

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Promoting Investment in the 3550-3700 MHz	)	GN Docket No. 17-258
Band	)	
	)	

**REPLY COMMENTS OF THE CONTENT COMPANIES**

CBS Corporation, Scripps Networks Interactive, Inc., The Walt Disney Company, Time Warner Inc., 21st Century Fox, Inc., Univision Communications Inc., and Viacom Inc.

(collectively, the “Content Companies”) file these reply comments to the Commission’s Notice of Proposed Rulemaking (“NPRM”) in the above-captioned proceeding on revised rules for the 3550-3700 MHz band (“3.5 GHz band”). Like the Content Companies, many parties explained in initial comments that the Commission should not allow increased out-of-band emissions (“OOBE”) into the adjacent 3700-4200 MHz band (“C-band”), particularly in light of the important role that uninterrupted C-band transmissions play in the delivery of video programming to U.S. households throughout the country.

The parties seeking the right to create greater OOBE bear the burden of demonstrating that these emissions will not harm adjacent uses, including video delivery. They have failed to meet this burden, and in most cases do not even attempt to rebut the Commission’s well-established findings that higher OOBE would fail to protect video delivery and other important and longstanding uses of the C-band. The Commission therefore should reject calls to allow greater OOBE from the 3.5 GHz band into the C-band.

**I. MANY COMMENTERS AGREE THAT THE FCC SHOULD REJECT THE LATEST PROPOSALS TO INCREASE EMISSIONS INTO THE C-BAND.**

In their initial comments, the Content Companies described the vital role of the C-band in delivering programming content to American households and the substantial threat of harmful interference into the lower portion of the C-band if the Commission were to relax OOB limits in the 3.5 GHz band.<sup>1</sup> Many commenters expressed the same concern. Among others, Comcast Corporation (“Comcast”), Motorola Solutions, Inc. (“Motorola Solutions”), NCTA - The Internet & Television Association (“NCTA”), and the National Association of Broadcasters (“NAB”) agreed that the FCC should not relax existing OOB limits.

For example, Comcast urged the Commission to maintain the existing emissions limits, explaining that “relaxing the emissions limits would result in significant increases in interference to operations in adjacent bands.”<sup>2</sup> NCTA warned that the proposals in the NPRM could “significantly increase the noise from [3.5 GHz] operations spilling over into the first 20 MHz of adjacent C-band spectrum,” which “could adversely impact the quality of television programming and other services delivered” using the C-band.<sup>3</sup> And the NAB commented that the proposals in the NPRM “lack a sound technical basis and would create increased and unacceptable interference into the C-band.”<sup>4</sup>

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<sup>1</sup> Comments of the Content Companies, GN Docket No. 17-183 at 2–8 (filed Dec. 28, 2017) (hereinafter “Content Companies Comments”).

<sup>2</sup> Comments of Comcast Corporation, GN Docket No. 17-258 et al. at 29 (filed Dec. 28, 2017).

<sup>3</sup> Comments of NCTA - The Internet & Television Association, GN Docket No. 17-258 at 18–19 (filed Dec. 28, 2017).

<sup>4</sup> Comments of the National Association of Broadcasters, GN Docket No. 17-258 at 1 (filed Dec. 28, 2017); *see also* Comments of the Utilities Technology Council, GN Docket No. 17-258 et al. at 8 (filed Dec. 28, 2017) (“UTC questions whether relaxing the emission limits is even necessary in order to promote wider bandwidth operations” and “agrees with the objections by Motorola and Vivint that question the technical basis upon which the petitioners claim that emission limits should be relaxed.”).

Notably, multiple parties filing comments that were primarily focused on improving the attractiveness of the 3.5 GHz band for 5G deployment advised against relaxing the emissions limits. For example, Ericsson cautioned that “[a]dditional analysis of the emissions masks is needed” prior to any adjustment of the existing limits.<sup>5</sup> Google stated that the Commission should not adopt any changes to the OOB limits unless and until it “is confident the new rules are compatible with the significant technical work that has already been done” in reliance on the existing limits.<sup>6</sup> Motorola Solutions commented that “relaxation of the existing mask is not warranted.”<sup>7</sup>

Given this broad consensus among commenters—including some of those whose comments otherwise were focused on rule changes to facilitate 5G deployment in the 3.5 GHz band—the Commission should reject the latest proposals to relax emissions limits in the 3.5 GHz band. The Commission should maintain the existing limits, protecting the integrity of C-band downlinks upon which the video programming marketplace and the people it serves depend.

## **II. THE HANDFUL OF PARTIES ASKING TO RELAX OOB LIMITS HAVE FAILED TO REBUT THE COMMISSION’S REPEATED, PRIOR FINDINGS REGARDING THE NEED FOR THE EXISTING LIMITS.**

Less than two years ago, the Commission for the second time found that the existing OOB limits struck an appropriate balance between new and incumbent uses, and that the parties seeking to relax the emissions limits at that time did “not provide convincing evidence or technical analysis to support their claims” or “the potential effects such changes could have on

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<sup>5</sup> Comments of Ericsson, GN Docket N. 17-258 at 8 (filed Dec. 28, 2017).

<sup>6</sup> Comments of Google LLC, GN Docket No. 17-258 at 24 (filed Dec. 28, 2017).

<sup>7</sup> Comments of Motorola Solutions, Inc., GN Docket No. 17-258 at 7 (filed Dec. 28, 2017).

adjacent channel operations.”<sup>8</sup> While some parties now attempt a third bite at the apple on the question of emissions limits, they fail to rebut these past Commission findings or to provide “convincing evidence or technical analysis to support their claims.”

Most of the handful of commenters supporting relaxation of the OOB limits simply suggested that doing so would provide greater flexibility in their use of the 3.5 GHz band but did not mention the need to protect adjacent band uses as part of any proposed relaxation of the current limits.<sup>9</sup> The fact that relaxing OOB limits might provide greater flexibility to in-band licensees,<sup>10</sup> however, does not mean that doing so is in the public interest, particularly given the substantial public interest in adjacent C-band uses.<sup>11</sup> The burden is on those supporting increased emissions to establish that uses in adjacent bands would be protected, but most of the commenters supporting relaxation of the emissions limits do not mention this concern, and even those that do provide no evidence of sufficient protection for adjacent bands.

Qualcomm acknowledges the needs of adjacent-band users, but it hypothesizes that the relaxed OOB limits would not harm reception of C-band transmissions because the -40 dBm limit would continue to apply above 3720 MHz, necessitating additional Maximum Power Reduction (“A-MPR”) for 3.5 GHz licensees operating at the band edge.<sup>12</sup> Nokia and Verizon repeat this claim that the -40 dBm limit at 3720 MHz will ensure sufficient protection for

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<sup>8</sup> *In re Amendment of the Commission’s Rules With Regard to Commercial Operations in the 3550-3650 MHz Band*, FCC 16-55, ¶ 91 (rel. May 2, 2016) (hereinafter “2016 Order”); *see also* Content Companies Comments at 4–5.

<sup>9</sup> *See, e.g.*, Comments of T-Mobile USA, Inc., GN Docket No. 17-258 et al. at 18–19 (filed Dec. 28, 2017); Comments of the Wireless Internet Service Providers Association, GN Docket No. 17-258 et al. at 55–57 (filed Dec. 28, 2017); Comments of CTIA, GN Docket No. 17-258 at 13 (filed Dec. 28, 2017); Comments of ATN International, Inc., GN Docket No. 17-258 at 9–10 (filed Dec. 28, 2017).

<sup>10</sup> Comments of CTIA, GN Docket No. 17-258 at 13.

<sup>11</sup> *See* Content Companies Comments at 2–3.

<sup>12</sup> Comments of Qualcomm Incorporated, GN Docket No. 17-258 at 3, 8 (filed Dec. 28, 2017).

adjacent bands.<sup>13</sup> Based on the information provided in these parties' comments, the Content Companies are unable to evaluate whether or not they are advocating for the right to create additional OOB at 3700-3720 MHz. To the extent they are suggesting that use of A-MPR to meet the -40 dBm limit at 3720 MHz will result in 3.5 GHz licensees complying with the existing OOB limits at 3700-3720 MHz, there should be no concern with maintaining those limits at their current levels.<sup>14</sup>

If, however, Qualcomm and others are suggesting that the emission limits at 3700–3720 MHz should be relaxed, then they have failed to establish whether or how the relaxed limits would sufficiently protect operations in adjacent bands. Specifically, there is no basis to believe that equipment designed to operate at the -40 dBm limit (which only applies above 3720 MHz) would be low-powered enough to protect operations above 3700 MHz if the current OOB limits at 3700–3720 MHz were relaxed. This is particularly the case given the device manufacturing variability that the Ofcom study highlighted in the NPRM suggests: devices may well emit greater-than-anticipated interference outside of their assigned channels due to roll-off performance variability.<sup>15</sup>

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<sup>13</sup> See Comments of Nokia, GN Docket No. 17-258 at 2 (filed Dec. 28, 2017); Comments of Verizon, GN Docket No. 17-258 et al. at 18 (filed Dec. 28, 2017).

<sup>14</sup> As the Content Companies emphasized in their initial comments, we have no objection to changes to emission limits within the 3.5 GHz band in ways that do not result in increased emissions into the C-band. Content Companies Comments at 9.

<sup>15</sup> See NPRM at ¶ 57; see also Content Companies Comments at 9.

### III. CONCLUSION

The record in this proceeding establishes that relaxing emissions limits in the 3.5 GHz band would cause harmful interference to the adjacent C-band downlinks that make the delivery of video programming possible throughout the United States. Accordingly, for the third and final time, the Commission should reject calls to relax the emissions limits in the 3.5 GHz band.

Respectfully submitted,

/s/ Matthew S. DelNero

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