October 29, 2018

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Comments of the C-SPAN Networks
   Expanding Flexible Use of the 3.7 to 4.2 GHz Band
   GN Docket No. 18-122

Dear Ms. Dortch:

C-SPAN\(^1\) is a non-profit organization created by the cable television industry with a public service mission to provide public affairs television to Americans in all 50 states on three networks on a twenty-four hour per day basis. Our programming includes gavel-to-gavel televised coverage of the U.S. House of Representatives and the U.S. Senate, coverage of other public policy events, and programs focused on newsmakers, journalists, public officials, American history and commentary from the public.

---

\(^1\) The C-SPAN Networks (C-SPAN, C-SPAN2 and C-SPAN3) are owned and operated by National Cable Satellite Corporation, d/b/a C-SPAN, a non-profit District of Columbia corporation that is exempt from federal income tax pursuant to IRC 501(c)(3). C-SPAN is also the licensee of WCSP-FM, a District of Columbia radio broadcast station featuring public affairs programming that is also distributed nationally by the SiriusXM satellite radio service.
C-SPAN offers these comments in this proceeding\(^2\) because the downlink system in the 3700-4200 MHz band (the "C-Band") is essential to our business operations and our to ability to continue to deliver programming of high technical quality. Our comments (i) emphasize that essentiality to our public service mission; (ii) point out that fiber is not an equivalent alternative transmission technology, and our reliance on it would effectively prevent us from fulfilling our primary mission; (iii) discount Ku band satellite service as an acceptable substitute for C-Band; and (iv) oppose the fixed point-to-multipoint ("P2MP") services in the C-Band and related proposed limits on full-band, full-arc protection for satellite earth stations.

C-SPAN relies on our C-Band satellite providers to deliver our three programming networks -- C-SPAN, C-SPAN2 and C-SPAN3 -- to our nearly 5,000 or more affiliated cable systems around the country in all 50 states. We currently reach approximately 92.7 million television households and about 99 percent of pay television households in the U.S. We also have relied on C-Band as a backup to the delivery of our audio stream of WCSP-FM to SiriusXM Radio, which distributes the radio station to a national audience under the C-SPAN Radio brand.

C-Band is also critical to the daily operation of the C-SPAN Video Library based in Indiana. We maintain two receive-only earth stations\(^3\) that receive the C-Band signals of our three networks on a round-the-clock basis. All of our programming since 1987 has been recorded, archived, indexed and abstracted and has been available to all Americans on a no-fee basis for personal, research, academic or news reporting purposes. It can be easily searched, clipped and shared by users. Currently the two-time Peabody Award winning C-SPAN Video Library houses


\(^3\) Both earth stations are registered with the Commission.
over 246 thousand hours of video programming comprising 2.1 petabytes of data. As such, it is now one of the most accessible and comprehensive video archives of governmental and political content in existence. Its continued usefulness as a source of quality video depends on a reliable C-Band transmission system free of terrestrial and other forms of interference.

Some of the proposed changes in the current C-band operating environment could, if taken too far, negatively affect our public service mission and the American audience we serve. An essential element of that mission has been to make our public affairs programming available to the maximum number of households possible. With C-Band satellite service we have been able to reach households in even the most remote rural areas served by cable systems, and to reach both Hawaiian and Alaskan households with good quality signals, despite the challenge of the satellite look angles from those states.

We considered whether fiber technology was an option for the C-SPAN Networks and we quickly rejected it primarily because fiber service is simply not available everywhere, nor it is likely to be so soon. If C-SPAN cannot reach the maximum number of American households we cannot fulfill the essential purpose set out for us by our cable television operator founders. Beyond its limited reach, fiber technology’s inability to match C-Band satellite service’s reliability and cost also made it an unattractive option for us. That is why, having looked at the present and near term transmission options for us, including fiber technology, we recently negotiated C-Band transponder leases through to at least 2028 with the ability to extend beyond that date.

As a news and information service C-SPAN has been a frequent user of the Ku-Band spectrum to deliver video signals back to a central facility when covering distant public affairs events. We have been able to use the Ku-Band for such relatively short duration periods, but we
reject it as an unworkable substitute for the vastly more reliable C-Band. Ku-Band transmissions are notorious for being subject to severe rain fade conditions, which we have experienced frequently over the years. The Ku-Band spectrum is not an equivalent alternative transmission path to C-Band and the Commission should not consider it one.

Finally, unless the risk of harmful interference can be totally eliminated we do not believe the Commission should allow new P2MP services in the C-Band or restrict the protection of C-Band earth stations across the full spectrum band and the visible satellite arc. Our ability and that of our cable operator affiliates and our satellite providers to easily and quickly change frequencies and receive antenna orientations is essential to the value of the C-Band satellite capacity on which C-SPAN relies. As we have experienced in the past, such flexibility allows prompt restoration of service if an outage affects our primary space segment. It also aids in the resolution of interference issues, which we have also experienced. A requirement by our transmission partners and us to work around new P2MP facilities would undermine the truly nationwide reach of C-Band service upon which we rely. And a requirement to modify earth station licenses for any change in operating parameters would be a significant and unjustified regulatory burden without sufficient public benefit. C-SPAN urges the Commission to focus on other spectrum that is not as intensely used as the C-Band to meet requirements for additional frequencies suitable for P2MP operations.

The C-Band spectrum is now, and has been a reliable workhorse serving many communications business interests that in turn benefit millions of American consumers. C-SPAN, as a public service programmer is serving the public interest of American citizens by means of that same spectrum. As it considers changes to the 3.7-4.2 GHz environment the

---

4 See NPRM ¶¶ 37-40 & 116-132.
Commission should take care to protect the core interests of all of us C-Band incumbents so that we can continue to provide quality services.

Respectfully submitted,

The C-SPAN Networks

[Signature]

By: Bruce D. Collins
Corporate Vice President & General Counsel

October 29, 2018