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

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

REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS

September 6, 2022
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COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS

I. INTRODUCTION AND SUMMARY

The National Association of Broadcasters (NAB)\(^1\) hereby replies to comments submitted in response to the Commission’s Third Further Notice of Proposed Rulemaking (FNPRM) concerning the state of the NextGen TV transition and the scheduled sunsets of two rules governing that transition.\(^2\)

Initial comments in this matter confirm that broadcasters have made and will continue to make substantial progress deploying ATSC 3.0 service under challenging circumstances. Broadcasters have deployed service in dozens of markets, with additional launches planned through the end of the year. ATSC 3.0 is already providing enhanced service to viewers with compatible equipment, and the services broadcasters can provide using ATSC 3.0 will only improve as additional 3.0 capacity becomes available in markets where only one or two stations are presently transmitting in 3.0. Millions of compatible receivers have already been

\(^{\text{1}}\) The National Association of Broadcasters (NAB) is the nonprofit trade association that advocates on behalf of free local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

sold, and the pace of sales of 3.0 capable television sets is expected to accelerate dramatically in the next two years. For the transition to ultimately prove successful, however, it is essential for the Commission to avoid a heavy-handed and overly prescriptive approach that could hamper this critical industry-wide effort.

The record also supports a predictable sunset of the substantially similar requirement. The Commission made plain when it adopted this requirement that it was intended to be temporary. Flexibility to experiment with programming showcasing ATSC 3.0’s potential will only help encourage consumer adoption of compatible receivers. Broadcasters are unlikely to invest in such programming, however, unless and until they know they will be permitted to air it. A predictable sunset of the requirement will encourage innovation and help speed the transition.

Finally, we urge the Commission to examine how it can accelerate this progress in a further notice. Initial comments suggest a number of productive inquiries, including adjustments to the 90-day notification to MVPDs by stations deploying ATSC 3.0 service, greater flexibility in the coverage requirements for host stations, the use of advanced video compression for broadcasters’ primary streams, and the circumstances under which stations might be permitted to voluntarily cease transmitting in ATSC 1.0.
II. THE RECORD CONFIRMS THAT BROADCASTERS HAVE MADE IMPRESSIVE PROGRESS IN DEPLOYING ATSC 3.0 SERVICE

A. ATSC 3.0 Deployment is Proceeding Rapidly and Bringing Benefits to Consumers

Initial comments in this proceeding document the progress broadcasters have made to date in rapidly deploying a new technology without access to additional spectrum. ³ Since those comments have been filed, NAB notes that Hisense, as anticipated, has released ATSC 3.0 compatible sets. This brings the number of major manufacturers offering 3.0 compatible televisions to four, and we continue to expect that the number of models available will rise substantially through the end of this year. We note that CTA has forecast that approximately 7.5 million ATSC 3.0 compatible sets will have been sold by the end of 2022, with almost eight million more expected to be sold in 2023, more than 15 million in 2024, and more than 27 million in 2025. In total, the industry expects more than 58 million television sets with 3.0 receivers to have been sold by the end of 2025, a figure that does not include set-top boxes, dongles, or other 3.0 receivers that will be sold during this time. As Pearl TV observed in its comments, “consumer demand for NEXTGEN TVs is outpacing demand for predecessor technologies, such as 4K Ultra HD TVs and DVD players.”⁴

The record also demonstrates that ATSC 3.0 will offer significant consumer benefits that will only become more compelling as the transition progresses and the amount of 3.0 capacity in individual markets increases. This development will permit broadcasters to take fuller advantage of the technology’s enhanced capabilities. Puzzlingly, however, Public

³ Comments of Pearl TV at 2-3, GN Docket No. 16-142 (Aug. 8, 2022) (Pearl Comments); Comments of America’s Public Television Stations, the Corporation for Public Broadcasting, and the Public Broadcasting Service at 3-5, GN Docket No. 16-142 (Aug. 8, 2022); Comments of ONE Media 3.0, LLC at 2-6, GN Docket No. 16-142 (Aug. 8, 2022).

⁴ Pearl Comments at 15.
Knowledge and the Open Technology Institute at New America (PK/OTI) question those consumer benefits in their comments, asserting that “broadcasters – not consumers – are the primary beneficiaries” of ATSC 3.0 technology. That view is simply inaccurate, and at odds with these interest groups’ approach to nearly every innovation pushed by their benefactors. PK/OTI’s position appears to rest on the erroneous assumptions that only consumers with broadband connections will benefit from ATSC 3.0 television programming that there are no public interest benefits associated with datacasting.

A more accurate view of ATSC 3.0’s potential would acknowledge that there are three categories of public interest benefits from the transition: (1) benefits to television viewers who do not have a broadband connection; (2) benefits to television viewers who do have a broadband connection; and (3) other public policy benefits.

First, ATSC 3.0 is already allowing broadcasters to provide superior television service to viewers who do not have broadband connections. Broadcasters have already rolled out HDR broadcasts in numerous markets where they have launched ATSC 3.0 service, providing an improved experience to viewers enjoying a free over-the-air signal. This bears repeating. Unlike nearly every other technology the Commission supports, broadcasters are required to provide a free over-the-air signal to viewers across the country. Additionally, as NAB noted in its initial comments, 3.0 broadcasts incorporate Dolby Atmos technology that provides object-oriented audio, the ability to maintain consistent volume across channels, and the ability to increase

5 Comments of Public Knowledge and The Open Technology Institute at New America at 1, GN Docket No. 16-142 (Aug. 8, 2022) (PK/OTI Comments).
6 For example, PK/OTI continue to lobby the FCC for regulatory favors to encourage the deployment of white spaces technology that primarily benefits a multi-trillion dollar technology company and has produced no meaningful public interest benefits. See, e.g., Reply Comments of the Open Technology Institute at New America and Public Knowledge, ET Docket Nos. 14-165, 20-36, 04-186, GN Docket No. 12-268 (Aug. 1, 2022).
the volume of audio dialog without increasing the volume of other audio components of programming. It is simply indisputable that these features constitute meaningful consumer benefits *right now*. And the benefits to over-the-air viewers will only improve as broadcasters add additional 3.0 capacity (e.g., additional 3.0 facilities) in markets that currently only have one or two ATSC 3.0 stations. ATSC 3.0 will allow broadcasters to tailor their modulation and coding schemes to fit their markets, providing more robust reception in some cases and higher throughput in others – or doing both at the same time in different parts of a market through layered division multiplexing. In addition, assuming the Commission resolves the long outstanding petition for reconsideration of its DTS order, ATSC 3.0 will allow broadcasters to deploy more efficient transmission architecture that will further enhance reception and throughput options, particularly at the edge of a broadcaster’s coverage area.

Second, ATSC 3.0 allows broadcasters to offer additional innovative and interactive features to viewers that have a broadband connection. It is unclear why PK/OTI view this as an indictment of the technology. Their argument is essentially that, because many of these enhanced features may already be provided by cable or streaming services, they are irrelevant.\(^7\) But this ignores the value of competition, and intermodal competition in particular. It is shocking that these groups do not recognize the benefits of such competition. If ATSC 3.0 allows broadcasters to offer new services that are competitive with cable or streaming services, that will likely lead to consumers having more choices and more competitive pricing options. That plainly serves the public interest and the Commission should be encouraging broadcasters in this respect. The argument that *some* advanced features and services may only be available to viewers with a broadband connection may be true, but it misses the larger

\(^7\) *Id.* at 5.
point, which is that broadcasters can provide public service benefits to multiple categories of consumers. Moreover, these groups strangely do not mention this objection in the context of wireless technology, whether licensed or unlicensed.

Third, ATSC 3.0 allows broadcasters to offer ancillary and supplementary services such as datacasting, which has been demonstrated in live-market trials as means of providing reliable video transmission to law enforcement during events that predictably overwhelmed commercial wireless networks, to provide location services that can enhance the precision of GPS, and to provide educational datacasting services to enable homes without broadband to access distance learning materials. There is also work underway to develop a standalone broadcast positioning service that can operate entirely independently of GPS to provide resiliency in the event that GPS signals are unavailable or jammed. It is entirely unclear why PK/OTI are so opposed to this possibility. As much as PK/OTI may resent it, there is nothing novel about broadcasters’ potential to offer ancillary and supplementary services – broadcasters have been permitted to do so since the DTV transition.\(^8\) More to the point, if ATSC 3.0 allows broadcasters the option of using a small portion of their capacity for datacasting applications such as distance learning, software updates, or other services, that serves the public interest. PK/OTI themselves expressly acknowledge that broadcasters’ providing positioning, navigation, and timing (PNT) services may “provide applications to support traffic management, accident control, package delivery, and ride-sharing,” but complain that these are not television services.\(^9\) If broadcasters can use a sliver of their

\(^8\) 47 CFR § 73.624(c).
\(^9\) Id. at 4.
capacity to provide resilient PNT applications to back up other PNT technologies, like GPS, that obviously serves the public interest regardless of the taxonomy of the service.

The reality is that to ensure a dynamic and vibrant future for broadcasting, broadcasters must keep pace with technological evolution and continue to provide compelling and competitive content. ATSC 3.0 will help broadcasters do that, by allowing them to dramatically improve their over-the-air video service offerings. If broadcasters can also use a portion of their capacity to provide ancillary and supplementary services, that is a winning scenario for consumers; it allows broadcasters to provide data services that serve the public interest while also providing new revenue opportunities for broadcasters to ensure that they can continue to make expensive investments in content and local news.

B. The Commission Should Not Overregulate the ATSC 3.0 Transition

While it is true that significant and complex work remains in the ATSC 3.0 transition, PK/OTI’s comments meaningfully understate the progress broadcasters have made to date as well as the public interest benefits associated with ATSC 3.0. As a result, their policy prescriptions are misdirected, and will not serve the public interest. Their proposals also misstate the Commission’s authority and precedent.

First, PK/OTI ask the Commission to use ancillary and supplementary service fees to establish a coupon program to offset consumer costs for ATSC 3.0 receivers and not to consider ending the simulcasting requirement until sufficient funds have been accrued to subsidize a receiver for every consumer.\(^\text{10}\) Beyond the fact that it is unknown when or if substantial ancillary service revenues will develop that would fund such a program in a

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\(^{10}\) PK/OTI Comments at 7.
remotely timely fashion, the Commission simply does not have statutory authority to establish such a program.

In support of their argument, PK/OTI cite Section 336(e)(3)(B) of the Communications Act which, with respect to ancillary and supplementary fees, provides that the FCC “shall retain as an offsetting collection such sums as may be necessary from such proceeds for the costs of developing and implementing the program required by this section and regulating and supervising advanced television services.” According to PK/OTI, the phrase “regulating and supervising advanced television services” should be read to provide the FCC with authority to retain ancillary and supplementary services fees to fund a coupon program. But it is a radically unsupported assumption that Congress somehow delegated its appropriation authority to the FCC with the phrase “regulating and supervising advanced television services.” The far more reasonable reading of the Act would be that Congress intended for the FCC to use ancillary and supplementary service fees to offset regulatory fees that broadcasters would otherwise be required to pay. The Commission simply has no authority to establish a slush fund and use it for any purpose plausibly related to television service, as PK/OTI suggest.

PK/OTI go on to ask the Commission to adopt requirements for reasonable and nondiscriminatory (RAND) licensing of patents associated with the ATSC 3.0 standards. As NAB stated in its initial comments, ATSC’s patent policy generally requires disclosure of

essential patents and licensing of essential patents on RAND terms.\textsuperscript{13} We are not aware of any broadcaster patent-holder that has refused to make essential patents available on RAND terms. Indeed, every ATSC member that has disclosed that it holds patents essential to ATSC 3.0 adopted standards has declared its intention to make those patents available on RAND terms.\textsuperscript{14}

But PK/OTI claim that the Commission’s decision not to require RAND licensing for ATSC 3.0 is inconsistent with prior Commission practice. In support of this assertion, PK/OTI cite a report authored by two members of OTI that claims that, with respect to the DTV transition, “the FCC explicitly imposed a RAND requirement for participants in the new transmission standard in a 1996 Order.”\textsuperscript{15} That is untrue. In fact, one of the specific paragraphs in the 1996 Order the OTI report itself cites expressly states “greater regulatory involvement is not necessary at this time.”\textsuperscript{16} The other provisions cited by the OTI report are dicta that are not reflected in the rules the Commission actually adopted. As NAB has previously explained, and as the Commission itself has acknowledged, the Commission’s approach to essential patents associated with ATSC 3.0 mirrors its approach in the original DTV transition.\textsuperscript{17} In its orders adopting ATSC 1.0, the Commission concluded that the fact that

\textsuperscript{17} FNPRM at ¶ 8.
industry testing procedures already required licensing of essential patents on RAND terms was adequate, and that the Commission would monitor developments and take further action if needed.\textsuperscript{18} Similarly, in its NextGen TV Order, the Commission observed that the ATSC requires licensing of essential patents on RAND terms, and stated that it would, “monitor how the marketplace handles patent royalties for essential patents.”\textsuperscript{19}

There is no reason for the Commission to change its approach at this time. Moreover, we agree with Qualcomm and Ericsson that it is unclear at best that the FCC has any authority to regulate patent royalties generally or require RAND licensing of patents specifically.\textsuperscript{20}

\section*{III. THE RECORD SUPPORTS A PREDICTABLE SUNSET OF THE “SUBSTANTIALLY SIMILAR” REQUIREMENT}

There are three parties that oppose the timely sunset of the substantially similar requirement: NCTA, ATVA, and PK/OTI. The cable lobby claims that the substantially similar requirement is needed to protect consumers and to prevent cable companies from being forced to acquire new equipment.\textsuperscript{21} PK/OTI similarly claim that the requirement is needed to

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\textsuperscript{19} ATSC 3.0 Order at ¶ 100, n. 300.
\textsuperscript{20} Comments of Ericsson at 5, GN Docket No. 16-142 (Aug. 8, 2022) (“The FCC lacks the statutory authority to dictate the terms of ATSC 3.0 patent licenses.; Comments of Qualcomm Incorporated at 12, GN Docket No. 16-142 (Aug. 8, 2022) (Qualcomm Comments) (“The FCC lacks the legal authority, as well as the underlying patent policy expertise, to adjudicate patent licensing terms and related disputes between private parties that involve contract and patent law issues.”)
\textsuperscript{21} See Comments of NCTA – The Internet & Television Association at 1-4, GN Docket No. 16-142 (Aug. 8, 2022); Comments of the American Television Alliance at 4-6, GN Docket No. 16-142 (Aug. 8, 2022).
protect consumers while also questioning the potential of ATSC 3.0 to provide any substantial benefit to over-the-air viewers at all. None of these arguments withstands scrutiny.

First, with respect to consumer protection, the Commission should be skeptical of the cable lobby’s purported concerns with the welfare of over-the-air television viewers. Cable companies plainly have an anticompetitive interest in thwarting broadcasters’ efforts to improve picture or sound quality and provide innovative product offerings broadcasters cannot provide using ATSC 1.0. But the Commission should not conflate this obviously anticompetitive motive with the public interest.

Further, even if the Commission were to accept at face value the big-hearted cable lobby’s purported concern with viewers who are not cable customers, the concern is misplaced. Broadcasters have no incentive to behave in this manner; they simply cannot afford to eliminate the majority of their over-the-air audience by prematurely shifting their most popular programming exclusively to ATSC 3.0. As a result, as NAB has previously explained, the most likely result of sunsetting the substantially similar requirement is not that broadcasters will alter the programming transmitted on their ATSC 1.0 signals; rather, it is that broadcasters will take the opportunity to try different programming or features on their ATSC 3.0 signals to entice viewers to voluntarily upgrade their equipment. That is, the effect in the near term of the elimination of the requirement would likely be changes to stations’ 3.0 programming, not changes to their 1.0 programming.

Meanwhile, as described above, PK/OTI’s comments fundamentally misunderstand the nature of the transition, the potential benefits to consumers, and the value of a competitive free over-the-air service. Indeed, PK/OTI’s chief criticism of ATSC 3.0 service appears to be that if offers no substantial advantage over pay-TV products such as internet streaming services. This is an odd objection. Even if it were true that the only benefit of
NextGen TV was the ability to match the capabilities of pay-TV services, that itself would be a significant benefit to consumers who would have more options in a more competitive marketplace. But of course, as detailed above, NextGen TV offers broadcasters far more than the ability to simply match pay-TV service offerings; it offers broadcasters the ability to significantly improve their over-the-air signal.

At bottom, PK/OTI’s comments appear to reflect skepticism or even animus towards the concept of broadcasters even attempting to improve free over-the-air broadcasting and using their facilities to offer new services. This is perplexing given that CTA has stated that “over-the-air content appears to be growing in importance to consumers.” 22 CTA estimates that nearly a third of homes has an antenna – a number that will CTA projects to grow as more than 8 million antennas will be sold during 2022 alone. 23 In other words, while consumer interest in over-the-air television is rising, PK/OTI are urging the Commission to restrict broadcasters’ ability to serve that interest. If the self-proclaimed “public interest” groups are interested in improving service to viewers who cannot afford pay-TV products, they should be working cooperatively with the broadcast industry and encouraging the Commission to accelerate the transition as much as possible. Perhaps their private benefactors simply see ATSC 3.0 as a competitive threat.

Finally, with respect to the argument that the end of the substantially similar requirement would impose costs on cable companies, 24 it is not at all obvious why this would be the case or why any costs would be onerous. In many instances, programming is delivered

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22 Comments of Consumer Technology Association at 5, GN Docket No. 16-142 (Aug. 8, 2022).
23 Id.
24 See NCTA Comments at 3; ATVA Comments at 5.
from broadcasters to MVPDs via a fiber optic feed, which renders the over-the-air transmission technology used irrelevant. For those MVPDs that receive programming via an over-the-air signal the costs of conversion from ATSC 1.0 to ATSC 3.0 are likely minimal. Pearl notes that the equipment necessary for MVPDs to receive an ATSC 3.0 broadcast signal is commercially available and low-cost, with the installation costs likely exceeding the hardware expense.\(^\text{25}\) In any event, MVPDs are free to negotiate with their broadcaster partners over the terms of programming delivery.

**IV. THE COMMISSION SHOULD ISSUE A FURTHER NOTICE TO HELP ACCELERATE THE TRANSITION**

NAB agrees with BitPath that “the best transition for everyone – viewers, broadcasters, MVPDs, regulators, policymakers, and all other stakeholders – is the fastest transition.”\(^\text{26}\) Because of the signature importance of ATSC 3.0 for the future of broadcast television, the Commission should seek to help accelerate deployment of ATSC 3.0 in additional markets and densification in markets where broadcasters have already launched service. While neither the Commission nor broadcasters may be able to fully address the most challenging aspect of the transition – an absence of additional spectrum – the Commission should acknowledge the difficulties the transition poses and remove regulatory barriers to deployment wherever possible. Initial comments in this proceeding suggest a number of avenues for further Commission action in that regard.

In particular, commenters support revisiting the Commission’s requirement that broadcasters transitioning to ATSC 3.0 provide 90 days’ notice to MVPDs, noting that the requirement is often excessive in practice and that broadcasters have every incentive to keep

\(^{25}\) Pearl Comments at 21.

\(^{26}\) Comments of BitPath at 8, GN Docket No. 16-142 (Aug. 8, 2022).
MVPDs informed as to their plans. Commenters also note that the current coverage requirements for ATSC 3.0 host stations are complicating the transition by limiting which facilities can serve as host stations and may be particularly complex for noncommercial television stations. The record also reflects support for a rulemaking to authorize broadcasters to use advanced video compression technology for their primary programming streams to help facilitate the transition and maximize broadcasters’ ability to preserve programming as capacity constraints grow more acute. Finally, we agree with commenters noting that there may be circumstances where the simulcasting requirement proves a substantial barrier to the transition. NAB has previously recommended the Commission open a proceeding to begin to examine the conditions that would warrant sunsetting the simulcasting requirement as a whole, not only the substantially similar requirement. The Commission should issue a further notice to examine all of these issues with an eye towards streamlining the regulatory requirements around ATSC 3.0 deployments and densification to help accelerate the transition to the benefit of all stakeholders.

Finally, Qualcomm’s comments ask the Commission to extend the requirement that broadcasters comply with the A/322 standard and to issue a further notice in this proceeding seeking comment on allowing broadcasters to use 5G Broadcast technology for datacasting while simultaneously offering a primary video service compliant with the A/322 standard.

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27 Comments of Pearl TV at 20-21, GN Docket No. 16-142 (Aug. 8, 2022) (Pearl Comments); Comments of ONE Media 3.0, LLC at 16-17, GN Docket No. 16-142 (Aug. 8, 2022) (ONE Media Comments).

28 Pearl Comments at 7; ONE Media Comments at 16.

29 ONE Media Comments at 16.

30 Pearl Comments at 7; ONE Media Comments at 17.

31 Qualcomm Comments at 4.
NAB has no objection to a reasonable extension of the A/322 requirement. Nevertheless, without expressing a view on the merits of 5G Broadcast technology, the plain language of the Commission’s rules already appears to authorize broadcasters’ use of 5G Broadcast technology as described by Qualcomm, suggesting that a further notice is likely unnecessary.\(^3^2\)

V. CONCLUSION

Broadcasters are committed to the success of the ATSC 3.0 transition because they view it as critical to the future success of the industry. Accordingly, despite numerous challenges and under unique regulatory constraints, broadcasters have made tremendous progress in deploying ATSC 3.0 service in a short period of time. The Commission should do everything in its power to encourage a successful and expeditious transition to ensure that broadcasters can continue to offer a competitive service and that the only free video service under the Commission’s jurisdiction can continue to serve viewers across the country. The best way for the Commission to do that is to reject calls to overregulate the transition, provide a predictable sunset of the substantially similar requirement, and work with the broadcast industry to explore opportunities to accelerate the transition by revisiting certain of the Commission’s rules.

\(^{32}\) 47 CFR § 73.624(c) (provided that broadcasters transmit at least one over-the-air video program signal at no charge, they are “permitted to offer services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis.”)
Respectfully submitted,

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