

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Review of the Spectrum Sharing Plan Among)
Non-Geostationary Satellite Orbit Mobile Satellite) IB Docket No. 02-364
Service Systems in the 1.6/2.4 GHz Bands)

To: The Commission

**REPLY COMMENTS OF
THE OFFICIAL CREDITORS' COMMITTEE OF GLOBALSTAR, L.P.**

Pursuant to Section 1.415 of the Commission's Rules¹, the Official Creditors' Committee (the "Committee") of Globalstar, L.P. ("Globalstar"), by its attorneys, hereby submits these reply comments in IB Docket No. 02-364.²

I. Introduction

As the Committee stated in its comments, the Commission only should consider modifying or reallocating a portion of the Big LEO MSS band upon a clear showing that the public interest benefits of any such Commission action clearly outweigh the adverse impact such action would have on operating Big LEO systems. The comments submitted by the parties to this proceeding in no way constitute such a showing. First, Iridium has not demonstrated that its audacious request to simultaneously increase its spectrum allocation by 116.5% while reducing Globalstar's by over 57% is "equitable" or in the public interest.³ Second, Iridium has again

¹ 47 C.F.R. § 1.415 (2003).

² *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, FCC 03-15, 18 FCC Rcd 1962 (2003) (*MSS Flexibility Decision*).

³ Iridium's proposed band plan would increase Iridium's current allocation to 11.15 MHz from its current 5.15 MHz, an increase of 6 MHz (116.5%), while decreasing the shared CDMA

failed to provide the detailed information regarding the Iridium system's performance, subscriber base and spectral efficiency requested and required by the Commission, thus making it impossible for the Commission to justify a modification of the Big LEO MSS band plan on the basis of the current record. Third, requests by parties to reallocate commercial Big LEO MSS spectrum for use by the government or other services do not provide justification sufficient to undermine the ability of commercial MSS operators to serve the public interest using the current allocation of MSS spectrum in the Big LEO band.

II. Iridium's request for the Commission to double its spectrum allocation while reducing Globalstar's by more than 57% is not justified.

In a maneuver that can best be described as brazen, Iridium has requested that the Commission redistribute the Big LEO MSS band by more than doubling Iridium's spectrum allocation while simultaneously reducing the spectrum available to Globalstar, its primary competitor, by more than 57%.⁴ This request is particularly audacious in light of the fact that the existing Big LEO band plan was adopted *specifically* to accommodate Iridium's demand for exclusive access to a portion of the Big LEO band for its TDMA system.⁵ As Globalstar points out, had Iridium not refused to construct a spectrum sharing MSS system, Globalstar and Iridium

spectrum available to Globalstar from 27.85 MHz to 11.85 MHz, a decrease of 16 MHz (57.45%). As Globalstar has observed, such redistribution will result in Iridium effectively being granted exclusive access to 22.3 MHz of Big LEO MSS spectrum for uplinks and downlinks. See Globalstar Reply Comments.

⁴ See Iridium Comments at 32.

⁵ See *Report of the MSS Above 1 GHz Negotiated Rulemaking Committee* (April 6, 1993); *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*, Report and Order, 9 FCC Rcd 5936 (1994) (*Big LEO Service Rules Order*).

would today be sharing 16.5 MHz on both the uplink and downlink, obviating the need for the instant rulemaking.⁶

Further, the difficulties the Iridium system is currently experiencing stem primarily from its decision to implement an inefficient TDMA architecture.⁷ Globalstar estimates that Iridium's actual L-band efficiency is 11.25% of the value stated in the Big LEO NRM,⁸ which inefficiency may stem from a variety of factors unrelated to spectrum constraints, including satellite power issues, inefficient resource allocation algorithms, and trunk capacity of the service gateways.⁹ Therefore, Commission adoption of Iridium's proposed band plan would essentially reward additional spectrum to Iridium for implementing a spectrally inefficient system— a result that is neither logical nor in the public interest.

It necessarily follows that the Commission should not *further* reward Iridium by reducing the spectrum allocated to CDMA MSS operators by more than 57% on the basis of some skewed notion of “equity.” Iridium's proposed reallocation is far from equitable, as it would dramatically interfere with Globalstar's ability to compete in the MSS market by creating forward-link constraints on Globalstar's capacity, restricting Globalstar's return link to spectrum that is shared with RAS and impaired by geographic and power limitations on L-band transmissions required to protect GNSS, constraining Globalstar's ability to offer remote telemetry services, and eliminating Globalstar's ability to offer aviation services by removing

⁶ See Globalstar Reply Comments.

⁷ See, e.g., Committee Comments at 5-7; Globalstar Comments, Technical Appendix at § 4; Globalstar Reply Comments, Technical Appendix at § 1.

⁸ See Globalstar Comments, Technical Appendix at § 4.

⁹ See Globalstar Reply Comments, Technical Appendix at § 2.

access to channels above 1616 MHz.¹⁰ Adoption of the proposed Iridium band plan would therefore constitute an unprecedented and unwarranted intervention in the MSS market that would result in the reallocation of spectrum from Globalstar, which efficiently and fully utilizes its authorized spectrum, to Iridium, the operator of an inefficient MSS system that has failed to demonstrate its need for additional spectrum. Such a result clearly is not in the public interest.

III. Iridium has failed to provide the information necessary for the Commission to justify a decision to redistribute the Big LEO MSS spectrum.

While the Iridium comments are noteworthy for their audacity, the fact remains that Iridium has failed to provide any of the detailed information regarding the Iridium system's capacity, subscriber base and spectral efficiency requested by the Commission.¹¹ Given that the Commission has stated that it will "base its final judgment on the record established in this proceeding," it is clear that Iridium has not provided information sufficient to justify any modifications to the existing Big LEO band plan.¹² Examples drawn from Iridium's comments are illuminating:

- In response to the Commission's query regarding "how many subscribers Iridium plans to support,"¹³ Iridium responds with a flurry of growth percentages which provide no insight into the actual or projected size of Iridium's subscriber base.¹⁴

¹⁰ See Globalstar Reply Comments.

¹¹ See, e.g., *MSS Flexibility Decision* at ¶ 267 ("While Iridium provides anecdotal evidence of its potential need for additional spectrum, we seek detailed comment regarding its actual current spectrum use and substantiated projections of its future spectrum requirements. Specifically, we seek additional information on the number of customers Iridium can support using its current spectrum, the demand of Iridium customers for spectrum in the United States versus other regions of the world. We also seek comment concerning how many subscribers Iridium plans to support and what type of services it plans to offer as a function of Iridium's projected spectrum requirements."); ¶ 268 ("We seek comment on how efficiently Iridium is using its current spectrum and, if we were to make more Big LEO spectrum available, exactly how much additional spectrum would be appropriate.")

¹² *MSS Flexibility Decision* at ¶ 266.

¹³ *Id.*

- In response to the Commission’s request for information regarding “what type of services [Iridium] plans to offer as a function of Iridium’s projected spectrum requirements,” Iridium responds that it “plans to continue rolling out other advanced services.”¹⁵
- In response to the Commission’s request for detailed information regarding “how efficiently Iridium is using its current spectrum,” Iridium has simply resubmitted its “Spectrum Report” dated January 13, 2003¹⁶ and a new “Technical Annex” that focuses almost exclusively on the design characteristics of the Iridium system rather than its actual performance characteristics.¹⁷

Iridium appears to believe that if it recites the same statements enough times, they must be true – regardless of whether those statements are grounded in fact. Even in the single instance in which Iridium provided some level of actual system performance data, a close analysis reveals little of substance. Iridium’s “technical” assertions regarding system loading caused by U.S. military use in the Middle East boil down to a single sentence: “Iridium has carefully evaluated the radio link failures within the Middle East in the above-mentioned timeframe and has determined that the call drop rate increase within the region was directly attributable to lack of spectrum resources.”¹⁸ Yet there is no discussion whatsoever of how Iridium conducted this “evaluation” or how Iridium “determined” that its system degradation was attributable to the need for additional spectrum rather than, for example, the inherent inefficiency of its TDMA architecture.

In short, the technical information provided by Iridium in this proceeding barely exceeds that which might be found in their glossy marketing materials, and is in no way responsive to the

¹⁴ See Iridium Comments at 16-20.

¹⁵ Iridium Comments at 34.

¹⁶ See Iridium Comments, Attachment B.

¹⁷ See Iridium Comments, Attachment F.

¹⁸ Iridium Comments at 14.

Commission's queries. Therefore, the record in this proceeding does not justify modification of the Big LEO MSS band plan.

IV. MSS Spectrum should not be reallocated for use by the government or other services.

Reallocation of commercial MSS spectrum to the government or other services will not serve the public interest, convenience and necessity. The record demonstrates that MSS operators provide unique, mission critical telecommunications services to individuals and organizations, many of whom are involved in national security, public safety and homeland defense operations.¹⁹ At this time, there is no additional spectrum available in the U.S. for MSS, and the Commission has no plans to consider making additional spectrum available to MSS in the foreseeable future. In fact, the Commission recently reduced the amount of spectrum available for MSS in the 2 GHz band from 70 MHz to 40 MHz.²⁰ Further, the Commission has reduced the number of potential providers of MSS services by canceling the 2 GHz MSS licenses of three MSS licensees.²¹ It is therefore not in the public interest to further reduce the amount of spectrum available to existing Big LEO MSS operators.

¹⁹ See, e.g., Globalstar Comments, Attachment B; Iridium Comments, Attachments C, D, and E.

²⁰ See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, 18 FCC Rcd 2223, 2241 (2003).

²¹ See *Globalstar, L.P. For Modification of License for a Mobile-Satellite Service System in the 2 GHz Band*, File Nos. 183/184/185/186-SAT-P/LA-97; 182-SAT-P/LA-97(64); IBFS Nos. SAT-LOA-19970926-00151/52/53/54; SAT-LOA-19970926-00156; SAT-AMD-20001103-00154; SAT-MOD-20020717-00119; SAT-MOD-20020722-00110; Call Signs S2320, S2321, S2322, S2323, S2324, Memorandum Opinion and Order, DA 03-328 (rel. Jan. 30, 2003); *Mobile Communications Holdings, Inc. and ICO Global Communications (Holdings) Limited for Transfer of Control*, File No. SAT-T/C-20020719-00104, *Constellation Communications Holdings, Inc. and ICO Global Communications (Holdings) Limited for Transfer of Control*, File No. SAT-T/C-20020718-00114, *Mobile Communications Holdings, Inc. for Modification of 2 GHz MSS License*, File No. SAT-MOD-20020719- 00105, and

With respect to each of the requests by non-governmental commenters to reallocate a portion of the Big LEO MSS spectrum to other services, it is not appropriate to consider reallocating Big LEO MSS spectrum used to provide a critical communications services that promote the public interest in light of the alternative solutions that exist to address the issues raised by those commenters. For example, the Commission recently released a Notice of Proposed Rulemaking proposing to authorize unlicensed operations in an additional 255 MHz of spectrum in the 5.47-5.725 GHz band.²² Proponents of increased availability of unlicensed spectrum and the constituents of the American Petroleum Institute and the United Telecom Council may well discover a solution to their perceived needs as equipment manufacturers rush to market equipment designed to operate in those bands.

Further, it would be inappropriate to reallocate MSS spectrum from commercial to government use. Reallocation of commercial MSS spectrum for government use would damage the viability of existing commercial providers without providing any requisite return for the government. The record clearly demonstrates the important role that commercial MSS services currently play in support of national security and homeland defense personnel, and existing commercial MSS operators have demonstrated that they can serve government and public safety officials with their existing systems utilizing the currently allocated spectrum. Allocation of MSS spectrum from commercial to government use could severely hinder the ability of existing MSS operators to serve those customers. Further, the design, deployment and operation of a new MSS system is a lengthy and incredibly expensive process – one that existing MSS operators in

Constellation Communications Holdings, Inc. for Modification of 2 GHz MSS License, File No. SATMOD-20020719-00103, Memorandum Opinion and Order, DA 03-285 (rel. Jan. 30, 2003).

²² *In the Matter of Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) devices in the 5 GHz band, Notice of Proposed Rulemaking*, FCC 03-110, ET Docket No. 03-122, RM-10371 (rel. June 4, 2003).

the Big LEO band have already completed to the benefit of government subscribers. As a result, reallocation of commercial MSS spectrum to government use could reduce the availability of MSS services from commercial operators while simultaneously causing the MSS spectrum to lie fallow for many years as the government attempts to fund, build and deploy a redundant system.

In light of the critical role MSS operators play in providing mission critical communications services in remote and underserved areas, the reduced number of potential MSS entrants, the already limited amount of spectrum available in which to operate these services, and the solutions that already exist for non-governmental commenters, the Commission must not allocate any of the Big LEO MSS spectrum to the government or other services.

V. Conclusion.

For the reasons set forth above, the Commission should not modify the existing spectrum-sharing plan for providers of MSS in the Big LEO band. Further, in light of the importance and unique nature of MSS services, the Commission should not reallocate existing MSS spectrum for other purposes.

Respectfully submitted,

OFFICIAL CREDITORS' COMMITTEE OF
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