In the Matter of: )

Rules Governing the Use of Distributed ) MB Docket No. 20-74
Transmission Systems Technologies )

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

COMMENTS OF AMERICA'S PUBLIC TELEVISION STATIONS
AND THE NATIONAL ASSOCIATION OF BROADCASTERS

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

In the Matter of:

Rules Governing the Use of Distributed Transmission Systems Technologies

MB Docket No. 20-74

Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard

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COMMENTS OF AMERICA’S PUBLIC TELEVISION STATIONS AND THE NATIONAL ASSOCIATION OF BROADCASTERS

I. INTRODUCTION AND SUMMARY

America’s Public Television Stations and the National Association of Broadcasters (collectively “Petitioners”) 1 hereby submit comments in response to the Commission’s Notice of Proposed Rulemaking on potential changes to the Commission’s rules governing Distributed Transmission Systems (DTS). 2

Petitioners commend the Commission for moving forward expeditiously in this proceeding and urge the Commission to continue to do so. Amendment of the Commission’s rules to permit greater use of DTS systems will benefit viewers by providing superior coverage, particularly at the

1 Petitioner America’s Public Television Stations (“APTS”) is a nonprofit membership organization that represents nearly all public television stations nationwide. APTS fosters strong and financially sound noncommercial television and works to ensure member stations’ commitment and capacity to perform essential public service missions in education, public safety and civic leadership for the American people.

2 Petitioner 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.

edges of stations’ service areas. ATSC 3.0 promises to bring much-improved free over-the-air television service to viewers around the country, including better pictures and sound, hyper-local content, new features that merge broadband and broadcast content, enhanced emergency alerting, and better reception particularly in mobile reception devices. As stations plan to transition to ATSC 3.0 in the coming months and years, each station’s specific deployment plans may in many cases be influenced by the potential for DTS deployments to provide robust coverage. Expeditious approval of the requested changes will improve service to viewers, encourage investment and speed the rollout of ATSC 3.0 services.

The proposed changes will also enhance the critical principle of localism. Petitioners and their members are dedicated to preserving and promoting localism, and expressly avoided asking the Commission to consider a more aggressive approach it had previously rejected out of concerns it could undermine localism. Indeed, facilitating the ATSC 3.0 rollout and allowing superior coverage through use of DTS will enhance localism as ATSC 3.0 provides the capability for broadcasters to provide hyperlocal, geo-targeted updates and alerts.

Finally, the Commission should not delay this proceeding examining hypothetical concerns over the impact of expanded DTS operations on secondary and unlicensed services. While there is no reason to believe these impacts will be widespread, there is also no basis for the Commission to expand the spectrum rights of secondary and unlicensed services in this proceeding.

II. **EXPEDITIOUS AMENDMENT OF THE FCC’S RULES WILL SERVE THE PUBLIC INTEREST**

The NPRM seeks comment on Petitioners’ proposal to amend the DTS rules to allow DTS signals to provide reliable coverage near the edge of a station’s service contour, even when the signals unavoidably spill over a station’s authorized service area. Critically, Petitioners did not propose to allow placement of DTS transmitters outside that service area, and transmitters would
be limited by the interference contour of the primary reference facility.\(^3\) While the requested changes are quite small, they can have a significant impact on the economic and practical feasibility of DTS deployments, which heretofore have been impeded and finally allow broadcasters to take advantage of the benefits the Commission has recognized that DTS systems can offer.

A. **Fast Action on the DTS Rules Will Facilitate the ATSC 3.0 Rollout**

The NPRM specifically states that the Commission seeks, “to facilitate the use of new and innovative technologies by broadcasters.”\(^4\) Adoption of the proposed rule changes will do just that, particularly if the Commission continues to move expeditiously in this proceeding. Yet the NPRM also seeks comment on whether it is premature to consider changes to the existing DTS rules, and whether the Commission should wait to see how the ATSC 3.0 market develops before considering these changes.\(^5\) It emphatically should not. Taking a “wait and see” approach will only serve to undermine the potential consumer benefits associated with use of DTS and complicate the voluntary transition to ATSC 3.0. In contrast, providing this much-needed flexibility for DTS deployments now will help broadcasters deliver on some of the key features of ATSC 3.0 and thereby accelerate deployment.

Broadcasters are currently developing plans to transition to ATSC 3.0, including the use of DTS, in markets across the country. Because broadcasters have not asked for additional spectrum in other bands to facilitate this transition, the voluntary deployment of ATSC 3.0 will require scrupulous planning and coordination among interested stations in a given market. Petitioners’

\(^3\) NPRM at ¶ 7.

\(^4\) Id. at ¶ 2.

\(^5\) Id. at ¶ 12.
proposed rule changes will facilitate the transition by making it easier for groups of stations that are not collocated to enter into simulcasting arrangements that preserve ATSC 1.0 service throughout their service areas. The sooner the Commission can provide certainty regarding the ability of stations to leverage the full potential of DTS technology, the better able stations will be to plan for the most efficient rollouts that best preserve existing service.

In response to the Commission’s Public Notice concerning the Petition for Rulemaking that initiated this proceeding, commenters noted that the Commission’s adoption of the existing DTS rules near the end of the DTV transition hampered use of DTS technology. According to the Merrill Weiss Group, many stations had already finalized their system designs based on a single transmitter architecture, and lacked funds or time to significantly modify those plans by the time the rules were finalized. The Commission has the opportunity to avoid repeating this mistake in this proceeding by quickly adopting new DTS rules while stations are still actively planning their ATSC 3.0 deployments.

**B. Amendment of the DTS Rules Will Improve Service for Viewers**

Beyond the benefits for stations in terms of planning and executing a successful transition that will bring the benefits of Next Gen TV to viewers, adoption of the proposed changes also will improve service for viewers themselves. The potential benefits of DTS deployments in this respect are undisputed. When it adopted the current DTS rules in 2008, the Commission cited the many potential benefits DTS operations could provide. Among other things:

- DTS can allow stations to reach viewers that could not otherwise be served by a single transmitter architecture. This includes serving rural and remote areas with improved coverage and filling in gaps in coverage caused by terrain.

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6 Comments of the Merrill Weiss Group, LLC at 2, GN Docket No. 16-142 (Nov. 27, 2019).

7 Id.
• DTS can improve service within stations’ coverage areas, particularly near the edges, by allowing the distribution of higher-level and more uniform signals throughout the service area.

• DTS can improve reception quality and reliability on mobile devices and enhance indoor reception.

• DTS solutions may enhance spectrum efficiency because single frequency networks require only a single channel, rather than multiple channels used by translators.⁸

While these benefits are unquestioned, the fact remains that the Commission’s existing rules authorizing use of DTS have resulted in only a limited number of such deployments. ATSC 3.0 permits stations to use a simplified DTS design that is more cost-effective and that we anticipate will be more widely deployed, but only if such deployments are planned from the outset. These advantages will be realized through the adoption of the rule changes Petitioners have proposed, as they allow broadcasters to deploy significantly more efficient DTS systems to provide more robust coverage in underserved areas at the edge of a station’s service area, enhance indoor reception, and enable robust mobile reception.

C. Amendment of the DTS Rules Will Strengthen Localism

Members of the broadcasting industry spent nearly a year developing a proposal for changes to the existing DTS rules that would avoid the potentially complex or controversial questions often associated with such proposals. In particular, broadcasters worked hard to develop a formula that would avoid concerns about undermining localism. As a result, the Commission has before it a proposed set of rules that will preserve and enhance localism while also providing broadcasters with greater flexibility to offer improved service to viewers.

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In adopting the current rules, the Commission rejected the adoption of an “Expanded Area Approach” because it did not want to allow stations to use DTS transmitters to achieve “dramatically expanded primary coverage rights.” \(^9\) The Commission cited a number of reasons for this conclusion, including the effort to foster localism by restricting a station’s focus to its primary coverage area and the Commission’s desire to ensure consistent treatment for both single-transmitter and DTS stations. \(^10\) Accordingly, the Commission rejected calls from some stakeholders to allow broadcasters to expand their service by using DTS operations to cover their entire DMAs and recognized the necessity of some DTS operations to spill outside a station’s service area -- at least by a *de minimis* amount.

The rules proposed here do not allow broadcasters to dramatically expand their primary coverage rights. By strictly limiting DTS signals from extending beyond the interference contour of the primary facility, Petitioners have avoided concerns that they would seek to “dramatically” expand service beyond their communities of license or encroach on the service areas of nearby television stations.

Moreover, we urge the Commission to consider these rule changes in the broader context of ATSC 3.0’s capabilities, which have the potential to deliver hyperlocal, geotargeted alerts, news updates, and educational interactive services. DTS deployments that allow broadcasters to increase throughput while preserving or enhancing robust service to the edges of their service areas can allow stations to maximize the potential of ATSC 3.0 while improving, not undermining, the important principle of localism.

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\(^9\) DTS Order at ¶¶ 17-18.

\(^10\) *Id.* at ¶ 18.
This may be particularly observed in those portions of a broadcaster’s service area where DTS deployments will provide robust coverage or where little or no coverage presently exists. Portions of a station’s service area that are obstructed by terrain and thus hard to reach with a station’s primary facility present one of the best use cases for DTS deployments. These areas also may have different weather patterns due to such terrain – making them precisely the areas where the hyperlocal, targeted transmission capabilities of ATSC 3.0 would provide the most benefit. Pairing the enhanced coverage capabilities of DTS with the geotargeting of ATSC 3.0 is a step forward for localism, particularly in light of the limitations we have proposed.

III. THE COMMISSION SHOULD NOT EXPAND THE SPECTRUM RIGHTS OF SECONDARY OR UNLICENSED USERS IN THIS PROCEEDING

A. The Commission Should Not Reverse its Previous Decisions Regarding the Spectrum Rights of White Spaces Operators

The NPRM seeks comment on the potential effects of DTS rule changes on TV white spaces (TVWS) and other unlicensed operations. As a practical matter, amendment of the Commission’s rules to facilitate more widespread deployment of DTS operations is likely to create more opportunities for TVWS use – particularly in rural and difficult to serve areas where broadcasters heavily rely on TV translators. Petitioners anticipate that some TV translator stations will opt to become part of the single-frequency network of the station they rebroadcast. Thus, DTS will enhance the efficient use of spectrum by reducing the number of additional channels needed for television translators particularly in rural and difficult to serve areas where viewers rely most heavily on translators. These rural and hard to reach areas are precisely the locations that Microsoft asserts would benefit most from expanded broadband access opportunities offered by TVWS technology. Given that DTS deployments should have the impact of freeing additional channels in rural areas, Microsoft and other TVWS proponents should support these changes enthusiastically and without reservation.
Regardless, the Commission should not, and legally cannot, prioritize unlicensed operations over existing and future licensed operations in the band. First, from the very beginning, TVWS proponents have understood that their operations would be unlicensed, would have no spectrum rights, no expectation of protection from interference and no right to restrict licensed broadcasters’ use of the band. Commission precedent on this issue could not be clearer.

When the Commission first proposed to allow unlicensed operation in the television bands, it expressly stated that the unlicensed uses it proposed were “not intended to limit future licensed use or to guarantee spectrum access rights for this band.”\(^\text{11}\) Then, when the Commission authorized TVWS operations in 2008, it again made plain that these unlicensed operations would always yield to current and future licensed broadcast services, stating expressly that “future broadcast uses of the television band will have the right to interference protection from TV band devices.”\(^\text{12}\)

TVWS operations have thus always been on notice that their access to television band spectrum was uncertain. The only path to acquiring certainty over access to spectrum in this band is, and has always been, to acquire spectrum licenses – as TVWS operators were free to do in the broadcast spectrum incentive auction. TVWS operators chose not to participate in that auction and acquire predictable, reliable and protected access to spectrum. Instead, they chose to embrace the ongoing unpredictability, unreliability and unprotected status of unlicensed operation in a band with existing licensed services.


Even if the Commission wanted to reverse its longstanding conclusions that TVWS operations would not interfere with existing and future television services, it could not legally do so. Section 301 of the Communications Act, as implemented by Part 15 of the Commission’s rules, imposes a categorical prohibition on harmful interference to licensed services.\textsuperscript{13} Under this prohibition, the FCC is not permitted to balance theoretical public policy benefits of expanded TVWS operations against licensed uses of the band. If TVWS devices cause interference, they must cease operation immediately, and they are afforded no protection whatsoever from interference by licensed users. In short, while the effect of amending the FCC’s rules to encourage DTS deployments may well be to expand the opportunities for unlicensed use of the television band, the Commission need not and should not consider the effects on TVWS operations at all in this proceeding.

**B. The Commission Should Not Expand the Rights of Secondary Licensees in this Proceeding**

The NPRM also seeks comment on the potential implications of expanded DTS operations on LPTV and TV translator stations.\textsuperscript{14} The NPRM also specifically asks whether Congress’s decision to reimburse displaced LPTV and TV translator stations for expenses associated with moving to a new channel after the broadcast spectrum incentive auction should have any bearing on the inquiry.

Petitioners submitted a study demonstrating that in most cases the impact on LPTV and TV translator stations will be minimal. We acknowledge, however, that the requested changes to the existing DTS rules will, in some small number of cases, potentially cause harmful interference to

\textsuperscript{13} 47 U.S.C. § 301; 47 C.F.R. §15.5.

\textsuperscript{14} NPRM at ¶ 29.
existing LPTV and translator stations. As Petitioners have previously stated, LPTV and TV translator stations are afforded interference protection only with respect to other Part 74 (and unlicensed) stations. Nothing about the proposed rule changes would alter those interference protection rights, and there is no basis for the Commission to consider elevating those rights as part of this proceeding. And, as discussed above, TV translator stations typically operate on channels different from the primary station they are rebroadcasting – a function that requires two channels. If adopted, the proposed DTS rules would permit translators to provide the same service within a single channel. This improved efficiency would free channels that could allow new broadcast voices to be brought into underserved areas.

In particular, Congress’s decision to provide funding to LPTV and translator stations displaced by the incentive auction does not reflect any Congressional intent to provide greater spectrum rights to those stations. Nothing in RAY BAUM’S ACT in any way alters the spectrum rights of LPTV and translator stations, or even discusses those rights. The Commission should not attempt to divine Congressional intent in the absence of any indication that Congress intended to alter the Commission’s rules in this regard, particularly given that RAY BAUM’S Act was passed in the context of legislation authorizing the incentive auction that permitted displacement of LTPV and translator stations by full-power television stations. We urge the Commission not to engage in purely speculative considerations in the absence of any indication Congress intended to alter the existing rules to provide greater rights to LPTV and translator stations.

15 Reply Comments of America’s Public Television Stations and the National Association of Broadcasters, GN Docket No. 16-142 (Nov. 27, 2019).

C. The Commission Should Not Expand the Protection Rights of FM Stations Regarding DTV Channel 6 Operations

The NPRM seeks comment on NPR’s request that the Commission address possible interference that DTV Channel 6 stations pose to NCE FM stations in the adjacent band.\textsuperscript{17} Specifically, NPR asks the Commission to require television broadcasters to use more rigorous filters in the construction and operation of DTS facilities for DTV Channel 6 stations and to impose specific filtering requirements.\textsuperscript{18}

As the Commission correctly notes, “It appears that at least some of NPR’s concerns may relate to the use of DTV Channel 6, generally, rather than the use of DTS, in particular.”\textsuperscript{19} The Commission recently addressed a similar request by NPR and decided to defer action on any changes in protections of FM operations adjacent to DTV Channel 6.\textsuperscript{20} Petitioners oppose the suggested revisions of NPR, and urge the Commission to reject NPR’s request to revisit issues the Commission addressed less than two months ago.

IV. CONCLUSION

We urge the Commission to continue to move forward expeditiously. Broadcasters have significant ATSC 3.0 deployments planned to launch later this year and in 2021 that would benefit from greater certainty regarding the rules that will apply to potential DTS deployments. Swift action in this proceeding to adopt the narrow changes petitioners have proposed will facilitate the rollout of ATSC 3.0, improve service to viewers at the edge of service areas, allow robust mobile

\textsuperscript{17} NPRM at ¶ 34.

\textsuperscript{18} Comments of National Public Radio at 2, 5, GN Docket No. 16-142 (Nov. 12, 2019).

\textsuperscript{19} NPRM at ¶ 34.

reception throughout the service area, and allow broadcasters to bring the full potential of Next Generation TV to life for American viewers.

Respectfully submitted,

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