

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
<b>Iridium Constellation, LLC and</b>	)	File No.
<b>Iridium, US LP</b>	)	
	)	SAT-STA-20030609-00100
Request for Special Temporary Authorization	)	

**ORDER**

Adopted: June 12, 2003

Released: June 16, 2003

By the Deputy Chief, Satellite Division, International Bureau:

**I. INTRODUCTION**

1. In this Order, we grant the request of Iridium Constellation, LLC and Iridium, US LP (collectively "Iridium") to operate its "Big LEO" mobile-satellite service (MSS) system in the 1620.10-1621.35 MHz band for a one-month period, through and including July 12, 2003. We find that grant of this authorization furthers important public interest requirements by supporting stated communications needs of U.S. forces in Iraq and the Middle East region.

**II. BACKGROUND**

2. Iridium holds a license for a Big LEO MSS system that is authorized to operate both uplink and downlink transmissions in the 1621.35-1626.5 MHz frequency band.<sup>1</sup> It also holds a license for mobile user terminals that operate in the same band.<sup>2</sup> Another MSS system, Globalstar, L.P., is licensed to operate uplinks in the 1610-1621.35 MHz band. In April and May 2003, the International Bureau, Satellite Division, granted Iridium special temporary authority (STA) to expand its operations into the 1618.85-1621.35 MHz frequency band.<sup>3</sup> The Division granted the STA's after determining that it would allow Iridium to support the communications needs of U.S. military forces in Iraq and the Middle East region, and further, that there was no evidence that Iridium operations in the band would degrade Globalstar's operations.

<sup>1</sup> *Motorola Satellite Communications, Inc.*, 10 FCC Rcd 2268 (1995), *corrected* 10 FCC Rcd 3925 (1995), *affirmed in part and modified*, 11 FCC Rcd 18502 (1996). "Big LEO" refers to low-Earth orbit (LEO) mobile satellite services above 1 GHz.

<sup>2</sup> *U.S. Leo Services, Inc.*, 11 FCC Rcd 20474 (Int. Bur. 1996).

<sup>3</sup> See File Nos. SAT-STA-20030414 (grant dated April 11, 2003 and April 14, 2003); SAT-STA-20030425-00074 (granted on April 25, 2003); and SAT-STA-20030502-00077 (granted on May 13, 2003). Globalstar consented to each of Iridium's requests except for the one requesting authority to operate on Globalstar's Channel 8 (1618.85-1620.10 MHz) from May 2, 2003 through May 13, 2003.

3. Due to extraordinarily high levels of demand of its service in the Middle East region, primarily from U.S. Government and Coalition Forces, Iridium requested an extension of its May 13, 2003 STA to June 12, 2003.<sup>4</sup> The U.S. Department of Defense filed a letter supporting Iridium's request, noting improved system performance since the availability of additional spectrum and anticipating "continued heavy usage of Iridium's satellite system ... for mobile time-sensitive communications."<sup>5</sup> Globalstar opposed an extension of the STA, stating it has experienced degradation in service that it believes may be attributable to Iridium's operations.<sup>6</sup>

4. On June 11, 2003, pursuant to Section 316(a) of the Communications Act, the Division modified Iridium's space station and earth station licenses to authorize use of the 1618.85-1621.35 MHz frequency bands until June 12, 2003.<sup>7</sup>

5. On June 9, 2003, Iridium filed the instant request. Iridium indicated that, while demand for service in the Middle East region continues at extraordinarily high levels, demand has subsided somewhat. Therefore, Iridium limited its request to authority to operate in the 1620.1-1621.35 MHz band, and indicated that it will cease operations in the 1618.85-1621.1 MHz band. In connection with this filing, the Defense Information Systems Agency ("DISA") provided the FCC with a copy of a letter sent to the National Telecommunications and Information Administration in which it indicates that U.S. military forces in Iraq and the surrounding region, as part of their peace enforcement operations, are continuing to rely heavily on the Iridium system for mobile time-sensitive communications. DISA notes that prior temporary authorizations for the Iridium system to use additional channels appear to be positively affecting system performance, and that the Department of Defense is supportive of extending Iridium's authorization for thirty days. DISA indicates that the Department of Defense will continue to monitor Iridium system usage by U.S. forces and other key government entities engaged in the rebuilding of Iraq to determine whether currently heavy usage subsides prior to the end of the thirty-day period. The National Telecommunications and Information Administration, after consultation with a number of Executive Branch agencies and departments, subsequently informed the Commission that it would have no objection to granting Iridium's request.

6. In addition, Cornell University (Cornell), which operates the Arecibo Observatory in Arecibo, Puerto Rico, filed comments stating that it does not oppose the short term temporary expansion of Iridium's authorized frequencies, provided its operations do not cause "prohibited interference" to the Arecibo Observatory.<sup>8</sup> Cornell also requests advance

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<sup>4</sup> Letter from Peter D. Shields, Counsel, Iridium, to Thomas S. Tycz, Chief, Satellite Division, FCC (May 9, 2003).

<sup>5</sup> Letter from Carl Wayne Smith, General Counsel, Defense Information Systems Agency, to Karl Nebbia, Deputy Associate Administrator, National Telecommunications and Information Administration (May 13, 2003).

<sup>6</sup> Letter from William F. Adler, Vice President – Legal and Regulatory Affairs, Globalstar L.P., to Thomas S. Tycz, Chief, Satellite Division, FCC (May 13, 2003).

<sup>7</sup> Iridium Constellation, LLC and Iridium, US LP, *Order*, DA 03-1917 (rel. June 11, 2003).

<sup>8</sup> Comments of Cornell University, filed June 11, 2003 (*Cornell Comments*). The Arecibo Observatory is part of the National Astronomy and Ionosphere Center, a national research center operated under a cooperative agreement with the National Science Foundation.

notification and an opportunity to comment on future requests by Iridium to use the additional frequencies.<sup>9</sup> Cornell indicates that it is still analyzing data to determine whether Iridium's temporary operations have resulted in prohibited interference to its operations.<sup>10</sup>

7. Globalstar opposes Iridium's request.<sup>11</sup> Globalstar indicates that the Globalstar system is experiencing harmful interference that appears to arise from Iridium's use of frequencies overlapping Channels 8 and 9 of the Globalstar system. Globalstar indicates that it is experiencing radio link failure for Globalstar calls in the 30 to 45% range. Globalstar states that it needs a period of at least 48 hours when Iridium is not transmitting in Globalstar channels 8 and 9 in order to complete its analysis of the impact of Iridium transmissions in Channel 8 and 9. Globalstar also questions whether increased call traffic is in fact the cause of Iridium's capacity shortfalls in the Middle East, and argues that there are a number of other possible reasons for low call completion rates. Globalstar also notes that its traffic data suggests a substantial decrease in the last month in traffic in the Middle East region.

### III. DISCUSSION

8. Section 309(c)(2)(G) and of the Communications Act and Section 25.120(a) of the Commission's rules provide for the grant of special temporary authority of the type Iridium has requested.<sup>12</sup> In this instance, Iridium's use of the 1620.10-1621.35 MHz band will allow Iridium to provide critical support to U.S. Forces engaged in peace enforcement operations in Iraq and the Middle East region. Furthermore, we believe Iridium's request to scale back its use of frequencies below 1621.35 MHz is an appropriate response to lower traffic levels and to concerns with possible interference from Iridium's operations raised by Globalstar and Cornell.

9. Because the continued need for additional frequencies, as well as the possible interference, will be a matter that we expect the interested parties to monitor closely during the 30 day Special Temporary Authority, Iridium will be required to have in place the capability to discontinue operations in the 1620.10-1621.35 MHz band within no less than twenty four hours after notice from the Commission. This grant of authority will be subject to such termination if such monitoring indicates that this authorization is no longer necessary in or consistent with the public interest.

### IV. CONCLUSION AND ORDERING CLAUSES

10. Based on the foregoing, we find that Iridium's request for a temporary authorization for operations in the 1620.1-1621.35 MHz band will serve the public interest by allowing Iridium to provide essential communication services to support vital U.S. Government operations in the Middle East region. This action is taken without prejudice to Commission action in the ongoing rulemaking proceeding in IB Docket No. 02-364, Review of the Spectrum

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<sup>9</sup> *Cornell Comments* at 5.

<sup>10</sup> *Cornell Comments* at 3.

<sup>11</sup> Comments of Globalstar, filed June 11, 2003.

<sup>12</sup> 47 U.S.C. § 309(c)(2)(G); 47 C.F.R. § 25.210(a).

Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands.

11. Accordingly, IT IS ORDERED, that the request of Iridium Constellation, LLC to operate in the 1620.1-1621.35 MHz frequency band until July 12, 2003, IS GRANTED.

12. IT IS FURTHER ORDERED, that the Iridium satellite system shall operate on co-equal status with the Globalstar satellite system in the 1620.1-1621.35 MHz band within the Middle East region.

13. IT IS FURTHER ORDERED, that in areas outside of the Middle East region, the Iridium satellite system must operate in the 1620.1-1621.35 MHz frequency band on a non-harmful interference basis with respect to any other allocated radio service in that band.

14. IT IS FURTHER ORDERED, that Iridium shall maintain the capability of suspending operations in the 1620.1-1621.35 MHz band, upon notice from the Commission, within no less than twenty four hours.

15. This action is taken pursuant to 47 C.F.R. § 0.261; 47 C.F.R. § 25.120; 47 U.S.C. § 309 and 47 U.S.C. § 4(i), and is effective upon adoption.

FEDERAL COMMUNICATIONS COMMISSION

Fern J. Jarmulnek  
Deputy Chief, Satellite Division  
International Bureau