

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Petition for Rulemaking to Amend and)	
Modernize Parts 25 and 101 of the)	RM-11791
Commission's Rules to Authorize and)	
Facilitate the Deployment of Licensed Point-)	
to-Multipoint Fixed Wireless Broadband)	
Service in the 3700-4200 MHz Band)	
)	

REPLY COMMENTS OF INTELSAT LICENSE LLC

Intelsat License LLC ("Intelsat"), pursuant to Section 1.405 of the Federal Communications Commission's ("FCC" or "Commission") rules¹ and the Commission's July 7, 2017 public notice,² submits this reply to comments on the petition for rulemaking (the "Petition")³ filed by the Broadband Access Coalition ("BAC" or "Coalition"). Intelsat opposes the BAC's request that the Commission modify its licensing rules for Fixed-Satellite Service ("FSS") earth stations operating in the 3700-4200 MHz band or "C-band" in an attempt to enable terrestrial point-to multipoint, co-frequency sharing. Intelsat is a member of the Satellite Industry Association ("SIA") and also fully supports the opposition and reply comments filed by SIA in this proceeding.⁴

¹ 47 C.F.R. § 1.405.

² *Consumer and Governmental Affairs Bureau; Reference Information Center; Petition for Rulemakings Filed*, Public Notice, Report No. 3080 (July 7, 2017).

³ *Petition for Rulemaking to Amend and Modernize 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 3700-4200 MHz Band*, RM-11791 (filed June 21, 2017) ("BAC Petition").

⁴ See *Opposition of the Satellite Industry Association*, RM-11791 (filed Aug. 7, 2017) ("SIA Opposition"); *Reply Comments of the Satellite Industry Association*, RM-11791 (filed Aug. 22, 2017).

As an initial matter, Intelsat agrees with SIA, that the BAC has not provided any record evidence to support the proposed radical changes to the existing coordination policy.⁵ Indeed, Intelsat pointed out in its initial comments that the BAC has not explained why a change in the Commission's full-band, full-arc licensing of FSS earth stations is a prerequisite to the BAC members' ability to provide fixed point-to-multipoint services under existing under existing coordination rules.⁶ Intelsat continues to believe that the BAC proposal is a "solution" in search of a problem.

As described below, the record in this proceeding requires the FCC to reject the BAC's ill-conceived proposal to introduce licensed fixed wireless point-to-multipoint service in the 3700-4200 MHz band on a shared basis with existing FSS and fixed service ("FS") users. As explained in detail by SIA and General Communications, Inc. ("GCI") in their opposition and comments respectively, the 3700-4200 MHz band is heavily used by FSS providers to offer a myriad of services from nationwide video programming distribution to Internet, television, and telephone services in the most remote areas of Alaska.⁷ The BAC's proposal for additional co-frequency sharing by terrestrial point-to-multipoint services is premised on restricting existing FSS use and lacks any semblance of a plan to protect important satellite earth station services. Accordingly, the Commission should dismiss the BAC's Petition.

⁵ See *SIA Opposition*, at 11.

⁶ See *Opposition of Intelsat License LLC*, RM-11791, at 8 (filed Aug. 7, 2017) ("Intelsat Opposition").

⁷ See *SIA Opposition*, at 7-8; *Comments of General Communications, Inc.*, RM-11791, at 4-11 ("GCI Comments").

I. THE RECORD DEMONSTRATES THAT THE 3700-4200 MHZ BAND IS HEAVILY UTILIZED BY FIXED-SATELLITE SERVICE OPERATORS TO PROVIDE ESSENTIAL SERVICES

Intelsat, SIA, and others have shown in this proceeding that the 3700-4200 MHz band is heavily used, discrediting unsubstantiated assertions by the Coalition that spectrum is “extremely underutilized” or that FSS use is “highly inefficient.”⁸ Intelsat’s review of the FCC databases confirms the Commission’s determination that there are approximately 4,700 licensed or registered earth stations throughout the United States, 48 satellites serving the U.S., and another dozen or so satellites authorized to serve a portion of the U.S. using the 3700-4200 MHz band.⁹

FSS licensees use these authorizations to provide broadband services, including services to those in remote areas and on board planes and ships, deliver television programming to cable and telco headends, restore communications after natural disasters, and support government communications, among other uses.¹⁰ GCI, the largest telecommunications provider in Alaska, described how it relies on the entire 3700-4200 MHz band to provide competitive services to consumers in unserved and underserved areas, as well as in extremely rural parts of the state.¹¹ “In many cases, GCI’s satellite services are the only communications option that Alaskans can rely upon to contact emergency officials in critical situations.”¹²

There are also thousands of unlicensed and unregistered receive-only earth stations utilizing the 3700-4200 MHz band. Because the precise number is unknown, it is impossible to

⁸ *BAC Petition*, at 5, 10.

⁹ *See Intelsat Opposition*, at 3, 4 (citing *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 4.2 GHz*, Notice of Inquiry, GN Docket No 17-183, FCC 17-104, ¶ 14 (Aug. 3, 2017)).

¹⁰ *See Intelsat Opposition*, at 3-4; *SIA Opposition*, at 6-8.

¹¹ *GCI Comments*, at 4-11 (discussing in depth the importance of “unfettered access” to the 3700-4200 MHz band for critical long-distance services, telehealth, long-distance learning, Federal Aviation Administration communications, and other services in Alaska).

¹² *Id.* at 3.

quantify the magnitude of harm the BAC’s proposal would cause to these unregistered users of C-band satellite services. As an example, one Intelsat customer alone has over 3,700 unregistered C-band downlink antennas deployed in North America for the distribution of religious programming. Another religious broadcaster—Gospel Broadcasting Network—believes that many of the small, rural cable headends and churches that it serves rely on unregistered receive-only antennas to downlink programming. The BAC’s proposal conveniently fails to acknowledge the continued use of unlicensed, unregistered receive-only antennas, many of which are located in rural America.

II. THE BROADBAND ACCESS COALITION’S PETITION FAILS TO OFFER A VIABLE PLAN TO PROTECT CO-FREQUENCY FIXED-SATELLITE SERVICE OPERATIONS

As noted in the SIA comments, satellite operators require full-band, full-arc licensing in order to accommodate shifting demand, move customers to optimize loading and resolve interference concerns, and respond to anomalies.¹³ The Coalition has not offered any viable plan to ensure such flexibility needed to protect co-frequency FSS operations.¹⁴ The BAC summarily states that it is “confident” that satellite operational changes “can be accommodated” absent the FCC’s full-band, full-arc licensing policy.¹⁵ Such changes would be restricted to those deemed “necessary”—a yet to-be-defined term.¹⁶ It further suggested that “the existing frequency coordination can ultimately be automated to govern interference protection criteria for incumbent

¹³ See *SIA Opposition*, at i.

¹⁴ See, e.g., *SIA Opposition*, at 9; *GCI Comments*, at 15; Opposition of SES Americom, Inc. RM-11791, at 1 (filed Aug. 7, 2017) (“SES Opposition”).

¹⁵ *BAC Petition*, at 26.

¹⁶ See *id.* (indicating the Coalition would “work with the FSS C-band industry to define the circumstances . . . when changes will be necessary”).

FSS and FS facilities.”¹⁷ “Like the [Fixed Wireless Communications Coalition, Inc.] before it, the BAC wants the Commission to eliminate its full-band, full-arc earth station licensing policy but has not presented a viable alternative approach that accommodates FSS flexibility requirements.”¹⁸

Satellite operators’ need for full-band, full-arc flexibility to ensure service continuity is not simply a theoretical concern. SES Americom, Inc. (“SES”) illustrated the importance of protecting the Commission’s full-band, full-arc licensing policy.¹⁹ When SES’s AMC-9 satellite experienced an unforeseen anomaly causing service interruptions, it could take immediate action to serve customers relying on the AMC-9 satellite by using capacity on other satellites—a time-sensitive and highly-complicated process. Full-band, full-arc licensing was “essential to implementation of SES’s restoration plans,” and but for this flexibility, service restoration “would likely have been completely impossible.”²⁰ SES further noted that without the full-band, full-arc licensing policy, the process would have required SES to file dozens of applications for modified authority and special temporary authority pending review of those applications.²¹ And in addition to interference events and operational anomalies, the Commission’s policy of full-band, full-arc earth station licensing enables providers to act quickly to ensure continuity of service in the event of a natural disaster or other emergency situation.

¹⁷ *Id.* at 34.

¹⁸ *SIA Opposition*, at 11 (referencing *FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service that Share Terrestrial Spectrum*, Second Report and Order, 17 FCC Rcd. 2002 (2002)).

¹⁹ *SES Opposition*, at 2.

²⁰ *Id.*

²¹ *Id.*

Indeed, even some of the commenters supporting the Coalition’s proposal recognize the need to protect incumbent operations, both satellite and terrestrial, from harmful interference and raise questions about the BAC’s to-be-determined coordination plan. The Competitive Carriers Association (“CCA”), for example, urged the Commission to closely examine whether any “interference plan would actually protect incumbent users, some of which are providing critical services to unserved, underserved, and very rural areas.”²² The National Spectrum Management Association (“NSMA”) similarly acknowledged that a wide range of commercial and government users rely on the 3700-4200 MHz band, and incumbent services must be adequately protected and allowed to expand.²³ The Fixed Wireless Communications Coalition, Inc. (“FWCC”) even said it would “reserve judgment on implementing an automated frequency coordination system until we can see its specifications.”²⁴ Without a viable solution to ensure protection of incumbent FSS operations, the Coalition’s proposal would have a debilitating effect on existing and future satellite services and is contrary to the public interest.

III. CONCLUSION

For the above-discussed reasons, the Commission should deny the BAC’s Petition.

Respectfully submitted,

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²² *Comments of Competitive Carriers Association*, RM-11791, at 5 (filed Aug. 7, 2017).

²³ *Comments of the National Spectrum Management Association*, RM-11791, at 3 (filed Aug. 7, 2017).

²⁴ *Comments of the Fixed Wireless Communications Coalition*, RM-11791, at 2 (filed Aug. 7, 2017).

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of August, 2017, I caused a true copy of the foregoing “Reply Comments of Intelsat License LLC” to be sent by first class mail, postage prepaid, upon the following:

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