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

MAY - 6 2004

In the Matter of

Request for Special Temporary
Authority for License held by

Iridium Constellation, LLC

For a Mobile Satellite System in the 1.6 GHz Frequency Band

Request for Special Temporary

MAY 1 | 3004

File No.

SAT-STA-20040319-00056

To: Chief, International Bureau

OPPOSITION TO PETITION TO DENY

Iridium Constellation, LLC ("Iridium"), by its attorneys, hereby opposes New Operating Globalstar LLC's ("Globalstar") Petition to Deny Iridium's above-captioned March 19, 2004 request for special temporary authority ("STA") to continue to provide Mobile-Satellite Service ("MSS") in the 1620.10-1621.35 MHz band ("Channel 9").

I. INTRODUCTION

Iridium's STA request of March 19, 2004 is the latest in a series of requests occasioned by the impact of the unusually heavy use of the Iridium System by the U.S. and Coalition Forces in the Middle East Region, beginning in the spring of 2003 and projected to continue for the foreseeable future. Iridium has demonstrated over and over again, with hard data gathered from monitoring and tracking the Iridium satellites, that Iridium requires the additional spectrum to avoid the resumption of acquisition failures that arose just before Iridium first received temporary access to additional spectrum.

Globalstar's Petition to Deny essentially repeats arguments that the Commission has previously thoroughly considered and rejected in response to similar objections by Globalstar

and its predecessor and that the Commission should reject again. Specifically, Globalstar continues to assert that Iridium has not demonstrated a need for STA to operate in Channel 9 in the Middle East region. Globalstar also again contends that the Commission may not authorize the operation of Iridium's MSS system outside the United States. The Commission should dismiss these arguments once again and grant Iridium's request for an extension of its STA to provide MSS in Channel 9.

II. BACKGROUND

Since April 2003, the International Bureau has authorized Iridium to operate in the 1620.10-1621.35 MHz band to allow Iridium to meet important and critical communications needs of the U.S. and Coalition Forces in the Middle East region. On March 19, 2004, Iridium filed a request for continued access to this spectrum for an additional 180 days—from May 13, 2004 through and including November 8, 2004. On March 26, 2004, the FCC placed Iridium's

See Iridium Request for Special Temporary Authority to Provide MSS in the 1616-1621.35 MHz frequency band, File No. SAT-STA-20030414-00066 (filed Apr. 11, 2003; grant dated April 11, 2003 and April 14, 2003). See, e.g., Iridium Request for Special Temporary Authority to Provide MSS in the 1618.85-1620.10 MHz Frequency Band, File No. SAT-STA-20030425-00074 (filed Apr. 25, 2003; granted Apr. 25, 2003); and SAT-STA-20030502-00077 (filed May 2, 2003; granted May 13, 2003); Modification of Licenses held by Iridium Constellation, LLC and Iridium, US LP, For a Mobile Satellite System in the 1.6 GHz Frequency Band, 18 FCC Rcd 11480 (Sat. Div., Int'l Bur. 2003) (Order); Modification of Licenses held by Iridium Constellation, LLC and Iridium, US LP, For a Mobile Satellite System in the 1.6 GHz Frequency Band, 18 FCC Rcd 11564, ¶ 8 (Sat. Div., Int'l Bur. 2003) (Order); Modification of Licenses Held by Iridium Constellation, LLC and Iridium, US LP, For a Mobile Satellite System in the 1.6 GHz Frequency Band, File Nos. SAT-MSC-20030515-00089, SES-MSC-20030515-00666, DA 03-2906 (Oct. 7, 2003) (October 7, 2003 Order); Iridium Request for Special Temporary Authority to Provide MSS in the 1620.10-1621.35 MHz Frequency Band, File No. SAT-STA-20031113-00327 (filed Nov. 13, 2003; granted Nov. 14, 2003); Request for Special Temporary Authority by Iridium Constellation, LLC For a Mobile Satellite System in the 1.6 GHz Frequency Band, File No. SAT-STA-20031010-00313, DA 03-3926 (Dec. 11, 2003) ("Dec. 11, 2003 STA Grant").

Iridium Request for Special Temporary Authority to Provide MSS in the 1620.10-1621.35 MHz Frequency Band From May 13, 2004 Through and Including November 8, 2004, SAT-STA-20040319-00056 (filed Mar. 19, 2004) ("March 19, 2004 Request").

request on public notice.³ On April 26, 2004, Globalstar filed a Petition to Deny Iridium's March 19, 2004 STA request. Herein, Iridium opposes that Petition to Deny.

III. CONTRARY TO GLOBALSTAR'S CLAIMS, IRIDIUM HAS DEMONSTRATED REPEATEDLY ITS NEED FOR ADDITIONAL SPECTRUM

In its *Petition to Deny*, Globalstar continues to deny the reality that the Iridium system requires additional spectrum to continue operating effectively. In doing so, Globalstar once again engages in its familiar practices of mischaracterizing as incomplete or irrelevant Iridium's data and statistically manipulating that same data to conceal the data's true message—in-region demand necessitates that Iridium retain access to additional spectrum.

The International Bureau has already dismissed Globalstar's argument that Iridium has not demonstrated an actual need for additional spectrum. In response to Globalstar's argument regarding the sufficiency of Iridium's data, the Bureau found that:

Iridium has provided sufficient data demonstrating its continued need for the additional spectrum to handle the increase in system traffic it has been experiencing in the Middle East region. If, as Globalstar asserts, there are other factors causing congestion to Iridium's system then these factors may support Iridium's need for additional spectrum to meet its traffic requirements.⁴

The Bureau further concluded that "although Globalstar questions the efficiency of Iridium's systems, we find that there are pressing national and public interest concerns warranting a grant of temporary authority to Iridium to operate in the 1610-21-1621.35 MHz frequency band to provide communications services to U.S. and Coalition Forces in the Middle East region."

Satellite Space Applications Accepted for Filing, *Public Notice* (Mar. 26, 2004).

⁴ Dec. 11, 2003 STA Grant, ¶ 11.

⁵ *Id*.

In its *Petition to Deny*, Globalstar reasserts the same arguments with respect to the monthly spectrum use reports filed by Iridium pursuant to the Bureau's STA grant.⁶ Globalstar notes the peak Erlang per MHz figure for March 2003 was ~65 and for May 2003 was ~72.⁷ Globalstar questions why Iridium's capacity per MHz increased 13% with access to additional spectrum. As an initial matter, it is curious that Globalstar would focus on data that are over a year old. Iridium has included the data cited by Globalstar in each monthly spectrum use report it has filed since the Bureau began requesting the reports in October 2003.⁸

Iridium has provided a technical explanation for these figures in numerous filings to the Commission. Iridium also previously has described in detail how efficiency is directly affected by the amount of spectrum available to the Iridium System. Each Iridium satellite was designed and optimized to operate with 10.5 MHz spectrum. The spectral efficiency of the Iridium System increases with access to additional spectrum up to the 10.5 MHz the system was designed to use. Hence, not only does Iridium's capacity increase with additional spectrum, but the spectral efficiency increases as well, resulting in a higher Erlangs per MHz saturation. These

⁶ October 7, 2003 Order, ¶ 9.

⁷ Special Temporary Authority for Licenses Held By Iridium Constellation, LLC, File No. SAT-STA-200040319-0056, Petition to Deny of Globalstar, 4 (filed April 26, 2004) ("Globalstar Petition to Deny").

The peak Erlang/MHz figures represent the total call minutes over the month adjusted for the average daily peak loading factor. As a result, these loading numbers were not one singular peak for the month, but represent the peak average throughout the month.

See, e.g., Review of Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Comments of Iridium Satellite, LLC, IB Dkt. No. 02-364, at 25-30, Exhibit F (July 11, 2003) ("Big LEO Spectrum Rebalancing Comments").

See, e.g., Letter from Peter D. Shields, Counsel for Iridium, to James L. Ball, Chief, International Policy Division, FCC, IB Dkt. No. 02-364, at 12-15 (Dec. 18, 2003) (detailing how spectrum is efficiently allocated in the Iridium system).

Big LEO Spectrum Rebalancing Comments at 28.

Erlangs per MHz figures are therefore not "inconsistencies," as asserted by Globalstar, but instead are further concrete evidence that the Iridium network is spectrum constrained. Through the authorization of additional spectrum, Iridium has demonstrated that it is able to provide more efficient and effective service to the Middle East region.

Notwithstanding Globalstar's latest Petition, the circumstances that justified the Commission's *Dec. 11, 2003 STA Grant* remain true today. Iridium has provided sufficient data demonstrating its continued need for the additional spectrum to handle the increase in system traffic it has been experiencing in the Middle East region. There are and continue to be pressing national and public interest concerns warranting a grant of temporary authority to Iridium to operate in the 1610-21-1621.35 MHz frequency band to provide communications services to U.S. and Coalition Forces in the Middle East region. ¹²

IV. THE COMMISSION'S LEGAL AUTHORITY TO REGULATE IRIDIUM'S OPERATIONS IS WELL ESTABLISHED

In its *Petition to Deny*, Globalstar once again challenges the Commission's legal authority to issue STA to Iridium to operate in the Middle East region.¹³ Globalstar continues to mischaracterize the issue as whether the Commission has authority to "specif[y] how these systems must operate within the borders of foreign countries globally."¹⁴ Although the Commission has already rejected this argument on at least two occasion, ¹⁵ Globalstar asserts it

¹² Iridium expects that the Defense Information Systems Agency ("DISA") will file a letter indicating its support of Iridium's continued access to Channel 9.

Globalstar Petition to Deny at 4-7.

¹⁴ *Id.* at 6.

¹⁵ See October 7, 2003 Order at 5; Dec. 11, 2003 STA Grant, ¶¶ 13-14.

once again, arguing that the Commission's previous grants of STA to Iridium violated the Commission's 1994 decision establishing rules for 1.6/2.4 MSS service.¹⁶

As Iridium has previously explained in response to this argument, ¹⁷ the Commission is not supplanting authorities in other jurisdictions when it addresses the frequencies on which the space station segment may operate. As the Commission explained in its *October 7, 2003 Order*, a satellite system consists of a space station segment and an earth station segment. ¹⁸ As the licensing administration of the Iridium System and Globalstar System space station segments, the Commission has the authority to issue restrictions and conditions governing the operations of the satellite systems; and that authority is included in the Communications Act. ¹⁹ Moreover, the U.S., as the licensing administration for the Iridium system, is responsible for the system's global operations in accordance with its treaty operations. ²⁰ Thus, as the licensing administration of the space segment, the Commission has ample authority to authorize the Iridium System to operate on a temporary basis on Channel 9. The Commission should reject this argument just as it did in the *October 7, 2003 Order* and *Dec. 11, 2003 STA Grant*.

Globalstar Petition to Deny at 6.

Opposition of Iridium to Petition to Deny of Globalstar, L.P., File No. SAT-STA-20031010-00313, at 8-9 (Dec. 2, 2003).

See October 7, 2003 Order at 5.

¹⁹ *Id.* at 6.

²⁰ *Id*.

V. CONCLUSION

For the foregoing reasons, Iridium respectfully requests that Iridium's above-captioned March 19, 2004 request for special temporary authority to continue to provide communications services in the 1620.10-1621.35 MHz band be granted and that Globalstar's Petition to Deny Iridium's March 19, 2004 STA request be denied.

Respectfully submitted,

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May 6, 2004