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

In the Matter of	)
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Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard	) GN Docket No. 16-142
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PETITION FOR RULEMAKING

NATIONAL ASSOCIATION OF BROADCASTERS
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I. INTRODUCTION AND SUMMARY

Nearly a decade ago, broadcasters took the first steps toward a revolution in television. In 2016, the National Association of Broadcasters (NAB)[1], America's Public Television Stations (APTS), the AWARN Alliance, and the Consumer Technology Association (CTA) petitioned the FCC to allow broadcasters to begin transitioning to Next Generation Television ("Next Gen TV" or ATSC 3.0).[2] Since then, broadcasters have launched Next Gen TV in more than 80 markets, reaching over 75 percent of the population—all while operating within their existing spectrum and maintaining ATSC 1.0 broadcasts.

The results have been encouraging. Since the FCC first authorized its use in 2017, Next Gen TV has delivered stunning improvements: better picture quality with higher frame rates and high dynamic range, interactive applications that give over-the-air viewers a more personalized experience, and groundbreaking tests of a Broadcast Positioning System (BPS)

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[1] 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.

[2] Joint Petition for Rulemaking of America's Public Television Stations, the AWARN Alliance, The Consumer Technology Association, and The National Association of Broadcasters, GN Docket No. 16-142 (filed Apr. 13, 2016).

that could provide a powerful backup to GPS, addressing critical vulnerabilities in national security and infrastructure. Broadcasters have launched joint ventures to bring Chairman Carr's "Broadcast Internet" vision to fruition. Meanwhile, consumers have embraced the future, purchasing more than 14 million television sets capable of displaying Next Gen TV. In addition, the Future of Television Initiative brought together stakeholders from across the television ecosystem with the goal of identifying the remaining challenges in completing an orderly transition to ATSC 3.0. Its findings were published in the Future of Television Initiative Report.[3]

But as Chairman Carr observed last year, the whole broadcast industry is at a "break glass moment" and the "FCC should be focused on decisions that will make it easier for broadcasters to attract the capital necessary for them to invest, compete, and serve their local communities."[4] As competitive pressures mount, completing the transition to ATSC 3.0 expeditiously is essential for the future of the industry. Without decisive and immediate action, the transition risks stalling and the realistic window for implementation could pass. Reaching the finish line requires industry-wide coordination and engagement—something individual broadcasters cannot do alone. The FCC must now establish a clear timeline to complete the transition, just as it did when the industry and consumers migrated from analog to digital.

A transition roadmap benefits everyone. It gives clarity to consumer electronics manufacturers and multichannel video programming distributors (MVPDs) so they can

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[3] Letter from Rick Kaplan, National Association of Broadcasters, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142 (Jan. 17, 2025). (FOTVI Report).

[4] *See Carr Statement on FCC's Denial of WADL TV's Application* (Apr. 23, 2024), https://docs.fcc.gov/public/attachments/DOC-402042A1.pdf.

prepare. It empowers broadcasters, retailers, and industry partners to educate consumers. And it allows stations to make plans for their newly reclaimed spectrum—unlocking the full potential of this technology.

The challenge is not technical; it's strategic. Due to the Commission's ownership restrictions which have fragmented the industry by design, no broadcaster is in a position to shut down ATSC 1.0 by themselves while other stations in the same market remain on the older standard. That would harm both the station and the viewers that rely on it. But if all stations in a market transition at the same time, viewers benefit from a seamless experience, and the industry moves forward together. That's why broadcasters are calling on the Commission to establish a timeline to complete the transition:

- **Phase 1:** Stations in the top 55 markets—representing roughly 70% of the U.S. population—transition fully to ATSC 3.0 in **February 2028,** with limited waivers for smaller or noncommercial stations if necessary.
- **Phase 2:** Stations in remaining markets transition in or before **February 2030.**

In addition to setting a timeline, this transition requires updates to outdated rules. NAB is also calling on the FCC to modernize regulations governing television reception devices—ensuring consumers who buy new TVs can continue receiving broadcast programming—and to adjust MVPD carriage rules so that obligations remain fair and unchanged during the transition.

The bottom line is simple: Next Gen TV is here, and it is delivering real benefits. But to realize its full promise, the FCC must take decisive action—just as it has in past technological shifts. The time for half-measures is over. America's television future is waiting.

II. ACCELERATING THE TRANSITION TO NEXT GEN TV WILL ENSURE A WORLD-CLASS BROADCAST SYSTEM AND STRENGHTHEN LOCAL BROADCASTING

The transition to Next Gen TV is well underway, bringing significant improvements in picture quality, audio clarity, interactive features, and public safety capabilities. Broadcasters have made substantial progress to date in rolling out ATSC 3.0 signals to 80 markets across the country while navigating complex regulatory requirements faced by no other industry seeking to upgrade its technology. However, as explained below, to realize the full benefits of this transition, the Commission should clear unnecessary regulatory hurdles and establish a coordinated, full industry-wide transition. By accelerating the complete transition to ATSC 3.0, the United States will maintain a world-class broadcast system that provides an enhanced free and local broadcast experience and support the long-term competitiveness and viability of the industry.

A. Next Gen TV Provides Valuable Consumer Benefits

Next Gen TV is a revolutionary broadcasting standard that unlocks a multitude of benefits for viewers, broadcasters, and the public at large. It enables broadcasters to offer an improved viewing experience with 4K ultra high-definition video, a complementary positioning, navigation, and timing (PNT) solution to address critical national security needs, endless datacasting possibilities via the "Broadcast Internet," and advanced emergency information. It also helps broadcasters remain competitive with other video programming services in negotiating for rights to high-demand video content.

Improved Viewing Experience

At the time NAB, CTA, and APTS first filed a joint petition to launch a transition to this new standard, 4K video was a novelty. Increasingly, however, 4K video has become commonplace on streaming services and multichannel platforms, and consumers have come to expect 4K video as a standard offering. For broadcasters to stay competitive – particularly

when it comes to obtaining content rights – they must be able to match the video quality of these other, competing platforms.

Next Gen TV represents a significant and necessary evolution in broadcast television technology. With the introduction of this technology, broadcasters already have begun to offer substantial improvements, including the higher resolution 1080p format with high-dynamic range ("HDR") video and immersive audio.[5] Once the transition is complete, viewers will be able to experience the full potential of this standard, including stunning 4K ultra-high definition ("UHD") programming.

In addition, Next Gen TV allows broadcasters to offer interactive applications ("apps") as part of their television service. Many broadcasters already offer such apps to Next Gen TV viewers, providing anytime access to news and weather, longer-form versions of news stories, and other local information. In April 2024, NBC introduced an integrated feature that enables viewers to restart live Next Gen TV programming in progress, along with other personalized interactive elements.[6]

Next Gen TV also offers several audio improvements, such as dialog enhancement that can serve the needs of individuals with some degree of hearing loss or who otherwise have difficulty understanding dialog over background audio. The AC-4 audio standard also includes

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[5] ATSC 3.0 provides the option for 1920 x 1080 pixels at 60 frames progressively-scanned (i.e., 60 full frames per second). In ATSC 1.0, the maximum formats are 1920x1080 pixels at 60 frames interlaced (30 full frames per second) or 1280x720 pixels at 60 frames progressive.

[6] Tom Butts, *NBCUniversal Launches Personalized Hyperlocal Services via ATSC 3.0*, TV Technology (April 15, 2024), https://www.tvtechnology.com/news/nbcuniversal-launches-personalized-hyperlocal-services-via-atsc-30.

advanced loudness management, which should further help with commercial loudness concerns.[7]

In short, ATSC 3.0 allows broadcasters to provide a viewing experience that is better in every way than broadcasters can offer in ATSC 1.0.

Addressing Critical Positioning, Navigation, and Timing Needs

Another promising facet of Next Gen TV is the advent of the Broadcast Positioning System (BPS™). In 2020, President Trump issued Executive Order 13095 on Strengthening National Resilience through Responsible Use of Positioning, Navigation, and Timing Services.[8] In the intervening time, NAB invented and patented a first-of-its-kind technology that leverages the ATSC 3.0 broadcast standard to transmit precise timing signals, which is not feasible with current DTV signals. Unlike GPS, which relies on satellites that can be vulnerable to jamming, spoofing and cyberattacks, BPS provides a high-power terrestrial-based solution that ensures critical systems remain operational even during GPS disruptions. A National Institute of Standards and Technology (NIST) study confirmed BPS as a viable complementary PNT solution. The study concluded, "BPS time transfer is comparable to or better than the Global Navigation Satellite System (GNSS), making BPS a viable complementary PNT solution when GNSS is unavailable."[9] Meanwhile, the National Security Space Association notes that the

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[7] *See* Dolby, Dolby AC-4: Audio Delivery for Next-Generation Entertainment Services (2021), https://professional.dolby.com/siteassets/technologies/dolby_atmos_ac-4_whitepaper.pdf.

[8] Exec. Order No. 13,905, (2020), https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-strengthening-national-resilience-responsible-use-positioning-navigation-timing-services/.

[9] Mondal, Tariq I., Sherman, Jeffrey A., Howe, David A., "Time Transfer Performance of the Broadcast Positioning System™ (BPS™)," *Proceedings of the 2025 International Technical Meeting of The Institute of Navigation*, Long Beach, California, January 2025, pp. 88-97. https://doi.org/10.33012/2025.19964.

economic value of GPS to the United States is measured in trillions of dollars, and the consequences of its disruption or loss could be catastrophic, impacting transportation, critical infrastructure, and national security.[10] BPS is already deployed on several ATSC 3.0 stations and can readily be deployed on any ATSC 3.0 station with minimal additional effort and expense. BPS can serve as a resilient backup for GPS for timing applications today and as additional Next Gen TV stations come online it will be able to provide positioning and navigation services as well.

Fulfilling the Promise of the Broadcast Internet

In 2020, then-Commissioner now-Chairman Carr coined the term "Broadcast Internet," to describe the immense potential ATSC 3.0 datacasting offers.[11] While typical wired and wireless broadband technologies do an admirable job of delivering vast amounts of content to individual consumers across the country, broadcasting offers the most efficient and most cost-effective way of reaching many different consumers at once. When Netflix, with its sophisticated and extremely expensive content delivery network (CDN), streamed a highly anticipated boxing match between Jake Paul and Mike Tyson, hundreds of thousands of users reported problems streaming the fight.[12] Imagine if Netflix had been able to offload even a portion of its connections to a broadcast datacasting service seamlessly integrated into smart

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[10] National Security Space Association, *America's Asymmetric Vulnerability to Navigation Warfare: Leadership and Strategic Direction Needed to Mitigate Significant Threats*, https://nssaspace.org/wp-content/uploads/2024/07/NAVWAR-FINAL.pdf.

[11] Brendan Carr, *Keynote Remarks of FCC Commissioner Brendan Carr at the National Association of Broadcasters and Communications Technology Association Online Event on ATSC 3.0, "Broadcast Internet: The Future of ATSC 3.0,"* May 18 2020, https://docs.fcc.gov/public/attachments/DOC-364414A1.pdf.

[12] *See* John Yoon, *Thousands Report Netflix Livestream Crashes During Mike Tyson-Jake Paul Fight*, New York Times (Nov. 16, 2024), https://www.nytimes.com/2024/11/16/business/media/netflix-outage-crash-boxing.html.

televisions. Viewers with access to a broadcast signal integrated with their Netflix app could have enjoyed a flawless experience, those connecting via Netflix's CDN would have faced less congestion, and Netflix's overall costs would have been lower – a true win-win-win.

Broadcast Internet has potential beyond carrying video events. Broadcasters have already begun using datacasting technology to help deliver time-sensitive communications and reliable video feeds to first responders in heavy crowd situations where mobile networks are frequently overloaded.[13] Similar technology has also been used in distance learning and telehealth applications.[14] Several broadcasters have launched a joint venture called EdgeBeam to deliver a nationwide datacasting capability.[15]

Advanced Emergency Information

Broadcasters participate in the Emergency Alert System (EAS), delivering time-sensitive, life-saving information to viewers. But in an emergency, the short message delivered via EAS or via a Wireless Emergency Alert (WEA) is only a starting point. Often those WEA messages are paired with a directive to consult local media. Advanced Emergency Information (AEI) can be delivered using the interactivity and data delivery capabilities in Next Gen TV, providing detailed rich media information relevant to the emergency at hand. If an evacuation

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[13] SpectraRep, "Case Study on Improved Interagency Sharing of Emergency Communications with SpectraREP's ATSC 3.0 Solution – InicdentOne™ Datacast – for the Marine Corps Marathon 2022," https://www.spectrarep.com/wp-content/uploads/2023/01/SpectraRep-Case-Study-Marine-Corp-Marathon-2022-final.pdf.

[14] SpectraRep, "Datacasting for Education," https://spectrarep.com/educast/ (detailing the use of ATSC 3.0 to "bridge[] the gap between the classroom and full broadband in places or situations where that connectivity is not feasible.").

[15] *See* Phil Kurz, *Scripps, Gray, Nexstar, Sinclair Form Powerhouse ATSC 3.0 Wireless Data Delivery Joint Venture*, TV Technology (Jan. 7, 2025), https://www.tvtechnology.com/news/scripps-gray-nexstar-sinclair-form-powerhouse-atsc-3-0-wireless-data-delivery-joint-venture.

is ordered, AEI can provide detailed information on evacuation routes. If a boil water advisory is issued, AEI can pinpoint who is affected. All of these capabilities rely on Next Gen TV being widely deployed and available.

Continued Access to Content

While locally produced content continues to be an extremely important part of broadcasters' missions, much of the content aired on local broadcast stations is produced and owned by other rightsholders. Those rightsholders are constantly making and re-evaluating decisions about which platform(s) to offer their content on. Considerations such as reach and revenue are an important part of that decision, but rightsholders also consider other parts of the viewer experience in these negotiations. Increasingly, other platforms are able to offer superior video and audio experience. The ability to offer 4K transmissions of major sporting events may soon be a determining factor about whether future sports league broadcasts will remain free and over-the-air or will migrate exclusively to pay services that can deliver a higher-quality experience.

B. The Progress to Date is Significant

Since 2022, when the Commission last inquired about the status of the transition, broadcasters have made substantial strides in rolling out ATSC 3.0.[16] Broadcasters have successfully launched ATSC 3.0 service in 80 markets, reaching over 75 percent of the U.S. population. The progress underscores the industry's commitment to advancing Next Gen TV and delivering enhanced viewing experiences to consumers. At the same time, the consumer

[16] *See Authorizing the "Next Generation" Broadcast Television Standard*, Third Further Notice of Proposed Rulemaking, 37 FCC Rcd 7978 (2022); Comments of NAB, GN Docket. No. 16-142, at 2-3 (Aug. 8, 2022) (NAB Third FNPRM Comments) (explaining progress to date); Comments of Pearl TV, GN Docket No. 16-142, at 2-4 (Aug. 8, 2022) (Pearl Third FNPRM Comments) (same).

device market continues to evolve to support this transition. CTA established the NEXTGEN TV certification and logo program to help consumers easily identify televisions and devices that are compatible with ATSC 3.0 signals. More than 100 NEXTGEN TV models, equipped with ATSC 3.0 tuners, are available from major manufacturers, including Hisense, Samsung, Sony, TCL, and Panasonic, reflecting growing investment and consumer interest in the technology.[17] Overall sales of NEXTGEN TV sets reached nearly 14 million units in December 2024 and 10 percent of all TV sets shipped to U.S. retailers in 2024 were ATSC 3.0 compatible.[18]

In addition to NEXTGEN TV television models, the availability of ATSC 3.0 converter devices has also expanded, marking a critical milestone in the transition. The first certified converter devices became commercially available in 2023, offering consumers a pathway to access ATSC 3.0 broadcasts without the immediate need to upgrade their television sets. Multiple manufacturers now produce these devices and offer a range of features, with current price points ranging from $90 to $250.[19] As consumer adoption of ATSC 3.0 accelerates and broadcasters continue their transition, the demand for affordable converter devices is expected to rise, inducing more manufacturers to enter the market and ultimately leading to greater availability and lower costs for consumers.[20]

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[17] *See* FOTVI Report, at 5-6 (explaining growth in the ATSC 3.0 television market).

[18] *Id*.

[19] *Id*. at 6-9 (describing the features available in different converter devices including receiving and displaying encrypted content, functionality without an internet connection, DVR capabilities, and analog compatibility).

[20] *Id*. at 7 ("Equipment manufacturers and most broadcasters agree that as more consumers and broadcasters transition to ATSC 3.0, the market will grow, increasing the number of options and overall affordability for consumers.").

Broadcasters have achieved this success while operating in a complex transition environment and while being subject to regulatory constraints faced by no other industry.[21] Unlike previous transitions, such as the analog-to-digital conversion that was supported by additional spectrum allocations, broadcasters must deploy ATSC 3.0 within their existing spectrum allotments. This limitation requires stations seeking to launch ATSC 3.0 service to partner with one or more competitors to ensure the continued availability of ATSC 1.0 programming for viewers who have not yet transitioned to the new standard. This is an intricate process requiring multiple steps for implementation and likely taking anywhere from six-to-nine months per market.[22]

The Commission's strict application processing requirements add another layer of complexity to the process. Broadcasters transitioning to ATSC 3.0 must ensure that their partner stations maintain ATSC 1.0 service to at least 95 percent of the population previously served by the transitioning station to qualify for expedited processing.[23] While stations may apply for non-expedited processing without meeting this coverage threshold, the FCC has not acted on such applications except in very limited circumstances, effectively making the 95 percent coverage threshold a *de facto* requirement for approval. In addition, broadcasters remain subject to the "substantially similar" requirement, which dampens the incentive for broadcasters to experiment with different programming or features on their ATSC 3.0 signals that would entice viewers to voluntarily upgrade their equipment. Addressing these regulatory

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[21] *See* NAB Third FNPRM Comments at 3-4.

[22] *See* Pearl Third FNPRM Comments at 4-6.

[23] *Authorizing the "Next Generation Broadcast Television Standard*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9930, ¶ 34 (2017) (ATSC 3.0 Order).

burdens now is essential to accelerating the transition and fully realizing the benefits of ATSC 3.0 for broadcasters and viewers alike.

C. Establishing a Coordinated Industry-Wide Transition is Essential

With ATSC 3.0 signals now reaching more than 75 percent of the country, the industry has reached a pivotal moment where a coordinated industry-wide transition is both logical and necessary. A complete transition is essential to unlock the full potential of ATSC 3.0, which cannot happen until the entire industry moves off ATSC 1.0 and reclaims that spectrum. Without this shift, broadcasters are forced to split their finite spectrum between the two standards, limiting the bandwidth available for ATSC 3.0's most advanced capabilities and harming consumers in the process. As more broadcasters voluntarily launch ATSC 3.0 services while still maintaining ATSC 1.0 broadcasts, capacity constraints will become more pronounced, forcing broadcasters to make trade-offs in picture quality, signal robustness, and service offerings as they lack full access to their own spectrum.[24] This dual-system approach not only strains resources but also stifles innovation and slows the widespread adoption of ATSC 3.0.

Despite the clear benefits of a full transition to ATSC 3.0, even if the Commission were to end the mandatory simulcasting requirement, uncertainty surrounding the transition timeline will make broadcasters hesitant to fully transition out of concern for potentially losing viewers who still rely on ATSC 1.0 signals. Consumer equipment manufacturers are reluctant

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[24] *See* FOTVI Report at 17-18 (explaining the difficulties in managing capacity constraints during the transition and stating that "[t]he nationwide delivery of all programming in both ATSC 1.0 and ATSC 3.0 simultaneously with available spectrum is simply not possible. The ATSC 3.0 'lighthouse' can offer only a small fraction of the features that will be possible after the transition" and that "[m]igrating additional stations to ATSC 3.0 opens more capacity for improved service but reduces the capacity available for ATSC 1.0 signals – making it much more difficult to continue to offer the quality and variety of content available today.").

to scale up production of very low-cost ATSC 3.0-compatible devices, as the absence of a firm transition timeline creates uncertainty about demand. At the same time, few, if any, broadcasters will be willing to be the first to turn off their ATSC 1.0 signal and put themselves at a disadvantage relative to other broadcasters. This cycle of hesitation — where manufacturers delay due to market uncertainty, and broadcasters delay due to concerns over audience retention — will ultimately slow the broader adoption of ATSC 3.0 and prevent consumers from receiving its full benefits.

A prolonged permissive transition also creates confusion and uncertainty for consumers, making the shift to Next Gen TV more costly and frustrating. In addition to depriving consumers of the full benefits of ATSC 3.0, without a coordinated industry-wide transition, consumers are left guessing when and if they will need new equipment, leading to hesitation in upgrading and the risk of spending money on devices that may soon become obsolete. Additionally, as noted above, those who do choose to upgrade may face higher prices due to more limited device availability – prices that would be significantly lower if a firm transition timeline encouraged mass production and competition. Furthermore, as broadcasters continue operating under increased spectrum constraints while supporting both ATSC 1.0 and ATSC 3.0, they will eventually be forced to make difficult tradeoffs, potentially resulting in the loss of valued programming.

To break this cycle and ensure a successful and complete transition, the Commission should establish a firm transition timeline that provides clarity for all stakeholders, including consumers. A coordinated industry-wide transition will eliminate the inefficiencies and uncertainties of the current fragmented approach and will provide a clear roadmap for the industry, allowing stakeholders to plan and allocate resources more effectively. This will not only accelerate deployment but also ensure that all markets — large and small — benefit from

ATSC 3.0's advancements in a timely manner. Given the inherent practical and regulatory complexities of a permissive market-by-market transition, without a firm transition date the industry risks a prolonged hybrid period that slows innovation and reduces the competitive advantage ATSC 3.0 offers against other services.

Critically, a clear timeline for the transition's completion will help drive the availability and affordability of low-cost ATSC 3.0 converter devices.[25] Broadcasters recognize that many consumers, particularly those relying exclusively on over-the-air television will need an affordable way to receive ATSC 3.0 signals without immediately purchasing a new television.[26] However, without a firm transition timeline, manufacturers will hesitate to make investments in large-scale production, keeping supply low and prices high. A set deadline creates certainty in the market, which encourages the level of mass production necessary to yield economies of scale and to lower consumer costs that ensure ATSC 3.0 adoption is inclusive and seamless.

Lastly, a coordinated, industry-wide transition will allow broadcasters, consumer advocacy groups, and other stakeholders to plan effectively for the significant investments and outreach efforts necessary for a smooth transition. Broadcasters have already taken steps to educate viewers on the benefits of ATSC 3.0.[27] A clear transition timeline will enable broadcasters to provide viewers with clear, consistent messaging on how and when the transition will take place, what they need to do to prepare, and what benefits they can expect.

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[25] *See* FOTVI Report at 17 ("Broadcasters and device manufacturers agreed that having a target date for a transition would help align product development cycles and messaging to ensure that consumers will have access to these devices.").

[26] *Id*. ("Broadcasters identified ubiquitous affordable dongles as a precursor" to turning off their ATSC 1.0 signals.).

[27] *Id*. at 16 (describing consumer education efforts to date).

This education campaign will help ensure that households understand their options for receiving television service post-transition and reduce disruptions and complaints.

By establishing an industry-wide transition now, the Commission can ensure that the shift to ATSC 3.0 is executed in an orderly, efficient manner that maximizes benefits for all stakeholders.

III. THE FCC SHOULD MAKE RULE MODIFICATIONS NECESSARY TO EFFECTUATE AN ORDERLY INDUSTRY-WIDE TRANSITION TO ATSC 3.0 BROADCASTING

As discussed above, an industry-wide transition is necessary to break the cycle of uncertainty, ensure spectrum resources are efficiently allocated, and ultimately to bring all the benefits of the Next Gen TV standard to viewers. To achieve this, certain changes are needed to Parts 73, 15, and 76 of the Commission's Rules.

A. Modify the Television Transmission Standard in Part 73 of the Commission's Rules

The Commission should modify its rules regarding broadcast television transmission standards in Section 73.682 to replace ATSC 1.0 with ATSC 3.0 following an orderly transition on the fastest realistic timeline. Before stations can transition, stations will require significant upgrades, including, in many cases, upgrading or replacing a transmitter and/or exciter with one that supports ATSC 3.0 transmission. In addition, as discussed in more detail below, those who rely on over-the-air reception, including viewers using an antenna to receive broadcast channels and many MVPDs, may need to upgrade their equipment.

Broadcasters believe that conducting a transition in two phases will best balance the challenges associated with a coordinated transition and the need for clear messaging to MVPDs, device manufacturers, and viewers. NAB proposes that in the first phase, stations in the top 55 markets (reaching 70 percent of viewers), would cease transmitting in ATSC 1.0 and broadcast exclusively in ATSC 3.0 on a date certain, while the remaining stations would cease transmitting in ATSC 1.0 at a later date.

While we do not want to understate how much effort is required to upgrade all the remaining stations to transmit in ATSC 3.0, market participants will accelerate those efforts if a reasonable deadline is set. NAB's modeling confirms that supply-chain resources and technical crews for ATSC 3.0 service implementation exist to meet demand for an early 2028 transition deadline for stations in the top 55 markets. Taking into account annual viewing patterns, it is feasible and desirable for the top 55 markets to complete a transition to ATSC 3.0 on a single date in February 2028. An additional 18-24 months would provide sufficient time for all remaining stations to complete the work necessary to transmit in ATSC 3.0. Therefore, NAB proposes that the remaining markets should transition in or before February 2030.

While transitioning an entire market on a single date would enable clear consumer messaging around device upgrades, NAB recognizes that some smaller stations, and in particular some non-commercial educational television stations, may have difficulty meeting this early deadline. As a result, NAB suggests that the Commission adopt a procedure for non-commercial educational television stations to opt to transition at a later date. Absent exceptional circumstances, it is essential that all of the commercial stations in a market all transition on the same date. Therefore, NAB suggests that the Commission consider allowing only noncommercial stations to avail themselves of any such streamlined opt-out process. To the extent the Commission feels it is necessary, smaller, independent stations could be permitted to request a later date. Commercial stations in the top 55 markets that do not meet this definition should be required to adhere to the phase 1 deadline absent extreme extenuating circumstances, such as natural disasters or bankruptcy.

To effectuate this shift, NAB asks that the Commission amend Section 73.682 of its rules to phase out ATSC 1.0 as outlined above and to allow for ATSC 3.0 transmission in its

place. NAB also recommends taking this opportunity to update the incorporations by reference in the rules to the current versions of the ATSC 3.0 standards, ATSC A/321:2024-04 and ATSC a/322:2024-09. NAB does not recommend subjecting low power television stations or television translator stations to any requirement to transition to ATSC 3.0.

B. Update DTV Tuner Rule to Ensure Next Gen TV Reception

As the broadcast industry shifts to nationwide ATSC 3.0 transmission, several other sections of the Commission's rules should be updated to match the evolving marketplace. In particular, the tuner requirement contained in Section 15.117 of the Commission's rules should obviously be modernized to match the change in the broadcast standard.

During the simulcasting phase of the transition, the Commission's rules implementing the All-Channel Receiver Act included a carve-out exempting TV broadcast receivers from being required to tune ATSC 3.0 channels. Several television manufacturers have begun including Next Gen TV tuners on some or all television sets manufactured. According to CTA data included in the Future of Television Initiative Report, approximately 14 million Next Gen TVs have been sold in the United States to date.[28] Those same data project that shipments of Next Gen TVs will ramp up significantly in the coming years.[29]

Setting deadlines for broadcasters to transition to ATSC 3.0 should go hand-in-hand with removing the carve-out in the Commission's rules that exempts televisions from a requirement to include an ATSC 3.0 tuner. While broadcasters would encourage the Commission to update the tuner rule to include ATSC 3.0 reception well in advance of the

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[28] FOTVI Report at 6, Figure 1.

[29] With each successive market forecast, the horizon for widespread availability of Next Generation Televisions has shifted later. NAB believes this is largely due to the lack of a clear date by which ATSC 1.0 transmissions will sunset.

start of the ATSC 1.0 sunset, we also understand that the consumer electronics industry needs time to build the capability throughout its supply chains. The Commission often allows a year or more for a phase in of any kind of device requirement after a final rule is adopted. We do not believe it is necessary to wait several years after implementation of a tuner requirement before beginning to sunset ATSC 1.0 transmission. Unlike the DTV transition, the market is already primed -- consumers have access to low-cost converter devices and televisions with ATSC 3.0 reception capabilities from numerous manufacturers.

Nevertheless, to prevent consumer confusion, broadcasters ask that the Commission remove the carve-out in Section 15.117 of its rules exempting tuners including ATSC 3.0 reception capabilities as soon as practical but *no later than* the date established for stations in the first phase of the transition to cease broadcasting in ATSC 1.0. Consumers buying new televisions after stations have stopped broadcasting in ATSC 1.0 should not have to worry about whether their brand-new device can receive all channels. Broadcasters would support removing the requirement to include an ATSC 1.0 tuner after the date at which all full-power and class A broadcasters cease transmitting in ATSC 1.0.

The All-Channel Receiver Act (ACRA) expressly gives the Commission authority to "require apparatus designed to receive television pictures broadcast simultaneously with sound be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting."[30] During the DTV transition, the Commission addressed arguments regarding its statutory authority in this regard, finding "[n]othing in either a plain language

[30] All Channel Receiver Act of 1962, P.L. No. 87-529, 76 Stat. 150 (codified at 47 U.S.C. 303(s)).

reading of the ACRA or the legislative history suggests that the ACRA would no longer apply if the Commission were to change the transmission technology used for television service."[31]

Along with modernizing the tuner rule to reflect the current broadcasting standard, broadcasters also believe that the Commission should re-examine what it means to "adequately receive" television channels. For most of the history of television, viewers could expect to turn on their television set and immediately see the channel they previously watched. Even as televisions started to include apps and smart capabilities, broadcast television remained at the center of the consumer interface. Increasingly, however, tuning functions can be difficult to find on some television sets. On initial start-up, some televisions direct viewers to set up smart features before presenting them for an option to scan for broadcast channels. Some televisions include remote controls with buttons for online subscription services but no easy-to-access button for the free over-the-air television.

Meanwhile, regulators around the world are looking at ways to ensure discoverability and/or prominence of local broadcast services on televisions as sources of video programming continue to evolve.[32] Broadcasters ask the Commission to consider adopting a requirement that television receivers make broadcast services available to a consumer in the same or fewer steps needed to access any other video content on the same device. For

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[31] *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Second Report and Order and Second Memorandum Opinion and Order, MM Docket No. 00-39 at ¶ 25 (Aug. 8, 2002) (Tuner Order).

[32] For example, Italy has recently approved prominence guidelines. *See* Branislav Pekic, *Italy Approves Prominence Guidelines*, Advanced Television (Oct. 14, 2024), https://advanced-television.com/2024/10/14/italy-approves-guidelines-to-promote-traditional-tv-services/. Ofcom in the United Kingdom is also undergoing a consultation to ensure that broadcast apps are available, prominent, and easily accessible. *See* Ofcom, *Consultation: designation of television selected services – principles and methods for Ofcom's recommendations* (Dec. 11, 2024), https://www.ofcom.org.uk/tv-radio-and-on-demand/public-service-broadcasting/consultation-designation-of-television-selection-services/.

example, if there is a button on the remote to access online services, there should be a button on the remote to access broadcast television. If there is a menu in the user interface that displays content sources, broadcast should be, by default, placed among the first page of content sources. Although broadcasters want to ensure that device manufacturers can continue to improve the user experience, it is essential that viewers are able to continue to easily find and access local broadcast services, especially in the event of an emergency. We are concerned that certain incentives may lead manufacturers to privilege largely unregulated paid services over the only free, over-the-air broadcast services that are required to serve the public interest. Congress mandated that broadcasters provide free signals to the American people, but that is meaningless if those channels cannot be received or located easily.

This proposal is consistent with the All-Channel Receiver Act. As the Commission observed 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."[33] For example, when the FCC adopted UHF tuning requirements under the ACRA, it required that UHF tuning controls and channel readout be "comparable in size, location, accessibility and legibility to VHF controls and readout on that receiver."[34] A requirement that television receivers ensure that broadcast channels are comparable with other video services would be consistent with the language and intent behind the concept of adequately receiving broadcast channels.

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[33] Tuner Order at ¶ 29.

[34] 15 C.F.R. § 15.117(c).

C. Update the Commission's Rules on MVPD Carriage as Necessary

In the industry's transition to Next Gen TV broadcasting, NAB's goal is to *maintain* existing MVPD carriage- not to expand or contract MVPD carriage obligations. Broadcasters and MVPDs have a symbiotic relationship; MVPDs use local broadcast signals to provide a compelling and desirable package of viewing options to their customers, while broadcasters rely on MVPD carriage to reach viewers who cannot or do not wish to receive programming via an antenna. Broadcasters and MVPDs alike have an interest in ensuring viewers can continue to receive broadcast content throughout the transition to ATSC 3.0. Any technology transition raises technical questions that need to be addressed.

Many, if not most, of these questions can be addressed without the need for regulatory involvement. The Society of Cable Telecommunications Engineers (SCTE) has recently released standards relating to the redistribution of ATSC 3.0 signals, and ATSC is in the advanced stages of developing and releasing a recommended practice that addresses redistribution of ATSC 3.0 signals by MVPDs. Together these efforts may address the technical challenges faced by MVPDs, including issues such as transcoding, signal compatibility, and the integration of advanced features.

Nevertheless, some rules, particularly those related to must-carry signals, may need to be revised in light of the new standard. For example, in the Future of Television Initiative Report, MVPDs concluded that changes may be necessary to the "good quality signal" requirement in Section 76.55 of the Commission's rules, which uses a fixed signal level for each RF band to determine whether a signal is adequate to be eligible for "must-carry" status.[35] These signal levels were derived using certain "planning factors" for DTV reception,

[35] 47 C.F.R. § 76.55(c)(3).

which included, among other things, a carrier-to-noise (C/N) ratio of 15.2 decibels (dB).[36] ATSC 3.0 signals can be provided using a variety of modulation and coding (modcod) combinations, which can require a C/N ratio that is either higher or lower than required in ATSC 1.0.[37] While most broadcasters are currently providing their primary video streams using a modcod that meets or exceeds the robustness of an ATSC 1.0 signal, the Commission may want to modify the definition of good quality signal to require a higher signal level when necessitated by the choice of modcod.

MVPD participants identified several other rule provisions that they believe may require updates to reflect the new standard.[38] Broadcasters do not concede that all of these rules require modifications. But to the extent the Commission believes such modifications may be necessary, we believe it is appropriate for the Commission to seek comment on those rule sections.

MVPD participants also identified several costs that MVPDs may incur to continue to carry broadcast signals after they transition. The particular costs can vary based on how the MVPD receives signals (e.g., over-the-air or via a direct fiber feed), whether signals need to be transcoded or reformatted to be compatible with the receivers they lease to viewers. In any case, while broadcasters acknowledge that there are costs associated with a transition,

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[36] *Carriage of Digital Television Broadcast Signals, Amendments to Part 76 of the Commission's Rules, Implementation of the Satellite Home Viewer Improvement Act of 1999: Local Broadcast Signal Carriage Issues, Application of Network Non-Duplication, Syndicated Exclusivity and Sport Blackout Rules to Satellite Retransmission of Broadcast Signals*, First Report and Order and Further Notice of Proposed Rulemaking, January 18, 2001(CS Docket Nos. 98-120, 00-96, 00-2) at ¶ 46 (DTV Carriage Order).

[37] *See* ATSC Recommended Practice: Guidelines for the Physical Layer Protocol, Doc. A/327:2024-12, p. 18-19, available at https://www.atsc.org/wp-content/uploads/2024/12/A327-2024-12-Physical-Layer-RP.pdf.

[38] *See* FOTVI Report at 21, n. 38.

broadcasters do not believe that these costs represent a significant impediment to continued carriage. Establishing a clear timeline for the transition to ATSC 3.0 would allow MVPDs to plan, budget, and manage the associated costs of ATSC 3.0 equipment in a structured way and would also help avoid the dual carriage concerns MVPDs raised.

D. Other Rule Changes Contemplated

During the Future of Television Initiative, some participants suggested that other sections of the Commission's rules be revisited. Although NAB does not believe that an industry-wide transition requires updates to these categories of rules, the Commission may wish to consider addressing these concerns at the same time as it addresses this petition.

Encoding Rules

Some participants in the Future of Television Initiative raised concerns about broadcasters' use of digital rights management technology and its impact on viewers ability to continue to time-shift content.[39] The ATSC 3.0 Security Authority (A3SA) has already adopted "encoding rules" as part of its adopter agreement to ensure that viewers will retain the right to "make an unlimited number of copies of these broadcasts" and "use 'trick play' features such as pause, rewind, fast-forward, and ad-skipping."[40] These rules conform to the encoding rules the Commission adopted in Part 76, Subpart W of its rules as they apply to retransmission of broadcast signals. While NAB does not believe it is necessary, to the extent the Commission believes it is necessary to replicate these rules in Part 73 or clarify that the Part 76 rule applies to broadcast-originated content, NAB does not object to such a clarification.

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[39] FOTVI Report at 7-9, 30.

[40] FOTVI Report at Appendix 2, slide 7.

Privacy

The Future of Television Initiative also discussed potential privacy concerns associated with ATSC 3.0. A complete, industry-wide transition to ATSC 3.0 does not raise new privacy concerns that would require rule changes. Broadcasters are already subject to a framework of federal and state privacy laws that govern the collection, use, and protection of consumer data that would apply with equal force to ATSC 3.0.

Moreover, the types of data that broadcasters may collect from viewers who do connect their ATSC 3.0-enabled devices to the Internet are no different from those already gathered by a wide range of other service providers, including streaming platforms, cable operators, and smart TV manufacturers to deliver personalized content and advertising, enhance the user experience, and improve service offerings. The Commission should not subject broadcasters to stricter privacy regulations than such competitors. Doing so would create an uneven playing field that disadvantages free, over-the-air television compared to subscription-based and digital-first services. The Commission should therefore ensure that privacy regulations are consistent across the video marketplace to foster competition, innovation, and consumer choice.

Accessibility

In the context of the Future of Television Initiative, parties discussed whether additional changes to the Commission's accessibility rules were necessary. The current rules need not be modified to continue to ensure that viewers can access closed captioning and audio description services as well or better than they can in ATSC 1.0.

IV. THE COMMISSION SHOULD CLARIFY AND/OR UPDATE CERTAIN RULES TO ACCELERATE DEPLOYMENT

Certain rules and practices of the Commission are adding unnecessary delay and uncertainty to the transition. NAB requests that the Commission clarify and/or modify certain of its rules to allow more rapid deployment of Next Gen TV prior to an industry-wide transition. The Commission should also seek comment on whether there are other potential rule changes that would help broadcasters manage capacity constraints and maximize the benefits ATSC 3.0 offers leading up to a full industry-wide transition.[41]

A. Request for Declaratory Ruling or Clarification Regarding Voluntary Hosting Arrangements

Given the significant public interest benefits of ATSC 3.0, the Commission should take immediate action to remove regulatory obstacles that unnecessarily slow deployment and hinder broadcasters' ability to implement practical transition solutions. Specifically, the Commission should provide greater flexibility in voluntary hosting arrangements and prevent undue delays in processing ATSC 3.0 applications by addressing two key issues: the 95 percent coverage requirement for expedited processing of ATSC 3.0 applications and the misapplication of this requirement to multicast streams.

First, the Commission should reassess the 95 percent coverage requirement for expedited application processing. Under current guidelines, broadcasters seeking expedited processing of their ATSC 3.0 applications must ensure that their partner ATSC 1.0 stations

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[41] *See, e.g.*, FOTVI Report at 18-19 (discussing potential solutions to maintain service to viewers with ATSC 1.0-compatible equipment while enabling more capacity to be dedicated to ATSC 3.0 transmissions).

cover at least 95 percent of their population served.[42] While this was initially intended as a guideline, it has effectively become a *de facto* requirement, as the Commission has not moved forward with applications that fail to meet this threshold absent exceptional circumstances. This rigid approach restricts which stations can serve as ATSC 3.0 hosts, creating unnecessary roadblocks for broadcasters seeking to bring ATSC 3.0 services to their communities. Meeting this coverage requirement is especially difficult in smaller markets, and for smaller broadcasters and independent stations that have fewer viable hosting partners and non-commercial educational television stations that often have different coverage areas than commercial stations. Relaxing this requirement would provide broadcasters with the flexibility needed to secure practical hosting solutions, accelerating the deployment of ATSC 3.0. Allowing for a modest reduction in coverage would not significantly impact overall consumer access, as stations still have strong market-driven incentives to serve their viewers.

The Commission should also remove regulatory red tape that complicates the transition of multicast streams. NAB understands that multicast streams have been subject to the same 95 percent coverage requirement as primary streams, even though they are not a mandated service. This creates an undue burden on broadcasters and potentially forces broadcasters into a false choice between eliminating multicast streams entirely or transitioning to ATSC 3.0. Moreover, the Media Bureau's practice of including multicasts when determining whether an application meets the 95 percent coverage requirement and therefore qualifies for expedited processing contradicts the FCC's statement that it "will apply the DMA and community of license coverage requirements to all multicast streams but will not consider those streams when determining whether a station qualifies for expedited

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[42] ATSC 3.0 Order at ¶ 34.

processing."[43] The FCC should therefore reaffirm this principle and ensure that the Media Bureau is processing applications accordingly.

B. End the "Substantially Similar" Requirement to Allow for Greater Innovation

The Commission should act now to eliminate the "substantially similar" requirement, which has become an unnecessary regulatory constraint that limits broadcasters' ability to fully realize the potential of ATSC 3.0. This rule, originally adopted to ensure viewers retained access to popular programming during the transition, was never intended to be a long-term restriction. Even at the time of its adoption, the Commission acknowledged that it "could unnecessarily impede Next Gen TV programming innovations as the deployment of ATSC 3.0 progresses."[44] The substantially similar requirement is set to sunset on July 17, 2027.[45] However, with ATSC 3.0 now reaching over 75 percent of the country, the Commission should not wait two more years to sunset a requirement that has outlived its usefulness and now only serves to hinder the transition.

The rationale behind the substantially similar rule was to prevent broadcasters from migrating their most valuable programming exclusively to ATSC 3.0, thereby leaving ATSC 1.0 viewers behind. As NAB has explained previously, this concern is no longer relevant as market dynamics already ensure that popular programming remains widely accessible.[46] Broadcasters have no financial incentive to restrict their highest-value content to the still-limited ATSC 3.0 audience. Their business models rely on maximizing viewership and

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[43] *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 38 FCC Rcd 6409, ¶ 32 (June 23, 2023) (Third Report and Order).

[44] ATSC 3.0 Order at ¶ 22.

[45] Third Report and Order at ¶ 1.

[46] *See* NAB Third FNPRM Comments at 13-16.

advertising revenue, which means they will continue to make their most-watched programming available to the largest possible audience — including those who have not yet transitioned to ATSC 3.0.[47]

Moreover, the requirement is now counterproductive, as it prevents broadcasters from using ATSC 3.0's capabilities to offer differentiated programming that could drive Next Gen TV consumer interest and adoption. This stagnation discourages investment in new content and services that could make ATSC 3.0 a more attractive and competitive platform. Eliminating the requirement now will not harm ATSC 1.0-reliant viewers but *will* accelerate ATSC 3.0 adoption. The success of ATSC 3.0 depends on adoption, and adoption depends on consumers seeing all the benefits that ATSC 3.0 has to offer. Broadcasters need the flexibility to experiment with the enhanced formats, experiences, and features that distinguish ATSC 3.0 from its predecessor. By lifting this outdated restriction, the Commission would encourage broadcasters to develop unique ATSC 3.0 content that gives consumers a compelling reason to upgrade. This, in turn, will create a virtuous cycle: higher consumer adoption will incentivize manufacturers to produce more affordable ATSC 3.0-compatible equipment, further expanding access for consumers, and thus driving broader industry investment in Next Gen TV.

V. CONCLUSION

For the United States to fully realize the benefits of ATSC 3.0, the Commission must take swift action to establish a coordinated, industry-wide transition plan. While broadcasters have made significant progress, continued reliance on spectrum-sharing agreements and regulatory and market uncertainties limit the full deployment of Next Gen TV services. A

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[47] *Id.*

structured, industry-wide transition will provide regulatory certainty, accelerate investment in ATSC 3.0 infrastructure and consumer devices, and ensure that American consumers benefit from improved broadcast quality and expanded service offerings. Moreover, a clear and coordinated transition will strengthen the long-term competitiveness of the broadcast industry, allowing it to better compete with digital and streaming platforms while providing high-quality, free, and local television to the public. Accordingly, we urge the Commission to clear regulatory hurdles that delay deployment and investment in ATSC 3.0 and initiate a rulemaking proceeding to establish a formal plan for an industry-wide transition that fosters innovation, promotes efficiency, and ensures a stronger future for local broadcasting.

Respectfully submitted,

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