Before the
Federal Communications Commission
Washington, DC 20554

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

To: The Commission

REPLY COMMENTS OF
NEW AMERICA'S OPEN TECHNOLOGY INSTITUTE
AND PUBLIC KNOWLEDGE

New America's Open Technology Institute and Public Knowledge ("OTI and PK") submit these reply comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM") in the above-captioned proceeding.[1]

I. Introduction and Conclusion

OTI and PK believe it would be premature to substantially relax the current limits on DTS spillover beyond a station's authorized service area. ATSC 3.0 services are not widely deployed and consumers have yet to see any tangible benefits. Beyond a few pilots, the record reflects the fact that there are no actual ATSC 3.0 services widely available to the public in any market. Nor is it clear that any benefits beyond leasing the spectrum out to providers of entirely different, non-broadcast services is likely. The relatively small number of comments filed by local broadcasters suggest that relatively few local TV stations are moving forward with an ATSC 3.0 transition—let alone investment in DTS technology. Since the market currently has yet to deliver actual services, it would be both unnecessary to change the DTS rules and difficult

[1] Notice of Proposed Rulemaking, *Rules Governing the Use of Distributed Transmission System Technologies*, MB Docket No. 20-74 (rel. April 1, 2020) ("NPRM"). All citations to comments below were filed in this docket on June 12, 2020, unless otherwise noted.

for the Commission to effectively tailor rule changes to the needs of the market, while also ensuring the public interest remains protected. The current waiver process is sufficient for now, and allows the Commission to consider special circumstances on a case-by-case basis.

At this early stage in the development of ATSC 3.0, the Commission should not rely on promises of future services as the basis for another massive giveaway of spectrum to broadcasters. The proposed rules could result in a DTS "Interference Area" more than twice the size of the current licensed coverage area of a broadcast station licensee. As a result, even if DTS deployments are permitted to spillover more than a "minimal amount," we strongly urge the Commission to reject proposals to give these signals interference protection. Upgrading the status of spillover signals beyond DTS station's areas to primary or secondary status could effectively grant broadcast licensees twice as much spectrum without even requiring that the licensee use the free spectrum to deploy the services promised when ATSC 3.0 was authorized.

In addition to unjust enrichment, granting interference protection to DTS spillover beyond the licensee's current service area is likely to deny neighboring communities of other services. Expanding TV station exclusion zones to this degree is likely to preclude TV White Space ("TVWS") deployments in many rural and underserved areas, undermine the market for TVWS equipment, and create a new climate of uncertainty that deters the use of vacant TV band spectrum to help close the rural connectivity divide. Creating a 'gold rush' among local broadcasters to greatly expand their holdings of free spectrum in areas outside their service area would result in denying residents in neighboring rural and remote areas the opportunity to gain basic broadband connectivity from wireless internet service providers operating using TVWS.

DTS spillover signals should be considered unlicensed and should not confer interference protection rights against other licensed or unlicensed operations.

II. It is Premature to Award Substantial New Spectrum Holdings to Broadcast Licensees Given the Absence of ATSC 3.0 Buildout or Services to Consumers

As OTI and PK detailed in initial comments, the proposed rule changes for DTS are premature.[2] ATSC 3.0 services are not widely deployed and consumers have yet to see any tangible benefits. The record reflects the fact that there are no new or valuable services widely available to consumers in any market. Nor is it clear that any benefits beyond leasing the spectrum out to providers of entirely different, non-broadcast services is likely. If and when broadcasters deploy next-generation broadcast services on a widespread basis, the industry will be able to come back and demonstrate in a tangible way why these or other rule changes could optimize their ability to serve their local communities. In the meantime, without evidence of the actual services being delivered and how they benefit consumers, it is both unnecessary to change the DTS rules and impractical to tailor any rule changes to the needs of the market while also ensuring the broader public interest remains protected.

Accordingly, OTI and PK agree with Microsoft that not enough has changed since the Commission's initial "next-generation TV" Order in 2017 to justify rule changes and that the existing waiver process is, for now, adequate:

> Very little has changed in the marketplace with respect to ATSC 3.0 deployments [since the 2017 Order], including the deployment of ATSC 3.0 SFN stations . . . that warrants the Commission's proposed elimination of its current standard . . . . A waiver process remains in place if a broadcaster believes it needs to extend its DTS signal spillover to beyond a minimal amount.[3]

The development (or rather, lack thereof) of ATSC 3.0 services suggest the technology—or a business model justifying investment—remains at best nascent. The record reflects a yawning

[2] *See* Comments of New America's Open Technology Institute and Public Knowledge at 5-9 ("Comments of OTI and PK").
[3] Comments of Microsoft at 2-3.

void when it comes to the public interest benefits of *actual or planned* ATSC 3.0 services, let alone services that would benefit consumers more if enhanced by DTS.

Comments filed by the broadcast industry provide few if any examples of tangible current services actually being deployed to consumers that evidence a need for the requested changes. Indeed, the relatively small number of comments filed by local broadcasters suggest that relatively few local TV stations are moving forward with an ATSC 3.0 transition—let alone investment in DTS technology.

The National Association of Broadcasters and America's Public Television Stations (NAB and APTS) try to paper over this obvious problem by claiming they need to be ready for future innovation:

> 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.[4]

However, the broadcast interests fail to offer any evidence that the services they promised to justify the 2017 authorization of ATSC 3.0 are ready for widespread deployment, or that more than a minority of TV stations will participate in a robust provision of new services. As one broadcast industry technical consultant and NAB member put it: "It appears on the surface to be a thinly veiled attempt to increase the service area of a facility under the guise of a speedier rollout of ATSC 3.0 and simpler antenna systems designs without factual evidence of need."[5]

ONE Media likewise relies on hope rather than actual service offerings: "Adoption of the proposed rules . . . is assuredly ***not*** premature: to the contrary, the rule changes will encourage

[4] Comments of America's Public Television Stations and the National Association of Broadcasters at 3 ("Comments of APTS and NAB").
[5] Comments of T.Z. Sawyer Technical Consultants at 4.

even more broadcasters to embrace ATSC 3.0 by creating a path to solving longstanding service and coverage issues near the edges of contours, which include an appreciable percentage of a stations' service areas and an even higher percentage of underserved households."[6] Although ONE Media offers one example of a community near Las Vegas, Nevada, that is currently unserved and could (according to the company) later be served by ATSC 3.0 if the Commission adopts the proposed rule changes, the company does not provide information regarding the actual services that would be made possible through DTS rule changes.

While the record so far reflects little evidence from broadcasters about the tangible benefits of ATSC 3.0 for consumers, it does suggest that TV stations face obstacles to deploying ATSC 3.0 and DTS on a widespread basis that are completely unrelated to expanding or enhancing their spectrum rights. Gray Television, for example, describes the different categories of expenses that must be factored into a decision to construct a DTS network, stating: "Because DTS transmitters must be coordinated to prevent self-interference, the costs to design a DTS network can be significantly more expensive than the costs to design a single transmitter facility."[7] While this and similar arguments about the architecture of DTS networks are relevant to whether the Commission should grant additional flexibility—and perhaps relax to some degree its "minimum amount" restriction—granting broadcasters more free spectrum with primary or secondary licensing rights over enormous areas outside their current service area goes far beyond any need to remedy obstacles to DTS that is evidenced in the record.

APTS, NAB, ONE Media, and Gray Television rely on a presumption that the ATSC 3.0 standard will bring with it a whole host of revolutionary new services never before seen in the

[6] Comments of ONE Media at 4-5 (emphasis in original).
[7] Comments of Gray Television, Inc. at 5. *See also* Comments of Merrill & Weiss at 27 ("The increased costs manifested in larger, more complex antennas, in more tower space on which to install those antennas, leading to higher rental charges for vertical real estate (i.e., tower space)").

industry. This may turn out to be true. This was a harmless assumption the Commission accepted in the context of authorizing ATSC 3.0 as a voluntary new standard. However, in this proceeding and in the absence of real-life services offered to consumers—or even tangible examples—the Commission can only reasonably conclude that it is premature to adopt DTS rule changes with wide-ranging and negative implications for other services that are currently benefitting consumers, including LPTV and rural broadband deployments relying on TVWS.

III. DTS Spillover Signals Should Not Be Granted Primary or Secondary Status to Avoid Unjust Enrichment and to Facilitate Rural Broadband and Other Current Uses that Serve the Public Interest

The Commission should not grant primary or secondary status to DTS spillover beyond a station's service area to avoid both unjust enrichment and unnecessary disruption of other services, particularly rural broadband using TV White Spaces, in neighboring markets. We urge the Commission to adopt its tentative conclusion that the agency will "not enlarge the area within which a DTV station is protected from interference,"[8] including interference from unlicensed operations in areas where TV spectrum is considered available for use under the current rules.

As OTI and PK argued in our initial comments, our groups are concerned that the Commission's proposal in the NPRM could result in expansive new DTS "Interference Areas" that could more than double the size of the current licensed coverage area of a broadcast station licensee.[9] Inflating the size of broadcast station exclusion zones to such a degree would wreak havoc on the market for TVWS equipment and would likely eliminate the business case for TVWS broadband services, leaving those in rural and remote areas without the opportunity to gain basic broadband connectivity from wireless ISPs operating using TVWS. It could also

[8] *NPRM* at ¶ 27.
[9] Comments of OTI and PK at 4.

severely disrupt other secondary services that have relied on a stable definition of broadcast market areas, including Low Power TV stations and wireless microphones. As PMCM TV argues, "[A]ll of the evils that would result from permitting 'spillover' remain just as compelling now as they were then, if not more so."[10] ARK Multicasting similarly argues that "no licensee should be permitted to harm neighboring licensees, just for some marginal or non-existent benefit of cost or convenience to the licensee."[11]

OTI and PK fully agree with Microsoft that such an outcome would represent the Commission "giving what amounts to free spectrum over a large area to a broadcaster if it chooses to deploy DTS. It could crowd out the use of WSDs in many places. Adoption of DTS and SFNs is a business decision and should not be enshrined in policy at the expense of a national priority, the deployment of broadband to close the digital divide."[12] The current TVWS rules already over-protect television viewers at the edge of a DTV licensee's authorized service area by excluding use of the channel (and minimizing use of the two adjacent channels to 40 milliwatts) for enormous distances beyond the station's maximum service area. Exacerbating this over-protection, the current rules require the TVWS Databases ("WSDBs") to calculate these exclusion zones without regard to real-world terrain (e.g., hills, mountains, forests) that might naturally protect viewers, thereby wasting valuable spectrum that could be put to use in narrowing the digital divide.

Granting DTS spillover signals primary or secondary status is both unnecessary and contradicts modern principles of spectrum assignment.[13] As Microsoft correctly states:

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[10] Comments of PMCM TV, LLC at 2.
[11] Comments of ARK Multicasting, Inc. at 4.
[12] Comments of Microsoft at 10.
[13] *Id.* at 9-10 ("The Commission is proposing that the DTS signals can spill over all the way to its broadcast station's interference contour. If adoption of the Commission's nearly decade old suggestion is binding, the starting point for the table of separations for co- and adjacent channel WSD operations could

"Conferring either primary or secondary status conveys rights associated with spectrum acquired at auction, licensed by rule, obtained through a secondary market or some other recognized mechanism."[14] Ancillary datacasting services, other so-called "Broadcast Internet" offerings and, in particular, leasing aggregated TV spectrum directly to third-party wireless operators would all distort mobile market competition by giving Sinclair and other favored licensees free TV spectrum that all other mobile service providers must typically acquire at auction—including, as recently as 2017, the $19.3 billion spent by mobile carriers for 600 MHz spectrum.

Importantly, as the *NPRM* acknowledged, petitioners did not even seek a change in the current rules that would grant them interference protection for DTS spillover signals and hence *de facto* grants of additional free spectrum. In their comments, NAB and APTS acknowledge the Commission rejected this approach, stating: "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.'"[15]

Accordingly, OTI and PK agree with Microsoft that the alternative and optimal middle ground would be to enhance flexibility while treating the DTS spillover signals as unlicensed transmissions:

> As the Petitioners did not seek interference protection for DTS signals in the spillover area, the Commission can best accommodate the Petitioners request by placing regulations for DTS transmissions operating between a reference facility's service and interference contours under its Part 15 rules. There is precedent. Licensed wireless microphones are under Part 74 of the Commission's rules. In 2015, the Commission codified Part 15 rules for unlicensed wireless microphones operating in the TV bands.[16]

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be well over 100 kilometers further out from the broadcaster's TV transmitter (or reference point) than today.").

[14] *Id.* at 10.

[15] Comments of APTS and NAB at 5.

[16] Comments of Microsoft at 2-3.

OTI and PK also agree with Microsoft that broadcast industry claims that expansive new rules for DTS are important to revitalizing over-the-air broadcasting should be rejected, just as it was when the Commission adopted the current DTS rules in 2008:

> In 2008, when the Commission released its DTS rules, . . . [it] rejected the 'Expanded Area Approach' and decided upon a 'Comparable Area Approach'. . . . In the 2008 R&O, the Commission wrote, "Paxson argues that DTS technology, if used to expand coverage throughout a station's DMA, has the 'potential to revitalize over-the-air-broadcasting' and would enable DTS broadcasters to compete with cable and satellite service." **The proposal in the Petition to increase the DTS signal spillover area that is adopted in the NRPRM seems like another attempt to revitalize over-the-air broadcasting, but this time it is through Broadcast Internet Services**.[17]

Because spillover signals should not be granted primary or secondary licensing status, neither should those signals confer more extensive must-carry rights. As NCTA opined: [S]pillover beyond a station's service area should not confer any additional carriage rights . . . [I]t would be inappropriate to subject cable operators to mandatory carriage or other additional legal obligations outside a station's authorized service area merely because a broadcaster has decided to utilize a transmission technology that enables extended coverage beyond that area."[18]

APTS, NAB, and other broadcasting interests attempt to justify DTS as a path to a massive free spectrum giveaway by arguing that the public interest in TVWS operations for rural and other underserved areas must be given little if any consideration. APTS and NAB argue that "the Commission should not, and legally cannot, prioritize unlicensed operations over existing and future licensed operations in the band."[19] ONE Media similarly states, "*To be quite clear, white space operators are secondary users and do not obtain protected or incumbent status*

[17] *Id.* at 3-4 (emphasis added).
[18] Comments of NCTA at 2-3.
[19] Comments of APTS and NAB at 8. *See also* Comments of Gray at 14 ("'spillover signals' should be entitled to the same regulatory status as the signal of a single transmitter").

against future deployment of broadcast DTS facilities."[20] This argument completely misses the point: Although unlicensed operations do not and should not have any priority for interference protection, neither should new, expanded DTS signals that extend beyond the range of the station's licensing area. DTS spillover signals should be considered unlicensed transmissions.

The issue is not whether unlicensed or secondary broadcast licensees have "protected or incumbent status" regarding full power broadcast stations—they do not. The issue is whether the Commission should authorize a doubling of the assignment of free spectrum to TV broadcasters for purposes unrelated to broadcasting and that harm the public interest in other long-authorized uses of the band. While NAB, APTS, *et al*. cloak their argument in the statutory rationale for their primary status—which is localism and providing broadcasting services to their local community of interest—their scheme to leverage DTS to expand their service areas is really about capturing billions of dollars in free spectrum, at taxpayer expense, and monetizing it for purposes wholly unrelated to the justification for their no-cost licenses.

APTS and NAB also wrongly claim that the Commission, when considering rule changes, does not have the legal authority to consider the impact on TVWS operations:

> 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. Under this prohibition, the FCC is not permitted to balance theoretical public policy benefits of expanded TVWS operations against licensed uses of the band… [T]he Commission need not and should not consider the effects on TVWS operations at all in this proceeding.[21]

This claim conflates the separable issues of DTS flexibility and the status of TV signals that extend beyond a station's licensed area. The Commission clearly has the authority to reject a request to amend a license in a manner that grants a huge expansion of the licensee's geographic

[20] Comments of ONE Media at 6 (emphasis in original).
[21] Comments of APTS and NAB at 9.

reach at no cost. The NAB and APTS argument might be relevant if the Commission was proposing to *shrink* the protected contour of full power TV stations.[22] But here the opposite is the case: The Commission is asking if it should amend TV licenses to *expand* the licensing rights of local TV stations, making them more valuable. In making a decision about whether it serves the overall public interest to amend a license to assign new, additional and incredibly valuable rights, the Commission can consider any relevant factor, including impacts on other users of the band.

Moreover, contrary to the implication of the NAB and APTS argument, optimal use of the band does not require a conflict between TVWS and protecting broadcast services. Indeed, under current rules there is no conflict: Spillover DTS signals have no special primary or secondary status that entitles them to interference protection. Like license holders in many bands, as a fixed service TV stations are licensed to use the spectrum exclusively in a defined geographic area (their local TV market) to provide a service in the public interest. Broadcast licenses in particular are subject to public interest obligations because they were assigned licenses (and reassigned more valuable DTV licenses in the late 1990s) free of charge. Broadcasters—along with any other licensee in any band—have no right to endlessly expand their geographic authorization at no cost and irrespective of the public interest impact. This is especially true when they are demanding both interference protection and the flexibility to use the free spectrum for services beyond (and inherently contradictory to) its licensed purpose.

[22] *See* 47 U.S. Code § 316. The Commission has the authority to modify licenses at any time provided it makes a public interest finding and it does not fundamentally change the license. *See California Metro Mobile Communications Inc. v. FCC*, 365 F.3d 38, 45 (D.C. Cir. 2004) ("Section 316 grants the Commission broad power to modify licenses; the Commission need only find that the proposed modification serves the public interest, convenience and necessity."); *MCI Telecommunications Corp. v. AT&T*, 512 U.S. 218, 228 (1994) (Section 316 authority to modify licenses does not contemplate 'fundamental changes'); *Cellco Partnership v. FCC*, 700 F.3d 534, 543- 544 (D.C. Cir. 2012); Community Television, Inc. v. FCC, 216 F.3d 1133, 1140-41 (D.C. Cir. 2000).

IV. Conclusion

The Commission should not give broadcasters sweeping new spectrum holdings premised on facilitating the mere promise of next-generation broadcast services. The rule changes are premature, as the industry has yet to deploy ATSC 3.0 services in any widespread manner. More critically, upgrading the status of DTS spillover signals so that they have primary or even secondary licensing status would create a harmful precedent, undermine the use of TVWS operations in rural and underserved areas, and amount to an unnecessary, unjustified, and anti-competitive giveaway to broadcasters for purposes that are likely be unrelated to fulfilling the broadcast industry's promises of innovative new ATSC 3.0 broadcast services.

Respectfully submitted,

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