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May 9, 2017

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

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

Dear Ms. Dortch:

The Dynamic Spectrum Alliance (DSA)¹ is a global organization advocating for actions leading to more efficient and effective spectrum utilization to (1) close the digital divide, (2) accelerate the Internet of Things and (3) alleviate the “spectrum crunch.” DSA is pleased to submit these comments “In the Matter of Authorizing Permissive Use of the ‘Next Generation’ Broadcast Television Standard” (GN Docket No. 16-142)².

DSA has long advocated for the unlicensed use of unassigned and unused frequencies in the TV white spaces (TVWS) in proceedings around the world. To these ends, we focus our comments on those aspects of the proposed rules and questions that will impact unlicensed operations in the TVWS. DSA agrees in principle there is a need to update the current DTV standard that is almost two decades old. Frankly, it is surprising that the broadcast industry took as long as it did to close ranks and get behind a new standard. The discussion of whether, on balance, the adoption of the proposed ATSC 3.0 standard herein is in the public interest is best left to other stakeholders to address. Unlike the transition from analog to digital television, the public interest justification for effectively mandating consumers to upgrade their TV receivers, presumably either through purchase of new ATSC 3.0 compliant TV sets or set top boxes, is just not as apparent at this time— but that is not to say it could not be created. .

DSA urges the Commission not to expand broadcasters’ spectrum rights by allowing them to claim white spaces for ATSC 1.0 (or ATSC 3.0) simulcasts. Each time the cloud of uncertainty lifts over the availability of spectrum in the TVWS, there seems to be yet another proceeding that creates market uncertainty. By ensuring that there are at least three usable channels in every market for TVWS devices, the Commission will spur further innovation and investment.

¹ The Dynamic Spectrum Alliance (DSA) is a global, cross-industry alliance focused on increasing dynamic access to unused radio frequencies. The membership spans multinational companies, small- and medium-sized enterprises, academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the utilization of available spectrum to the benefit of consumers and businesses alike. A full list of DSA members is available on the DSA’s website at www.dynamicspectrumalliance.org/members/.

² “In the Matter of Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard”, Notice of Proposed Rulemaking, GN Docket No. 16-142, Adopted February 23, 2017. (NPRM)

DSA understands that the broadcasts complying with the ATSC 3.0 standards are technically incompatible with ATSC 1.0 compliant TV receivers. We recognize this presents some fundamental challenges regarding the transition from ATSC 1.0 to ATSC 3.0. Given the value proposition to over-the-air consumers and the “voluntary” nature of carriage agreements, this transition may take a longer time to occur than would be ideal. In fact, the Commission doesn’t even presume there is going to be a transition date. Thus it appears highly likely that once authorized, over-the-air ATSC 1.0 and ATSC 3.0 television broadcasts will be transmitted in parallel for the foreseeable future. Given the generally more limited amount of spectrum available in major metropolitan markets after the incentive auction repack, it is critical that the Commission gives further consideration to this matter so that its decision do not effectively lock in VHF and UHF channel assignments and the band plan for decades to come.

Of the local simulcasting approaches described, the one that seems most reasonable is where a so-called ‘NextGen’ TV broadcaster converts its current facility to broadcast in ATSC 3.0 and enters into an agreement with a host station to simulcast its programming in ATSC 1.0 via one of the host’s multicast streams; or, alternatively, to continue to broadcast in ATSC 1.0 and enters into an agreement with a host station to simulcast its programming in ATSC 3.0 in one of the host’s multicast streams.³ If over-the-air broadcasters in a market cannot pair up by themselves, the Commission should attempt to facilitate agreements but be ready and willing to use the license renewal process as a backstop.

Working out the details of local simulcasting arrangements within a market is going to be challenging. It will be even more challenging if local simulcasting is overlaid on the post incentive auction transition process. One or more stations may want to change its channel assignment during the post incentive auction transition period not because of any reason related to the incentive auction, but to better position itself for the local simulcasting arrangement the Commission adopts in this proceeding (assuming the Commission decides to move forward). The Commission will need to exert great care in ensuring that simulcasting arrangements authorized in this proceeding do not reduce the utility of the TV band for other services, including TVWS and wireless microphones, nor cause an undue extension to the post incentive auction transition period.

Finally, the Commission’s TVWS rules protect ATSC 1.0 broadcasts from receiving harmful interference. DSA’s understanding is that the primary ATSC 3.0 digital broadcast stream will have the same protection requirements as the ATSC 1.0 signal protection requirements. Thus, the DSA concludes that the Commission’s TVWS rules will equally protect the primary ATSC 3.0 broadcast stream in the future as it does the ATSC 1.0 broadcast today. The ATSC 3.0 primary stream will provide the identical free over the air broadcast as the current free over the air broadcast carried over ATSC 1.0, but in ultra-high definition format, as well as other potential content streams. These ancillary data streams, some which seem likely to require a fee from over-the-air consumers, will clearly financially benefit the broadcasters and are unrelated to the public interest benefits that justify a free grant of spectrum to broadcasters. The Commission should be clear in stating that these ancillary ATSC 3.0 data streams will receive no greater protection than the primary ATSC 3.0 stream. Therefore, the Commission should not require TVWS and unlicensed wireless microphones to protect all ATSC 3.0 digital streams beyond what is required to protect the primary ATSC 3.0 digital stream from harmful interference.

³ NPRM at 19

Sincerely,



Kalpak Gude
President
Dynamic Spectrum Alliance