Before the
Federal Communications Commission
Washington, D.C. 20554

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

REPLY COMMENTS OF THE PUBLIC BROADCASTING SERVICE,
CORPORATION FOR PUBLIC BROADCASTING, AND
AMERICA’S PUBLIC TELEVISION STATIONS

The Public Broadcasting Service (“PBS”),1 Corporation for Public Broadcasting (“CPB”),2 and America’s Public Television Stations (“APTS”)3 (collectively, “PTV”) submit these reply comments to emphasize the importance of providing noncommercial educational licensees with the flexibility to transition to the “Next Generation” broadcast television transmission standard (“Next Gen” or “ATSC 3.0”) as soon as they determine that it is in their communities’ best interest. The Commission should reject one commenter’s request that it indefinitely delay implementing standards for granting simulcasting exemptions and waivers. A delay would prevent some public television stations from delivering the many public service benefits of ATSC 3.0 programming to viewers, and it would unfairly disadvantage stations that,

1 PBS, with its 350 member stations across the country, offers all Americans the opportunity to explore new ideas and new worlds through television and online content. Each month, PBS reaches nearly 100 million people through television and nearly 30 million people online, inviting them to experience the worlds of science, history, nature, and public affairs; to hear diverse viewpoints; and to take front row seats to world-class drama and performances.
2 CPB is a private, non-profit corporation created and authorized by the Public Broadcasting Act of 1967 to facilitate and promote a national system of public telecommunications. Pursuant to its authority, CPB has provided millions of dollars in grant monies for support and development of public broadcasting stations and programming.
3 APTS is a non-profit organization whose membership comprises the licensees of nearly all of the nation’s CPB-qualified noncommercial educational television stations. The APTS mission is to support the continued growth and development of a strong and financially sound noncommercial television service for the American public.
through no fault of their own, are not sited near commercial broadcasters. PTV also reiterates its support for permitting broadcasters to use vacant channels on the television band temporarily during the ATSC 3.0 rollout. Prioritizing the needs of broadcasters—which are, after all, primary users of the band—is not a “dramatic giveaway” to the broadcast industry, as one commenter audaciously asserts. Instead, such an approach serves the public interest by helping stations without simulcast partners deploy the many benefits of Next Gen television.

I. The Commission Should Not Delay in Establishing Simulcasting Exemptions and Waivers; Stations Need Regulatory Certainty to Begin Planning for ATSC 3.0

Financially constrained noncommercial educational licensees need regulatory certainty to incentivize their investment in equipment upgrades and educational content development so that they are well-positioned to deliver the many public service benefits of ATSC 3.0. Exempting these stations as a class from the local simulcasting requirement would best achieve this objective by recognizing the unique geographic challenges many of these stations face.  This approach also would provide a practical “light-touch” regulatory framework that maximizes innovation and recognizes that public television stations have zero incentive, based on their statutory mandate to serve all citizens of the United States and their reliance on viewers for financial support, to leave their viewers behind.

Contrary to the assertion of the National Cable & Telecommunications Association (“NCTA”), the Commission should not delay in implementing standards for simulcasting

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4 These challenges, detailed more fully in the Comments of the Public Broadcasting Service, Corporation for Public Broadcasting, and America’s Public Television Stations, GN Docket No. 16-142, at 7–8 (filed Feb. 20, 2018) (“PTV Comments”), affect remote and rural stations like KAWE in Minnesota; stations tasked with serving statewide networks, such as KAFT and KEMV in Arkansas (Comments of Public Media Company, GN Docket No. 16-142, at 4 (filed Feb. 20, 2018) (“Public Media Comments”)); and stations like KVCR, which serve large population centers but are nevertheless geographically isolated from other full-power stations (Comments of San Bernardino Community College District, GN Docket No. 16-142, at 5–6).
exemptions or waivers. NCTA argues that since ATSC 3.0 is voluntary, “there is no need for universal broadcaster participation” at this stage. While no station should be forced to transmit in ATSC 3.0 during the voluntary rollout, stations lacking a simulcast partner that wish to innovate should be able to do so and not be placed at a disadvantage. Indeed, NCTA clearly recognizes the value of innovation—on its website, NCTA emphasizes the importance of adapting to new technology and advancing innovation. To that end, some multichannel video programming distributors (“MVPDs”) are currently testing and deploying 4k, or ultra HD, television service. Innovation, however, is not limited to MVPD services. Noncommercial educational licensees are also striving to meet consumer demand in the rapidly evolving media landscape. Delayed implementation of simulcast exemptions and waivers would hinder these efforts and would disproportionately impact underserved viewers in rural areas (where simulcasting partnerships may be precluded by geography), further exacerbating the nation’s digital divide. Next Gen television combines the capabilities of over-the-air broadcasting with advanced technologies such as personalization, interactivity, and downloadable content, which can bring many of the same benefits as broadband to areas where no broadband is available. Public television stations are eager to use this technology to deliver enhanced services that include interactive educational children’s content, including the ability to distribute over-the-air integrated games and other immersive learning materials that are otherwise inaccessible to viewers who lack broadband Internet connections.

Promptly implementing flexible simulcast standards will allow public television stations to begin planning for the rollout of ATSC 3.0 at a time that makes sense for their local

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communities rather than relying on a timeline outside their control. As PTV explained in its Comments, numerous stations involuntarily reassigned channels in the post-Incentive Auction repacking process are making investments now in new transition equipment. Absent a flexible regulatory framework, stations lacking a simulcast partner that might otherwise choose to allocate money for ATSC 3.0-capable equipment and software might be unable to justify the costs to authorizing boards (including state and local entities) if they are forced to indefinitely broadcast in ATSC 1.0. Instead, they may forego plans to roll out ATSC 3.0 and limit their current expenditures by only purchasing equipment with minimal functionality.

Moreover, NCTA’s assertion that waiving the simulcast rules will “inevitably cause significant disruption” for over-the-air viewers of public television stations is without merit. While PTV appreciates NCTA’s purported concern for over-the-air viewers, public television stations have zero incentive to leave these viewers behind, as stated above and explained more fully in PTV’s Comments. To be clear: PTV is not requesting an exemption to simulcasting so that stations can immediately flash cut to ATSC 3.0. PTV is requesting an exemption so that those stations lacking a simulcast partner can begin carefully planning for an eventual ATSC 3.0 rollout on a market-by-market basis, and each deployment will be inherently dependent on whether local conditions support a transition in a given community. Most likely, a switch to ATSC 3.0 will occur only after there is significant dual-mode receiver penetration and/or affordable converter devices. And, as ONE Media has noted, many stations that receive an

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7 PTV Comments, at 10.
8 NCTA Comments, at 4.
9 PTV Comments, at 8.
exemption or waiver may continue to look for a simulcasting partner, even though it will not meet all of the Commission’s simulcasting requirements.\textsuperscript{10}

Granting all noncommercial educational licensees a simulcasting exemption also will have little practical effect on MVPDs. In its comments, the Rural Broadband Association (“NTCA”) stated that some of its members have many customers who cannot receive over-the-air broadcast signals and must therefore rely on MVPDs to receive those signals.\textsuperscript{11} In those instances, public television stations will likely wait until the technical upgrades necessary for MVPDs’ facilities to carry ATSC 3.0 programming have been put in place—a process that will be driven largely through marketplace negotiations with commercial stations. In those instances where public television stations decide to flash-cut to ATSC 3.0 before the local MVPD is capable of receiving a Next Gen signal, those stations will likely make the necessary arrangements to deliver a good quality ATSC 1.0 signal to the MVPD headend or facility using an alternative means.\textsuperscript{12} Importantly, public television stations have a long history of working closely with MVPDs to ensure that public television viewers are well served. PTV views MVPDs as partners in delivering advanced communication and video services, and stations will work closely with these partners—just as they did in the digital television transition and in the

\textsuperscript{10} Comments of ONE Media, LLC, GN Docket No. 16-142, at 3 (filed Feb. 20, 2018).

\textsuperscript{11} Comments of NTCA – The Rural Broadband Association, GN Docket No. 16-142, at 3 (filed Feb. 20, 2018).

\textsuperscript{12} As previously stated, PTV is not advocating for new carriage requirements at this time. While PTV appreciates the Public Media Company’s request that the Commission provide must-carry rights for the primary ATSC 3.0 service of any noncommercial educational licensee that flash-cuts to Next Gen TV (Public Media Comments, at 5), PTV realizes the Commission is not inclined to do so at this time.
implementation and carriage of numerous multicast channels. Thus, PTV urges the FCC to implement a blanket simulcast waiver for all noncommercial stations.\footnote{13}

II. As Primary Users of the TV Band, Broadcasters Should Have Priority to Temporarily Use Vacant Channels to Deliver Public Service Benefits of ATSC 3.0

The Commission should reject any characterization of the proposed temporary use of vacant in-band channels as temporary host facilities for either ATSC 1.0 or 3.0 programming as a “giveaway” to broadcasters. This characterization by Microsoft and other commenters\footnote{14} is manifestly untrue. As PTV has emphasized, broadcasters are the \textit{licensed primary users} of the television spectrum band. The FCC has made clear in authorizing unlicensed white spaces devices as a secondary service that “future primary use of the band by broadcasters [must] be protected” and that the amount of unused spectrum space could change over time depending on the needs of the band’s primary users.\footnote{15} Unlicensed white space devices, which are governed by Part 15 of the FCC’s rules, are not permitted to disrupt incumbent licensed services. While PTV understands Microsoft’s desire to reserve a dedicated portion of the television band for white space use, Microsoft had an opportunity to purchase dedicated spectrum during the recently-concluded Broadcast Incentive Auction. Rather than doing so, Microsoft is instead asking that the Commission favor unlicensed white space devices at the expense of licensed broadcasters.

\footnote{13} If, however, the Commission ultimately decides against granting a blanket exemption for public television stations, then PTV urges it to adopt the presumptive waiver process as defined in its Comments. PTV Comments, at 8.

\footnote{14} Comments of Microsoft Corporation, GN Docket No. 16-142 (filed Feb. 20, 2018) (“Microsoft Comments”); Comments of Open Technology Institute at New America and Public Knowledge, GN Docket No. 16-142 (filed Feb. 20, 2018) (“Public Knowledge Comments”).

\footnote{15} \textit{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, 16827 (2008).
Allowing broadcasters to temporarily use vacant channels as host facilities for either ATSC 1.0 and 3.0 programming not only prioritizes the needs of the television band’s primary users, it allows for the delivery of many public service benefits. Microsoft, Public Knowledge, and Wi-Fi Alliance claim that allocating vacant channels as temporary host facilities during the rollout of ATSC 3.0 would undermine broadband access for rural communities. In fact, the outcome would be quite the opposite. PBS has been testing, researching, and deploying multi-platform educational children’s content for many years. As discussed above, this content includes the integration of curriculum-driven video content with interactive games. Unfortunately, these interactive games are currently inaccessible to viewers who lack traditional broadband access. However, ATSC 3.0, which operates on an IP platform and incorporates many capabilities often associated with broadband, could enable viewers without broadband Internet connections to access this interactive educational content. This is simply not possible with ATSC 1.0 technology. The impact on underserved children could be significant, as years of research demonstrate that children learn more from media when these types of content are thoughtfully combined. Meanwhile, while Microsoft and other commenters have long touted the anticipated benefits of white spaces technology in closing the digital divide, no more than a few hundred white spaces devices are currently in operation.

Advocates of white space devices have also argued, disingenuously, that the proposal to allow broadcasters to apply for vacant channel authorization is inconsistent with the

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16 Microsoft Comments, at 11–12; Public Knowledge Comments, at 9–12; Comments of Wi-Fi Alliance, GN Docket No. 16-142, at 5 (filed Feb. 20, 2018).
18 See https://www.fcc.gov/general/white-space-database-administration. See also Comments of the National Association of Broadcasters, GN Docket No. 16-142, at 6 (filed Feb. 20, 2018).
Commission’s rules. These commenters assert the need for competitive bidding on spectrum under Section 309(j) of the Communications Act and the limited time-period of a grant of Special Temporary Authority (STA). The Commission, of course, has several options for granting full-power broadcasters priority to use vacant channels. As explained in the Further Notice, the Commission could decide to require only a minor change application, which would not trigger competitive bidding or the STA’s 180-day period. PTV has requested that the Commission allow broadcasters to apply for authorization to use vacant channels through a minor change application, which is consistent with the Commission’s decision in its Order to treat temporary ATSC 1.0 channels as minor changes.

Even if the Commission were to decide that broadcasters should apply for vacant channel authorization by requesting an STA, this approach provides flexibility to stations. STAs can be extended beyond the initial 180-day period by additional periods of 180 days as explicitly outlined in the FCC’s rules. The Commission’s website also acknowledges the flexibility of its rules, stating that “STAs are granted with a fixed expiration date, usually six months, or for the term necessary to cover a special event, etc.” Thus, the implication that an STA would preclude operation after 180 days is meritless.

Microsoft also asserts that the Commission is precluded from granting broadcasters the temporary use of vacant channels without conducting an auction if mutually exclusive applications are submitted for a given license. However, Section 309(j)(2) of the

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19 Microsoft Comments, at 2–4; Public Knowledge Comments at 12–16.
20 PTV Comments, at 14.
21 47 C.F.R. §73.1635(4).
23 Microsoft Comments, at 2.
Communications Act, which sets forth the types of authorizations where competitive bidding does not apply, specifically exempts, “stations described in section 397(6) of this Act”—i.e., noncommercial educational television stations. Moreover, Microsoft and other commenters are greatly overstating the likelihood that there will be competing applications for vacant channels. In urban markets, such channels will not be available; this option will primarily provide relief for rural, remote, and isolated stations that are (1) otherwise unable to share facilities for simulcasting and (2) are in a financial position to utilize a vacant channel. Thus, while it is unlikely that many public television stations will utilize vacant channels, the Commission should craft its rules to maximize options to stations in order to facilitate the transition to ATSC 3.0.

Finally, as another reason to deny broadcasters the use of vacant channels, Microsoft asserts that allowing full-power licensed broadcasters to use these channels will displace additional LPTV and translator stations and/or delay the post-Incentive Auction transition. As PTV explained in its Comments, provided that the vacant channels are made available to full-power broadcasters after the Special Displacement Window has closed, there should be limited impact of LPTV and translator licensees. Given that the Commission has announced that the Special Displacement Window will close on May 15, 2018, Microsoft’s assertion is unfounded.

**CONCLUSION**

PTV urges the Commission to exempt noncommercial educational licensees from the local simulcasting requirement so as to provide stations with the regulatory certainty they need to being investing in ATSC 3.0 equipment and programming. Imposing a one-size-fits-all approach, or delaying the implementation of standards for providing exemptions and/or waivers,

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24 Microsoft Comments, at 8–11.
would stunt the innovation of public television stations and deprive their viewers of the many
benefits of Next Gen television. PTV also asks the Commission to prioritize the needs of
licensed broadcasters over unlicensed white space devices by allowing broadcasters to use vacant
in-band channels as temporary host facilities for either ATSC 1.0 or 3.0 programming. Allowing
the use of these channels would help rural, remote, and isolated stations deliver on the public
service benefits of Next Gen television.

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