

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
2018 Biennial Review of Telecommunications)	IB Docket No. 18-377
Regulations)	
)	

To: Federal Communications Commission

COMMENTS OF IRIDIUM COMMUNICATIONS INC.

I. INTRODUCTION

Iridium Communications Inc. (“Iridium”) hereby submits these comments in response to the Federal Communications Commission’s Public Notice (“Biennial Notice”) in the above-captioned proceeding seeking comment in its 2018 Biennial Review of Telecommunications Regulations.¹ In particular, Section 11 of the Communications Act requires the Commission to review biennially its regulations that (1) “apply to the operations or activities of any provider of telecommunications service,” and (2) “determine whether any regulation is no longer necessary in the public interest as a result of meaningful economic competition between providers of such service.”² Pursuant to the Biennial Notice, Iridium reiterates its call for the elimination of the Ancillary Terrestrial Component (“ATC”) rules³ originally filed in response to the 2018

¹ *FCC Bureaus and Offices Seek Public Comment in 2018 Biennial Review of Telecommunications Regulations*, Public Notice, DA 18-1260 (rel. Dec. 17, 2018).

² 47 U.S.C. § 161.

³ Comments of Iridium Communications, Inc., CB Docket No. BO 16-251; IB Docket No. 16-131 (filed Oct. 29, 2018) (“Iridium Reg Flex Comments”).

Regulatory Flexibility Public Notice (“2018 Reg Flex Proceeding”).⁴

The Commission created the ATC rules in 2003 to enable Mobile Satellite Service (MSS) operators to provide ancillary terrestrial services in the same spectrum that the Commission had allocated and authorized for MSS in these bands.⁵ However, attempts to deploy ATC have led to waiver of a significant number of the rules, and a move toward deploying terrestrial operations that are not ancillary to MSS operations. The ATC applications have led to protracted proceedings and sapped the resources of the FCC, federal government and private industry resources while increasing the threat of interference to critical MSS operations. As a result, the FCC should eliminate the ATC rules are no longer in the public interest upon a finding that they are no longer in the public interest.

II. THE ATC RULES SHOULD BE ELIMINATED BECAUSE THEY HAVE CREATED SUBSTANTIAL BURDENS FOR STAKEHOLDERS

In 2003, the Commission adopted the *ATC Order* permitting MSS operators to integrate ATC into their MSS systems in response to two proposals from MSS operators seeking flexibility to integrate ancillary terrestrial components into their satellite networks by re-using their assigned MSS frequencies.⁶ The ATC rules were modified in 2005 in response to petitions for reconsideration of the *ATC Order*.⁷ Under these rules, MSS operators were permitted to seek

⁴ *FCC Seeks Comment Regarding Possible Revision or Elimination of Rules Under the Regulatory Flexibility Act, 5 U.S.C. Section 610*, Public Notice, DA 18-115 (rel. Apr. 6, 2018), published in 83 Fed. Reg. 36848 (July 31, 2018).

⁵ *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd 1962, 1964, ¶ 1 (2003) (“*ATC Order*”).

⁶ *Id.*

⁷ *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Memorandum Opinion and Order and Second

authority to deploy ATC in frequency bands allocated for MSS in the L-band (1525-1544, 1545-1559 MHz; 1626.5-1645.5, 1646.5-1660.5 MHz), Big LEO band (1610-1626.5 MHz; 2483.5-2500 MHz) and 2 GHz band (2000-2020 MHz; 2180-2200 MHz). The ATC rules were aimed at providing better coverage in areas that MSS providers could not otherwise serve, such as urban areas and inside buildings.⁸ The Commission saw the ATC regime as a means of enabling MSS operators to “enhance[] their ability to offer high-quality, affordable mobile services on land, in the air and over the oceans without using any additional spectrum resources beyond spectrum already allocated and authorized by the Commission for MSS in these bands.”⁹

The Commission adopted five “gating criteria” to ensure that ATC would remain ancillary to the provision of MSS in order to protect MSS satellite operations.¹⁰ The gating criteria requires MSS providers to maintain: (1) MSS coverage; (2) a ground spare satellite within one year of commencing ATC operations; (3) commercial availability of MSS service; (4) operation of ATC in the same band as the applicant’s MSS operations; and (5) an integrated MSS/ATC service offering, which could be met through a safe harbor showing that all handsets offered by the operator were dual-mode (MSS and ATC).¹¹ The Commission stressed the importance of satisfying each of these criteria, noting that it viewed “full and complete

Order on Reconsideration, 20 FCC Rcd 4616, 4618 ¶ 7 (2005) (“*2005 ATC Second Reconsideration Order*”).

⁸ *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Notice of Proposed Rulemaking, 16 FCC Rcd 15532, 15532-33 ¶ 1 (2001) (“*Flexibility Notice*”).

⁹ *ATC Order*, 18 FCC Rcd at 1964, ¶ 1.

¹⁰ *See id.* at 1999-2012 ¶¶ 66-93.

¹¹ 47 C.F.R. §25.149(b)(1)-(5).

compliance with each of these requirements as essential to the integrity of our ‘ancillary’ licensing regime.”¹²

In addition to the gating criteria, the Commission also adopted technical rules to mitigate the potential for harmful interference resulting from ATC operations.¹³ The Commission expressed confidence that the rules, which were “designed to protect adjacent and in-band operations from interference from ATC,” would be “sufficient” for preventing such interference.¹⁴ However, “in the unlikely event” of “harmful interference from ATC operations,” the Commission placed the onus squarely on the ATC operator to “resolve such interference.”¹⁵ The Commission later explained that the rule imposes an “absolute obligation on the MSS/ATC operator to resolve any harmful interference to other services.”¹⁶

Since 2003, four MSS operators – Ligado, Globalstar,¹⁷ Terrestrial, and DBSD and their predecessors – have sought and have been granted ATC authority.¹⁸ As described in detail in

¹² *ATC Order*, 18 FCC Rcd at 1999 ¶ 66.

¹³ *See, e.g., id.*, 18 FCC Rcd at 2017 ¶ 104 (“We adopt technical parameters for ATC operations in each of the bands at issue designed to protect adjacent and in-band operations from interference from ATC.”) (citation omitted).

¹⁴ *Id.*

¹⁵ *Id.*; *see* 47 C.F.R. § 25.255.

¹⁶ *Spectrum and Service Rules for Ancillary Terrestrial Components in the 1.6/2.4 GHz Big LEO Bands*, Report and Order and Order Proposing Modification, 23 FCC Rcd 7210, 7223 ¶ 35 (2008) (citation omitted).

¹⁷ Iridium does not seek to alter any existing waiver-based approvals to offer terrestrial service that have been granted under the ATC regime, *i.e.*, Globalstar. If the ATC rules are eliminated or modified as proposed, the Commission should do so in a manner that maintains the flexibility to offer terrestrial service that has already been granted to those parties.

¹⁸ *Mobile Satellite Ventures Subsidiary LLC*, Order and Authorization, 19 FCC Rcd 22144 (IB 2004); *Mobile Satellite Ventures Subsidiary LLC*, Memorandum Opinion and Order, 22 FCC Rcd 20548 (IB 2007); *SkyTerra Subsidiary LLC formerly Mobile Satellite Ventures Subsidiary LLC Application for Minor Modification of Space Station License (AMSC- 1) Modification and Request for Expedited Consideration*, IBFS File No. SAT-MOD-20090429-00047 (Apr. 29,

Iridium’s Reg Flex Comments, the efforts of these parties to deploy ATC have ultimately been unsuccessful.¹⁹ The MSS operators in question sought greater and greater flexibility for their terrestrial operations, rendering the ATC rules largely irrelevant.²⁰ These efforts have resulted in a string of waivers of the ATC rules and authorizations. In reality, these waivers of the ATC rules have substantially increased the likelihood of interference to the applicant’s spectrum neighbors, and their own MSS operations. Ultimately, the flexibility sought by ATC applicants has changed the nature of ATC such that the only way for the terrestrial component to work is if satellite service becomes ancillary to the terrestrial component. The FCC and federal government as well as private parties have expended substantial resources in response to these efforts to waive the ATC rules.

2009); *See SkyTerra Subsidiary LLC*, Order and Authorization, 25 FCC Rcd 3043 (IB 2010); *LightSquared Subsidiary LLC*, Order and Authorization, 26 FCC Rcd 566 (IB 2011); Applications of LightSquared Subsidiary LLC, Narrative, IBFS File Nos. SAT-MOD-20151231-00090, SAT-MOD-20151231-00091, & SES-MOD-20151231-00981 (filed Dec. 31, 2015); Ligado Networks LLC, Amendment to License Modification Applications, IBFS File Nos. SES-AMD-20180531-00856, SAT-AMD-20180531-00044, SAT-AMD-20180531-00045, SES-MOD-20151231-00981, SAT-MOD-20151231-00090, & SAT-MOD-20151231-00091, IB Docket No. 11-109 (filed May 31, 2018); *Globalstar Licensee LLC*, Order and Authorization, 23 FCC Rcd 15975 (2008); *Globalstar Licensee LLC*, Order, 25 FCC Rcd 13114 (IB, WTB & OET 2010); *Terrestrial Use of the 2473-2495 MHz Band for Low-Power Mobile Broadband Networks; Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems*, Report and Order, 31 FCC Rcd 13801 (2016) (“*Globalstar 2016 Order*”); *New DBSD Satellite Service G.P., Debtor-in-Possession, and TerreStar Licensee Inc., Debtor-In-Possession, Request for Rule Waivers and Modified Ancillary Terrestrial Component Authority*, Public Notice, 26 FCC Rcd 13011 (2011); *see DBSD North America, Inc. Debtor-in-Possession; New DBSD Satellite Services G.P., Debtor-in-Possession; Pendrell Corporation, Transferor; and TerreStar License Inc., Debtor-in-Possession*, Order, 27 FCC Rcd 2250 (IB 2012) (“*DBSD Satellite Order*”); *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, Report and Order and Order of Proposed Modification, 27 FCC Rcd 16102 (2012) (“*AWS-4 Order*”).

¹⁹ Iridium Reg Flex Comments at 11-19.

²⁰ *Id.*

By the end of 2012, the Commission changed the spectrum allocations in the 2 GHz band. The Commission approved the transfer of control of the DBSD and TerreStar, the two 2 GHz MSS entities, to DISH and adopted flexible use rules enabling the provision of stand-alone terrestrial services in what had previously been the 2 GHz MSS band, eliminating the need for ATC rules in the band.²¹ The Commission concluded that “the changing circumstances in the 2 GHz MSS band demonstrate that ATC regulations are no longer the best framework for developing and deploying terrestrial broadband operations in the band.”²²

In summary, Commission grant of ATC authority to date has resulted in waivers of more than half of the core ATC rules, demonstrating that integrated MSS/ATC service is not possible. Iridium reiterates its call for the elimination of the ATC rules in the portions of the L-band and Big LEO band that are allocated for MSS. Instead, the Commission should maintain spectrum bands for satellite use, and where appropriate adopt band-specific rules for any additional spectrum use.²³ To the extent that the FCC is interested in terrestrial flexibility, each band requires a unique assessment tailored to the conditions in a given band. At the same time, the Commission must balance the desire for additional terrestrial spectrum with the need to support existing critical satellite services and new satellite opportunities on the horizon.

²¹ See *DBSD Satellite Order*, 27 FCC Rcd 2250; *AWS-4 Order*, 27 FCC Rcd 16102.

²² *AWS-4 Order*, 27 FCC Rcd at 16220 ¶ 318 (citation omitted). In the *AWS-4 Order*, the Commission noted its intent to address the ATC rules for L-band and Big LEO Band MSS operators at a later date. *Id.*

²³ Nothing in this filing is intended to impact Globalstar’s terrestrial service authorization. See *Globalstar 2016 Order*, 31 FCC Rcd 13801; see also IBFS File Nos. SAT-MOD-20170411-00061 and SES-MOD-20170412-00422 (granted Aug. 8, 2017 & Aug. 14, 2017, respectively). If the rules are eliminated or modified as proposed, the Commission should do so in a manner that maintains the existing flexibility to offer terrestrial service that has already been granted to Globalstar.

III. CONCLUSION

The ATC rules have not provided the anticipated opportunity for MSS operators to deploy ancillary terrestrial service in the L-band and Big LEO band. As a result and contrary to the public interest, the FCC and federal government has expended massive amounts of resources that are better spent on more productive endeavors. Thus, in order to protect MSS operations while continuing to explore opportunities for potential terrestrial deployment, the Commission should pursue the elimination of the ATC rules from Parts 2 and 25 of the Commission's rules. If the Commission prefers not to address the elimination of the rules in the above-captioned proceeding or the 2018 Reg Flex Proceeding, then the Commission should initiate a new rulemaking proceeding seeking comment on the elimination of the ATC provisions in Parts 2 and 25 of the Commission's rules consistent with these comments.

Respectfully submitted,

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