

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

In the Matter of)	
)	
Iridium Constellation LLC Petition for)	RM-11697
Rulemaking to Promote Expanded Mobile)	
Satellite Service in the Big LEO MSS-band,)	
)	
Terrestrial use of the 2473-2495 MHz Band for)	IB Docket No. 13-213
Low-Power Mobile Broadband Networks;)	RM-11685
Amendments to Rules for the Ancillary)	
Terrestrial Component of Mobile Satellite)	
Service Systems)	
)	

REPLY COMMENTS OF IRIDIUM CONSTELLATION LLC

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REPLY COMMENTS OF IRIDIUM CONSTELLATION LLC

Iridium Constellation LLC (“Iridium”), by its attorneys, hereby submits its Reply Comments on the Notice of Proposed Rulemaking (“Notice”) in the above-captioned proceeding.¹ As explained previously, Iridium takes no position on the merits of Globalstar’s terrestrial proposal,² however, any actions in this proceeding must be consistent with the continued success and growth of satellite services relied upon by government, public safety, emergency first responders, critical infrastructure industries, and consumers around the globe. The record in this proceeding demonstrates that grant of the Terrestrial Low Power Service (“TLPS”) proposals in the Notice would reduce substantially the availability of mobile satellite services nationwide. Therefore, Iridium herein reiterates its call for prompt action on its

¹ See 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, IB Docket No. 13-213, RM-11685, *Notice of Proposed Rulemaking*, 28 FCC Rcd 15351 (2013) (“Notice”).

² See Comments of Iridium Constellation LLC, RM-11697, IB Docket No. 13-213, RM-11685 (filed May 5, 2014) (“Iridium TLPS Comments”).

proposal to allocate a modest amount of spectrum for its system, which will ensure sufficient spectrum for continued development of critical mobile satellite services.³

I. INTRODUCTION AND SUMMARY

The record in this proceeding underscores the need to provide additional spectrum to support continued availability and growth of critical mobile satellite service (“MSS”). The Commission has long recognized the unique public interest benefits of MSS, which provide advanced and reliable connectivity globally to critical users in the harshest operating environments.⁴ For example, the Commission has asserted “the importance of maintaining MSS to provide services, for example, to public safety and Federal government agencies, to rural areas, and during natural disasters.”⁵ Mobile satellite services “serve important needs,” and the agency correctly noted that “MSS systems can provide communications in areas where it is difficult or impossible to provide communications coverage via terrestrial base stations, such as remote or rural areas and non-coastal maritime regions, and at times when coverage may be unavailable from terrestrial-based networks, such as during natural disasters.”⁶ Any action in

³ See Supplemental Comments of Iridium Constellation LLC, RM-11697, IB Docket No. 13-213, RM-11685 (filed May 5, 2014) (“Iridium Supplemental Comments”).

⁴ See, e.g., *Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, Order, 20 FCC Rcd 19696, 19707, at ¶ 28 (2005) (“Returned Spectrum Order”) (outlining some of the many public benefits of continued access to mobile satellite services); *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Report and Order, 26 FCC Rcd 5710, 5711 ¶ 4 (2011) (“MSS Report and Order”) (noting the particular importance of MSS in emergency situations when terrestrial infrastructure is unavailable).

⁵ See *Fixed and Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, 25 FCC Rcd 9481, ¶ 4 (2010) (“MSS NPRM and NOI”).

⁶ *Id.*, ¶¶ 3, 33.

this proceeding to expand the availability of terrestrial broadband access should not reduce the overall availability of critical mobile satellite services.

Globalstar's Comments leave no doubt that the company's plans for a new terrestrial system will reduce significantly the availability of satellite services in the United States. As described below, the rule changes it proposes would allow Globalstar effectively to cease providing its current satellite services,⁷ and the business plan it outlines contemplates the creation of nationwide exclusion zones for its two-way satellite operations.⁸ Moreover, the purported public safety benefits of the proposal are unclear and highlight the challenges of spectrum sharing between incompatible terrestrial and satellite services.⁹

In the face of this proposed reduction in satellite availability, the record in this proceeding reinforces the conclusion that the Commission should foster the success and development of critical satellite services through favorable action on Iridium's revised Big LEO band spectrum proposal. That revised proposal calls for a modest reassignment of 1.225 megahertz of 1.6 GHz Big LEO band spectrum for Iridium's exclusive use, as well as access on a shared basis with Globalstar to 1.5 megahertz of additional spectrum.¹⁰ There is an ample record of the public interest benefits of Iridium's proposal. Iridium's proposal will provide additional spectrum to support continued MSS growth, while also preserving the integrity of Globalstar's satellite operations. The case for granting additional spectrum to Iridium is made even more convincing in light of the substantial reduction in satellite capabilities inherent in Globalstar's proposal, which will only fuel Iridium's spectrum needs. Therefore, regardless of

⁷ See *infra* Section II.A.; see also Iridium TLPS Comments at 6-8.

⁸ See *infra* Section II.B.; see also Iridium TLPS Comments at 8-9.

⁹ See *infra* Section III.

¹⁰ See *infra* Section IV; see also Iridium Supplemental Comments.

how the Commission acts on Globalstar’s Terrestrial Low Power Service (“TLPS”) concept, it should immediately issue an *Order Proposing License Modifications* to implement the modest spectrum reassignment requested in Iridium’s Supplemental Comments.

Indeed, the Commission can and should act quickly on Iridium’s proposal. As detailed below, the Commission has ample statutory authority under Section 316 of the Communications Act to modify Iridium’s and Globalstar’s licenses to effectuate Iridium’s proposal. Nor is there a need for a separate rulemaking on Iridium’s proposal because, as pointed out by Globalstar itself, the Commission can exercise its Section 316 license-modification authority via rulemaking or adjudication.¹¹

II. GLOBALSTAR’S PROPOSAL WOULD REDUCE MSS AVAILABILITY ACROSS THE NATION.

Despite proclaiming its “commitment to a vibrant, successful satellite business,”¹² Globalstar confirms in its Comments that its TLPS plans would reduce substantially the availability of satellite communications across the country. As Iridium explained in its initial Comments, the rules proposed in the Notice would free Globalstar from any obligation to provide a robust, two-way mobile satellite service in the Big LEO band.¹³ Indeed, Globalstar’s Comments appear to contemplate fully exploiting this very option, as the business plan outlined by Globalstar would include nationwide deployment of a terrestrial technology that Globalstar

¹¹ Yet, even if notice-and-comment rulemaking procedures were required, the Commission has already given public notice of Iridium’s proposal, Globalstar has already commented on the proposal, and Globalstar will have yet another opportunity to comment on Iridium’s proposal after the Commission proposes the license modifications. This satisfaction of the Administrative Procedure Act’s (APA), 5 U.S.C. § 500 *et seq.*, requirements moots the need for a further round of notice and comment.

¹² Comments of Globalstar, Inc. at 10, IB Docket No. 13-213, RM-11685 (filed May 5, 2014) (“Globalstar Comments”).

¹³ Iridium TLPS Comments at 6-8.

itself acknowledges as incompatible with its own two-way satellite services.¹⁴ The detrimental impact on satellite services in the United States posed by Globalstar’s proposals highlights the need for the Commission to take action to protect and promote critical services in satellite spectrum bands, such as would be accomplished through grant of Iridium’s revised spectrum proposal.

A. The Proposed TLPS Rules Would Eliminate Nearly Any Obligation for Globalstar to Provide Big LEO Satellite Services.

The rules proposed in the Notice would effectively eliminate nearly all of the satellite service obligations contained in the Commission’s MSS Ancillary Terrestrial Component (“ATC”) rules. Under the proposal, Globalstar would be excused from demonstrating detailed interference protections for adjacent services,¹⁵ as well as from requirements to offer integrated satellite and terrestrial services,¹⁶ maintain spare satellites,¹⁷ offer continuous MSS throughout the United States,¹⁸ and limit ATC operations to authorized channels.¹⁹ The Notice proposes this substantial regulatory relief citing Globalstar’s new satellite constellation as evidence of its continued commitment to the provision of satellite services;²⁰ however, nothing in the Commission’s proposed rules would require Globalstar to make any use of its new satellite

¹⁴ Globalstar Comments at 11, 22 (describing Globalstar’s plans for nationwide TLPS); *id.* at 21 (describing the need to terminate TLPS to prevent MSS interference); *see also* Globalstar Inc., Petition for Rulemaking to Reform the Commission’s Regulatory Framework for Terrestrial Use of the Big LEO MSS Band, RM-11685 at 29-30 (filed Nov. 13, 2012) (“Globalstar Petition”) (recognizing that MSS exclusion zones will result from the deployment of TLPS).

¹⁵ 47 C.F.R. § 25.254.

¹⁶ *Id.* § 25.149(b)(4).

¹⁷ *Id.* § 25.149(b)(2).

¹⁸ *Id.* § 25.149(b)(1).

¹⁹ *Id.* § 25.149(b)(5)

²⁰ *See* Notice at ¶ 26 (noting that “Globalstar is continuing to develop and pursue MSS operations in the portion of the Big LEO spectrum designated for tis use, and has recently announced that it has substantially replenished it satellite constellation . . .”).

constellation, as the Notice would eliminate all ATC satellite obligations “except to demonstrate the commercial availability of MSS, without regard to coverage requirements.”²¹ To be clear, under the rules proposed in the Notice, Globalstar’s commitment to robust MSS rests entirely on its word, a radical departure from the established MSS/ATC regime. When the Commission adopted the ATC rules in 2003, it stated that it viewed “full and complete compliance with each of the requirements as essential to the integrity of [its] ‘ancillary’ licensing regime.”²² The Notice proposes a dramatic reversal from this position, suggesting instead that this nominal evidentiary showing “may be sufficient to address a fundamental goal of the ATC rules—that the deployment of terrestrial facilities is in fact ancillary to satellite operations.”²³

B. Globalstar’s Comments Confirm Its Plans to Create Nearly-Nationwide MSS Exclusion Zones.

Taking full advantage of rule proposals that would allow it effectively to abandon the two-way satellite services market, Globalstar’s Comments describe a plan for nationwide deployment of a TLPS system that cannot coexist in the same place as its 2.4 GHz satellite operations, reinforcing the case for action on Iridium’s Petition. Globalstar acknowledges that TLPS inherently interferes with its satellite operations.²⁴ Indeed, the interference between terrestrial and satellite services is essential to Globalstar’s argument that it should be the only

²¹ *Id.*, 28 FCC Rcd at 15375 (proposed rule section 25.149(g)).

²² *See* 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; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, IB Docket Nos. 01-185 and 02-365, *Report and Order and Notice of Proposed Rulemaking*, 18 FCC Rcd 1962, ¶ 66 (2003) (“2003 MSS ATC Order”).

²³ Notice at ¶ 26.

²⁴ *See, e.g.*, Kevin Pritchard, “A look inside Globalstar’s plan to build an exclusive nationwide Wi-Fi network”, Gigaom.com, <http://www.gigaom.com/2014/03/17/a-look-inside-globalstars-plan-to-build-an-exclusive-nationwide-wi-fi-network> (Mar. 17, 2014) (discussing Globalstar’s plans to build a nationwide terrestrial network that will not overlap with its satellite services).

operator authorized to conduct licensed terrestrial operations in Wi-Fi channel 14.²⁵ Without Globalstar managing its network by shutting down TLPS access points to accommodate satellite services, Globalstar asserts, introducing public Wi-Fi in the band “would result in unpredictable, unlimited interference to Globalstar’s MSS operations.”²⁶ This assertion illustrates Globalstar’s default assumption that Wi-Fi channel 14 devices interfere with its satellite operations, and, because the two services cannot operate in the same location at the same time, the only way to resolve this interference is to turn off the terrestrial service. Moreover, the company plans to “deploy potentially hundreds of thousands or even millions of newly-manufactured TLPS access points across the United States,”²⁷ effectively stretching its contemplated zone of potential satellite interference nationwide.

Globalstar makes much of its proposed Network Operations System (“NOS”), which it claims will help it manage terrestrial/satellite interference, but Globalstar never suggests that its NOS will enable it to offer TLPS and two-way satellite services in the same area.²⁸ Although Globalstar suggests that the NOS would give it the capability to turn off TLPS operations to protect its satellite customers—affecting an undetermined number of commercial terrestrial customers—it stops short of stating that it actually will do so anytime a satellite user comes into a TLPS service area.²⁹ Rather than choosing to degrade or to suspend service to numerous commercial terrestrial customers in an area on behalf of a single satellite subscriber, a more

²⁵ See Globalstar Comments at 21-22.

²⁶ *Id.*; see also *id.* at 21 (discussing the need to “to terminate” TLPS transmissions “to ensure interference-free MSS”); Globalstar Petition at 29-30 (discussing the need for Globalstar to manage MSS exclusion zones that will result from the deployment of TLPS).

²⁷ Globalstar Comments at 11.

²⁸ *Id.* at 21-22.

²⁹ *Id.* at 21.

practical and likely alternative for Globalstar would be to avoid offering two-way satellite services anywhere TLPS is deployed.

Globalstar's suggestion that TLPS deployment will reinforce the viability of its satellite services strains credulity.³⁰ Although there is little doubt that allowing Globalstar finally to realize the terrestrial ambitions that have been the company's primary focus for the last decade would create a substantial windfall for the company and its shareholders,³¹ it seems unlikely this windfall would be reinvested in its satellite system, as any increase in popularity or use of its duplex satellite services would only complicate its self-interference mitigation process. Once authorized to deploy TLPS, every incentive for Globalstar will be to reduce its satellite footprint to maximize the value and size of its terrestrial network. Globalstar's articulated plans for nationwide TLPS deployment combined with the elimination of any substantial satellite obligations and its obvious incentives favoring terrestrial service confirm the conclusion reached in Iridium's initial comments: Globalstar will ultimately abandon its two-way mobile satellite services across the country as it transitions to TLPS.³² As such, it is appropriate in this proceeding for the Commission to consider other actions it can take to ensure sufficient resources

³⁰ *Id.* at 17.

³¹ Indeed, as Iridium explained previously, industry analysts have affirmed that Globalstar's value as an enterprise is largely attributable to its terrestrial spectrum play, having recently valued Globalstar's satellite business at \$500 million, while placing the value of the spectrum at anywhere from \$1.1 billion to \$8.7 billion. *See* Reply of Iridium Constellation LLC at 15, RM-11697, IB Docket No. 13-213, RM-11685 (filed Dec. 17, 2013) (citing New Street Research, Company Note, "Innovators & Disruptors; GSAT: An Innovative & Potentially Valuable Spectrum Play" (Nov. 4, 2013)). Another analyst has predicted that Globalstar's post-NPRM stock value could fluctuate by over 600 percent depending on whether it receives terrestrial relief. Elevation LLC, "Steve Sweeney - TMT Long/Short Equity Ideas" (Dec. 5, 2013) (on file with author) (predicting a range of \$0.75 to \$5.00 depending on success or failure of the TLPS Notice).

³² Iridium TLPS Comments at 8-9.

are available for the continued growth and development of critical satellite services in the future through the grant of Iridium’s revised spectrum proposal.

III. THE UNCERTAIN PUBLIC SAFETY IMPLICATIONS OF GLOBALSTAR’S PROPOSAL HIGHLIGHT THE NEED FOR INCREASED SATELLITE SPECTRUM.

Globalstar makes inconsistent statements regarding the public safety benefits of its TLPS proposal that, on balance, highlight the importance of promoting robust critical satellite services in spectrum bands free of incompatible terrestrial operations. Globalstar correctly points out that “still-operating 802.11-based hotspots can provide broadband and voice communications to citizens” in areas affected by natural disaster or other emergencies, acting as an important consumer communications service.³³ However, Globalstar also reiterates its voluntary commitment to offer MSS free of charge in federal disaster areas.³⁴ There is a tension between these two statements left unresolved in the Comments.

As discussed above, Globalstar acknowledges in its Comments and elsewhere that TLPS and its 2.4 GHz satellite services cannot coexist in the same area without harmful interference to Globalstar’s satellite operations.³⁵ It is unclear exactly what Globalstar proposes with respect to satellite/TLPS interaction during emergencies. Although it acknowledges the important role operational TLPS could play for consumers after a disaster,³⁶ Globalstar also suggests that it might have to turn off TLPS transmissions in a disaster area to ensure interference-free satellite operations for public safety officials.³⁷

³³ Globalstar Comments at 17.

³⁴ *Id.* at 17, 40.

³⁵ *See supra* Section II.B.

³⁶ Globalstar Comments at 17.

³⁷ *Id.* at 21.

As Iridium has repeatedly stressed, satellite service is critical to public safety and other responders after a disaster,³⁸ however, in the hypothetical Globalstar poses, neither the public safety services nor the commercial terrestrial services it proposes to offer will have an acceptable quality of service or reliability. As the Commission has recognized, public safety users demand access to spectrum “that will be reliably available without delay” in emergency situations.³⁹ Any risk of interference to a mission-critical public safety call because of a delay or miscalculation in mitigating interference from TLPS operations would be unacceptable to the public safety user and could result in loss of life.⁴⁰ However, should TLPS be one of the few functional consumer communications systems in a disaster-stricken area, terminating this service (which might be used for 911 calls/texts, to access emergency information, or for communications to loved ones) throughout a large geographic area also may not make sense commercially or from a public safety standpoint.

³⁸ See, e.g. Petition for Rulemaking of Iridium Constellation, LLC at 8-12, RM-11697 (filed Feb. 11, 2013) (“Iridium Petition”); Reply of Iridium Constellation LLC at 3-6, RM-11697, IB Docket No. 13-213, RM-11685 (filed Dec. 17, 2013).

³⁹ *The 4.9 GHz Band Transferred from Federal Government Use*, WT Docket No. 00-32, Second Report and Order and Further Notice of Proposed Rulemaking, 17 FCC Rcd 3955, 3960 ¶ 28 (2002). More recently, the Commission has specifically identified as a national priority ensuring the availability of mobile satellite services in emergency situations, including “in the first few hours or days of a disaster.” See Federal Communications Commission, *Connecting America: The National Broadband Plan* at 320 (March 16, 2010).

⁴⁰ The Commission has long recognized the paramount importance of ensuring interference free communications for public safety. Indeed the Commission has observed that ensuring public safety access to spectrum free from interference that risks “severing the communications link that public safety officers rely upon to summon help, coordinate actions with their fellow officers, request emergency medical services, and respond to incidents that threaten our Homeland Security” is essential to the Commission’s fulfillment of “one of its prime directives: to manage the spectrum in a manner that promotes safety of life and property.” *Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, ET Docket Nos. 00-258, 95-18, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order and Order, 19 FCC Rcd 14969, 15010 ¶ 62 (2004); see also 47 U.S.C. § 151 (charging the Commission with “promoting safety of life and property through the use of wire and radio communication”).

The conflict between the important public safety implications of terrestrial commercial communications and robust two-way mobile satellite services illustrates the importance of having protected spectrum for satellite services. Even if Globalstar's NOS is able to mitigate interference to its satellite services in many instances with a relatively high level of success, this still may not be sufficient for safety-of-life satellite services. Indeed, the uncertainty surrounding potential interference from TLPS may be enough to drive public safety users away from Globalstar's satellite system. The Commission should, therefore, take action to ensure sufficient spectrum resources are available elsewhere to support continued success and innovation in satellite services by acting on Iridium's revised spectrum proposal.

IV. THE COMMISSION CAN AND SHOULD ACT PROMPTLY ON IRIDIUM'S PROPOSAL TO ENSURE SUFFICIENT SPECTRUM FOR MOBILE SATELLITE SERVICES.

Iridium's revised spectrum proposal will help ensure continued satellite innovation and access to essential satellite services in the Big LEO band without negatively impacting Globalstar's services.⁴¹ The proposed modifications are well within the Commission's Title III authority to modify licenses to serve the public interest. The Commission can also effectuate the modifications by moving directly to a license modification without the need to follow the APA's rulemaking procedures. Because the Commission's authority is beyond dispute and the public interest favors swift action, the Commission should act promptly on Iridium's spectrum proposal through an adjudication without engaging in a separate rulemaking proceeding, irrespective of any action taken on Globalstar's TLPS proposal.

⁴¹ See Iridium Supplemental Comments.

A. Iridium Has Proposed Allocation of a Modest Amount of Spectrum to Meet Growing Needs for Critical Satellite Services.

In its initial Petition for Rulemaking, filed February 11, 2013, Iridium proposed reallocation of less than 3 megahertz of 1.6 GHz Big LEO band spectrum (1616-1618.725 MHz) to Iridium's exclusive use.⁴² Iridium explained that this additional spectrum would accommodate continued growth in demand for its current services and facilitate the development and deployment of new services, particularly over Iridium's second generation satellite constellation, Iridium NEXT. Citing design choices in its first and second generation satellite systems that it alleged made it incapable of functioning without access to spectrum above 1616 MHz, Globalstar opposed Iridium's Petition.⁴³ Although Iridium does not concede the validity of the technical challenges Globalstar asserts, in the interest of addressing Globalstar's concerns while ensuring access to increased spectrum to meet growing demand, Iridium revised its proposal in a way that addresses any of the technical issues raised by Globalstar.⁴⁴

In its revised spectrum proposal, Iridium has proposed a modest reassignment of 1.225 megahertz of spectrum for its exclusive use, as well as access on a shared basis with Globalstar to 1.5 megahertz of additional spectrum. Under Iridium's revised proposal, the 1617.5-1618.725 portion of the L-Band (0.95 megahertz of which currently is shared by the licensees, while the remaining .0275 megahertz is held exclusively by Globalstar) would be assigned to Iridium for its exclusive use, and the 1616-1617.5 portion of the band (currently exclusively licensed to Globalstar) would be made available for shared use by Iridium and Globalstar. By limiting the proposed exclusive reallocation to spectrum above 1617.5 MHz, and proposing shared use

⁴² Iridium Petition at 3.

⁴³ See Globalstar Opposition.

⁴⁴ See Iridium Supplemental Comments.

between 1616-1617.5, Iridium's revised proposal is entirely consistent with Globalstar's channelization and operations as articulated in its Opposition.⁴⁵

Access to additional spectrum is vitally important to meet current demand for satellite services, as well as anticipated increases in demand as Iridium activates its second generation satellite system—Iridium NEXT. Independent of Globalstar's proposal, the public benefits of ensuring access to robust satellite services, taken together with Iridium's demonstrated need for additional spectrum, highlight the need for prompt action to approve Iridium's revised spectrum proposal. The substantial reduction in the availability and reliability of critical satellite services that would result from implementation of Globalstar's terrestrial ambitions, which is likely to further drive demand for Iridium's critical satellite services, only increases the public interest in granting Iridium's proposal.

B. The Commission Has Statutory Authority under Section 316 to Grant Iridium's Revised Spectrum Proposal Immediately, Without a Further Rulemaking Proceeding.

The Commission has ample legal authority under the Communications Act to implement Iridium's spectrum proposal through a license modification without the need for another rulemaking, and the public interest supports such action. Title III of the Communications Act affords the Commission plenary authority to manage spectrum and to modify licenses to better serve the public interest.⁴⁶ Section 301 of the Act provides that “[i]t is the purpose of this [Act], among other things, to maintain the control of the United States over all the channels of radio

⁴⁵ See *id.* at 7-9.

⁴⁶ See *NBC v. United States*, 319 U.S. 190 (1943); *FCC v. Sanders Bros. Radio Station*, 309 U.S. 470 (1940).

transmission; and to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority.”⁴⁷

To further that broad purpose, Section 316(a)(1) of the Act provides that “[a]ny station license or construction permit may be modified by the Commission either for a limited time or for the duration of the term thereof, if in the judgment of the Commission such action will promote the public interest, convenience, and necessity.”⁴⁸ As the D.C. Circuit has explained, “Section 316 grants the Commission broad power to modify licenses; the Commission need only find that the proposed modification serves the public interest, convenience and necessity.”⁴⁹ Indeed, that court’s recent decision upholding the Commission’s *Data Roaming Order* illustrates the extent of the agency’s authority to modify licenses in the public interest.⁵⁰

Iridium has demonstrated that the license modifications it proposes are in the public interest as they will provide much needed additional capacity to support continued growth in demand for Iridium’s satellite services while also allowing for continuation of Globalstar’s satellite operations consistent with its articulated business plans.⁵¹ The proposed modifications are also well within the bounds of Section 316. “[T]he Commission’s section 316 power to ‘modif[y]’ existing licenses does not enable it to fundamentally change those licenses,”⁵² but Iridium’s proposed modifications are only slight changes to the spectrum authorizations of Iridium and Globalstar.

⁴⁷ 47 U.S.C. § 301.

⁴⁸ 47 U.S.C. § 316(a)(1).

⁴⁹ *California Metro Mobile Commc’ns, Inc. v. FCC*, 365 F.3d 38, 45 (D.C. Cir. 2004).

⁵⁰ *See Cellco P’ship v. FCC*, 700 F.3d 534 (D.C. Cir. 2012).

⁵¹ *See supra* Section IV.A.; *see also* Iridium Petition at 7-19; Iridium Supplemental Comments at 4-5, 8-9; Iridium TLPS Comments at 11-16.

⁵² *Cellco*, 700 F.3d at 543.

Despite claims that the proposed spectrum reallocation would cause “severe harm” to its existing simplex and duplex services,⁵³ Globalstar has failed to show that Iridium’s proposal would cause a fundamental change to the manner in which it offers its existing services. If spectrum reallocation of the sort proposed by Iridium were beyond the scope of Section 316, then the Commission’s license modification authority would be illusory. In its Supplemental Comments, Iridium put forward a revised spectrum proposal that satisfies Globalstar’s concerns regarding access to spectrum above 1616 MHz, thereby allowing it to continue to operate its existing services, while also providing Iridium with a moderate injection of additional spectrum to meet increased demand for its satellite services.⁵⁴ A license modification that allows Globalstar to continue offering substantively the same satellite services with no new operational restrictions can hardly be said to effectuate a fundamental change to Globalstar’s license.⁵⁵

Courts have interpreted Section 316 as providing the Commission with authority to modify licenses via rulemaking or adjudication.⁵⁶ The Commission has substantial discretion in deciding via which option to proceed,⁵⁷ and different procedures apply depending on how the Commission chooses to modify licenses. If the agency modifies a license in a rulemaking

⁵³ See *Opposition of Globalstar, Inc. to Petition for Rulemaking, RM-11697* at 12-27 (filed Dec. 2, 2013) (“Globalstar Opposition”).

⁵⁴ See *Iridium Supplemental Comments* at 8-9 (explaining that Iridium’s revised proposal addresses Globalstar’s concerns and preserves Globalstar’s duplex and simplex capabilities).

⁵⁵ *Cellco*, 700 F.3d at 542-43; cf. *MCI Telecommunications Corp. v. AT&T*, 512 U.S. 218, 228-29 (1994).

⁵⁶ See, e.g., *Cellco*, 700 F.3d at 542 (explaining that Section 316 “empowers [the FCC] to modify existing licenses, including by rulemaking, “if it determines that such action ‘will promote the public interest, convenience, and necessity’”); *California Metro Mobile Commc’ns, Inc.*, 365 F.3d at 44-45 (affirming license modification via adjudication).

⁵⁷ See *Cassell v. FCC*, 154 F.3d 478, 486 (D.C. Cir. 1998) (explaining that “the choice between rulemaking and adjudication lies in the first instance within the [agency’s] discretion” (quoting *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294 (1974))).

proceeding, the Commission must follow the APA’s notice-and-comment requirements.⁵⁸ Those procedures do not apply if the Commission elects to modify a license via adjudication, *i.e.*, a license modification proceeding. If the Commission chooses this route, the license holder must “have been notified in writing of the proposed action and the grounds and reasons therefor, and shall be given reasonable opportunity, of at least thirty days, to protest such proposed order of modification.”⁵⁹

Here, the Commission can modify the licenses of Iridium and Globalstar via adjudication without following the APA’s rulemaking procedures. While the Commission has historically revised the Big LEO band plan via rulemaking,⁶⁰ such a proceeding is unnecessary here because modification of Iridium’s and Globalstar’s licenses will not require an amendment of the Commission’s rules or substantive changes to the band plan.⁶¹ Iridium’s proposal requires nothing more than basic license modifications to reallocate spectrum in a more efficient manner

⁵⁸ 5 U.S.C. § 553.

⁵⁹ 47 U.S.C. § 316(a)(1); *see also Mobile Relay Associates v. FCC*, 457 F.3d 1, 12 (D.C. Cir. 2006) (explaining that “the Commission has the unilateral authority, provided it gives notice to the licensee, to modify a license ‘either for a limited time or for the duration of the term thereof, if in the judgment of the Commission such action will promote the public interest, convenience, and necessity’”).

⁶⁰ *See, e.g.*, 2003 MSS ATC Order, 18 FCC Rcd at 2087, ¶ 261.

⁶¹ In earlier Big LEO band rulemaking proceedings, it was contemplated that there might be additional licensees or services added to the band. *See Amendment of the Commission’s Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands*, CC Docket No. 92-166, Report and Order, 9 FCC Rcd 5936, 5961 (1994) (Assigning six Big LEO MSS licenses); 2003 MSS ATC Order, 18 FCC Rcd at 2091 (seeking comment on making returned Big LEO spectrum available to additional MSS licensees or other users). However, Iridium’s proposal seeks no substantive changes to the Big LEO band plan, which contemplated shared use and coordination between Iridium and Globalstar in the 1.6 GHz Low Big LEO Band since 2004. *See Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands*, IB Docket No. 02-364, Report and Order, Fourth Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 13356 (2004) (Adopting a spectrum sharing plan for the Big LEO band). Here, Iridium seeks only a modest rebalancing of frequency assignments between the operators, which can be appropriately performed through rulemaking.

to accommodate increased demand for critical MSS. Indeed, the only affected licensees would be Iridium and Globalstar.⁶²

Iridium's proposal is also consistent with the goals of maximizing the efficient use of spectrum in the Big LEO band. With Globalstar's focus turning to its terrestrial ambitions—to the detriment of its satellite service offerings—the spectrum Iridium seeks in its proposal would be put to substantially more efficient use to meet the demand for critical satellite services. Indeed, as described above, Globalstar's proposals contemplate a reduction of satellite availability nationwide and an increase in the potential for harmful interference to those two-way services that remain.⁶³ If anything, these circumstances will drive additional traffic to Iridium's system, further justifying the increase in spectrum to Iridium.

⁶² Even if rulemaking procedures were required, there has already been sufficient notice and opportunity for comment on Iridium's proposal, as evidenced by Globalstar's active participation in these proceedings. *See, e.g.*, Comments of Globalstar, Inc., RM-11685 (filed May 5, 2014) (“Globalstar Comments”); *Ex Parte* Notice from Regina M. Keeney, Globalstar, Inc., to Marlene H. Dortch, Secretary, FCC, RM-11697 (Dec. 3, 2013); Globalstar Opposition. The Commission issued a public notice on Iridium's proposal, and Globalstar filed an Opposition criticizing Iridium's proposal. *See* Globalstar Opposition. In addition, the Commission expressly stated in the Notice that it might address Iridium's Petition alongside Globalstar's. *See* Notice, n.5 (reserving the right to consolidate the TLPS proceeding with Iridium's Petition for Rulemaking). Globalstar then had opportunity to respond to Iridium's proposal in its TLPS Comments and Supplemental Comments, both filed in this proceeding, *see* Iridium TLPS Comments; Supplemental Comments, and Globalstar will have an additional opportunity for comment when the Commission issues an Order Proposing License Modifications. *See Globalstar Licensee LLC, GUSA Licensee LLC and Iridium Constellation LLC, Iridium Satellite LLC, Iridium Carrier Services LLC, Modification of Authority to Operate a Mobile Satellite System in the 1.6 GHz Frequency Band, Order of Modifications*, 23 FCC Rcd 15207, ¶ 24 (2008) (finding that an Order Proposing License Modification provides sufficient notice and opportunity for comment to modify a Big LEO MSS license). Because Globalstar has already “had abundant opportunity to comment” on Iridium's proposal, the absence of a notice of proposed rulemaking on Iridium's proposal has not harmed Globalstar's ability to share its views with the Commission. *Aeronautical Repair Station Ass'n, Inc. v. FAA*, 494 F.3d 161, 171 (D.C. Cir. 2007); *see also Natural Res. Def. Council, Inc. v. EPA*, 822 F.2d 104, 121 (D.C. Cir. 1987); *First Am. Disc. Corp. v. Commodity Futures Trading Comm'n*, 222 F.3d 1008, 1015 (D.C. Cir. 2000); *U.S. Telecom Ass'n v. FCC*, 400 F.3d 29, 40-41 (D.C. Cir. 2005).

⁶³ *See supra* Sections II.B., III.

Finally, Globalstar has also endorsed the Commission's ability to proceed directly to a license modification proceeding without another round of notice and comment in this proceeding.⁶⁴ Globalstar's comments are consistent with Iridium's position that the Commission need not initiate another rulemaking to allocate the modest amount of spectrum outlined in its revised proposal. Indeed, the record here is sufficient for the Commission to act on Iridium's proposal in isolation immediately. Due to the detrimental impact Globalstar's proposal would have on satellite availability nationwide, however, the Commission should avoid rapid action to facilitate Globalstar's TLPS operations unless it also acts to protect access to satellite services by promptly approving Iridium's revised spectrum proposal. Proceeding quickly on Globalstar's proposal without an accompanying reallocation of spectrum to ensure MSS availability would run contrary to the public interest. The Commission can and should act promptly on Iridium's revised spectrum proposal without initiating a new rulemaking proceeding.

V. CONCLUSION

The record in this proceeding demonstrates the need for action to promote the Big LEO band as a home for thriving mobile satellite services. Although Iridium takes no position on the merits of Globalstar's TLPS proposal, the Commission should recognize that inherent in that proposal is a substantial reduction in the availability of satellite services nationwide.

Additionally, Globalstar's inconsistent claims regarding the public safety benefits of its TLPS plans underscore the need for satellite spectrum free of incompatible terrestrial uses. In light of the above, the Commission should take prompt action on Iridium's revised spectrum proposal. The Commission has ample legal authority to act on Iridium's proposal through adopting

⁶⁴ Globalstar Comments at 24.

appropriate license modifications, and the record here supports moving directly to such a modification, regardless of how the Commission chooses to act on the TLPS concept.

Respectfully submitted,

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