

FCC Proposes Changes to DTS Rules to Facilitate ATSC 3.0 Deployment

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On April 1, 2020, the Federal Communications Commission (FCC or Commission) released a Notice of Proposed Rulemaking (NPRM) seeking comment on proposed changes to the agency's rules governing the use of distributed transmission systems (DTS) by broadcast television stations. Specifically, the Commission is seeking comment on technical changes to its DTS rules, adopted more than a decade ago in advance of the digital television transition, that television broadcasters say are necessary to facilitate the deployment of the Next Gen television transmission standard (ATSC 3.0). Comments are due 30 days after publication of the NPRM in the Federal Register and reply comments are due 30 days thereafter.

A DTS employs two or more transmission sites located around a television station's service area, each using the same radiofrequency (RF) channel and synchronized to manage self-interference. Under the FCC's current rules, a DTS signal is only allowed to spill over a station's authorized single-transmitter (or "reference facility") service area by a "minimal amount," thus hampering the station's ability to deploy DTS transmitters near the edge of its coverage area. Recognizing the enormous potential for DTS technology used in conjunction with ATSC 3.0 technology, in late 2019, America's Public Television Stations and the National Association of Broadcasters (collectively, Petitioners) filed a joint petition for rulemaking asking the FCC to change its DTS rules to provide stations more flexibility in the placement of their DTS transmitters. The NPRM seeks input on the technical changes sought by the Petitioners, including (1) whether to permit more than a "minimal amount" of DTS spillover beyond a station's authorized service area; (2) how the agency should treat DTS signals beyond their current service areas if such spillover is allowed

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and how such spillover may impact incumbent spectrum users; and (3) whether Class A and low power television (LPTV) stations should be allowed to use DTS in the same manner as full-power television stations.

Below is a brief summary of the NPRM's key questions and proposals.

DTS Spillover

The Commission seeks comment on whether a rule change to allow DTS signal spillover beyond a "minimal amount" is, as the Petitioners contend, necessary to facilitate the television industry's deployment of ATSC 3.0 and, if so, what the permissible level of spillover should be. Under the Petitioners' proposal, the FCC would permit spillover both to ensure that combined coverage from all of the DTS transmitters covers all of the applicant's authorized service area, as in the current rules, as well as where additional coverage is necessary to "achieve a practical design." The NPRM seeks comment on how to determine when additional coverage is necessary to "achieve a practical design." The NPRM also seeks comment on whether to replace the current rule's "minimal amount" limitation with a limitation that would permit the DTS transmitter's 36 dBu F(50, 10) "interference" contour to extend up to the reference facility's 36 dBu F(50, 10) contour, including whether the 36 dBu F(50, 10) interference contour is the appropriate limiting contour or whether a different contour should be used to avoid co-channel interference with Class A and LPTV operations. The Commission tentatively concludes that the allowable area within which a station may locate a DTS transmitter would not expand as a result of this proposed rule change, nor would the station's authorized antenna height or authorized effective radiated power increase beyond what is currently allowed for the station.

The NPRM asks whether the proposed DTS rule changes would be consistent with the original purpose of the rules as adopted in 2008.¹ At that time, the FCC determined that a DTS station's maximum authorized service area should be comparable to that which the television station could be authorized to serve with a single transmitter (i.e., the "Comparable Area Approach"). In reaching this conclusion, the FCC rejected requests to adopt an "Expanded Area Approach" allowing DTS stations to reach a wider area than is achievable with a single-transmitter station. The Commission asks whether modifying the "minimal amount" standard would effectively amount to an adoption of the Expanded Area Approach and whether the FCC's reasons for rejecting the Expanded Area Approach remain valid today. In particular, the Commission seeks input on the impact of an Expanded Area Approach on localism and whether allowing DTS stations such flexibility would improve localism through, for instance, expanded access to local news and ATSC 3.0 geotargeting, or distract stations from their primary responsibility of providing programming responsive to the needs and interests of their communities of license.

Treatment of the Spillover Area

The Commission seeks comment on its tentative conclusion that if it were to modify its spillover rules as described above, the agency would not enlarge the area within which a DTS station would receive interference protection. Moreover, the FCC asks whether DTS signals in the spillover area should be given any interference protection at all, considering the Commission's conclusion in 2008 that such signals should not be afforded either primary or secondary status. The FCC also requests feedback on whether other spectrum users

could be impacted by the rule changes discussed above, and whether there are steps that should be taken to mitigate interference impacts, particularly with respect to co-channel Class A, LPTV, and translator stations. The NPRM also seeks comment on the potential interference effects that changing the DTS technical rules as described above would have on non-commercial FM stations operating in the band adjacent to Channel 6 stations; wireless microphones; and white spaces devices.

Use of DTS by Class A and Low Power Stations

In 2008, the FCC approved the use of DTS technologies by Class A, LPTV, and translator stations on an experimental basis, finding that there was not an adequate record at the time to resolve the technical issues for such stations as they differ from full-power stations. Moreover, in 2008, the Commission did not observe much interest in DTS among Class A and LPTV stations. The NPRM asks whether things have changed in the past 12 years that make the use of DTS more attractive for Class A and LPTV stations today and whether the NPRM's proposed DTS usage rules for full-power stations should be extended to Class A and LPTV stations.

If you have questions about the NPRM or are interested in filing comments, please contact the Wiley attorney who regularly assists you with your FCC matters or one of the attorneys listed on this alert.

¹ *Digital Television Distributed Transmission System Technologies*, MB Docket No. 05-312, Report and Order, 23 FCC Rcd 16731, 16734, para. 4 (2008).