

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

In the Matter of

Expanding Flexible Use of the 3.7 to 4.2 GHz Band	)	GN Docket No. 18-122
	)	
Expanding Flexible Use in Mid-Band Spectrum	)	GN Docket No. 17-183
Between 3.7 and 24 GHz (Inquiry Terminated	)	
as to 3.3-4.2 GHz)	)	
	)	
Petition for Rulemaking to Amend and Modernize	)	RM-11791
Parts 25 and 101 of the Commission's Rules to	)	
Authorize and Facilitate the Deployment of)	)	
Licensed Point-to-Multipoint Fixed Wireless	)	
Broadband Service in the 3.7-4.2 GHz Band)	)	
	)	
Fixed Wireless Communications Coalition, Inc.	)	RM-11778
Request for Modified Coordination Procedures in	)	
Band Shared Between the Fixed Service and the	)	
Fixed Satellite Service	)	

**SUPPLEMENTAL COMMENTS**

**GLOBECAST AMERICA, INCORPORATED (“Globecast”)**, hereby submits its Supplemental Comments in response to the Commission’s invitation to interested parties<sup>1</sup> to supplement the record to address issues raised by commenters in response to the Commission’s Notice of Proposed Rulemaking in this docket.<sup>2</sup>

1. Globecast is the U.S. subsidiary of an international company involved in broadcast and technology, working with global media companies of all size.<sup>3</sup> Globecast provides a wide variety of television services (including extensive C-band uplink and downlink services for both broadcast and cable content and information providers) to U.S. broadcasters and programmers.

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<sup>1</sup> *Public Notice*, Report No. DA 19-678, released July 19, 2019. These Supplemental Comments are timely filed.

<sup>2</sup> *In re Expanding Flexible Use of the 3.7 to 4.2 GHz Band in GN Docket No. 18-122 (Order and Notice of Proposed Rulemaking)*, 33 FCC Rcd 6915 (2018) (hereafter the “Notice” or the “NPRM”).

<sup>3</sup> <https://www.globecast.com/about-us/key-facts/>

2. Globecast distributes several broadcast and cable television channels to thousands of C-band receive earth stations throughout the United States and other countries within the Americas. Ongoing access to adequate C-band satellite spectrum and protection from interference is critical to Globecast and our customers like Hallmark, Scripps, In-Demand, Sinclair Broadcasting, Fox and others whose programming is downlinked to Globecast to continue to allow high-quality delivery of news, sports and entertainment programming. There is no alternative transmission mechanism that matches the reliability and reach of C-band satellites. As the Commission conducts its review of the C-band with the objective of possible repurposing of a portion or all of the band for terrestrial mobile 5G service, Globecast has previously urged the Commission to consider the needs of the video programming distribution community.<sup>4</sup>

3. Globecast continues to be concerned about how the C-band can continue to function if too much spectrum is redirected to terrestrial mobile service. In these Comments, Globecast addresses in particular the proposal submitted by ACA Connects – America’s Communications Association, the Competitive Carriers Association and Charter Communications, Inc. (“ACA Connects”). In its proposal, ACA Connects has overhyped the ability of fiber to substitute for C-band, overstated the amount of C-band spectrum that can be effectively repurposed without harming the video programming industry and underestimates the challenges in time and resources to increase the deployment of fiber to substitute for Satellite Earth Stations (“SES”).

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<sup>4</sup> Globecast January 14, 2019 Ex Parte Filing in GN Docket No. 18-122, Cartesian Study.

## ACA Connects Proposes Repurposing Too Much Spectrum and Underestimates C-band's Importance to Delivery of Programming Services

4. ACA Connects glibly suggests that 370 MHz of the C-band can be repurposed for uses other than FSS service. Globecast believes that this reflects a lack of understanding of the role of satellite downlinks for program production and distribution purposes.<sup>5</sup> Repurposing of 370 MHz away from satellite use effectively sterilizes the entire band. A company like Globecast cannot operate its business with the infrastructure in which it has invested with only 130 MHz of C-band spectrum for satellite downlink.

5. A significant source of revenue for Globecast is management of programming services, which involves handling programming feeds for television clients. Approximately 50% of Globecast's total revenue in the U.S. involves these types of services incorporating C-band frequencies. Thus, significant reductions in C-band capacity and, therefore, signal access for its Los Angeles, California facility would have a substantial impact on Globecast's U.S. business.

6. For example, Globecast provides event management for clients like In-Demand involved in major live events programming. This depends on the ability to manage and control the downlinks that come off satellite on the C-band.

7. Globecast also offers Video-on-Demand (VOD) services, such as liveSpotter, a feature that allows service content providers to create VOD files from live streams and syndicate to multiple online platforms. With liveSpotter, which relies on C-band satellite feeds as one of the inputs to the system,

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<sup>5</sup> As the Commission has noted, "the ACA Connects Coalition represents "incumbent C-band earth station users and wireless providers that seek to use this spectrum to provide 5G services." July 19<sup>th</sup> Public Notice, at p. 2. In other words, they neither represent programming concerns nor understand the dependence of programmers on the flexibility of the C-band.

clients can clip, edit and publish high quality content instantly on social media.<sup>6</sup>

8. Key to providing such services is Globecast's Los Angeles, California Media Center, which incorporates multiple C-band downlinks across the entire North American satellite arc. Signal acquisition on the C-band at Globecast's Los Angeles Media Center is the most important intake source for the programming that Globecast manages for its clients. If Globecast can no longer support a portion of the service it provides to the client, it puts the whole of live programming events management and video program distribution at risk.

9. There is no alternative transmission mechanism that matches the reliability and reach of C-band satellites. The proposal by the C-Band Alliance ("CBA") to repurpose 200 MHz would already severely restrict Globecast's capacity to service its clients. However, repurposing an additional 170 MHz as proposed by ACA Connects would be catastrophic. Under the ACA Connects proposal, all video programmers satellite downloads will be crammed into the upper 130 MHz of the C-band, significantly limiting the ability to provide, for example, live events programming because of the competing demands for spectrum from 24-hour programmers with dedicated transponders.

10. Globecast is not a "naysayer" regarding fiber and the importance of fiber to programming distribution. Globecast itself operates fiber networks and receives substantial revenue from its fiber distribution services. Every day Globecast sends thousands of hours of content flowing over 75,000 miles of fiber worldwide. However, fiber is not a substitute for C-band. In addition to the superior quality of signal of programming downlinked from our clients, C-band satellite service is simply a more reliable source of video programming than fiber. It is Globecast's experience that fiber is inherently unstable, especially single fiber. Having carrier and conduit diversity – both C-band satellite

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<sup>6</sup> <https://www.globecast.com/what-we-do/localisation-and-creative-services/>

transponders and fiber -- is essential to quality production and reliability for client services.<sup>7</sup>

### ACA Connects Overpromises the Reach and Speed of Deployment of Fiber to Substitute for C-band Use

11. ACA Connects claims that under its proposal, “Urban markets can be cleared within 18 months, most other markets within 3 years, and certain hard-to-build areas within 5 years.” (ACA Connects July 9<sup>th</sup> Cartesian Proposal Document, p. 11). Further, “[s]imilar to how programmers and MVPDs transport programming via fiber today, they will deploy fiber to interconnect their headends and to peer in major data centers nationwide.” (ACA Connects July 9<sup>th</sup> Cartesian Proposal Document, p. 8). As noted above, Globecast is not opposed to fiber and, indeed, is a major user – in combination with the C-band. However, the impediments to fiber deployment, as demonstrated by history of past promises, makes clear that this is far too optimistic a scenario.

12. As an initial matter, the outfitting of facilities, data centers and cable headends with the necessary equipment entails considerable effort that requires design, deployment and testing before it can be commissioned for service. Agreements will need to be put in place to ensure protection of our valuable content.

13. Then there is the issue of actual deployment of fiber. Even in urban areas, the assertion that all urban cable headends could be moved off satellite and onto fiber in 18 months is excessively aggressive and not realistic. Indeed, in some cities, it can take more than 18 months to get the permits and rights of way required to lay fiber to cable headends where it is not currently available or where diverse and redundant fiber paths are not yet provided.

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<sup>7</sup> Particularly in the context of live events programming, redundancy of capacity and diversity of source – so having both satellite and fiber available – is a requirement of commercial insurers of live events.

14. Recent history does not dispel the idea that when considering rollout, the difference between promise and performance is very wide. For example, although Verizon pledged in 2008 to complete deployment of fiber to all of New York’s residential wire all residential buildings with its FiOS fiber by 2014, an audit conducted by the City of New York concluded that showed that at least a quarter of the city's residential blocks had no FiOS service.<sup>8</sup>

15. Alphabet encountered numerous delays and unexpected costs that ultimately caused it to abandon its Google Fiber high speed fiber project. After deploying to six metro areas in six years, company management announced in late 2016 that it was “pausing” future deployment after initial rollouts proved more expensive and time consuming than anticipated.<sup>9</sup> This occurred notwithstanding that Google Fiber obtained major “administrative efficiencies” in its final list of target cities, “including a single master contract, a sole point of contact in city government, streamlined procedures for permits to install equipment on city-owned property, and permission to dig up city streets to lay conduit. These costs—in dollars, time, and political conflict—had proven to be a major hindrance for network deployment.”<sup>10</sup>

16. As recently as its Open Meeting held August 1, 2019, in adopting a new mapping method for broadband coverage, the Commission implicitly recognized the failure to provide broadband fiber coverage for large portions of the U.S. population ten years after Congress mandated nationwide coverage.<sup>11</sup> Based upon such past experience, ACA Connects’ estimates of time and obstacles to

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<sup>8</sup> Susan Crawford, “Bad Internet in the Big City,” *Wired* (Feb. 28, 2018); *see also* “City to audit Verizon's delayed rollout of FiOS,” *Crain’s New York Business* (Sep. 17, 2014).

<sup>9</sup> “Google’s High-Speed Web Plans Hit Snags,” *Wall Street Journal* (Aug. 25, 2016).

<sup>10</sup> Blair Levin and Larry Downes, “Why Google Fiber Is High-Speed Internet’s Most Successful Failure,” *Harvard Business Review* (Sept. 7, 2018).

<sup>11</sup> *Report and Order on Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, FCC 19-\_\_\_\_,

achieve a rapid deployment of fiber to substitute for the C-band do not justify a wholesale disruption of the video distribution market.

## Conclusion

17. The United States is a world leader in the production and distribution of high-quality video programming. The film and video industry contributed \$100 billion to U.S. GDP in 2015, and it employed 390,000 workers.<sup>12</sup> The C-band is a key element of this economic success.

18. The video content providers agree with Globecast’s assessment of the importance of the C-band in this production effort. As the principal television content providers have advised the Commission, “While fiber and other technologies play a role in distribution, these are complements, not substitutes, to the C-band.”<sup>13</sup> “No other distribution method matches the C-band in ubiquity and reliability.”<sup>14</sup>

19. The importance of continued access to the C-band to of such importance to video programming compels the Commission to “do no harm” as it decides how much spectrum to repurpose. ACA Connects would cause great harm and should be rejected. The Commission should maximize the amount of spectrum repurposed in the C-band at 200 MHz, as proposed by the CBA.

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adopted August 6, 2019.

<sup>12</sup> Source: Arts and Cultural Production Satellite Account, which is produced jointly by the U.S. Bureau of Economic Analysis and the National Endowment for the Arts, cited in “Taking Note: The Film Industry’s Contributions to National and State Economies,” National Endowment for the Arts, published March 1, 2018.

<sup>13</sup> Ex Parte submission by Matthew S. DelNero, Covington & Burling, dated June 7, 2019, on behalf of CBS Corp., Discovery, Inc., The Walt Disney Company, Fox Corp., Univision Communications Inc., and Viacom Inc., at p. 2.

<sup>14</sup> *Id.*

Respectfully submitted,

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