

ALERT

# Commission Releases Circulation Version of ATSC 3.0 NPRM

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On February 2, 2017, the Federal Communications Commission released the proposed text of a Notice of Proposed Rulemaking (Circulation NPRM) in the Next Gen TV (a/k/a ATSC 3.0) proceeding in which the agency proposes to authorize television broadcasters to use the Next Gen TV transmission standard on a voluntary, market-driven basis, while continuing to deliver current-generation DTV service to viewers using the ATSC 1.0 standard. The text was released at the same time that it is being circulated to the FCC Commissioners and is on the agenda for the Commission's February 23rd Open Meeting. Between now and February 23rd, the Commissioners will review and study the item, and changes may be made before it is officially adopted and released for public comment. The Circulation NPRM is part of a pilot program announced by Chairman Pai that is designed to provide more transparency at the Commission. If successful, the program will become Commission practice. Below, we summarize some of the key tentative conclusions and questions asked by the Commission in the Circulation NPRM.

Voluntary Use. The Commission proposes to authorize voluntary use of ATSC 3.0 transmissions and to incorporate by reference into its rules ATSC A/321:2016 "System Discovery and Signaling" (A/321), which is one of the two components of the "physical layer" of the ATSC 3.0 standard. The physical layer is the foundational element of the ATSC 3.0 standard that addresses RF reception and interference considerations and defines the core transmission system that allows content to be transmitted by a station. The Commission seeks comment on whether it is necessary to incorporate any other parts of the ATSC 3.0 standard aside from A/321 into its rules at this time. In particular, the Commission asks whether it should incorporate into its

## Authors

John M. Burgett  
Partner  
202.719.4239  
jburgett@wiley.law  
Kathryne C. Dickerson  
Partner  
202.719.7279  
kdickerson@wiley.law

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rules the second component of the physical layer, A/322:2016 “Physical Layer Protocol” (A/322), which, along with other features, enables single frequency networks.

Local Simulcasting. In the Circulation NPRM, the Commission proposes requiring “local simulcasting” for stations that choose to deploy Next Gen TV transmissions so that broadcasters will continue to provide their existing ATSC 1.0-based services to viewers. Under this proposal, each television station choosing to broadcast its signal in both ATSC 1.0 and ATSC 3.0 would arrange for another station in its local market to act as a “host” station and “simulcast” one of the two signals. If both stations elect to broadcast their signals in both ATSC 1.0 and ATSC 3.0, one station would broadcast its own ATSC 3.0 signal and act as the “host” station for the other’s ATSC 3.0 signal, and one station would broadcast its own ATSC 1.0 signal and act as the “host” station for the other’s ATSC 1.0 signal.

According to the Circulation NPRM, local simulcasting “would enable broadcasters to provide both ATSC 3.0 and ATSC 1.0 service to viewers (without the need for an additional allocation of spectrum to broadcasters), thereby reducing the disruption to consumers that may result from ATSC 3.0 deployment.” Accordingly, the Circulation NPRM seeks comment on what license modifications are needed for a broadcaster to convert its current ATSC 1.0 facility to a facility transmitting ATSC 3.0 signals and whether, as a regulatory matter, simulcasts should be separately licensed as second channels of the originating stations or treated as multicast streams of the host stations.

- If the Commission adopts a licensed simulcasting approach, it proposes to adopt licensing procedures similar to those it adopted for channel sharing, i.e., to require a station whose program stream will be changing channels to file an application for a construction permit specifying the technical facilities of the host station. The Commission further proposes to treat such applications as minor modification applications. In addition, the agency notes that a licensed simulcast approach appears to have the benefit of allowing non-commercial educational stations the ability to act as hosts for commercial stations and would allow the Commission to monitor the deployment of ATSC 3.0 service.
- Alternatively, under a multicast approach, a Next Gen TV broadcaster could choose to deploy ATSC 3.0 service by converting its current facility to broadcast in ATSC 3.0 and entering into an agreement with a host station to simulcast its programming in ATSC 1.0 via one of the host’s multicast streams or by continuing to broadcast in ATSC 1.0 and entering into an agreement with a host station to simulcast its programming in ATSC 3.0 via one of the host’s multicast streams. Although a multicast approach “may minimize administrative burdens and offer more flexibility to the broadcast industry,” it would also seem to preclude NCE stations from serving as hosts, raise questions about carriage rights, and subject the host station to the Commission’s enforcement authority with respect to the multicast stream.

The Commission seeks comment on the regulatory implications, as well as the advantages and disadvantages, of each approach and any others it should consider.

Further, the Circulation NPRM seeks comment on the extent to which a Next Gen TV station should be permitted to partner with an ATSC 1.0 host simulcast station with a different service contour or community of license. The Commission explains that, “even with ATSC 1.0 simulcasting, it is possible, if not likely, that some

over-the-air consumers will lose ATSC 1.0 service from stations that begin transmitting in ATSC 3.0.” Thus, the Commission seeks input on how it should ensure that there is not a significant loss of ATSC 1.0 service by Next Gen TV stations as a result of local simulcasting arrangements. In particular, the agency asks for comment on the proposal that Next Gen TV stations should be permitted to arrange for the simulcast of their ATSC 1.0 signal on another broadcast facility “serving a substantially similar community of license.”

MVPD Carriage. Also in the Circulation NPRM, the Commission proposes requiring MVPDs to continue carrying broadcasters’ ATSC 1.0 signals but not broadcasters’ ATSC 3.0 signals during the Next Gen TV transition. The Commission notes that “[b]roadcasters and MVPDs appear to agree on the premise that MVPDs must continue to carry broadcasters’ ATSC 1.0 signals, pursuant to their statutory mandatory carriage obligations, and that MVPDs should not be required to carry broadcasters’ ATSC 3.0 signals at this time. The Petition, however, does not clearly explain the legal basis for achieving this result.” Relatedly, the Commission states that “our legal basis for according mandatory carriage rights to ATSC 1.0 simulcast streams may depend on whether, ..., such streams will be temporary shared channels separately licensed to the originating broadcasters, or, alternatively, will be multicast streams broadcast by a ‘host’ licensee.” The Commission seeks comment on how to implement carriage rights and obligations under both approaches. In addition, the Commission tentatively concludes that it is premature to address questions related to the mandatory carriage of ATSC 3.0 streams at this stage and seeks comment on that tentative conclusion. The Commission also seeks comment on the timing and content of the notices that Next Gen TV broadcasters with must-carry rights must provide to MVPDs prior to transitioning to ATSC 3.0 and arranging for an ATSC 1.0 simulcast.

With regard to carriage of ATSC 3.0 signals through the retransmission consent process, the Commission seeks comment on MVPD concerns that they will be compelled to upgrade their equipment to carry ATSC 3.0 signals before they are ready to do so. The Commission further asks whether or how the good faith rules concerning retransmission consent should be applied or adapted to address the concerns of MVPDs.

Service and Interference Protection. The Circulation NPRM seeks comment on whether Next Gen TV transmissions will raise any interference concerns for existing DTV operations or for any other services or devices that operate in the TV bands (including LPTVs and TV translators) or in adjacent bands. The Commission proposes to calculate Next Gen TV interference to DTV signals using the methodology and planning factors specified in OET Bulletin 69. In addition, because ATSC 3.0 signals contain multiple video streams each requiring a signal strength threshold, the agency proposes to require Next Gen TV broadcasters to provide at least one free stream comparable to a DTV signal to ensure viewers within the “DTV-equivalent” service area continue to receive programming service at the current DTV protection levels. Additionally, the Commission tentatively concludes there is no need for rules to consider potential interference between Next Gen TV transmissions and the 600 MHz Band service given that there are no impairments to 600 MHz Band wireless licenses projected to exist after the post-broadcast incentive auction transition period.

The Commission further proposes to update its rules regarding acceptable levels of interference resulting from a broadcaster’s application for new or modified facilities. Specifically, the Commission proposes that, for purposes of evaluating such applications, the Media Bureau should use the latest official U.S. Census statistics, as opposed to the 2000 census population data currently required by the rules.

In addition, the Commission proposes to authorize broadcast television stations to operate ATSC 3.0 Single Frequency Networks (SFN) under the agency's existing Distributed Transmission Systems (DTS) rules. SFNs allow a broadcaster to use two or more transmission sites to broadcast an identical signal on the same RF channel, synchronized to manage self-interference. The Commission tentatively concludes that the rules established to authorize a DTS station generally are adequate to authorize an ATSC 3.0 SFN station, and as such an ATSC 3.0 SFN should be considered a DTS station for the purposes of its rules. The Commission further tentatively concludes that it is not necessary to adopt a specific synchronization standard in order to authorize an ATSC 3.0 SFN as long as the synchronization used to implement an SFN/DTS minimizes interference within the network and provides adequate service. In addition, the Commission tentatively finds that a DTS implementation that mixes ATSC 3.0 and ATSC 1.0 would not meet the requirement to be "synchronized" as specified in Section 73.626(a) of its rules because it would not minimize interference within the system.

With regard to the definition of television broadcasting, the Commission proposes that television stations transmitting both an ATSC 1.0 and an ATSC 3.0 signal are "television stations" engaged in "broadcasting" as those terms are defined in the Communications Act. Although the Commission does not propose to authorize broadcasters to transmit solely in ATSC 3.0 at this time, it tentatively concludes that stations transmitting only an ATSC 3.0 signal would be "television stations" engaged in "broadcasting" under the Act.

Public Interest Obligations, Transition and Consumer Issues. The Commission proposes that television stations transmitting signals in ATSC 3.0 be subject to the public interest obligations currently applicable to television broadcasters. The Commission seeks comment on its tentative conclusion that it is unnecessary at this time to adopt an ATSC 3.0 tuner mandate for new television receivers. In addition, the Commission seeks comment on whether broadcasters should be required to provide on-air notifications to educate consumers about their transition to Next Gen TV service and on how to ensure that deployment of Next Gen TV-based transmissions will not negatively impact the post-incentive auction transition process.