

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

In the Matter of)	
)	
Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands)	WT Docket No. 12-70
)	
Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.6 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz)	ET Docket No. 10-142
)	
Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands)	WT Docket No. 04-356
)	

REPLY COMMENTS OF IRIDIUM SATELLITE LLC

Iridium Satellite LLC (“Iridium”) hereby submits its reply comments in response to the Notice of Proposed Rulemaking and Notice of Inquiry in the above-captioned proceedings (the “*NPRM*”).¹ The record demonstrates that the Commission was correct to limit the proposals in the *NPRM* to the 2 GHz band. Commenters to address this point were nearly unanimous in their support of the decision. Iridium’s Mobile Satellite Service (“MSS”) offerings have thrived in the

¹ *In the Matter of Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands; Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.6 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz; Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 12-70, ET Docket No. 10-142, WT Docket No. 04-356, FCC 12-32 (rel. Mar. 21, 2012) (“*NPRM*”).

Big LEO MSS band without a significant terrestrial component and are relied upon to provide critical public safety, governmental, and commercial communications worldwide. Consistent with the record of this proceeding, the Commission should promote existing Big LEO MSS operations and reject any suggestion to expand terrestrial operations in the Big LEO MSS band.

I. THE COMMISSION CORRECTLY LIMITS ITS INQUIRY TO THE 2 GHZ MSS BAND AND EXCLUDES THE BIG LEO BAND.

The record demonstrates that the Commission correctly excluded the Big LEO MSS band from its “band-specific approach” in this 2 GHz band proceeding.² Echoing both the *NPRM* and Iridium’s initial comments, the Mobile Satellite User Association (“MSUA”) explains that “the need to protect existing MSS users creates different issues pertaining to the ATC rules for the Big LEO band,” and “these issues should not be addressed in the instant proceeding.”³ The U.S. GPS Industry Council agrees, stating that “[i]njecting . . . new issues involving the potential reallocation of other spectrum bands that the Commission has not specifically advanced for evaluation in the current *NPRM/NOI* would be counterproductive.”⁴ Indeed, the Satellite Industry Association (“SIA”) affirms that “any allocation changes in the Big LEO and L-band MSS should be considered independently of the specific spectrum allocation questions raised in [this] proceeding.”⁵

² *NPRM*, ¶ 2.

³ Comments of the Mobile Satellite Users Association at 2, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012).

⁴ Comments of The U.S. GPS Industry Council at 3, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012) (“U.S. GPS Comments”).

⁵ Comments of the Satellite Industry Association at 2, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012) (“SIA Comments”).

Iridium’s initial comments make clear that the unique characteristics of each MSS band warrant limitation of the Commission’s proposals to the 2 GHz band.⁶ In addition to the MSS bands’ distinctive spectral positions and band configurations,⁷ Iridium’s robust, innovative, and expanding use of the Big LEO band to provide crucial communication capability to public safety, government, and commercial entities stands in contrast to the underutilized 2 GHz band. As SIA notes, whereas “other MSS bands [like Big LEO] have established commercial MSS operations that provide critical services,” “operational development of the 2 GHz MSS band in North America has just begun.”⁸ These differences reinforce the Commission’s recognition that “each MSS band is differently situated” and validate the resulting limited scope of the *NPRM*.⁹

II. THE COMMISSION SHOULD REJECT ANY SUGGESTION TO OPEN A PROCEEDING EXAMINING EXPANDED TERRESTRIAL USE OF THE BIG LEO MSS BAND.

There is no basis for the Commission to jeopardize the most successful, thriving MSS band by initiating a proceeding seeking to expand terrestrial use of the Big LEO Band, and any proposal to the contrary should be rejected. As the record shows, national and international disaster-relief efforts, first responders, public safety personnel, the military, border security officers, the aviation industry, and the energy sector rely on the strength and innovation of Iridium’s MSS service offerings.¹⁰ A bona fide MSS success, Iridium’s subscribership continues

⁶ See Comments of Iridium Satellite LLC at 2-3, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012) (“Iridium Comments”).

⁷ See, e.g., U.S. GPS Comments at 3 (“Unlike the 2000-2020 MHz and 2180-220 MHz bands, the other MSS ATC bands are not allocated internationally for mobile use.”).

⁸ SIA Comments at 2.

⁹ See *NPRM*, ¶ 2

¹⁰ Iridium Comments, at 3-6; see also SIA Comments at 2 (“[T]he other MSS bands have established commercial MSS operations that provide critical services, including connectivity for public safety services performed by government agencies at the federal, state, and local levels.”).

to rise, and demand will continue to grow following the Iridium Force initiative and the launch of the Iridium NEXT system. With Iridium actively and effectively utilizing Big LEO spectrum to deliver essential MSS communications to public safety, government, and commercial personnel, the Commission should ensure that the band is preserved and protected for satellite use and reject any suggestion that would expand terrestrial use of the Big LEO MSS band.

The Big LEO band's thriving MSS operations belie the one comment that "[g]reater terrestrial use of MSS spectrum can also help sustain the development of satellite services in the United States and around the world."¹¹ Using the largest commercial satellite constellation in the world, Iridium has expanded its vital service worldwide without the need for any subsidization by terrestrial use. In addition, Iridium recently initiated Iridium Force, through which it will drive innovation by opening and licensing its technology and collaborating with others to create new solutions for a wide range of markets, and it plans to launch the Iridium NEXT system, which will further enhance and extend its mobile communication services. Even if one accepts the assertion that terrestrial use could promote additional MSS, there is no evidence that the Big LEO Band—the most heavily-used MSS band in the United States—is in need of such “assistance.”

Moreover, adding a terrestrial component to the Big LEO MSS band similar to the one proposed in this proceeding would chill investment and innovation in the Big LEO MSS band. Various commenters agree with the Commission's assessment that the “complexities of coordination” inherent in same-band sharing between MSS and terrestrial operations present significant challenges.¹² Globalstar notes that the “real-world conditions” necessary for

¹¹ Comments of Globalstar at 5, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012) (“Globalstar Comments”).

¹² *NPRM*, ¶ 71.

spectrum sharing require “complex, dynamic frequency coordination,”¹³ and Dish Network describes the “interference issues” and “highly complex coordination process” required for effective MSS and terrestrial operations.¹⁴ Under these circumstances, introducing terrestrial operations to a heavily populated satellite band would not benefit an MSS provider.

For these reasons, replacing ATC rules with Part 27 flexibility as the *NPRM* proposes for the 2 GHz band is inappropriate for the Big LEO band. Iridium agrees with SIA that “[a]ny decision in the *NPRM* proceeding that would modify the existing [ATC] rules in the 2 GHz MSS band . . . should not have any direct bearing on whether the FCC makes changes in a later phase of this proceeding to the Big LEO band”¹⁵ The Commission instituted the ATC rules applicable to the Big LEO MSS band with protections to “ensure that MSS remains first and foremost a satellite service” and “based upon the premise that ATC remains ‘ancillary’ to a fully operational space-based MSS system.”¹⁶ In contrast to the *NPRM*’s proposal for the 2 GHz band,¹⁷ these ATC protections remain important today to ensure that Iridium’s robust Big LEO MSS system continues to provide critical communications for public safety, government, commercial, and other entities, without suffering from harmful interference caused by terrestrial operations.

¹³ Globalstar Comments at 6.

¹⁴ Comments of Dish Network at 4, WT Docket Nos. 12-70, 04-356, ET Docket No. 10-142 (filed May 17, 2012).

¹⁵ SIA Comments at 2.

¹⁶ *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, ¶¶ 3, 67 (2003) (“*ATC Order*”).

¹⁷ *NPRM*, ¶ 1.

III. CONCLUSION

The record supports the Commission's decision to exclude Big LEO spectrum from proposals in the *NPRM*. Significant differences between the 2 GHz and Big LEO MSS bands warrant a band-specific approach. In future proceedings, the Commission should ensure that the Big LEO band is preserved for satellite use and reject any suggestions that terrestrial operations should be expanded in the band.

Respectfully submitted,

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