

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of: )  
 )  
Expanding Flexible Use of the ) GN Docket No. 18-122  
3.7 GHz to 4.2 GHz Band )  
 )

**REPLY COMMENTS OF  
THE NATIONAL ASSOCIATION OF BROADCASTERS**

**I. INTRODUCTION AND SUMMARY**

The National Association of Broadcasters (NAB)<sup>1</sup> hereby replies to comments submitted in response to the Commission’s Public Notice seeking additional comment in the above-referenced proceeding.<sup>2</sup>

Initial comments in this proceeding reflect broad opposition to the ill-conceived, self-serving and anticompetitive proposal submitted by ACA Connects – America’s Communications Association, the Competitive Carriers Association and Charter Communications, Inc. (the ACA Proposal).<sup>3</sup> Of particular note, content providers oppose the plan that would force them to abandon the reliable, efficient C-band distribution that serves

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<sup>1</sup> The National Association of Broadcasters (NAB) is the nonprofit trade association that advocates on behalf of free local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

<sup>2</sup> *Wireless Telecommunications Bureau, International Bureau, Office of Engineering and Technology, and Office of Economics and Analytics Seek Focused Additional Comment in 3.7-4.2 GHz Proceeding*, Public Notice, GN Docket No. 18-122, DA 19-678 (July 19, 2019) (Public Notice).

<sup>3</sup> Letter from ACA Connects, CCA and Charter to Marlene H. Dortch, GN Docket No. 18-122 (July 2, 2019).

over one hundred million American households today. We urge the Commission to reject this proposal, which seeks to use auction proceeds to construct a fiber network that will operate as a money printing machine for members of the ACA Coalition for decades to come.

We also urge the Commission to reject shared use for point-to-multipoint links in any portion of the C-Band that is not reallocated to terrestrial use. The FCC should take note in this proceeding when diverse interests, including wireless carriers, satellite operators and content providers are all in alignment. Here, those stakeholders all agree that the introduction of point-to-multipoint links in the remainder of the C-band will complicate the transition and stymie future efforts to study the band, and that there is no compelling reason to provide free spectrum to support such use.

## **II. THE RECORD DOES NOT SUPPORT THE ACA PROPOSAL**

The Commission's central challenge in this proceeding is balancing the interest in additional spectrum for mobile broadband with the critical interest in preserving a reliable and efficient content distribution architecture that serves well over a hundred million American households today. In this context, it is notable that content providers themselves, who supply the lifeblood of the entertainment, sports and news programming ecosystem that viewers and listeners rely on and enjoy, uniformly oppose the ACA Proposal.

NAB agrees with the Content Companies Comments that the ACA Proposal simply cannot achieve sufficient reliability in any immediately foreseeable timeframe because they cannot replicate the simplicity of C-Band satellite's one-to-many network topology.<sup>4</sup> The 99.999 percent reliability C-band distribution provides translates to just minutes per year of

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<sup>4</sup> Comments of the Content Companies at 6, GN Docket No. 18-122 (Aug. 7, 2019) (Content Companies Comments).

potential C-band delivery outages, which can be significantly exceeded by a single fiber failure.<sup>5</sup> Indeed, the ACA Proposal is not for a single point-to-point fiber connection; rather, it contemplates hundreds, if not thousands, of individual fiber connections that would frustrate negotiating an end-to-end service level agreement. NAB also agrees with the Content Companies Comments that the complexity of the unprecedented fiber distribution network the ACA Proposal contemplates will inevitably lead to years of delay and gross cost overruns.<sup>6</sup> Those costs, it should be noted, will flow directly to some members of the ACA Coalition, who will be all too happy to pocket the overages.

NAB also agrees with Cumulus and Westwood One that failure of many terrestrial services, including fiber networks, in the New York City immediately following the tragic September 11, 2001 attacks, illustrates the pressing need to maintain sufficient C-band spectrum for content delivery.<sup>7</sup> In the aftermath of the September 11<sup>th</sup> attacks, Westwood One was quickly able to rely on C-band's unique combination of reliability and ubiquity to transmit news programming to Cumulus's and other Westwood One affiliated stations in New York, and ultimately to deliver news programming to unaffiliated stations that had lost fiber feeds as well.<sup>8</sup> At a time of maximum need for New Yorkers, the C-band allowed radio stations to continue to serve their listeners, even when fiber links catastrophically failed.

While that is a singularly horrific example, Cumulus and Westwood One also note that the quotidian fiber failures due to construction or other cuts have given rise to the nickname

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<sup>5</sup> *Id.* at 6-7.

<sup>6</sup> *Id.* at 8-12.

<sup>7</sup> Comments of Cumulus and Westwood One at 2-3, GN Docket No. 18-122 (August 7, 2019) (Cumulus/Westwood One Comments).

<sup>8</sup> *Id.*

“backhoe fade” for fiber failures.<sup>9</sup> NAB agrees that, while fiber may serve as an important complement, the reliability of C-band content delivery continues to exceed fiber even in urban markets. Critically, the types of emergencies that are likely to cause even “redundant” fiber links to fail, such as widespread storms or the horrific events of September 11, are precisely the times when the seamlessly reliable distribution of news and emergency information the C-band provides is most vital. It’s important to note that most “redundant” fiber links do not traverse different paths; to a large extent “redundant” fiber links occupy the same conduits and the same aerial attachments and are therefore subject to concurrent failure.

The Commission should also note that even those commenters attempting to buttress the ACA Proposal cannot help but betray the naked self-interest of that proposal. For example, NTCA generally supports the ACA Proposal, but urges the Commission to require that content providers work with *existing* fiber providers and use *existing* fiber wherever possible – evidently to be sure that the Commission does not inadvertently create competition using auction proceeds.<sup>10</sup> In other words, the ACA Coalition is asking the Commission to eliminate intermodal competition for content delivery, and NTCA is asking the Commission to make sure content providers are funneled directly into the cash printing bottleneck the Commission will have created unwittingly for fiber providers.

### **III. THE RECORD DOES NOT SUPPORT SHARED USE OF REMAINING C-BAND SPECTRUM**

In a proceeding that has generated many disagreements and a wide variety of competing proposals, it is noteworthy that one singularly bad idea has united the most relevant stakeholders in the proceeding in opposition. The wireless carriers who seek access

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<sup>9</sup> *Id.*

<sup>10</sup> Comments of NTCA – The Rural Broadband Association at 3, GN Docket No. 18-122 (Aug. 7, 2019).

to the spectrum, the satellite operators who currently use the spectrum, and the content companies and broadcasters who rely on satellite use all oppose the introduction of shared use of the portion of the band that is not reallocated during this proceeding.

While the Broadband Connects America Coalition and others argue that “fixed wireless point-to-multipoint deployments represent the most cost-effective option for high-capacity broadband in rural and other less densely-populated areas,”<sup>11</sup> they fail to mention that there is already considerable spectrum, including mid-band spectrum, available in those areas. AT&T and CTIA correctly note the many alternative opportunities for point-to-multipoint (P-MP) operations, including more than 650 MHz of spectrum already available to Wireless Internet Service Providers.<sup>12</sup> That spectrum includes mid-band spectrum in the 2.5 GHz and CBRS bands.<sup>13</sup> NAB agrees that, if Wireless Internet Service Providers desire access to C-band spectrum, they are free to bid on access to that portion of the band that is reallocated in this proceeding.<sup>14</sup>

Further, satellite operators and wireless interests agree that proponents of shared use continue to grossly overstate the ease of introducing shared operations in the C-band.<sup>15</sup> In particular, the C-Band Alliance has demonstrated that sharing proponents have underestimated the separation distances required to protect earth stations and failed to take

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<sup>11</sup> Comments of the Broadband Connects America Coalition, GN Docket No. 18-122 (August 7, 2019)

<sup>12</sup> Comments of AT&T at 13, GN Docket No. 18-122 (Aug. 7, 2019) (AT&T Comments); Comments of CTIA at 11-12, GN Docket No. 18-122 (Aug. 7, 2019) (CTIA Comments).

<sup>13</sup> AT&T Comments at 13; CTIA Comments at 12.

<sup>14</sup> AT&T Comments at 12; CTIA Comments at 11-12.

<sup>15</sup> See CTIA Comments at 12-13; Comments of the Satellite Industry Association at 4-7, GN Docket No. 18-122 (Aug. 7, 2019); Comments of the C-Band Alliance at 20-21, GN Docket No. 18-122 (Aug. 7, 2019) (CBA Comments).

into account aggregate interference from all potential sources.<sup>16</sup> While ITU-R Report S.2368 concludes that shared co-frequency operation requires considerable protection distances,<sup>17</sup> it is notable that when national administrations have elected to allow such sharing at power levels comparable to those contemplated by P-MP proponents there have been massive interruptions and system failures. In both Bangladesh and Brazil, for example, interference to C-Band FSS earth stations due to shared spectrum P-MP operations resulted in television signals getting knocked off the air across entire cities.

Meanwhile, the Content Companies Comments correctly note that the latest inadequate technical study to which sharing proponents cling does not even claim that its operating parameters will protect *all* earth stations.<sup>18</sup> Rather, as the Content Companies Comments state, the study claims that radically smaller exclusion zones may protect *most* earth stations, and fails to explain which earth stations would not be protected and how interference will be resolved.

The Commission has its hands full in this proceeding balancing the equities of providing additional spectrum for mobile broadband with preserving C-band spectrum for content distribution given the inadequate alternatives. The last thing the Commission should do under these circumstances is further complicate the reallocation of C-band spectrum by introducing significant potential sources of harmful interference in the remainder of the band – which will also only complicate the examination of future opportunities for reallocation.

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<sup>16</sup> CBA Comments at 20-21.

<sup>17</sup> ITU-R Report S.2368, “Sharing studies between IMT-Advanced systems and geostationary satellite networks in the fixed satellite service in the 3 400–4 200 and 4 500–4 800 MHz frequency bands in the WRC study cycle leading to WRC-15” (2015) available at: [https://www.itu.int/dms\\_pub/itu-r/opb/rep/R-REP-S.2368-2015-PDF-E.pdf](https://www.itu.int/dms_pub/itu-r/opb/rep/R-REP-S.2368-2015-PDF-E.pdf).

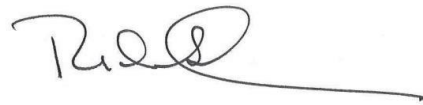
<sup>18</sup> Content Companies Comments at 14.

#### IV. CONCLUSION

We continue to urge the Commission to focus on narrowing, rather than expanding, the proposals under consideration in this proceeding. A first step in that direction would be foreclosing further consideration of two proposals that have failed to generate support while garnering substantial cross-industry opposition from the relevant stakeholders. The Commission should not further indulge ACA's nakedly self-interested proposal to use auction funds to pay ACA's members to install fiber to displace their competition. Nor should it complicate reallocation to give a handout to for-profit companies stubbornly unwilling to invest in spectrum. Instead, the Commission should speed the 5G transition at C-Band by focusing its attention on reallocating 200 MHz of spectrum immediately while preserving flexibility to evaluate additional opportunities as they become warranted.

Respectfully submitted,

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