Commission should exercise its broad authority under the ACRA to require that devices that are designed and marketed to receive and display such television

⁹ According to Verizon Wireless' website, go90 programming is free, and Verizon Wireless customers can stream that programming without incurring data charges. See Verizon Wireless Go90 FAQs, *available at* <https://www.verizonwireless.com/support/go90-faqs/> (last visited May 9, 2017).

¹⁰ See DirecTV Now Help Center, *available at* <https://help.directvnow.com/hc/en-us/articles/212914066-Will-AT-T-Wireless-subscribers-incur-data-usage-with-DIRECTV-NOW-> (last visited May 9, 2017).

¹¹ *Consumer Electronics Ass'n v. FCC*, 347 F.3d 291 (2003).

¹² The term "broadcasting" is defined in 47 U.S.C. §153(6) as "the dissemination of radio communications intended to be received by the public."

programming, and which include an RF front end, video and audio decoding and processing capability, and high resolution screens and audio systems, must include ATSC 3.0 receive capability. The obligation to include ATSC 3.0 capability in large screen televisions should begin within one year of the date on which the Commission authorizes ATSC 3.0 broadcasts. The obligation to include ATSC 3.0 capability in other devices should begin when ATSC 3.0 broadcasts are available to at least 25% percent of the population.

In tentatively concluding not to impose an ATSC receiver requirement, the NPRM observes that it may be possible to upgrade most, if not all, receivers currently being manufactured to allow them to receive ATSC 3.0 signals. However, the NPRM also acknowledges that such upgrades would require over-the-air viewers to purchase additional equipment (such as a dongle, set-top box or gateway device) that can be attached to the receiver's HDMI port, assuming that receiver has an HDMI port.¹³ We agree that many larger screen devices, especially large-screen televisions and most computers, can be upgraded to ATSC 3.0 capability with a simple HDMI dongle or, for Wi-Fi and Ethernet capable devices, through a home gateway. This capability can provide something of a bridge to allow older devices to access ATSC 3.0 services. But smaller devices that qualify as televisions cannot easily be upgraded, as many lack HDMI or other appropriate ports, and in any case, external adapters are not practical for smaller devices. An entirely hands-off approach falls far short of the goal to ensure that any "apparatus designed to receive television pictures broadcast simultaneously

¹³ See NPRM at ¶ 72.

with sound” be capable of receiving all frequencies allocated by the FCC to television broadcasting.¹⁴

Without a nudge from the FCC, the combination of the “chicken and egg” problem and competitive resistance from wireless companies that are expanding into broadcasting could delay or altogether prevent many Americans from enjoying the benefits of Next Gen TV technology. In 2002, the Commission modified its rules implementing the ACRA to require that television receiver manufacturers phase in support for the then-new digital television standard.¹⁵ In doing so, it acknowledged that the transition from analog to digital broadcasting presented a dilemma analogous to the UHF issue Congress was grappling with when it adopted the general language of § 303(s):

According to the legislative history, the Senate Committee recognized the existence in 1962 of a "vicious cycle" that had been "strangling" the development of UHF television, that is the "refusal by the public to buy UHF sets until there are UHF stations offering attractive programs, and the inability of UHF broadcasters to provide good programming in the absence of an audience which will attract advertisers and networks."¹⁶ The Senate Committee determined that it was necessary to break this cycle and that to do so "must be done by striking at the root cause of the problem – namely, the lack of television receivers capable of receiving UHF signals."¹⁷

The “vicious cycle” dilemma that plagued the marketplace during the introduction of the first generation of digital television could present an even greater headwind to adoption of

¹⁴ As discussed below, some distinctions between large screen/in home devices and portable devices may be appropriate.

¹⁵ See *Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, Second Report and Order and Second Memorandum Opinion and Order, 17 FCC Rcd 15978 (2002).

¹⁶ See 1962 U.S.C.C.A.N. at 1876.

¹⁷ *Id.*

Next Gen TV. For the digital transition each broadcaster was assigned a transition channel and permitted to simulcast analog and digital signals. Yet even with the phase-in of a digital receiver requirement for television sets, tens of millions of households did not have the capability to receive digital signals until the government provided subsidized converter boxes in advance of the analog sunset.

Competitive pressures, too, could hamper Next Gen TV growth. The wireless industry is moving swiftly to address the rapidly growing demand for television on mobile devices. These companies have great influence on the makers of mobile devices, and may resist incorporation of ATSC 3.0 capability that would simultaneously reduce demand for paid mobile data and provide a partial substitute for their fee-based television services.

The cost of adding ATSC 3.0 capability to both large and small screen devices will be small. Large screen televisions already include the necessary RF front end. And unlike the digital transition, when television makers cited extraordinary (and, as it turned out, highly inflated) costs per unit to include digital reception capability in what were then analog-era CRT sets, today's traditional television sets and mobile video devices already include the great majority of electronics that are required to receive and display ATSC 3.0 transmissions. Indeed, even mobile "phones" today operate in former "low band" television frequencies. Their RF front ends, if not already capable, can easily be modified, at least to receive UHF television channels.

The NPRM proposes not to include a Next Gen TV receiver mandate in part because, under the Commission's tentative proposal, ATSC 1.0 broadcasting (including simulcasts) will

continue indefinitely.¹⁸ The NPRM overlooks the fact that, given the lack of transition channels, it will not be practical or even possible for all ATSC 3.0 transmissions to be simulcast on 1.0. Single-station markets present the most obvious examples of cases in which simulcasting will be impossible, but there will be other cases in which simulcasting is impossible or impractical. As Next Gen TV deployment proceeds, it is likely that more stations will seek to switch from obsolete ATSC 1.0 transmissions to more capable 3.0 broadcasts, further limiting the degree of simulcasting that is practical.

Phasing in a Next Gen TV receiver requirement as stations begin the conversion to ATSC 3.0 service will comport with the Commission's previous decision that receivers should be capable of actually *displaying* all television broadcasts on all channels:

The ACRA was intended to ensure that the viewing public has access to receivers which are capable of receiving all broadcast signals. Thus, to suggest that the statutory requirements are somehow satisfied simply where a receiver picks up the frequency but is incapable of displaying the signal in a viewable format strikes us as an absurd reading of the ACRA. Indeed, as we have noted previously, the legislative history indicates that the word "adequately" was added to the ACRA (*i.e.*, "be capable of *adequately* receiving all frequencies") to ensure that all receivers would be constructed with equipment sufficient to permit "satisfactory and *usable* reception."¹⁹

For the reasons explained in these comments, we urge the Commission to make any simulcasting obligation a "best efforts" requirement, and/or to exempt LPTV stations from simulcasting requirements altogether. We also ask the Commission to exercise its authority to

¹⁸ NPRM at ¶ 71.

¹⁹ See *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Second Report and Order and Second Memorandum Opinion and Order, 17 FCC Rcd 15978 (2002) (*citing* Senate Report, 1879-1880 (emphasis added)); See also, *In the Matter of Amendment of Part 15 of the Rules and Regulations with Regards to All-Channel Television Broadcast Receivers*, Report and Order, 21 FCC 2d 245 at ¶ 6 (1970); See *EIA vs. FCC*, 636 F.2d 689, 695-96 (D.C. Cir. 1980).

establish a reasonable time period, which may include a phased approach, in which ATSC 3.0 capability must be included in any “apparatus designed to receive television pictures broadcast simultaneously with sound,” including all devices that include an RF front end receiver, hardware and software to decode and process audiovisual programming, and high resolution screens and audio outputs.

Respectfully submitted,

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